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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No. 3886-07	Press
135-137	Mis.
Dated 2-12-	1867.

Not to be folded or roughly handled

No. 135. Read the following letter from the Controller of Public Works Accounts, to the Secretary to Government, Public Works Department, dated Madras, 20th November 1867, No. 3,188 :—

2 Reports and 1 from the Supg. Engr, 2nd Division, dated
2 Statements. } 2nd and 26th July 1867, respectively.
1 Letter from the Superintending Engineer, 6th Division,
No. 1,246, dated 16th November 1867.

I have the honor to submit the Statement of Remunerative works for 1866-67, with the papers, in original, noted in the margin.

Proceedings of the Madras Government, Public Works Department, 7th December 1867.

Statement of Remunerative Works for 1866-67.

Statement of Remunerative Works for 1866-67.														
Name of Works.	CAPITAL.				Description.	REVENUE.								Remarks.
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).			CHARGES.		INCOME.								
	Description.	Amount up to the end of the past year.	Amount of the current year.			Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.				
		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		Rs.	Rs.	Rs.		
Godavery Anicut and its subsidiary works.	Outlay on original works and re-construction.	43,19,008	1,16,489	44,35,497	GANJAM.									
	Deduct deterioration by wear and tear at 1 per cent.	4,09,116	43,190	4,52,306	None.									
					VIZAGAPATAM.									
					None.									
					GODAVERY.									
					Interest on the Capital, Rupees 43,19,008, at 4 per cent.	18,21,796	1,72,760	19,94,556	Gross proceeds from all sources.	1,95,13,223	17,55,825	2,12,69,048		
					Maintenance and repairs.	29,98,637	1,26,305	31,24,942						
	Balance of Capital...	39,09,892	73,299	39,83,191	Total Charges...	18,20,433	2,99,065	51,19,498	Balance of Income ...	1,46,92,790	14,56,760	1,61,49,550		
					KISTNA.									
					Interest on the Capital, Rupees 26,01,886, at 4 per cent.	7,92,212	1,04,075	8,96,287	Gross proceeds from all sources.	34,03,270	6,74,932	40,78,202		
Kistna Anicut Project.	Outlay on original works and re-construction.	26,01,886	95,704	26,97,590	Maintenance and repairs.	8,21,503	87,065	9,08,568						
	Deduct deterioration by wear and tear.	3,89,704	52,037	4,41,741										
					Total Charges...	6,13,715	1,91,140	18,04,855	Balance of Income ...	17,89,555	4,83,792 Being at the rate of 21.44 per cent. on balance of Capital.	22,73,347		
	Balance of Capital...	22,12,182	43,667	22,55,849										
					NELLORE.									
	Outlay on original works and re-construction.	5,26,079	8,449	5,34,528	Interest on the Capital, Rupees 5,26,079.	1,22,682	21,044	1,43,726	Gross proceeds from all sources.	2,83,824	98,385	3,82,209		
	Deduct deterioration by wear and tear.	1,05,916	10,522	1,16,438	Maintenance and repairs.	1,97,829	8,752	2,06,581						
					Total Charges...	3,20,511	29,796	3,50,307	Balance of Income ...		68,589 Being at the rate of 16.4 per cent. on balance of Capital.	31,902		
Pennar Anicut Project.	Balance of Capital...	4,20,163	2,073	4,18,090	Balance of Charges...	36,687								

Proceedings of the Madras Government, Public

Statement of Remunerative

Statement of Remunerative					
Name of Works.	CAPITAL.				Description.
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).				
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
		Rs.	Rs.	Rs.	
					CUDDAPAH. None. BELLARY. None. KURNOOL. None.
Palar Anicut project, excavating Cumbankal channel and constructing masonry works.	Outlay on original works and re-construction.	2,14,925		2,14,925	MADRAS. Interest on the Capital, Rupees 2,14,925, at 4 per cent.
	Deduct deterioration by wear and tear.				Maintenance and repairs.
	Balance of Capital ...	2,14,925		2,14,925	Total Charges...
Coratoor Anicut.	Outlay on original works and re-construction.	16,430		16,430	Interest on the Capital, Rupees 16,430, at 4 per cent.
	Deduct deterioration by wear and tear.				Maintenance and repairs.
					Total...
Casavaram Anicut.	Outlay on original works and re-construction.	20,316		20,316	Interest on the Capital, Rupees 20,316, at 4 per cent.
	Deduct deterioration by wear and tear.				Maintenance and repairs.
	Balance of Capital...	36,746		36,746	Total...
					Total Charges of two works.
East Coast Canal.	Outlay on original works and re-construction.	5,10,492		5,10,492	Interest on the Capital, Rupees 5,10,492, at 4 per cent.
	Deduct deterioration by wear and tear.				Maintenance and repairs.
	Balance of Capital...	5,10,492		5,10,492	Total Charges...

Works Department, 7th December 1867.

Works for 1866-67.—(Continued.)

REVENUE.							Remarks.
CHARGES.			INCOME.				
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
32,663	8,597	41,260	Gross proceeds from all sources.	72,305	18,548	90,853	
1,920	880	2,800					
34,583	9,477	44,060	Balance of Income...	37,722	9,071	46,793	
7,193	657	7,850					
1,192	114	1,306					
8,385	771	9,156					
7,072	812	7,884	Gross proceeds from all sources.	1,27,315	8,679	1,35,994	
4,794	115	4,909					
11,866	927	12,793					
20,251	1,698	21,949	Balance of Income...	1,07,064	6,981	1,14,045	
1,80,319	20,420	2,00,739	Gross proceeds from all sources.	8,91,772	42,819	9,34,591	
2,52,112	10,122	2,62,234					
4,32,461	30,542	4,63,003	Balance of Income...	4,59,311	12,277	4,71,588	

Proceedings of the Madras Government, Public

Statement of Remunerative

Statement of Remunerative						
Name of Works.	CAPITAL.					
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).					
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	
Palar Anicut ...		Rs.	Rs.	Rs.	NORTH ARCOT.	
	Outlay on original works and re-construction.	7,18,235	2,468	7,20,703	Interest on the Capital, Rupees 7,18,235, at 4 per cent.	
	Deduct deterioration by wear and tear.	...	...	...	Maintenance and repairs.	
	Balance of Capital...	7,18,235	2,468	7,20,703	Total...	
Poiney Anicut...					Balance of Charges...	
	Outlay on original works and re-construction.	1,52,890	100	1,52,990	Interest on the Capital, Rupees 1,52,890, at 4 per cent.	
	Deduct deterioration by wear and tear.	...	...	...	Maintenance and repairs.	
	Balance of Capital...	1,52,890	100	1,52,990	Total...	
Extending the Cheyaur Anicut project to Taitary and for widening main channel as far as Pooresay.					Balance of Charges...	
	Outlay on original works and re-construction.	27,674	19,525	47,199	Interest on the Capital, Rupees 27,674, at 4 per cent.	
	Deduct deterioration by wear and tear.	...	...	...	Maintenance and repairs.	
					Total...	
Constructing the Cheyaur Anicut and channel to Pooresay.						
	Outlay on original works and re-construction.	32,976	...	32,976	Interest on the Capital, Rupees 32,976, at 4 per cent.	
	Deduct deterioration by wear and tear.	...	...	...	Maintenance and repairs.	
					Total...	
Constructing 13 Moraries in the Cheyaur Anicut channel.						
	Outlay on original works and re-construction.	2,454	...	2,454	Interest on the Capital, Rupees 2,454, at 4 per cent.	
	Deduct deterioration by wear and tear.	...	...	...	Maintenance and repairs.	
	Balance of Capital...	63,104	19,525	82,629	Total Charges...	
					Grand Total of Cheyar.	

