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MADRAS RECORD OFFICE

Government of Madras

Public works. DEPARTMENT

G.O. No.	418-19.	Press
~~B.P. No.~~ 387-390	(9)	~~Mis.~~
Dated	20-2-1874	~~105~~ .

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 20th February 1874.

Read the following:—

No. 934A.

No. 387. *Note by the Chief Engineer for Irrigation.*

THE accompanying Statements of expenditure on the Godavery and Kistna Delta Works, in continuation of those printed in G. O. of the 13th January 1869, No. 93 and No. 193, of the 21st idem, are submitted for the information of Government. The Statements have been prepared by the District Engineers, and before transmitting them to be placed on record they were sent to the Controller of Public Works Accounts for verification, but that officer, it will be seen by the letter as per margin, is unable to verify them, and in a Statement of totals, which forms an enclosure to his letter; he shows the discrepancies between the District Engineers' accounts and those of his office.

No. 5,206, 12th November 1873.

2. It is not understood how the differences have arisen, but as the Controller is of opinion that neither his nor any other office can furnish accurate accounts, though this is not easily to be comprehended, seeing that, although mistakes in the distribution of expenditure might arise, the total under Original Works and Repairs should be ascertainable with accuracy, it seems to be advisable that the Statements should be printed, as apparently it will be an indefinite time before anything more complete or reliable will be forthcoming, and at present the District Engineers' Statements are likely to be more correct than any which the Controller, with the imperfect information at his disposal, can prepare.

FORT ST. GEORGE,
27th December 1873.

(Signed) J. MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

Statement showing the outlay incurred on the Godavery Delta Works from the year 1847 *to* 1872-73.

	Total Expenditure from 1847 to 1866-67, as per Statemnt embodied in G. O., No. 93, dated 13th January 1869.				Expenditure in 1867-68.				Expenditure in 1868-69.			
	Main Channels.		Distribution Channels.		Main Channels.		Distribution Channels.		Main Channels.		Distribution Channels.	
	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.
	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Anicut	12,63,793	7,76,084	.....	.....	25,379 4 6	16,110 14 4	.....	.....	6,531 11 11	29,376 15 4	.....	.....
Boats and Machinery...	35,552	18,673	.....	.....	.....	152 9 1	.....	.....	.....	1,390 0 3	.....	.....
River improvements ...	1,22,815	2,81,231	.....	.....	1,570 5 4	34,160 13 4	.....	.....	.....	25,616 14 4	.....	.....
Avenues	.....	7,453	.....	.....	.....	2,659 3 11	.....	.....	.....	3,066 15 7	.....	.....
Conservancy Establishment	.....	2,11,871	.....	.....	.....	36,609 1 7	.....	.....	.....	36,394 9 7	.....	.....
Delta Irrigation ...	1,09,788	10,07,681	2,658	18,340	.....	.....	.....	.....	.....	.....	.....	.....
Do. Drainage ...	.....	29,057	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eastern Delta ...	13,335	33,105	71,326	3,884	.....	.....	.....	.....	.....	.....	.....	.....
1. Cocanada Canal ...	1,04,357	79,649	4,274	15,690	.....	1,049 7 9	.....	.....	6,531 8 5	279 13 5	6,171 7 0	1,272 0 6
2. Bank do. ...	28,016	19,951	9,237	5,165	1,993 3 8	3,683 6 3	.....	.....	.....	2,383 3 6	.....	483 8 0
