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MADRAS RECORD OFFICE.

Government of Madras.

Public Works DEPARTMENT.

G.O. No.	1506	Press Mis.
Dated	2-6-	1871.

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
2nd June 1871.*

Read the following papers:—

- | | |
|---------|--|
| No. 35. | From the Superintending Engineer, 1st Division.
(Here enter No.—, dated 22nd April 1871.) |
| No. 36. | From do. do., 2nd do.
(Here enter No.—, dated 15th April 1871.) |
| No. 37. | From do. do., 3rd do.
(Here enter No.—, dated 27th April 1871.) |
| No. 38. | From do. do., 4th do.
(Here enter No. 279, dated 26th April 1871.) |
| No. 39. | From do. do., 5th do.
(Here enter No. 4, dated 13th April 1871.) |
| No. 40. | From do. do., 6th do.
(Here enter No.—, dated 8th May 1871.) |
| No. 41. | From do. do., 8th do.
(Here enter No.—, dated 24th April 1871.) |

Statement showing the progress of Agricultural Works under execution from the Extraordinary Grant for the quarter ended 31st March 1871.

Item of Budget.	District.	Name of Work.	Amount of estimate.	Number and date of sanction.	Expenditure up to end of preceding official year.	Current year's grant.	EXPENDITURE IN CURRENT YEAR.		Total expenditure.	Succinct account showing the state to which the works have been advanced up to date.
							In the quarter.	Up to the end of present quarter.		
Paragraph 12 of G. O. No. 1,259, dated 16th May 1870.	Godavery.	Improvements to Akeed canal.	Rs. 1,03,234	G. O. No. 1,773, dated 16th June 1863; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	Rs. 98,964	...	Rs. ...	Rs. 447	Rs. 99,411	Completed.
76	Do.	Re-building side-wall of Gunnaran aqueduct.	21,429	G. O. No. 3,575, dated 4th Dec. 1863; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	14,035	5,000	...	23	14,058	Completed with the exception of three coils of plastering.
G. O. No. 1,259, dated 16th May 1870.	Do.	Widening and improving Samulcottah canal.	1,31,200	G. O. No. 2,854, dated 28th Nov. 1863; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	1,10,953	20,247	...	20,730	1,31,683	Thirty miles earth-work done, and forty-one bridges and culverts built; canal work completed.
77 and G. O. No. 1,259, dated 16th May 1870.	Do.	Extension of irrigation from Ellore canal.	...	Government of India's No. 185-A. I. of 1869; G. O. No. 2,927, dated 6th Sept. 1869.	56,531	40,000	3,449	4,626	61,157	See accompanying statement.
78 and G. O. No. 1,259, dated 16th May 1870.	Do.	Extension of irrigation in Western Delta.	...	Do. do. do.	63,760	54,753	9,121	22,199	85,953	
79	Do.	Do. do. in Eastern Delta.	9,45,400	Do. do. do. No. 103-I., dated 27th March 1871.	...	50,000	...	...	...	...
80 and 81 superseded by special sanction of all the major masonry works.	Do.	Constructing locks and weirs on the Cocanada canal, Eastern Delta.	1,19,680	G. O. No. 1,183, dated 5th May 1870; Govt. of India's No. 152-I., dated 2nd April 1870.	10,123	...	10,823	19,165	29,293	Thosipooly lock concrete ... 0-97 Rough stone ... 0-27 Cut-stone flooring ... 0-27 Excavating foundation ... 0-95 Chintapully lock, earth-work 3,178 cubic yards. Improving Cocanada canal, 2,229; cubic yards.
G. O. No. 2,450, dated 15th October 1870.	Do.	Canal from Ellore high level canal to Wyairu.	70,460	G. O. No. 498, dated 18th Feb. 1871.	...	15,000	14,016	14,517	14,517	Arulah head-slucice, low level channel head-slucice, drop and bridge at Moodapuram pulled down, about 1/2 earth-work done.
82	Kistna	Enlargement, extension, and improvement of the channels in the Masulipatnam section of the Kistna delta.	1,83,100	G. O. No. 80, dated 7th Jan. 1870; Govt. of India's Register No. 7-A. I. of 1868-69.	98,859	27,077	13,237	25,466	1,24,325	Masulipatnam canal, from 1st to 4th mile Masulipatnam canal, from 4 to 12 1/2 miles Pulluru, from Kunkopaud to head of Pelraza Koda Masonry ... 0-33 ... 0-55 ... 0-73 ... 1-00