Works Department, 7th December 1867.

Works for 1866-67.—(Continued.)

REVENUE.							Remarks.
CHARGES.			INCOME.				
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
2,27,424	28,729	2,56,153	Gross proceeds from all sources.	45,914	6,210	52,124	
7,378	1,499	8,877					
2,34,802	30,228	2,65,030					
1,88,888	24,018	2,12,906	Balance of Income...			...	
28,041	6,116	34,157	Gross proceeds from all sources.	11,920	3,119	15,039	
7,063	885	7,948					
35,104	7,001	42,105					
23,184	3,882	27,066	Balance of Income ..			...	
5,124	1,107	6,231					
11,628	844	12,472					
16,752	1,951	18,703					
15,348	1,319	16,667					
...	...	...	Gross proceeds from all sources.	45,864	4,414	50,278	
15,348	1,319	16,667					
1,037	98	1,135					
...	...	...					
1,037	98	1,135					
33,137	3,368	36,505	Balance of Income...	12,727	1,046	13,773	

Proceedings of the Madras Government, Public

Statement of Remunerations

Statement of Immunerat						
Name of Works.	CAPITAL.				Description.	
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).					
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.		
Lower Coleroon Anicut.	Outlay on original works and re-construction.	Rs. 1,49,050	Rs. ...	Rs. 1,29,050	SOUTH ARCOOT. Interest on the Capital, Rupees 1,29,050, at 4 per cent. Maintenance and repairs.	
	Deduct deterioration by wear and tear.	12,581	...	12,581		
	Balance of Capital...	1,16,469	...	1,16,469		
	Total Charges					
Vellaur Anicut.	Outlay on original works and re-construction.	94,037	...	94,037	Interest on the Capital, Rupees 94,037, at 4 per cent. Maintenance and repairs.	
	Deduct deterioration by wear and tear.	11,881	...	11,881		
	Balance of Capital...	82,156	...	82,156		
	Total Charges...					
Ragavien channel and Ponnair Anicut.	Outlay on original works and re-construction.	69,865	...	69,865	Interest on the Capital, Rupees 69,865, at 4 per cent. Maintenance and repairs.	
	Deduct deterioration by wear and tear.	6,160	...	6,160		
	Balance of Capital...	63,705	...	63,705		
	Total Charges...					
Trivady Anicut.	Outlay on original works and re-construction.	13,729	...	13,729	Interest on the Capital, Rupees 13,729, at 4 per cent. Maintenance and repairs.	
	Deduct deterioration by wear and tear.	2,274	...	2,274		
	Balance of Capital ..	11,455	...	11,455		
	Total Charges...					
Vieravaundi Anicut and channel.	Outlay on original works and re-construction.	15,016	...	15,016	Interest on the Capital, Rupees 15,016, at 4 per cent. Maintenance and repairs.	
	Deduct deterioration by wear and tear	1,300	...	1,300		
	Balance of Capital...	13,716	...	13,716		
	Total Charges...					

Works Department, 7th December 1867.

Works for 1866-67.—(Continued.)

REVENUE.					
CHARGES.			INCOME.		
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.
Rs.	Rs.	Rs.		Rs.	Rs.
1,44,536	5,162	1,49,698	Gross proceeds from all sources.	82,12,527	4,08,415
3,98,297	...	3,98,297			
5,42,833	5,162	5,47,995	Balance of Income...	76,69,694	4,03,253
63,941	3,761	67,702	Gross proceeds from all sources.	14,38,295	80,380
1,19,701	1,001	1,20,702			
1,83,642	4,762	1,88,404	Balance of Income...	12,54,653	75,618
17,721	2,795	20,516	Gross proceeds from all sources.	5,04,756	35,284
15,520	715	16,235			
33,241	3,510	36,751	Balance of Income...	4,71,515	31,774
9,334	549	9,883	Gross proceeds from all sources.	4,72,154	31,119
15,592	603	16,195			
24,926	1,152	26,078	Balance of Income...	4,47,228	29,967
6,401	601	7,002	Gross proceeds from all sources.	46,089	5,505
6,088	2,282	8,370			
12,489	2,833	15,372	Balance of Income...	33,600	2,622

Proceedings of the Madras Government, Public

Statement of Remunerative

Statement of Remuneration of the Madras Government, Public Works Department.					
Name of Works.	CAPITAL.			Description.	
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).				
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
		Rs.	Rs.	Rs.	
Vanamadavy Anicut.	Outlay on original works and re-construction.	20,993	...	20,993	SOUTH ARCOT.—(Conld.) Interest on the Capital, Rupees 20,993, at 4 per cent. Maintenance and repairs. Total...
	Deduct deterioration by wear and tear.	...	...	...	
	Balance of Capital...	20,993	...	20,993	
Thadapally Channel.	Outlay on original works and re-construction.	49,004	1,490	50,494	COIMBATORE. Interest on the Capital, Rupees 49,004, at 4 per cent. Maintenance and repairs. Total... Balance of Charges...
	Deduct deterioration by wear and tear, &c.	...	...	...	
	Balance of Capital...	49,004	1,490	50,494	
Calingaroyen Channel	Outlay on original works and re-construction.	15,284	739	16,023	Interest on the Capital, Rupees 15,284, at 4 per cent. Maintenance and repairs. Total... Balance of Charges...
	Deduct deterioration by wear and tear.	...	...	...	
	Balance of Capital...	15,284	739	16,023	
Caniempolliem Channel.	Outlay on original works and re-construction.	42,970	...	42,970	Interest on the Capital, Rupees 42,970, at 4 per cent. Maintenance and repairs. Total... Balance of Charges...
	Deduct deterioration by wear and tear.	...	...	...	
	Balance of Capital...	42,970	...	42,970	

Works Department, 7th December 1867.

Works for 1866-67.—(Continued).