3. Coringa do. ...	24,373	34,603	1,648	12,822	.....	8,796 2 5	.....	.....	631 4 5	395 8 8	.....	1,275 9 5
Ingeram do. ...	26,186	7,778	199	2,820	.....	133 3 6	.....	.....	.....	7 1 11	.....	13 8 0
4. Samulcottah do. ...	3,03,566	68,650	181	4,026	26,308 3 7	1,477 14 5	.....	.....	639 2 7	.....	59,092 14 4	943 2 8
5. Mundapettah do. ...	43,699	4,341	3,686	10,011	1,977 10 8	142 9 6	.....	.....	5,593 6 11	306 0 5	1,560 3 6	1,005 6 6
6. Drainage ...	12,297	34,064	.....	.....	3,683 5 8	3,087 8 11	.....	.....	.....	.....	1,141 4 10	4,148 3 11
7. Sundries ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Central Delta ...	1,81,664	55,723	40,450	16,702	.....	.....	.....	.....	.....	.....	.....	.....
1. Rally Canal ...	2,03,333	65,307	4,820	12,355	.....	.....	.....	.....	.....	1,436 5 0	.....	4,400 13 2
2. Gunnavaram do. ...	3,51,245	30,251	12,665	7,605	.....	3,641 6 11	.....	.....	.....	494 3 4	4,668 8 7	3,034 6 11
Nuggaram do. ...	20,100	6,922	2,663	10,243	4,978 11 10	245 2 7	.....	.....	.....	3,597 0 3	779 8 8	97 7 0
3. Bank do. ...	14,853	21,756	.....	6,370	8,444 12 10	643 6 5	.....	.....	.....	663 4 5	778 13 10	204 11 6
Ayanapuram channel	.....	2,022	.....	.....	.....	245 10 7	.....	.....	.....	.....	.....	.....
4. Drainage	7,865	12,214	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Western Delta ...	3,247	49,946	21,962	4,790	1,761 4 0	1,337 12 3	.....	.....	.....	.....	51 1 4	1,295 7 1
1. Main Canal ...	26,807	46,908	.....	200	376 13 4	187 4 2	.....	.....	.....	.....	260 10 11	80 14 0
2. Ellore do. ...	6,20,763	1,12,397	300	18,574	5,631 7 1	3,018 4 2	.....	.....	.....	298 1 9	.....	484 3 11
Do. Branch channel, viz., Junction Canal	.....	.....	.....	.....	14,998 14 8	793 2 10	.....	.....	2,465 3 5	.....	10,915 7 1	1,735 5 3
3. Wyaru	1,32,405	35,721	7,252	22,661	.....	.....	.....	.....	.....	.....	.....	.....
Undi Canal ...	15,293	6,620	241	1,580	67 10 2	1,798 1 4	.....	.....	205 2 0	844 3 9	.....	786 8 7
Chinacapavarum channel	.....	47	.....	315	595 2 6	1,243 14 3	.....	.....	1,014 11 6	2,266 3 8	406 2 4	2,899 14 11
Rudroycodu ...	31	768	.....	644	.....	619 4 2	.....	.....	.....	.....	.....	242 0 3
4. Attily Canal ...	5,383	20,694	764	9,946	17,045 7 1	210 1 5	.....	.....	.....	.....	52,115 8 5	.....
5. Narsapur Canal ...	2,50,108	43,760	953	32,308	85 2 0	376 13 8	.....	.....	282 8 6	2,225 10 5	.....	22 9 0
Bhapiah Canal includes the Velpur channel which is to be taken off from Gostanuddy.	6,684	6,105	.....	1,327	.....	1,943 3 9	.....	.....	2,227 5 3	2,893 5 9	3,742 5 6	2,228 15 4
Rapaka channel ...	6,495	1,002	.....	.....	.....	3 12 6	.....	.....	179 1 1	2,256 2 5	.....	5 6 6
Chinchinada ...	9,949	1,690	.....	2,567	.....	2,096 8 9	.....	.....	.....	.....	.....	126 13 6
Jinnur	.....	3,239	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gostanuddy ...	3,877	552	8,410	3,618	275 6 7	.....	.....	.....	.....	.....	.....	659 3 5
Mukkamala ...	.....	.....	.....	.....	.....	359 15 5	.....	.....	.....	1,300 12 6	3,599 14 8	.....
6. Bank Canal ...	10,786	13,793	1,802	2,446	.....	305 0 10	.....	.....	.....	108 2 9	.....	57 5 10
7. Drainage	91,492	38,392	.....	.....	.....	5,254 6 0	.....	.....	2 0 0	4,438 15 11	25 10 9	227 11 0
					.....	8,575 4 4	.....	.....	.....	.....	13,354 10 1	2,860 13 1
Total...	40,50,157	31,90,020	1,95,491	2,27,009	1,15,397 14 2	1,40,961 7 4	19,771 6 1	26,194 3 10	1,65,093 10 1	1,26,437 8 4	33,912 0 0	24,242 11 8