Proceedings of the Madras Government, Public Works Department, 2nd June 1871.

Item of Budget.	District.	Name of Work.	Amount of estimate.	Number and date of sanction.	Expenditure up to end of preceding official year.	Current year's grant.	EXPENDITURE IN CURRENT YEAR.		Total expenditure.	Succinct account showing the state to which the works have been advanced up to date.
							In the quarter.	Up to the end of present quarter.		
83	Kistna	Irrigation channel on the west side of Masulipatnam canal from 13th mile to Akumuru.	49,860	G. O. No. 3,342, dated 19th Oct. 1866; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	33,635	14,500	3,023	7,152	45,807	Earth-work ... 0-82 Head-slucice ... 0-84
84	Do.	Widening the head of Masulipatnam canal for 1,000 yards from the ancient to the head of Ellore branch.	20,080	G. O. No. 3,395, dated 24th Oct. 1866; Govt. of India's Register No. 7-A. I., of 1868-69.	13,324	8,500	3,341	5,811	19,135	Earth-work ... 0-32
85	Do.	Improvements to the lower portion of Pullair.	1,01,050	G. O. No. 3,581, dated 27th Nov. 1865; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	1,03,412	2,330	...	641	1,04,053	Earth-work ... 1-00 Masonry ... 0-95
86	Do.	Side channel from Doogerralla to Nizampatam.	56,740	G. O. No. 80, dated 7th Jan. 1870; Govt. of India's Register Nos. 7-A. I. and 8-I. of 1868-69.	51,720	1,519	...	1,310	53,230	Earth-work ... 1-00 Masonry ... 1-00 Minor sluices ... 0-44
87	Do.	Channel from Ravendrapaud to tide water or western bank channel.	1,45,450	G. O. No. 1,405, dated 12th Aug. 1856; G. O. No. 8,232, dated 7th Nov. 1863; Govt. of India's Register, No. 7-A. I. of 1868-69.	...	...	...	...	...	...
87	Do.	Sloping down the banks of the main canal from the southern flank of the ancient, and enlarging the head of main canal from Soetanagar to Doogerralla.	2,76,400	G. O. No. 2,358, dated 15th Dec. 1865; G. O. No. 2,382, dated 24th Dec. 1861; G. O. No. 1,376, dated 19th June 1863; Govt. of India's Register No. 7-A. I. of 1868-69.	2,06,125	15,000	2,606	7,823	2,13,948	Earth-work ... 0-87
88	Do.	Enlargement and improvement of Ryes' channel and its branches, and construction of the masonry works.	4,14,193	G. O. No. 80, dated 7th Jan. 1870; Govt. of India's Register No. 7-A. I. of 1868-69.	80,864	45,000	15,477	87,865	1,18,729	Head-slucice and bridge ... 0-99 Head of channel ... 0-40 Enlarging and improving Ryes' channel ... 0-36 Do. do. branch channel ... 0-99 Masonry ... 0-26 Three accommodation bridges on branch channels ... 0-80 Masonry ... 0-80
88	Do.	Extension of Commamore channel and construction of the necessary masonry works.	1,95,770	G. O. No. 3,699, dated 15th Dec. 1863; G. O. No. 1,310, dated 1st May 1867; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	1,74,089	3,035	...	1,708	1,75,797	Earth-work ... 0-74 Revetment ... 0-60 Masonry ... 0-74 Earth-work ... 1-0
88	Do.	Drainage channel to dispose of four drainages which at present run into the Velanar channel and restrict its means of irrigation.	10,460	G. O. No. 2,590, dated 17th Aug. 1866; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	9,412	2,217	...	813	10,230	Rapid at Doogerralla.