REVENUE.							Remarks.
CHARGES			INCOME.				
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	
1,565	839	2,404	Gross proceeds from all sources.	10,275	5,652	15,927	
3,793	...	3,793					
5,358	839	6,197	Balance of Income...	4,917	4,813	9,730	
8,540	1,960	10,500	Gross proceeds from all sources.	10,380	597	10,977	
28,571	544	29,115					
37,111	2,504	39,615					
26,731	1,907	28,638	Balance of Income...	...	...	...	
4,872	611	5,483	Gross proceeds from all sources.	374	75	449	
55,182	3,290	58,472					
60,054	3,901	63,955					
59,680	3,826	63,506	Balance of Income...	...	...	...	
65,316	1,719	67,035	Gross proceeds from all sources.	37,521	111	37,632	
15,219	...	15,219					
80,535	1,719	82,254					
43,014	1,608	44,622	Balance of Income...	...	...	...	

Statement of Remunerative

Works for 1866-67.—(Continued.)

Statement of Remunerative					
Name of Works.	CAPITAL.				Description.
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).				
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Arakencottah Channel.		Rs.	Rs.	Rs.	COIMBATORE.—(Conld.) Interest on the Capital, Rupees 22,023, at 4 per cent. Maintenance and repairs. Total Balance of Charges...
	Improving and extending Arakencottah channel.	22,023	1,395	23,418	
	Deduct deterioration by wear and tear, &c.	...	...	...	
	Balance of Capital...	22,023	1,395	23,418	
Yennamakul Dam.	Outlay on original works and re-construction.	30,880	...	30,880	MALABAR. Interest on the Capital, Rupees 30,880, at 4 per cent. Maintenance and repairs. Total... Balance of Charges...
	Deduct deterioration by wear and tear.	11,734	618	12,352	
	Balance of Capital...	19,146	618	18,528	
					SOUTH CANARA. None. MADURA. None. TINNEVELLY. None. TRICHINOPOLY.
Nunthayaur Anicut in the District of Trichinopoly.	Outlay on original works and re-construction.	46,850	...	46,850	Interest on the Capital, Rupees 46,850, at 4 per cent. Maintenance and repairs. Total Charges...
	Deduct deterioration by wear and tear, &c.	...	...	...	
	Balance of Capital...	46,850	...	46,850	
Upper Anicut in Coleroon.	Outlay on original works and re-construction.	2,39,865	...	2,39,865	TANJORE. Interest on the Capital, Rupees 2,39,865, at 4 per cent. Maintenance and repairs. Total Charges...
	Deduct deterioration by wear and tear.	...	...	...	
	Balance of Capital...	2,39,865	...	2,39,865	

Works for 1866-67.—(Continued.)									
REVENUE.									
CHARGES.			INCOME.				Remarks.		
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.			
Rs.	Rs.	Rs.		Rs.	Rs.	Rs.			
1,944	881	2,825	Gross proceeds from all sources.	6,169	1,589	7,758			
10,221	1,232	11,453							
12,165	2,113	14,278							
5,996	524	6,520	Balance of Income...	...	...	...			
27,174	1,235	28,409	Gross proceeds from all sources.	38,949	2,789	41,738			
22,207	914	23,121							
49,381	2,149	51,530			640	...			
10,432	...	9,792	Balance of Income.	...					
14,992	1,874	16,866	Gross proceeds from all sources.	44,783	4,983	49,766			
4,867	276	5,143							
19,859	2,150	22,009	Balance of Income...	24,924	2,833	27,757			
2,39,886	59,595	2,49,481	Gross proceeds from all sources.	1,35,15,118	5,19,945	1,40,35,063			
1,67,167	2,742	1,69,909							
4,07,053	12,337	4,19,390	Balance of Income...	1,31,08,065	5,07,608	1,36,15,673			

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Proceedings of the Madras Government, Public

Statement of Remunerative

Statement of Remunerative					
Name of Works.	CAPITAL.				Description.
	OUTLAY ON CONSTRUCTION (DEAD STOCK VALUATION).				
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Lower Anicut in Coleroon.	Outlay on original works and re-construction.	Rs. 2,25,190	Rs. 19,213	Rs. 2,44,403	TANJORE.—(Conld.) Interest on the Capital, Rupees 2,44,403, at 4 per cent. Maintenance and repairs. Total Charges... Balance of Charges...
	Deduct deterioration by wear and tear.	...	...	...	
	Balance of Capital ..	2,25,190	19,213	2,44,403	

MADRAS,

MADRAS,
20th November 1867.

Works Department, 7th December 1867.

Works for 1866-67.—(Concluded.)

Works for 1866-67.—(Concluded.)

REVENUE.							Remarks.
CHARGES.			INCOME.				
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Rs. 1,27,254	Rs. 9,776	Rs. 1,37,030	Gross proceeds from all sources.	Rs. 4,71,008	Rs. 29,065	Rs. 5,00,073	
2,23,506	37,884	2,61,390					
3,50,760	47,660	3,98,420					
...	18,595	...	Balance of Income...	1,20,248	...	1,01,653	

R. E. O'CONNELL, Lieut.-Colonel, R. E.,

(Signed) P. P. L. O'CONNELL, Lieut.-Colonel, R. E.,
Controller of Public Works Accounts.

Statement showing the amount expended on the Kistna Anicut Project for 1852, and the returns realized to accompany Statement of Remunerative Works for 1866-67.

Years.	Capital expended.	Deduct deterioration.	Balance of Capital.	CHARGES.			Returns realized, minus Charges.	Per-centage of profit on balance of Capital.	Deterioration at 2 per cent. per annum has been allowed in these calculations according to orders of Government; but the principle on which this is directed seems inapplicable as regards channels which, if duly maintained, will be as serviceable also is yearly, whilst repairing it, becoming stronger by reason of the large quantity of stone used.
				Interest on Capital up to previous year at 4 per cent.	Maintenance and Repairs.	Total.			
From 1852 to 1857-58	14,69,045	80,172	13,88,863	1,73,146	96,270	2,69,416	92,417	4.87	Deterioration at 2 per cent. per annum has been allowed in these calculations according to orders of Government; but the principle on which this is directed seems inapplicable as regards channels which, if duly maintained, will be as serviceable also is yearly, whilst repairing it, becoming stronger by reason of the large quantity of stone used.
In 1858-59	65,829	29,380	36,449	58,761	57,439	1,16,200	69,461		
In 1859-60	1,49,694	30,697	14,25,312	61,395	61,919	1,23,314	1,50,526	9.74	The decrease was caused by remissions on account of cyclone.
In 1860-61	1,21,103	33,691	15,44,309	67,382	65,827	1,33,209	1,27,744	7.82	
In 1861-62	1,32,849	36,113	16,31,721	72,226	95,613	1,67,839	1,74,510	10.9	
In 1862-63	2,23,012	38,770	17,28,457	77,540	1,06,329	1,83,869	2,11,500	11.05	
In 1863-64	2,00,471	43,230	19,12,699	86,460	96,384	1,82,844	3,51,009	16.95	
In 1864-65	1,58,577	47,240	20,69,940	94,480	1,36,493	2,30,973	2,55,729	11.72	
In 1865-66	81,316	50,411	21,81,277	1,00,822	1,05,199	2,06,021	3,56,659	16.12	
In 1866-67	95,704	52,037	22,12,182	1,04,075	87,065	1,91,140	4,83,792	21.02	
	26,97,590	4,41,741	22,55,849	8,96,287	9,08,568	18,04,855	22,73,347		

Under the head "Maintenance and Repairs" only Irrigation Repairs and the Conservancy Establishments, such as "Anicut," "Delta," and "Navigation" are included, and not the regular Public Works Establishments, such as Engineers and Upper and Lower Subordinates, and Office Establishments.