Statement showing the outlay incurred on the Godavery Delta Works from the year 1847 to 1872-73.—(Continued.)

	Expenditure in 1869-70.				Expenditure in 1870-71.				Expenditure in 1871-72.	
	Main Channels.		Distribution Channels.		Main Channels.		Distribution Channels.		Main Channels.	
	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Anicut	.....	30,184 7 10	.....	.....	.....	26,001 3 7	.....	.....	.....	23,906 8 2
Boats and Machinery ...	.....	3,247 6 0	.....	.....	.....	11,396 3 2	.....	.....	.....	4,386 4 3
River improvements ...	7 3 7	18,060 13 0	.....	.....	738 15 8	27,281 15 2	.....	.....	.....	43,335 15 2
Avenues	.....	2,480 12 8	.....	.....	.....	3,697 8 3	.....	.....	.....	3,849 0 8
Conservancy Establishment.	.....	36,471 0 5	.....	.....	.....	38,724 12 0	.....	.....	.....	40,028 7 7
Delta Irrigation	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Do. Drainage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eastern Delta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1. Cocanada Canal... ...	6,314 13 5	3,662 9 1	220 0 4	70 11 10	20,236 1 8	1,347 7 5	211 14 4	3,178 1 10	61,692 0 1	813 7 4
2. Bank do.	.....	1,230 5 6	[illegible]		.....	2,102 3 10	389 10 11	1,903 3 0	.....	1,254 1 6
3. Coringa do.	5,911 10 7	1,671 12 2	.....	320 5 8	2,077 7 6	1,597 6 7	68 12 0	1,853 9 10	.....	3,241 14 2
Ingeram do.	.....	193 12 3	398 5 10	419 14 0	.....	130 10 0	.....	471 0 10	795 5 8	201 1 3
4. Samulcottah do.	26,988 9 10	1,256 11 6	.....	.....	21,410 9 7	8,677 9 1	.....	97 11 1	3,450 7 9	2,653 1 9
			.....	129 15 8					11,624 0 0	
5. Mundapettah do. ...	13 7 3	332 1 5			.....	729 2 10	539 8 6	370 9 6	.....	488 9 0
6. Drainage	6 0 0	2,674 10 3	1,088 12 8	977 0 0	182 12 9	521 12 7	.....	.....	41,773 14 7	1,486 11 9
7. Sundries	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Central Delta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1. Rally Canal	.....	17,806 15 8	.....	.....	.....	2,481 2 2	27 0 1	2,494 1 8	34 8 0	1,663 0 8
2. Gunnavarum do.... ...	4,387 10 1	904 9 8	48 6 7	2,056 14 5	23 3 2	769 1 5	199 15 0	1,206 5 9	171 9 10	4,121 15 9
Nuggaram do.... ...	.....	257 14 6	.....	496 11 3	.....	1,392 14 10	69 9 2	4,124 6 2	.....	616 13 4
3. Bank do.... ...	.....	87 14 2	88 0 0	1,622 11 8	.....	457 12 3	.....	2,266 12 11	65 12 3	1,711 4 6
Ayanapuram channel ...	.....	97 15 8	.....	360 6 7	.....	.....	.....	.....	.....	54 14 3
4. Drainage	190 9 6	436 11 4	.....	.....	580 6 0	412 11 10	.....	.....	.....	1,938 2 3
Western Delta... ...	436 8 2	103 3 11	.....	.....	11 9 0	1,851 11 3	.....	.....	106 13 0	1,214 12 2
1. Main Canal	.....	1,805 12 4	.....	.....	.....	959 9 8	.....	284 4 11	.....	153 9 2
2. Ellore do.	305 0 0	1,107 14 5	27,637 1 2	590 6 3	1,568 7 0	2,459 8 0	3,018 12 5	160 6 3	1,105 7 4	3,440 4 9
Do. Branch channel, viz., Junction Canal ...	.....	.....	.....	.....	14,517 5 6	.....	.....	.....	14,684 0 8	.....
3. Wyaru	1,381 3 10	475 12 10	.....	.....	275 8 8	495 15 11	.....	158 11 3	708 0 10	3,438 15 5
Undi Canal	.....	175 6 7	.....	201 8 9	.....	559 9 10	743 8 6	725 12 9	.....	278 3 11
Chinacapavarum channel.	.....	20 15 6	.....	360 5 11	.....	349 11 8	.....	162 14 7	.....	.....
Rudroycodu	7,724 0 0	203 7 0	202 11 11	281 5 5	446 8 7	81 3 6	.....	505 9 7	.....	.....
4. Attily Canal	1,443 6 0	258 8 0	.....	340 10 9	83 11 8	438 3 2	1,186 5 5	227 3 6	347 9 5	246 2 7
5. Narsapur Canal ...	10,421 11 0	8,602 3 8	.....	813 11 6	18,857 1 1	4,553 9 3	856 11 4	1,524 11 5	19,203 9 8	3,941 9 10
Bhapiah Canal includes the Velpur channel which is to be taken off from Gostanuddy ...	.....	35 7 9	3,798 2 5	4,401 15 8	.....	246 12 8	.....	.....	.....	75 9 4
Rapaka channel... ...	.....	137 5 6	885 13 3	1,153 1 4	... ...	79 6 4	132 5 11	.....	.....	1,260 6 9
Chinchinada	.....	99 4 3	.....	201 13 10	.....	316 6 2	.....	71 1 8	.....	7 3 11
Jinnur	.....	55 10 8	.....	227 7 0	.....	.....	.....	.....	.....	346 0 8
Gostanuddy	.....	471 6 4	.....	.....	.....	.....	42 4 0	896 13 10	.....	.....
Mukkamala	.....	77 1 6	49 11 4	695 6 6	.....	438 12 10	144 3 0	.....	.....	.....
6. Bank Canal	1,266 5 3	44 13 0	.....	799 8 3	.....	639 0 1	9 10 10	1,451 2 5	.....	595 12 4
7. Drainage	27,900 12 2	3,148 10 9	.....	3,400 9 7	2,736 5 8	6,750 10 6	.....	.....	18,601 2 3	2,131 15 5
Total...	94,312 4 8	1,37,881 7 1	34,111 5 6	19,922 9 10	83,746 1 6	1,47,941 11 10	7,640 3 5	24,134 10 9	1,51,116 5 4	1,52,881 15 7

Statement showing the outlay incurred on the Godavery Delta Works from the year 1847 *to* 1872-73.—(Concluded.)