Statement showing the progress of Agricultural Works under execution from the Extraordinary Grant, etc.—(Concluded.)

Item of Budget.	District.	Name of Work.	Amount of estimate.	Number and date of sanction.	Expenditure up to end of preceding official year.	Current year's grant.	EXPENDITURE IN CURRENT YEAR.		Total expenditure.	Succinct account showing the state to which the works have been advanced up to date.
							In the quarter.	Up to the end of present quarter.		
89	Kistna ...	Excavating an irrigation channel on the east side of Masikipatam canal from Pullairu at Pammurra to Akumuru. Improvements to the Survapully channel.	Rs. 13,610	G. O., No. 3,342, dated 19th Oct. 1866; Govt. of India's No. 132-A. I., dated 1st Sept. 1868.	Rs. 13,753	Rs. 600	Rs. 561	Rs. 561	Rs. 14,313	Earth-work ... 1-0 Masonry ... 0-95
94	Nellore ...	Improvements to the Survapully channel.	4,20,000	G. O., No. 1,844, dated 20th June 1867; Govt. of India's Register No. 7-A. I. of 1868-69.	1,88,822	60,000	17,819	60,080	2,55,803	Main Reservoir. Earth-work ... Revolvement ... Turbing ... Masonry works ... Channels south of Pennaru, Earth-work ... Cutting laterite and gravel ... Masonry works ... Main canal ... Road-slucie in progress and a large quantity of materials prepared. All works connected with this project have been completed, with the exception of the minor masonry works, amounting to Rupees 9,550, which have not yet been commenced.
101	South Arcot	Ancient across the Vellaur river at Pelandoral.	1,08,235	G. O., No. 601, dated 3rd Mar. 1870; Govt. of India's No. 78-I., dated 9th Feb. 1870.	...	...	...	...	...	Conveyance of rough stone from Trincomopoly in progress; all other works completed with the exception of the front retaining wall which is not to be carried out.
102	Tanjore ...	Regulating works for the improvement of the river Cauvery. Deduct amount to be charged to Local Funds, as per G. O., No. 118, dated 15th January 1869.	1,37,790	G. O., No. 775, dated 14th March 1867; G. O., No. 270, dated 24th Jan. 1868; G. O., No. 118, dated 15th Jan. 1869; Govt. of India's Register No. 7-A. I. of 1868-69.	87,439	10,000	10,623	80,831	86,834	Foundations in progress.
100	Do. ...	Completing a front and rear retaining wall and apron along the south branch of the Lower Coleroon anicut. Regulators for the principal branches of the Vennaur.	84,300	G. O., No. 2,748, dated 21st Aug. 1869; Govt. of India's Register No. 8-E. of 1869-70.	51,698	4,000	1,290	3,324	55,020	The expenditure is in this quarter only the cost of office and work establishment and a few sundries, as the work is stopped owing to the committal of the contractor.
104	Tinnevely.	Streetsvignatum anicut ...	1,03,490 70,400	G. O., No. 1,144, dated 29th April 1870; G. O., No. 2,472, dated 29th August 1870; Govt. of India's No. 325-I., dated 9th August 1870. G. O., No. 3,365, dated 26th Oct. 1868; Govt. of India's No. 53-I., dated 11th Feb. 1869.	91	1,00,000	16,932	23,079	28,170	
			8,31,600		4,60,534	3,50,000	72,143	5,54,808		
					...	...	22,171			

Proceedings of the Madras Government, Public Works Department,
2nd June 1871.

Statement showing the nature and progress of all preliminary surveys and inquiries under prosecution in connection with new Irrigation projects intended to be carried out from Loan Funds.