CAMP AT NALLAMADA,
2nd July 1867.

(Signed) W. WILSON, Acting Collector.

(Signed) G. V. WINSOM, Lieut.-Colonel, R. E.,
Superintending Engineer, 2nd Division.

Proceedings of the Madras Government, Public Works Department,
7th December 1867.

Sketch of the past history and future prospects of the Kistna Anicut and Channels.

1. These works were commenced in 1852, and the appended statement shows the amount expended during each year since that time, both as regards original outlay and repairs, also the returns realized. The construction of the head works, main ducts, and subsidiary channels, have progressed in proportion to the expenditure shown. In 1858-59, the income derived became remunerative, and since then has gradually risen, except in 1864-65, when the great hurricane occurred.

2. The Kistna Delta is composed of rich alluvial soil, and has a tolerably regular slope towards the sea of about one foot per mile. It is thus particularly fitted for irrigation from channels led off at the apex of the delta, assisted by a dam across the river Kistna, which raises the water 20 feet above the dry weather low bed. The rise of the Kistna is generally sufficient from end of May till December to give water for one full crop of rice, but after that time it becomes too low to irrigate (as in the case of Godavery) two crops. During the above months the quantity of water obtainable would be sufficient for the cultivation of the full delta, if the channels were wide and numerous enough. The rough estimates framed for widening the ducts, so as to ensure a supply for an additional 259,000 acres, amount to Rupees 31,00,000. This sum, added to the capital expended up to the present time, shows that the total outlay of, at least, 57 lacs of Rupees will be needed to supply about 430,000 acres. Allowing water-rate of 4 Rupees per acre, the revenue will be eventually about Rupees 17,20,000. Deducting from this 20 per cent. as the cost of establishment and repairs we may hereafter anticipate a return of Rupees 13,76,000 on the capital, or about 24 per cent. This is without allowing anything for deterioration of the works. As, however, much new ground will be taken up, which will pay dry silt in addition to water-rate, and much new dry land will be cultivated in the upper talooks to grow the crops, which will be supplanted by rice in the delta lands, it may be believed that the Kistna works will, when completed, yield about 30 per cent. upon the outlay.

3. On account of the quantity of silt which Kistna water contains, the cost of maintenance is now much greater than it will hereafter be, when the navigation channels are made into still-water reaches, and the irrigation ducts are so aligned as to carry the silt on to the fields. Much valuable time is now taken up in clearances, which ought to be employed in pushing on new projects with vigor. On this account I consider that the formation of the side channels of the Masulipatam and Nizampatam canals are probably more important at the present time than any other works.

4. The Kistna works have been executed with comparative ease, because, first, excepting on the Ellore canal and Commamoor channel, there are few cross drainages, and in those cases the streams pass with moderate rapidity; second, the slope of the country is very favorable; third, sub-soil is sufficiently firm for foundations and to withstand the velocity of the water; and fourth, the supply of materials has been ample for all the upper parts of the delta, whilst navigation has been available for the works executed in the lower talooks.

5. The outlay can never, I think, be expected to return such large profits as that on the Godavery and Coleroon; first, on account of the vastly greater expense in constructing them, the rise of prices having been very considerable in late years; second, on account of the water not being available for more than six months, whilst in the Godavery, irrigation can be carried on for nine months, so that no second crop can be looked for as a rule; and third, on account of the yearly great expense of clearing the channels, owing to the wonderful amount of silt in the water, as an example of which I mention that when the river was in flood (14 feet over anicut,) on 2nd July 1866, I found that it contained by weight $\frac{1}{11}$ part of silt. The average quantity appears to be about $\frac{1}{15}$ th. As the side channels are now under construction, a marked improvement may be expected in the course of two years in this respect.

The navigation works have not been directly a remunerative investment of money. The boat licenses during last year amounted to Rupees 6,662, whilst the locks, &c., have cost about 4½ lacs of Rupees. This scarcely gives a return of 1½ per cent. on the capital invested, but indirectly, of course, they have been very valuable in improving the district.

(Signed) G. V. WINSOM, Lieut.-Colonel, R. E.,
Superintending Engineer, 2nd Division.

Statement showing the amount expended on the Pennair Anicut Project from 1854-55, and the returns realized to accompany Statement of Remunerative Works for 1866-67.

Years.	CHARGES.				Returns realized minus Charges.	Per-centage of profit on balance of Capital.	Deterioration is allowed in making these calculations agreeably to Orders of Government, but the principle on which this is done seems inapplicable as regards tanks, channels, &c., which if duly maintained will be as good 50 years hence as now.
	Capital expended.	Deduct deterioration.	Balance of Capital.	Interest on Capital up to previous year at 4 per cent.	Maintenance and Repairs.	Total.	
Up to 1861-62...	3,96,014	68,768	3,27,246	48,283	1,68,721	2,17,109	...
In 1862-63	56,858	7,920	48,938	15,810	4,937	20,777	5.26
In 1863-64	39,830	9,058	3,76,184	18,114	8,790	26,904	9.24
In 1864-65	23,109	9,854	30,772	19,708	6,031	25,739	9.3
In 1865-66...	10,268	10,316	4,06,956	20,632	19,330	29,962	15.66
In 1866-67...	8,449	10,522	13,255	21,014	8,752	29,766	16.4
	5,31,528	1,16,438	4,20,211	1,43,726	2,06,551	3,50,307	2,30,955

Under the head "Maintenance and Repairs" only Irrigation Repairs and Conservancy Establishments, such as Anicut and Irrigation Canal Establishment are included and not the regular Public Works Establishment, such as Engineers and Upper and Lower Subordinates, and Office Establishments.

MASULIPATAM,

26th July 1867.

(Signed) J. A. C. BOSWELL,
Acting Collector.

(Signed) G. V. WINSCOM, Lieut.-Colonel, R. E.,
Superintending Engineer, 2nd Division.

Proceedings of the Madras Government, Public Works Department,
7th December 1867.

Sketch of the past history and of the future prospects of the Nellore Anicut and Channels.

1. The Pennair anicut was commenced in 1851-55, and was designed to secure a g supply of water to various large tanks previously existing, as well as to increase the irrigated area to a considerable extent by a direct supply from the channels. Unlike most other delta projects, the water is supplied only from one bank of the river, the levels of the northern portion of the delta being too high for the purpose.

2. The section given to the anicut in the first instance was too weak. The river comes down with great suddenness and impetuosity, and has a slope of bed of 3 feet per mile, i. e., three times as great as that of the Kistna. The anicut often lasting some short time, and even then materially increasing the revenue, failed under the freshes of October 1857, and the section had to be entirely remodelled, but this plan also failed, and the present design (Colonel Cotton's) was completed in 1861-63, at a cost of Rupees 1,29,062. The benefits of the works did not begin fairly to be developed till 1861, since which period the accompanying statement shows the rise in the revenue.