	Expenditure in 1871-72.—(Concluded.)		Expenditure in 1872-73.		Total Expenditure from 1847 to 1872-73.					
	Distribution Channels.		Main Channels.		Main Channels.		Distribution Channels.		Distribution Channels.	
	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Anicut	.....	.....	.....	21,604 7 4	12,95,704 0 5	9,33,268 8 7	.....	.....	.....	.....
Boats and Machinery.	.....	.....	.....	16,417 10 9	35,552 0 0	55,663 1 6	.....	.....	.....	.....
River improvements ...	.. ..	... .	.....	29,195 15 3	1,38,743 1 11	4,58,883 6 3	.....	.....	.....	.....
Avenues	.....	.....	13,611 9 4		.....	26,623 4 1	.....	.....	.....	.....
Conservancy Establishment	.....	.....	... .	3,416 11 0	.....	4,39,940 0 0	.....	.....	.....	.....
Delta Irrigation ...	.....	....	.....	39,841 0 10	1,09,788 0 0	10,07,681 0 0	2,658 0 0	18,340 0 0		
Do. Drainage ...	.....	.....	.....	.....	.....	29,057 0 0	.....	.....		
Eastern Delta ...	.....	.....	.....	.....	13,335 0 0	33,105 0 0	71,326 0 0	3,884 0 0		
1. Cocanada Canal ...	100 8 3	2,697 6 10	52,310 15 4	.....	5,055 13 10	2,763 14 5	2,51,082 5 6	91,672 11 9	16,866 14 2	26,195 5 0
2. Bank do. ...	320 11 11	601 14 1	.....	3,878 11 8	84 0 0	183 6 2	30,009 3 8	33,659 15 1	10,031 6 10	10,813 9 8
3. Coringa do. ...	.. ..	3,906 10 9	.....	4,955 6 0	14 14 6	797 7 5	32,362 2 1	53,705 0 3	2,867 13 9	21,367 14 5
Ingeram do. ...	.....	19 2 10	1,972 0 0	2,519 3 6	.....	69 0 5	28,953 5 8	8,887 12 11	199 0 0	3,473 11 3
4. Samulcottah do. ...	.....	373 1 9	3,374 11 2	437 9 11	.....	.....	4,32,567 8 3	85,484 13 7	2,089 9 6	4,872 1 10
5. Mundapettah do. ...	30 8 6	2,363 7 0	8,546 1 0	1,826 6 2	721 15 0	1,780 15 4	55,796 6 5	7,339 3 9	13,309 6 11	16,292 0 7
6. Drainage ...	.....	.....	47,345 0 0	300 6 6	.....	.....	1,06,429 5 10	46,954 1 4	.....	.....
7. Sundries ..	... ...	.....	467 2 4	971 1 11	.....	.....	467 2 4	434 5 1	.....	.....
Central Delta ..	.....	.....	.....	434 5 1	.....	.....	1,81,664 0 0	55,723 0 0	40,450 0 0	16,702 0 0
8. Rally Canal ...	.....	4,261 11 8	.....	.....	.....	3,125 7 6	2,03,367 8 0	1,02,279 13 7	4,895 6 8	26,905 12 0
2. Gunnavarum do. ...	.....	450 10 9	.....	6,979 7 0	530 6 6	389 8 2	3,65,474 11 6	42,614 3 9	13,395 5 6	12,137 13 1
Nuggaram do. ...	244 12 7	6,240 4 5	.....	3,287 15 5	.....	5,487 2 5	29,324 5 6	10,493 8 7	3,230 15 11	34,955 15 3
3. Bank do. ...	.....	3,221 7 11	.....	563 0 6	.....	979 11 8	15,697 10 1	25,133 8 1	370 2 10	15,216 4 2
Aynapuram channel	.....	.....	.....	670 3 1	.....	1,294 5 3	.....	2,174 13 11	.....	1,294 5 3
4. Drainage	.....	.....	.....	.....	.....	.....	10,428 0 9	27,901 4 11	.....	.....
Western Delta ...	.....	.....	468 11 7	10,266 8 2	.....	.....	7,689 11 1	54,587 1 7	21,962 0 0	4,790 0 0
1. Main Canal ...	104 7 9	192 15 9	3,250 4 8	1,203 4 1	.....	467 9 10	32,438 7 1	53,329 7 3	104 7 9	2,033 6 6
2. Ellore do.	9,686 15 9	103 4 11	.....	.....	3,128 2 8	2,985 14 10	6,54,647 4 11	1,27,238 3 6	72,664 14 8	21,823 10 0
Do. Branch channel viz., Junction Canal	.....	.....	4,991 0 10	5,305 0 3						
3. Wyraru	.....	.....	... .		25,153 13 11	640 13 5	29,201 6 2	2,170 2 10	25,153 13 11	640 13 5
Undi Canal ...	111 3 5	272 3 9	.. ..	2,170 2 10	1 10 0	.....	1,34,837 7 6	42,716 6 1	7,455 8 0	24,545 10 0
Chinacapavarum channel	.....	555 4 10	7,897 12 5	.....	.....	1,528 10 9	24,192 1 3	12,140 4 2	2,360 12 11	7,778 8 7
Rudroycodu ...	.....	.....	.....	363 2 8	722 8 6	259 9 4	.....	2,048 15 3	925 4 5	1,025 11 4
4. Attily Canal ...	.....	.....	.....	.....	.....	.....	77,362 8 1	1,262 11 11	10 8 0	1,536 13 1
5. Narsapur Canal ...	.....	204 8 6	.....	769 15 8	.....	868 8 2	23,202 6 5	22,105 15 10	2,481 14 10	15,913 11 9
Bhapiah Canal includes the Velpur channel which is to be taken off from Gostanuddy ...	12 0 0	1,565 11 9	15,859 9 4	69 11 5	482 3 2	1,315 4 4	3,33,759 7 0	67,939 4 9	9,314 2 2	46,838 7 5
			31,426 11 9	2,909 10 11						
Rapaka channel ...	.....	47 5 2	.....	.....	.....	927 15 2	6,684 0 0	6,472 0 9	1,183 10 4	6,717 6 3
Chinchinada ...	.....	.....	.....	.....	.....	667 0 3	6,495 0 0	5,517 6 11	132 5 11	1,618 5 8
Jinnur	.....	.....	.....	814 14 1	.....	.....	9,949 0 0	4,576 0 1	.....	3,066 14 1
Gostanuddy ...	.....	296 4 7	.....	2,463 1 9	970 12 5	260 1 3	275 6 7	5,162 10 3	970 12 5	578 15 10
Mukkamala ...	.....	50 4 3	750 12 11	862 11 6	363 9 9	528 8 7	8,227 11 7	1,383 5 9	8,865 9 1	7,319 1 0
6. Bank Canal ...	.....	.....	.....	.....	.....	.....	.....	878 5 0	144 3 0	1,487 14 0
7. Drainage... ...	.....	23 1 6	.....	.....	450 6 0	1,737 4 7	12,078 0 0	20,746 7 6	3,854 1 11	17,842 4 11
	.....	.....	....	....	.....	.....	1,82,683 5 3	63,016 7 10	.....	.....
Total...	10,671 4 2	27,446 15 0	28,373 6 5	191 13 1 1,157 1 9	37,677 0 3	29,058 3 3	48,80,469 0 10	40,61,970 14 3	3,39,274 3 5	3,78,008 6 4
			2,20,645 13 1	1,65,846 12 1						