District.	Name of Project.	Particulars of progress of investigations.
Ganjam ...	Rooshkoolia irrigation and navigation.	Project under revision.
Do. ...	Vamsadara river or Chicacole project.	Outline of project has been received by Superintending Engineer.
Godavery ...	Central delta project	Project under revision.
Do. ...	Western delta project	Estimates submitted to Government of India with letter No. 769, dated 14th March 1871.
Do. ...	Unnammalunka reservoir	Surveys in progress.
Kistna ...	Eastern delta	Survey of Kykalur Division completed. Plans and estimates under preparation. All branch channels under west side channel have been surveyed and levelled. Considerable difficulty experienced in getting through the swamps and jungle which abound in the portion of the delta in the neighbourhood of Bantamully. Fair progress has, however, been made, and there seems little doubt that the whole of this part will be surveyed and levelled by the end of next quarter.
Do. ...	Western delta, Commamore channel project.	260 Miles surveyed and levelled.
Do. ...	Western bank channel project and drainage works...	
Tinnevely	Numbiar river irrigation	The principal work done this quarter has been the taking of some levels and surveys on the hills for the repair of an old channel, which the villagers are to repair at their own expense. A plan with drawings has been made for the repair of one of the principal anicuts on the Numbiar.
Do. ...	The improvement and extension of irrigation under the Tambrapoornu and its tributaries.	A report on this scheme has been received by the Chief Engineer for Irrigation. Executive Engineer Mr. Rundall has taken charge of the Irrigation Range, and the arrangements directed by Government are being carried out.
Madura ...	Perryaur project	This project is still under investigation.

Proceedings of the Madras Government, Public Works Department.
2nd June 1871.

No. 42.

ORDER THEREON, 2nd June 1871, No. 1,506.

IRRIGATION, No. 2.

ORDERED that the above statements
be tabulated and forwarded to the Gov-
ernment of India.

(True Extract.)

(Signed) J. G. RYVES, Captain, R.E.,

Ag. Joint-Secretary to Government.

Ed. E. C. Shunker.

Abstract of Expenditure on the Western Delta Completion Project Works up to March 1871.

Names of Canals.	Amount of Estimate.	Particulars of work.	Estimate.	Expenditure up to end of March 1871.	Remarks.
Mid Level Channel ...	RS. 64,180	Earthwork ... Land ... Head-slucice... 7 Bridges ... 7 Drops ... 3 Escapes ... Village sluices ... Metalled crossings ...	RS. 23,800 8,440 1,480 12,110 4,380 7,970 5,040 960	Rs. A. P.	Some work still to be done beyond the 13th mile. Completed; since removed. New sluice provided in Junction Canal. Four built to springing; three completed. Four completed; three not commenced. One materials collected, one finished with the excep- tion of trough shutters; one not commenced. Sluice at 4 mile completed. Sluice at Darsipuram in progress. Not commenced.
Low Level Channel ...	19,290	Total Mid Level Channel... Earthwork ... Land ... Head-slucice... 3 Bridges ... 3 Drops ... 1 Escape ... 6 Village sluices ... 6 Metalled crossing...	64,180 6,150 2,760 1,140 3,090 1,510 1,000 2,520 1,120	32,440 6 4	Completed as far as Duva road. Completed; since removed. New sluice provided in Junction Canal. One built to springing; since removed; two in progress. Not commenced. In progress. Not commenced. Do.
Ellore Main Canal ...	55,000	Total Low Level Channel... Earthwork ... Masonry works. 26 Sluices ... Minor Channels ... 20 Dams ...	19,290 31,580 12,590 7,560 3,270	6,246 13 9 5,764 14 10	Ten sluices built and channels from sluices partly done.

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Shape 6/6/71

Abstract of Expenditure on the Western Delta Completion Project Works up to March 1871.—(Concluded.)