3. There is every reason to believe these works will become more and more remunerative. The river supply lasts but for a short while, and it is desired, therefore, to be able to take the water into the reservoirs as quickly as possible. Hitherto the lowness of the channel banks has prevented the reception of the depth of water desirable, but they have been, and are being, considerably raised, and every year the channels will thus become more powerful. The Survapully channel project has just been sanctioned, and there can be no doubt but that it will be a very profitable scheme. Altogether, I believe, I am within the mark when I anticipate that the outlay on these works will, when the project is fully developed, return from 30 to 35 per cent. per annum.

4. The causes of the satisfactory condition of these works may be summed up—
1st. The previous existence of large reservoirs into which the Pennair water could be directed and without which the scheme would be comparatively unprofitable, as the character of the Pennair is to come down impetuously in bursts of short duration.

2nd. All the channels flow along the water-shed of the country. There is but little cross drainage.

3rd. The soil throughout the delta is generally very favorable for wet crops.

4th. There are no heavy cuttings except near the heads of the channels.

5th. The slope of the channels is such (from 8 inches to 12 inches per mile) that very little silt or sand deposits, and when once all the works are in order, the cost of maintenance will be smaller than in most delta projects.

(Signed) G. V. WINSCOM, Lieut.-Colonel, R. E.,
Superintending Engineer, 2nd Division.

MASULIPATAM,
26th July 1867.

From the Superintending Engineer, 6th Division, to the Controller of Public Works Accounts, dated Tanjore, 16th November 1867, No. 1,246.

1. In forwarding the Statement of Remunerative works for 1866-67 for the Tanjore District, I have the honor to inform you that the Capital charges, &c., of previous years are those entered in the Revised Statement of 1865-66, forwarded with this office letter No. 1,017, dated 24th November 1866.

2. The amount added to Capital in 1866-67, on account of the Lower Anicut works, is the sum expended on the construction of additional aprons before the sluices on the estimate of Rupees 16,000, sanctioned in G. O. No. 1,098, dated 10th April 1865, and the sum expended on rough stone, as I consider that these works render the anicut much more secure than it was without them, and that the works properly come under the head of improvements, and should not be regarded as repairs for the same reason, the actual expenditure incurred in extending the rest of the apron, for which Rupees 48,650 out of the estimate of Rupees 70,400* provides, will next year be charged to Capital.

* Sanctioned in G. O., Nos. 3,295 and 3,774 of 1866.

Proceedings of the Madras Government, Public Works Department,
7th December 1867.

No. 136.

ORDER THEREON, 7th December 1867, No. 3,806.

IRRIGATION, No. 7.

Ordered that this letter, together
with its enclosures, be forwarded to the
Government of India.

(True Extract.)

Colonel, R. E.,

Secretary to Government.

To the Controller of Public Works Accounts.
,, Superintending Engineers.
To Captain Kennedy.

Exd. F. R. Bantleman.

PUBLIC WORKS DEPARTMENT,
FORT ST. GEORGE,
7th December 1867.

No. 3,807.

No. 137.

To

THE SECRETARY TO THE GOVERNMENT OF INDIA.
SIR,

IRRIGATION, No. 8.

I have the honor, under the orders
of the Right Honorable the Governor
in Council, to forward the Statement
of Remunerative Works in this Presidency for the year 1866-67.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Exd. F. R. Bantleman.

Proci

No. 136.

To the

To Ca

23

Sketch of the past history and future prospects of the Kistna Irrigation Channels.

1 These works were commenced in 1852 and the appended statement shows the amount expended during each year since that time both as regards original outlay and repairs also the returns realized. The construction of the Head Works, Main ducts and subsidiary Channels, have progressed in proportion to the Expenditure shown in 1858/59, the income derived became remunerative, and since then has gradually risen except in 1864/65 when the great hurricane occurred.

2 The Kistna Delta is composed of rich alluvial soil, and has a tolerably regular slope towards the Sea of about one foot per mile. It is thus particularly fitted for irrigation from Channels led off at the apex of the Delta, assisted by a dam across the river Kistna which raises the water 20 feet above the ordinary low bed. The rise of the Kistna is generally sufficient from end of May till December to give water for one full crop of rice but after that time it becomes too low.

too low to irrigate (as in the case of Godavery)
2 Crops. During the above months the
quantity of water obtainable would be
sufficient for the cultivation of the full
Delta of the Channels were wide and
numerous enough. The Right Estimates framed
for widening the ducts so as to ensure a
supply for an additional 250,000 acres
amount to Rs 3,10,000. This sum added
to the Capital expended up to the present
time shows that the total outlay of at-
least 57 lacs of Rupees will be needed
to supply about 4,30,000 acres allowing
water rate of Rs 2 for acre. The Revenue
will be eventually about Rs 17,20,000.
Deducting from this 20 per cent as the
Cost of Establishment and Repairs we
may hereafter anticipate a return of
Rs 13,76,000 on the Capital or about 24
per cent. This is without allowing any
thing for deterioration of the Works.
As however, much new ground will be taken
up which will pay very little in addition
to water rate and much new dry land will
be cultivated in the Upper Taluqs to grow
the Crops which will be supplanted
by rice in the Delta lands. it may be
believed that the Krishna works will

24 when completed yield about 30 per cent
upon the outlay.

25
3 On account of the quantity of silt
which Krishna water contains the cost of
Maintenance is now much greater than
it will hereafter be, when the Drainage
Channels are made into still water
reaches, and the irrigation ducts are so
aligned as to carry the silt on to the fields.
Much valuable time is now taken up in
clearances which ought to be employed
in pushing on new projects with vigor.
On this account I consider that the
formation of the side Channels of the
Maulipatam and Vizampatam Canals
are probably more important at the present
time than any other works.

4 The Krishna works have been executed
with comparative ease, because 1st -
excepting on the Ellore Canal & Commanoor
Channel, there are few crops or irrigations
and in those cases the streams pass with
moderate rapidity. 2nd The slope of the
Country is very favorable. 3rd Sub soil
is sufficiently firm for foundations
and to withstand the velocity of the water
and 4th the supply of materials has been
ample

5 The outlay can never, I think, be expected to return such large profits as that in the Godamery and Coleroon.

The navigation works have not been

Sup & Engrs Office & Dr
 Capt Hall's Regt
 2^d July 1867. } Lieut Minors
 } Sup & Engrs Office & Dr

1246 29 Supr Eng's Office 6th D^o
Lanjore 16th November/67

29
From, Captain R. F. Oakes R.E.
Supr Engineer 6th D^o

To, Lieut Col G. P. L. & Small R.E.
Controller of P.W. Accounts.