Dowlaishweram,
27th October 1873.

(Signed) J. MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

Statement showing the outlay incurred on the Kistna Delta Works from the year 1852 to 1872-73.

	Total Expenditure from 1852 to 1866-67, as per Statement embodied in G. O., No. 193, dated 21st January 1869.				Expenditure in 1867-68.		Expenditure in 1868-69.				Expenditure in 1869-70.			
	Main Channels.		Distribution Channels.		Main Channels.		Main Channels.		Distribution Channels.		Main Channels.		Distribution Channels.	
	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kistna anicut	7,40,588	1,16,454	...	...	4,574	10,462	...	103	11,376	...	...	59	10,166	...	...
Boats	24,012	628	...	...	...	...	...	...	...	...	...	...	...	...	...
Machinery	6,135	520	...	...	...	...	...	...	...	...	...	...	...	...	...
Compensation for land	7,812	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Irrigation and Navigation Conservancy Establishment ...	...	1,93,750	...	...	...	24,153	...	23,532	...	...	...	23,640	...	...	...
Eastern Delta.															
1. Ellore canal	1,77,923	47,213	1,827	...	1,935	4,311	...	982	4,420	...	...	414	4,548	...	...
Budemair branch	14,353	333	9,909	8,093	...	...	71	389	...	...	378	...	...	...	737
2. Ryves' channel	54,529	1,965	5,145	1,506	1,935	14	...	...	39,962	...	...	35,390	2,015	...	...
Gudewada branch	3,901	...	5,575	3,420	...	...	...	...	5,371	...	...	...	...	259	...
3. Masulipatam canal	4,85,260	1,78,955	13,423	5,754	26,560	7,014	...	...	12,712	9,404	458	1,026	1,537	...	470
Western side channel	282	...	8,802	4,990	14,502	...	563	...	17,447	...	14	346	3,697	12,753	...
4. Pullairoo	17,516	16,904	15,251	79,392	21,699	36	...	...	24,686	...	295	...	6,734	...	...
East side channel	...	...	16,012	3,721	12,845	6	368	...	11,181	...	822	...	19,004	2,847	280
Butler Codu	6,474	1,650	2,479	20,273	...	...	...	...	24	...	...	...	3,718	15	...
Buntamilly branch	45,800	2,869	...	6,542	2,332	310	118	1,099	89	228	233	...	...	...	1,258
Polrauze Codu	22,910	2,025	3,173	4,628	2,720	...	...	533	...	...	...	...	...	293	863
Caldindy branch	1,882	1,316	...	18,855	...	201	4,098	1,384	...	1,366	610	1,255	640	2,870	1,772	1,921
5. Bank channel	44,965	...	...	...	...	...	...	554	...	1,761	...	87	...	352	176	1,608
6. River embankment	32,233	56,448	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7. Drainage	11,137	13,627	1,281	4,262	...	2,254	...	...	...	...	...	...	...	46	...	...
							...	...	2,477	1,460	...	...	1,222	2,212	...	...
							...	...	536	734	...	...	...		...	...
Western Delta.															
1. Nizampatam canal	4,83,593	71,237	655	14	5,467	2,573	766	232	5,052	3,302	283	1,349	3,171	6,849	1,303	644
East side channel	4,346	1,654	25,277	21,654	9,549	46	...	423	10,798	...	...	...	5,513	...	369	1,314
West Side do.	4,346	1,943	10,998	10,815	9,549	...	...	1,071	10,798	...	...	...	5,513	...	622	848
2. Bank channel	1,30,419	18,053	11,343	12,190	20,639	11	...	209	13,995	...	...	275	19,913	...	200	3,251
Vellatur branch	635	2,977	7,001	5,258	...	...	...	305	...	...	...	...	...	...	...	1,174
Isakapully channel	376	986	604	2,946	...	276	...	...	...	...	...	...	...	...	...	...
3. Cammamoor do.	1,57,612	16,656	33,090	88,334	73,002	...	1,189	3,864	50,394	2,501	1,401	5,664	27,617	1,326	1,746	5,751
Toongabadra do.	2,953	427	15,308	21,154	...	195	...	603	...	...	...	886	...	...	...	429
4. Southern High level channel ...	29,955	73	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5. River embankment	1,398	31,762	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6. Drainage	27,532	1,569	7,166	37	10,509	1,329	...	...	...	...	...	...	...	...	...	...
							...	...	4,822	756	...	...	876	2,552	...	...
Total ...	25,40,877	7,81,994	1,94,319	3,23,838	2,17,817	53,191	7,173	10,666	2,11,429	60,840	4,116	11,266	1,35,018	72,484	6,727	21,088