Names of Canals.	Amount of Estimate.	Particulars of works.	Estimate.	Expenditure up to end of March 1871.	Remarks.
Ellore Main Canal.— (Concluded.)	RS. ...	Bungalow at Prattipad, etc. ... Materials used on above works ... Do. at site ... Paid for stone supplied by contractor.	RS.	RS. A. P 1,123 14 11 5,370 11 5 2,821 12 8 565 6 1	• This sum is debitable to the various masonry works noted above. To be charged off as used up. do.
Pandikodu Drain ...	59,530	Total Main Canal... Pandikodu and drain below aqueduct at Peremella. Embanking channel from head-sluiice and drain by side of Chinacapa-varam Channel. Drain from Bodapad ... Sundries on earthwork ... Aqueduct at Peremella ... 1 Regulator, 1 sluice, and 1 bridge. Compensation for land ...	55,000 25,336 8,346 4,722 1,696 11,560 2,485 5,385	15,646 11 11 15,766 2 1 8,911 5 0 4,421 7 1 10,758 8 10 2,557 15 4	Portion of drain completed. Pandikodu work in progress. Completed. Do. Do. Do.
Nursapur Canal ...	2,09,600	Total Pandikodu drain... 2 Weirs and locks ... 1 Sluice ... 2 Channels and sluices ... 1 Channel ... Other works not commenced	59,530 54,740 150 3,303 151,407	42,415 6 4 33,353 0 6 165 3 6 2,557 5 4	Weirs completed and locks in progress. Completed. Three channels and two sluices completed, and materials being collected for one sluice.
Bank Canal ...	1,29,460	Total Nursapur Canal... Drainage tunnel under Deva Channel Other works not commenced ... Total Bank Canal...	209,600 750 1,28,710 1,29,460	36,075 9 4 821 0 3 821 0 3	Completed.

Venkiah and Weyaru Irrigation.	11,960	Chilacumpad Escape in Venkiah Canal. Other works not commenced ...	1,500 10,460 11,960	1,566 7 5 1,566 7 5	Completed.
Attili Canal ...	78,800	Lock and weir at Godicherla ... Two under tunnels ... Manufacture of bricks at Juttiga and Penumantra. Other works not commenced	20,320 1,500 56,980	1,527 1 8 1,219 1 3 279 8 3	Stone partly collected at site and angle irons paid for. One completed and one nearly completed. Bricks at Juttiga will be required at Penumantra for lock.
Drain west of Nursapur Canal.	18,320	Total of Attili Canal... Earthwork ... Two bridges ... Other works not commenced	78,800 14,300 2,370 1,650	3,025 11 2 8,199 14 7	118,582 Cubic yards of work done up to date. The cross bund was put in order that the tide water from the Vempa salt creek may not get into the drain; that the excavation of the drain to proper section might be carried out. The tunnel on this drain under the Viravasaram road in progress; concrete under foundations completed, and the rubble just commenced.
Caza Drain ...	5,760	Total drain west of Nursapur Canal Earthwork ...	18,320 5,760	8,199 14 7 324 2 2	Small quantity of work done below sluice-bridge at Nursapur.
Minor drainages ...	4,840	Deepening old drainage channel from Rayacudura Tunnel. Grand Total...	430	354 2 7 1,47,116 5 10	Very nearly completed.

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Proceedings of the Madras Government
1871. Add the following

From the Supg. Engineer Division
(Here enter No. of 22nd April/71)

From —————
(Here enter No. of 15th April/71)

From —————
(Here enter No. of 27th April/71)

From —————
(Here enter No. 279 of 26th April/71)

From —————
(Here enter No. 148 of 13th April/71)

From —————
(Here enter No. of 8th May/71)

From —————
(Here enter No. of 24th April/71)

Ordered that the
above statements be tabu-
lated and forwarded to the
Government of India.

To the Govt of India
" Chief Secy for Disputes
Dated 6/6/71

25 Copies of the statement

of Abstract of Expenditure
on the Western Delta Can-
-dication Project with Receipts
manuscript, dated 25/7/71.

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Govt of 1871 Madr.s.

PUBLIC WORKS.

To

Dated

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G. O., 1871, No. 157.

Nos. 38 (42).

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