Sir,
In forwarding the Statement
of remunerative works for 1866-67
for the Lanjore District, I have
the honor to inform you that the
Capital Charges &c of previous years
are those entered in the Revised
Statement of 1865-66 forwarded
with this office Letter No 1017,
dated 24th November 1866.

The Amount added to Capital
in 1866-67 on account of the Lower
Ancient works is the sum & paid
ed on the construction of additional
aprons before the sluices on the
Estimate of Rs 16,000 sanctioned
in G.O. No 1098, dated 10th April 1866,
& the sum & expended on rough Stone,
as I consider that these works
render



17/11/67

Recd of the Secy
to the Govt of India
for the P.W. Accounts
16/11/67

render the Assent much more
secure than it was without them
& that the works properly come
under the head of improvements
& should not be regarded as repairs.
For the same reason the actual
expenditure incurred in extending
the mesh of the Apron for which
Rs. 48,650 out of the Estimate of
Rs. 70,400 provided, will not again
be charged to Capital.

I have the honor to be
Sir,

Your most obed^t Serv^t

A. T. Walker Capt R.E.

Sup^r Engineer Bt^d &c

Sketch in ink

From
The Super^r Eng^r
Bt^d &c

To The Controller
of P. W. Accts

Dated 16th } Nov/67
Recd. }
No 1246
Enclosure 1-

PW 4403/67

Forwards a
Statement of P. W.
enumerative works
for 66/67 for the Lajp
District. - V

Sketch of the past history and
of the future prospects of the *Pellore*
Ancient and Channels. 33

1 The *Pennair* *Ancient* was commenced
in 1854-55, and was designed to secure a
good supply of water to various large
Tanks previously existing, as well as
to increase the irrigated area to a considerable
extent by a direct supply from the Channels.
Unlike most other Delta projects,
the water is supplied only from one bank
of the River, the levels of the northern
portion of the Delta being too high
for the purpose.

2 The Section given to the *Ancient*
in the first instance was too weak.
The River comes down with great suddenness
and impetuosity and has a slope
of bed of 3 feet per mile i.e. 3 times
as great as that of the *Ristna*. The
Ancient often lasting some short time
and even then materially increasing the
revenue, failed under the freshes of
October 1857, and the section had to be
entirely remodelled, but this plan failed

and the present design / Col. Cottons /
was completed in 1862-63. at a cost of
Rs. 129,062. The benefits of the works
did not begin fairly to be developed
till 1861 since which period the
accompanying statement shows the
rise in the revenue.

3. There is every reason to believe
these works will become more & more
remunerative. The River supply lasts
but for a short while and it is desired
therefore to be able to take the water
into the reservoirs as quickly as possible.
Without the lowings of the Channel
banks has prevented the reception
of the depth of water desirable but
they have been and are being considerably
raised and every year the Channels
will thus become more powerful.
The Sumasully Channel project
has just been sanctioned and can
be no doubt but it will be a very
profitable scheme. Altogether
I believe I am within the mark when
I anticipate that the outlay on these works

will, when the project is fully developed
return from 30 to 35 per cent. per annum.
4. The causes of the satisfactory
Condition of these works may be
summed up.

1st The previous existence of large
reservoirs into which the Pennair water
could be directed and without which
the scheme would be comparatively
unprofitable as the Character of the
Pennair is to come down impetuously
in bursts of short duration.

2nd All the Channels flow along the
watershed of the Country. There is but
little cross drainage.

3rd The soil throughout the delta is
generally very favorable for wet
crops.

4th There are no heavy cuttings except
near the heads of the Channels.

5th The slope of the Channels in each
leg from 8 to 12 feet mile / that very little
silt or sand deposits and when once
all the works are in order, the cost of
Maintenance

Sup. Eng. Office & Dr.
Marine Palace
26th July 1867. J. Harrison Sub. Lieut. R.E.
Sup. Engineer & Dr.

By Knicker

W. J. Harrison

To accompany statement
of income and the
border of of the
District for 1866/67

6/22/44

Madras, 20th November 1867.

No. 3188

From
The Controller of Public Works Accounts,

To, *The Secretary to Government. P. N. D.*
York N. C.

dis

Eno

2 Report from the
2 Stalls of Long & Son
4 2 & 26" July 1871,
respectively.

Letter from the
S. Aug: b. & su. N.
1246 4/16" 1000/10

I have the honor to submit the
Statement of Remunerative works for 1866/67,
with the papers in original noted in the
margins.

I have the honor to be

Rev.

Your most-obl^d Servant

Wannell St. John R. G.
Controller of P. W. Accounts.

Wm. A. H. W.

P. H. 1864 2000
Pro: of Govt for December
A 4403

No.

From

The Controller of P. W. Accounts,

To

The Secy to Govt P. H. &
Jest & J. J. J.

Dated

20

R. D. 212

Nov

1867

N. 3188

En: 6.

submit statement of
Remuneration made for
1864/67.

43807.
43806 - 720000 1567

C. 135

25th Nov 1867 R. D. 212

39

2

Statement of Remunerations

Name of Works	Capital		Total	Description
	Outlay on construction (see also sheet valuation)			
	Description	Amount up to the end of the past year	Amount the current year	
Ganjam				
None				
Vizagapatnam				
None				
Godavery				
Ancient and modern	Outlay on original works and re.			Interest on the Capital Rs 4319,008 at 4 per cent.
	construction	4319,008	116,489	4435,497
its subsiding and deterioration				Maintenance and repairs
	works - by wear and tear @ 1% per cent	409,116	43,190	452,306
Balance of Capital		3909,892	73,299	3983,191
				Total charges
Historical				
Ancient and modern	Outlay on original works			Interest on Capital Rs 2601,886 at 4 per cent.
	and reconstruction	2601,886	93,704	2695,590
Project	Deduct deterioration by wear and tear -	389,704	52,037	441,741
				Maintenance and repairs
Balance of Capital		2212,182	43,667	2255,849
				Total charges
8 1/2 5 5 5 10				

Revenue							Remarks
Amount up to the end of the past year	Charges	Amount the current year	Total	Description	Amount up to the end of the past year	Amount of the current year	
Gross proceeds							
1821796	172760	1994556	from all sources	19513223	1755828	21269048	
2998637	126308	3124945					
Balance of Revenue							
4820433	299068	5119498	Balance of Revenue	14692790	1456760	16149550	
Gross proceeds							
792212	104078	896287	from				
821503	87068	908568	all sources	3403270	674933	4078203	
1613715	191140	1804855	Balance of Revenue	1789555	483793	2273347	
							being at the end of 21-44 on balance of capital
5	5	5	10	6	6	5	4

Statement of Reimbursement

Capital

Name of works	Outlay on Construction - (See stock valuations)				Description
	Description	Amount up to the end of the past year.	Amount of the current year.	Total	

Outlay on

Pennar Street Project	Original work and				Imputed on the Capital
	reconstruction —	526,079	8,449	534,528	Rs. 526,079 —
	and deterioration				Maintenance
	by wear and tear —	105,916	10,522	116,438	and Repairs —
					Total
	Balance of Capital	420,163	— 2073	418,090	Balance of charges

None

None

None

None

None

None

marks for 1866/67. (Continued)

43

Revenue

Charges.	Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Income.		Total.	Remarks.
					Amount up to the end of the past year.	Amount of the current year.		
	122,682	21,044	143,726	Profits from all sources —	283,824	98,385	382,209	
	197,829	87,022	206,851					
	320,511	297,962	380,307					
	38687	"	"	Balance of income		68,589	31,902	being at the end of 18-14 per cent. on Balance of Capital

Statement of Remuneration

works for 1866/67: (Continued).