Statement showing the outlay incurred on the Kistna

Delta Works from the year 1852 *to* 1872-73.—(Concluded).

	Expenditure in 1870-71.				Expenditure in 1871-72.		Expenditure in 1872-73.				Total Expenditure from 1852 to 1872-73.			
	Main Channels.		Distribution Channels.		Main Channels.		Main Channels.		Distribution Channels.		Main Channels.		Distribution Channels.	
	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.	Original Works.	Repairs.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kistna anicut	924	7,542	...	...	1,154	9,828	352	11,611	...	...	7,47,754	1,77,439	...	...
Boats	1,550	...	...	...	...	...	...	...	...	...	25,362	628	...	...
Machinery	...	...	...	...	...	...	...	...	...	...	6,135	520	...	...
Compensation for land	...	...	...	...	...	...	...	...	...	...	7,812	...	...	...
Irrigation and Navigation Conservancy Establishment ...	...	24,348	...	...	...	3,580	...	24,466	...	...	...	3,37,469	...	...
Eastern Delta.														
1. Ellore canal	3,316	7,009	...	70	7,805	11,076	9,274	21,368	...	...	2,01,649	99,945	1,827	70
Budemair branch	...	..	104	41	...	768	...	...	...	...	14,353	333	10,084	9,638
2. Ryves' channel	37,882	144	...	108	41,905	...	54,595	288	131	...	2,66,198	5,194	5,276	1,614
Gudewada branch	...	...	...	5	...	14,297	...	...	...	...	10,809	...	6,292	4,451
3. Masulipatam canal	8,802	9,987	200	287	12,582	...	11,103	14,084	...	...	5,60,716	2,46,494	14,200	7,161
Western side channel	7,173	...	...	...	4,003	33	...	...	...	...	50,141	...	9,097	4,990
4. Pullairoo	21,136	518	27	919	13,631	500	3,152	1,189	...	131	1,20,824	21,527	17,284	81,606
East side channel	562	481	...	...	...	75	...	476	...	...	28,306	1,478	16,012	3,721
Butler Codu	...	640	...	774	...	495	...	41	...	...	6,498	2,406	2,830	23,404
Buntamilly branch	...	47	...	...	...	500	...	435	...	220	48,221	4,677	...	8,158
Polrauze Codu	...	68	616	653	...	...	...	648	...	354	26,270	7,477	10,269	10,495
Caldindy branch	...	...	...	54	...	1,018	300	...	...	...	1,882	3,630	176	21,157
5. Bank channel	...	...	...	...	...	71	...	...	...	...	41,965	...	...	...
6. River embankment	...	...	...	...	...	...	...	...	...	...	35,932	60,093	...	...
7. Drainage	187	974	...	...	...	...	...	1,121	...	...	11,860	19,908	1,281	4,262
								36	...	...				
Western Delta.														
1. Nizampatam canal	3,090	1,415	342	662	1,840	2,576	170	1,438	2,347	6,094	27	1,485	5,04,560	94,046	3,546	5,824
East side channel	755	...	...	2,038	73	491	275	1,170	10	66	297	1,417	31,044	2,257	26,218	28,016
West side do.	755	...	...	657	...	652	...	492	...	173	...	461	30,961	2,768	11,620	14,344
2. Bank channel	2,499	1,536	55	2,673	1,832	993	523	193	1,619	383	702	378	1,90,916	20,975	12,823	19,169
Vellatur branch	...	617	267	4,829	...	398	389	1,104	...	...	...	730	635	3,992	7,657	13,400
Isakapully channel	...	...	...	...	...	...	...	138	...	...	...	702	376	1,262	604	3,786
3. Commamoor do.	3,161	3,907	738	2,768	2,005	1,371	273	6,805	2,293	3,330	206	9,133	3,16,084	29,091	38,643	1,22,319
Tocngabaora do.	...	163	2,976	1,005	...	...	19,531	634	...	...	8,690	206	2,953	785	46,505	24,973
4. Southern High level channel ...	...	...	...	...	...	...	...	...	...	...	...	...	29,955	73	...	...
5. River embankment	...	...	...	...	...	...	...	...	...	...	...	...	1,398	31,762	...	...
6. Drainage	676	2,484	...	...	...	3,108	...	...	...	...	...	...	41,892	19,370	7,166	37
							...	366	7,572	...	...	...				
Total ...	92,268	61,880	5,325	17,542	86,941	71,829	21,697	12,922	85,111	93,381	10,053	15,273	33,69,461	11,95,599	2,49,410	4,12,595

Camp at Dowlashweram,
27th October 1873.

(Signed) J. MULLINS, Lieut-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 388. From T. MOSS, Esq., Officiating Controller of Public Works Accounts, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Fort St. George, 12th November 1873, No. 5,206.

In returning the two Statements received with your No. 754-E., dated 27th October 1872, I have the honour to state that this office has no means of verifying the figures entered therein.

2 Original Statements.
1 Comparative Statement.
2 Copies of letters.

2. This office has lately prepared and submitted to the Accountant-General, Public Works Department, approximate Capital Accounts for the works in the Godavery and Kistna Deltas to the end of 1871-72, based upon the best available data; and this office, to the best of its ability, records distinctly the expenditure supposed to be debitable to these works; but the information possessed by this office as to the works comprised in the Godavery and Kistna Delta Projects is so imperfect that no reliance can be placed in statements prepared by it purporting to represent the expenditure on those projects, and it would be quite useless to attempt to reconcile the differences between statements prepared by this Office and statements prepared, probably on very different data, by yourself or by District Engineers.

3. With regard to the distinction between main channels and distribution channels, I must point out that this office has *no* information as to what channels are held to fall under one and what under the other head; also this office has no information as to the geographical connection between the different channels, in the absence of which it would—setting aside other difficulties—be impossible to verify the details of the statements prepared by you.

4. I append, for your information, a statement showing in comparison the figures given by you and the figures adopted by this office as the total expenditure on the Godavery and Kistna Delta projects during different periods. Correspondence with District Engineers with a view to at once reconciling these differences would I am sure be quite useless. District Engineers have, as you are aware, been asked to furnish information such as that referred to in paragraph 3 of this letter, to facilitate the preparation of Capital and Revenue Accounts; and the completion of their accounts for recent years will alone, as it seems to me, afford the means of verifying the statements prepared by you.

5. I take this opportunity of forwarding, for your information, copies of the letters marginally noted, and I must repeat that, in my opinion, statements such as those which accompanied your letter under reply should either be prepared entirely in this office, or this office should not be asked to have anything to do with them. The verification of such statements, when possible, gives more trouble than their preparation *de novo*: in the present case such verification is impossible; at present also neither this office nor, I believe, any other office has the means of preparing such statements *with accuracy*.

To Secretary to Government, Public Works Department, dated 18th Oct. 1873, No. 4,587.
To Accountant-General, Public Works Department, dated 31st October 1873, No. 4,881.

Comparative Statement showing the expenditure on the Godavery and Kistna Delta Works as per Chief Engineer's Statements and as per Statements prepared in Controller's Office.

Years.	GODAVERY.						KISTNA.					
	Chief Engineer's figures.			Controllee's figures.			Chief Engineer's figures.			Controllee's figures.		
	Original Works.	Repairs.	Total.	Original Works.	Repairs.	Total.	Original Works.	Repairs.	Total.	Original Works.	Repairs.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Expenditure to end of 1870-71 ...	47,99,623	40,64,745	88,64,368	47,20,622	Not known.	.....	34,15,069	14,14,789	48,29,858	33,84,922	Not known.	.....
Do. during 1871-72	1,61,788	1,80,329	3,42,117	1,62,637	1,59,805	3,22,440	1,08,638	84,751	1,93,389	1,08,383	74,785	1,83,168
Do. do. 1872-73...	2,58,323	1,94,905	4,53,228	2,75,080	1,77,583	4,52,663	95,164	1,08,654	2,03,818	1,12,112	1,00,461	2,12,573

(Signed) T. MOSS,
Offg. Controller of Public Works Accounts.

Fort St. George,
12th November 1873.

From T. MOSS, Esq., Officiating Controller of Public Works Accounts, to Colonel G. W. WALKER, R.E, Secretary to Government, Public Works Department, dated Madras, 18th October 1873, No. 4,587.

With reference to my No. 3,371, of the 30th August last, I have the honour to forward the Statement of Remunerative Works for the year 1871-72.

2. The statement has been compiled from returns furnished by District Engineers, and corrections have been applied by this office where possible. The figures in black are throughout those returned by District Engineers; the figures in red, which are those adopted by this office, and based upon the approximate Capital Accounts already submitted to the Accountant-General, Public Works Department, which were framed from the best available data. It would be useless to attempt an explanation of the differences between the figures adopted by this office and those furnished by District Engineers.

3. As soon as something has been done in the way of grouping the Irrigation Works in the Presidency, this office will be able to make a commencement with the final Capital and Revenue Accounts, and when Capital Accounts have been prepared for the different works included in the Statement of Remunerative Works it will of course be the duty of this office to furnish annually the information required. In the meantime I would suggest that the Statement of Remunerative Works should be finally prepared by District Engineers, and by them submitted direct to Government, or else that the preparation of the statement be left *entirely to this office*. To call upon this office to revise the statements prepared by Districts Engineers is virtually to require the statement to be prepared twice over, and each time upon different data.