45

Name of works.	Capital.		Capital.	Description.
	Outlay on Construction - (See also valuations).			
	Description.	Amount up to the end of the past year.	Amount of the current year.	
Palar Amieit				Maintenance
Profit excavating	Outlay on original			Interest on the Capital Rs 214,925 at 4 per cent.
Humburkal works & reconstruction		214,925	"	214,925
Channel Construction	Due to deterioration			Maintenance
ing masonry works by wear and tear		"	"	and repairs
	Balance of Capital	214,925	"	214,925
Corators	Outlay on original works and reconstruction	16,430	"	16,430
Amieit	Due to deterioration			Maintenance
	by wear and tear	"	"	and repairs
	Outlay on original			Interest on the Capital Rs 20,316 at 4 per cent.
Amieit	Due to deterioration	20,316	"	20,316
	by wear and tear	"	"	Maintenance and repairs
				Capital
				Capital charges of these works
	Balance of Capital	36,746	"	36,746

Revenue		Capital.	Description.	Income		Total.	Remarks.
Charges.				Amount up to the end of the past year.	Amount of the current year.		
Amount up to the end of the past year.	Amount of the current year.						
32,663	41,897	41,260	Profits from all sources	72,305	18,548	90,853	
1920	880	2,800					
34,583	42,777	44,060	Balance of Income	37,722	9,071	46,793	
7192	7,857	7,850					
1192	114	1306					
8385	771	9156	Gross proceeds of all sources.	127,315	8,679	135,994	
37072	812	7,884					
4794	415	4909					
11866	927	12793					
20251	1698	21949	Balance of Income	107,064	6981	114,045	

E.

Statement of Remuneration

works for 1866/67. / Continued /

47

Name of works.	Capital.			
	Outlay on construction (read shift valuations).			
	Description.	Amount up to the end of the past year.	Amount of the current year.	Colab. Description.
East Coast Leasab.	Outlay on original works and reconstruction —	510,493	"	Interest on the Capital Rs 510,493 at 4 per cent —
	Deduct deterioration by wear and tear —	"	"	Maintenance and repairs —
	Balance of Capital	510,493	"	510,492 Colab charges —
				Rs 1000
Palor Ancient.	Outlay on original works and reconstruction —	718,235	2,468	Interest on the Capital Rs 718,235 at 4 per cent —
	Deduct deterioration by wear and tear —	"	"	Maintenance and repairs —
	Balance of Capital	718,235	2,468	720,703 Balance of charges —
				Rs 1000
Poiney Ancient.	Outlay on original works and reconstruction —	152,890	100	Interest on the Capital Rs 152,890 at 4 per cent —
	Deduct deterioration by wear and tear —	"	"	Maintenance and repairs —
	Balance of Capital	152,890	100	152,990 Balance of charges —
				Rs 1000

Revenue					
Charges			Income		
Amount up to the end of the past year.	Amount of the current year.	Colab.	Description	Amount up to the end of the past year.	Amount of the current year.
150,319	20,420	200,739	Graft proceeds from all sources	89,772	42,819
252,142	10,122	262,264			
432,464	30,542	463,006	Balance of income	45,931	12,277
227,424	28,729	256,153	Graft proceeds from all sources	43,914	6,210
7,378	1,499	8,877			
234,802	30,228	265,030			
188,888	24,018	212,906	Balance of income	"	"
28,041	6116	34,157	Graft pro. —		
7,083	885	7,968	— curd from all sources	11,920	3,119
35,104	7,001	42,105			
23,184	3,882	27,066	Balance of income	"	"
5	5	5			

E

Statement of Remunerative works

for 1866/67, Continued /.

49

Capital.

Revenue.

Name of Works.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	Description.
Extending the Heyon Ancient Phajik to Soutary and for widening main Channel as far as Porosay.	Outlay on original works and reconstruction —	27,674	19,525	47,199	North Canal. Interest on the Capital Rs 27,674 at 4 per cent —
	Reduced deterioration by wear and tear —	"	"	"	Maintenance and repairs —
					Total
Constructing the Heyon Ancient Channel to Porosay.	Outlay on original works & reconstruction —	32,976	"	32,976	Interest on the Capital Rs 32,976 at 4 per cent —
	Reduced deterioration by wear and tear —	"	"	"	Maintenance and repairs —
					Total
Constructing 13 Moies in the Heyon Ancient Channel.	Outlay on original works & reconstruction —	24,54	"	24,54	Interest on the Capital Rs 24,54 at 4 per cent —
	Reduced deterioration by wear and tear —	"	"	"	Maintenance and repairs —
					Total
	Balance of Capital —	63,104	19,525	82,629	Grand Total of Heyon

Charges.			Income.		Total.	Remarks.
Amount up to the end of the past year.	Amount of the current year.	Description.	Amount up to the end of the past year.	Amount of the current year.		
5124	1107				6231	
7628	844				12472	
16782	1931				18703	
15348	1319	Gross proceeds from all sources	45864	4414	50278	
15348	1319				16667	
1037	98				1135	
1037	98				1135	
33137	3368	Balance of Income	12727	1046	13773	

Statement of Expenditures

for 1866/67, / Continued /

Name of Works.	Capital.				Description.
	Outlay on construction (See stock valuations).				
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Shivady Amlul.	Outlay on original works & reconstruction	137290	"	13729	Interest on the Capital Rs 13729 at 4 per cent.
	Deduct deterioration by wear and tear	2274	"	2274	Maintenanced and repairs
	Balance of Capital	11455	"	11455	Total charges
Veeravandiy Amlul and Channel.	Outlay on original works & reconstruction	15016	"	15016	Interest on the Capital Rs 15016 at 4 per cent.
	Deduct deterioration by wear & tear	1300	"	1300	Maintenanced and repairs
	Balance of Capital	13716	"	13716	Total charges
Vannamadayy Amlul.	Outlay on original works and reconstruction	20993	"	20993	Interest on the Capital Rs 20993 at 4 per cent.
	Deduct deterioration by wear & tear	"	"	"	Maintenanced and repairs
	Balance of Capital	20993	"	20993	Total charges

Revenue.							
Charges.			Income.				Remarks.
Amount up to the end of the past year.	Amount of the current year.	Totals.	Description.	Amount up to the end of the past year.	Amount of the current year.	Totals.	
9334	549	9883	Gross proceeds from all sources—	472,154	31,119	503,273	
15592	603	16195					
24926	1152	26078	Balance of Income	447,228	29,967	477,195	
6401	601	7002	Gross proceeds from all sources—	46089	5505	51594	
6088	2282	8370					
12489	2883	15372	Balance of Income	33,600	2622	36222	
15655	839	2404	Gross proceeds from all sources	10275	5652	15927	
3793	"	3793					
5358	839	6197	Balance of Income	4917	4813	9730	

Statement of Remuneration

Capital.