From T. MOSS, Esq., Officiating Controller of Public Works Accounts, Madras, to the Accountant-General, Public Works Department, Simla, dated Madras, 31st October 1873, No. 4,881.

In reply to your No. 299-I, dated 21st October 1873, I have the honour to state that my predecessor reported correctly that this office has no information as to what channels are and what are not considered Rajbuhas for the purpose of the statement of outlay on Rajbuhas furnished by the Local Government to the Government of India.

2. It is true that channels are entered in the accounts, but there being no information of the particular canals from which they issue and no maps in existence to refer to, this office is at present unable to apply the check required. This office knew nothing of the requirements of the Government of India until receipt of the above mentioned statement for check. In all such cases it would be best to call on this office for complete information, leaving it to the office to obtain from Executive Officers such particulars as are not on record. Had this course been followed in the first instance, this office would ere this have ascertained what particular channels are regarded as distributaries or Rajbuhas, and would have been in a position to report the expenditure incurred on them. To check statements of the kind prepared in other offices, on probably different data, is far more troublesome, and takes up more time than the entire preparation of such statements in this office.

3. Lieutenant Christie will soon be able to explain to you fully, in person, the difficulties with which this office has to contend.

No. 389.

Order thereon, 20th February 1874, No. 418.

IRRIGATION, No. 25.

Account.

Ordered that these statements be printed and transmitted for the information of the Government of India.

2. It appears to the Government somewhat surprising that the Controller is not in a position to show with complete accuracy the expenditure on original works and repairs respectively in the two deltas, in each year; but as the Irriga-

Proceedings of the Madras Government, Public Works Department, 20th February 1874.

n Account Department is in a transition state, and no more reliable returns are thcoming, these statements may with advantage be recorded, pending the mpletion of the Capital and Revenue Accounts.

(True Extract.)

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

No. 390.

(Docket No. 419, dated 20th February 1874)

Copy of the above forwarded to the Government of India.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

Exd. S. T. Austin.

Spare Copies

№ 934 A

Note by the Chief Engineer for Irrigation

Encl. 6

The accompanying statements of expenditure on the Godavery and Kistna Delta works, in continuation of those printed in G.O. of the 13th January 1869 № 93, and № 193 of the 21st Idem are submitted for the information of Government. The statements have been prepared by the District Engineers and before transmitting them to be placed on record they were sent to the Controller of Public Works Accounts for verification, but that officer, it will be seen by the letter as per margin, is unable to verify them, and in a statement of totals which forms an enclosure to his letter he shows the discrepancies between the District Engineers accounts and those of his

№ 5206-
12th Novr-73

office

office

2. It is not understood how the differences have arisen, but as the Controller is of opinion that neither his nor any other office can furnish accurate accounts, though this is not easily to be comprehended, seeing that, although mistakes in the distribution of expenditure might arise, the total under original works and repairs should be ascertainable with accuracy, it seems to be advisable that the statements should be printed, as apparently it will be an indefinite time before anything more complete or reliable will be forthcoming, and at present the District Engineers' statements are likely to be more correct than any which the Controller, with the imperfect information at his disposal can prepare.

Fort St George
27th December 1878.

Lieutenant Colonel
Chief Engineer for Irrigation

To
The Secretary to Govt
P. W. D.

No 418 P.D.

Proc: of the Bengal Govt

Rec'd 18th Jan 74

Ans: 24th Jan 74

P.D. 1874 Department
Proc: of Govt for Educ
No 82.
From
The Chief Sec
for Irrigation
To The Secretary
to Govt N.W.P. & O.
No 934 A.
Dated 27th Dec 73.
Recd 8th Jan 74.
Encls 6

Note on the
Estimate of Ex-
penditure on the
Godavery Narrow
Delta works up
to 1872-73.

No 387
Cir 10th Aug/74

No 418-419-20 Feby/74

original works & repairs respectively in the two Deltas, in each year; but, as the Irrigation account Department is in a transition state, and no more reliable returns are forthcoming, these statements may with advantage be recorded pending the completion of the Capital & Revenue Account.

W. 5/1/74

H. E. No. ~~2~~ 419

Copy of the above forwarded to the Govt of India -

Desp 27/2/74 with 255-cf.

Genl

19 February/74

40

To The Chief Engr for Irrigation
12 — Dist Engr Godavery
Northern
5 — Controller Prods

Desp written 27/2/74.

Cl. 82

Govt. of India.

PUBLIC WORKS.

To The Chief Engr for Irrigation & The Secretary to the Govt of India

Dated

Read.

Encl

G. O., 20th July 1874 No 418-419.

Nos. 387-388 & 389 1874

Godavery & Kistna Delta Works. Passing orders on Note by the Chief Engr for Irrigation submitting statements of expenditure on the Works up to 1872/73.

Forward copy of Note by the Chief Engr for Irrigation submitting statements of expenditure on the Godavery and Kistna Delta works up to 1873