Name of Works.	Outlay on construction (Read stock valuation).					
Description.	Amount up to the end of the first year.	Amount of the current year.	Total.	Description.		
Salun						
Bond						
Bangalore						
Bond						
Shasapully Channel.	Outlay on original works and reconstruction	49004	1490	50494	Interest on the Capital Rs 49004 at 4 per cent.	
	Deduct deterioration by wear & tear	"	"	"	Maintenanced and repairs	
	Balance of Capital	49004	1490	50494	Balance of charges	
Lalungaroyen Channel.	Outlay on original works and reconstruction	15284	739	16023	Interest on the Capital Rs 15284 at 4 per cent.	
	Deduct deterioration by wear & tear	"	"	"	Maintenanced and repairs	
	Balance of Capital	15284	739	16023	Balance of charges	
Lanierpollayin Channel.	Outlay on original works & reconstruction	42970	"	42970	Interest on the Capital Rs 42970 at 4 per cent.	
	Deduct deterioration by wear & tear	"	"	"	Maintenanced and repairs	
	Balance of Capital	42970	"	42970	Balance of charges	

works for 1866/67. (Continued).

Revenue.

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Charges.			Income.			Total.	Remarks.
Amount up to the end of the first year.	Amount of the current year.	Total.	Description.	Amount up to the end of the first year.	Amount of the current year.		
8540	1960	10500	Gross pro. cess from all sources	10380	599	10979	
28571	544	29115					
27111	2504	39615					
26731	1907	28638	Balance of Income	"	"	"	
4872	611	5483	Gross pro. cess from all sources	374	75	449	
58152	3290	61442					
60654	3901	64555					
59680	3526	63206	Balance of Income	"	"	"	
65316	1719	67035	Gross pro. cess from all sources.	37521	111	37632	
15219	"	15219					
80535	1719	82254					
43074	1608	44682	Balance of Income	"	"	"	

Statement of Remuneration Capital.

Name of works.	Outlay on construction (Read also valuations).				Description.
	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Arakencottah Channel.	Improving & extending Arakencottah Channel.	22023	1395	23418	Expenditure Interest on the Capital Rs 22023 at 4 per cent.
	Deduct deterioration by wear & tear $\frac{1}{100}$	"	"	"	Maintenance & repairs
	Balance of Capital - 22023	1395	23418	Balance of charges -	Total

Yennama.	Outlay on original works and reconstruction.	30880	"	30880	Interest on the Capital Rs 30880 at 4 per cent.
	Deduct deterioration by wear and tear	41734	618	12352	Maintenance and repairs
	Balance of Capital - 19146	618	18528	Balance of charges	Total

South (capital)
None
Madras
None
Sinnivilly
None

works for 1866/67. / Continued /

Revenue.				Income			Remarks.
Charges.		Total.	Description.	Amount up to the end of the past year.	Amount of the current year.	Total.	
Amount up to the end of the past year.	Amount of the current year.						
(Continued)							
1944	881	2825	Gross proceeds from all sources	6169	1589	7758	
10221	1232	11453					
12165	2113	14278					
3996	524	4520	Balance of Income	"	"	"	
27174	1235	28409	Gross proceeds from all sources	38949	2789	41738	
22267	974	23241					
49381	2149	51530					
10432	9792	19224	Balance of Income	"	640	"	

Statement of Expenditure

Name of works.	Capital.		Total.	Description.
	Outlay on construction (Road & other valuation).	Amount up to the end of the past year.		
	Description.	Amount of the current year.		
Trichinopoly				
Munthayoor	Outlay on original works and			Interest on the Capital Rs 46850
ancient in the reconstruction	46850	"	46850	at 4 per cent —
District of	Reconstruct deterioration			Maintenance and
Trichinopoly by wear & tear	"	"	"	and repairs
Balance of Capital	46850	"	46850	Total charges —
Vellore.				
Upper Ancient	Outlay on original works and			Interest on the Capital Rs 239865
reconstruction	239865	"	239865	at 4 per cent —
in folorow.	Reconstruct deterioration			Maintenance and
by wear & tear	"	"	"	repairs
Balance of Capital	239865	"	239865	Total charges —
Lower Ancient				
reconstruction	225190	19213	244403	Interest on the Capital Rs 244403
in folorow.	Reconstruct deterioration			at 4 per cent —
by wear & tear	"	"	"	Maintenance and
				and repairs
Balance of Capital	225190	19213	244403	Total charges —

Office of the Controller of P. N. Arch.
Madras 20th Nov 1887

To The Secretary to

Camp A. H. Ho

works for 1886/87. / Continued /

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Revenue

Charges.			Income.			Total.	Remarks.
Amount up to the end of the past year.	Amount of the current year.	Total.	Description.	Amount up to the end of the past year.	Amount of the current year.		
14992	1874	16866	Gross produce from all sources —	14783	4983	49766	
4867	276	5143					
19559	2150	22609	Balance of Income	24924	2833	27757	
Gross produce from all sources —							
239886	9595	219481		13515.118	519945	14035.063	
167167	2742	169909					
407053	12337	419390	Balance of Income	13108065	507608	13615.673	X
Gross produce from all sources —							
127254	9776	137030		471008	29065	500.073	
223506	37887	261390					
350760	47660	398420					
"	18595	"	Balance of Income	120248	"	101.653	

Government.
P. N. D
Dist. Secy

Monnell L. L. L. R. 6
Controller of P. N. Arch.

Public Works Department
No 3806 61

Proceedings of the Madras Government
Under date the 7th Decr 1907
Read the following

From The Controller of P.W. A. / H. E. No 3188 Dated 20th Nov 1907

Ordered that this
letter, together with its
enclosures, be forwarded
to the Govt. of India.

- 62 To the Controller.
- 63 Supg: Engrs.
- 64 "Capt. Henry
- 90 Decr 10/12/07
- 11

3807
No 3807
To The Secretary to the
Govt. of India.

won
Sir,
I have the honor,
under the orders of the
Right Honorable the
Governor in Council,
to forward the State-
ment

ment of Remunerative
Works in this Presidency
for the year 1866/67

W. B.

Grant & Co. Secy.
4th Decr 1867

Recd 10/12/67 int. ltr

Cy of Govt 2806 of 1867

No. of books for Decmber

No. 3806 & 3807

of the Madras Govt.
 7th Decmber 1867

Passing Orders on a letter
 from the Controller of P. W. D.
 Submitting the Statement of
 remunerative works for 1866, by
 the Presidency

Furnishing the Govt.
 India with the above
 statement.