

gle.

(1) Number of pages 10(2) Date of repair 10-1-37

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

Public works DEPARTMENT.

G.O. No. 2217.

Press
~~Mis.~~

564-565.

Dated

23-7-

18/7

Not to be folded or roughly handled

H-103

15

*Proceedings of the Madras Government, Public Works Department,
23rd July 1867.*

No. 564. Read the following Proceedings of the Board of Revenue, dated 4th July 1867, No. 4,165.

Read the following letter from the Collector of the Kistna District, to the Secretary to the Board of Revenue, dated Masulipatam, 13th May 1867, No. 135:—

1. I have the honor to submit the following report on the operations of the Public Works in this district during the official year 1866-67.

2. The total expenditure in the year under report was Rupees 2,61,487. The particulars, compared with the results of the previous year, are given in the following summary, which shows a net decrease of Rupees 16,971 on the expenditure of the last year:—

Works.	Expenditure in 1865-66.	Expenditure in 1866-67.	COMPARISON.		Estimate for 1866-67.
			Increase.	Decrease.	
1	2	3	4	5	6
<i>New Works.</i>	RS.	RS.	RS.	RS.	RS.
1. Irrigation...	97,506	1,02,280	4,774	...	...
2. Communications...	16,499	8,980	...	7,519	...
3. Buildings...	7,177	9,322	2,145	...	...
Total...	1,21,182	1,20,582	6,919	7,519	...
<i>Repairs.</i>					
1. Irrigation...	1,10,568	99,863	...	19,705	...
2. Communications...	15,240	23,897	8,657	...	...
3. Buildings...	4,569	4,535	...	34	...
Total ..	1,30,377	1,19,295	8,657	19,739	...
1. Ferries...	86	...	...	86	...
2. Miscellaneous Improvements...	19,958	16,593	...	3,365	...
3. Supplies of Tools...	987	5,017	4,030	...	...
4. Advances in addition...	5,868	...	...	5,868	...
Total...	26,899	21,610	4,030	9,319	...
Grand Total...	2,78,458	2,61,487	19,606	36,577	1,42,656
Deduct Increase...	...	...	...	19,606	
Net Decrease...	...	...	...	16,971	

3. The sum laid out on the construction of new and repair of old irrigation works during the year under report, was Rupees 1,93,143, shewing a decrease of Rupees 14,931 on the outlay of the preceding year. Under the other two heads, Communications and Buildings, the expenditure in the last year was about equal to that of the current year, as shewn in the subjoined Statement:—

Official years.	COMMUNICATIONS.			BUILDINGS.		
	New works.	Repairs.	Total.	New works.	Repairs.	Total.
	RS.	RS.	RS.	RS.	RS.	RS.
1865-66	16,499	15,240	31,739	7,177	4,709	11,746
1866-67	8,980	23,897	32,877	9,322	4,535	13,857
Total...	25,479	49,137	64,616	17,499	9,104	25,603
Difference..	7,819	8,657	1,138	2,145	34	2,111

*Proceedings of the Madras Government, Public Works Department,
23rd July 1867.*

4. The following Statement will shew the wet land occupied in each of the delta talooks under the command of the Kistna anicut channels, and the revenue derived therefrom for Fusly 1276:—

Names of the Talooks.	Seri wet land.	Jummahbundy Sist, excluding remission.	Water-rate on dry lands converted into wet, and on dry crops belonging to Agraharams and Inams.	Total.	Deduct average of Fuslies previous to the construction of anicut.	Remaining profit or loss.
1	2	3	4	5	6	7
	Acres.	Rupees.	Rupees.	Rupees.	Rupees.	Rupees.
1. Repalli	41,070	2,28,538	20,126	2,48,664	31,696	2,17,268
2. Bapatla	26,984	1,52,637	10,902	1,63,539	36,879	1,26,660
3. Gudewada	43,837	2,37,314	23,613	2,60,927	51,625	2,09,302
4. Bunder	1,134	4,205	242	4,447	2,820	1,627
5. Dezwada	4,326	24,111	3,602	27,713	...	27,713
Total...	1,17,650	6,46,855	58,785	7,05,640	1,23,920	5,82,620
1. Zemindary estates...	...	...	67,184	67,184	...	67,184
2. Tirwajasty included in the Peishcush of Gudur Pargana ...	...	...	10,100	10,400	...	10,100
	...	...	1,36,369	7,81,224	Due to anicut.	6,60,204
Deduct last year's profit	...	...	...	...	...	5,56,897
Increase	...	...	...	...	...	1,03,307

5. NEW WORKS.—*Irrigation*.—Under the head Agricultural, the following chief works were performed at an outlay of Rupees 70,629-6-1:—

Names of Works.	AMOUNT OF ESTIMATE ORIGINALLY SANCTIONED.		Amount of work performed in the year under report.
	Dates of Government Orders.	Amount.	
1	2	3	4
1. Commamoor Channel... ..	15th Dec. 1863, No. 3,699.	RS. A. P. 1,81,460 0 0	RS. A. P. 21,117 0 0
2. Western Bank Channel	6th Nov. 1863 and 12th Aug. 1865, Nos. 1,405 and 3,232.	1,46,479 0 0	13,793 0 0
3. Widening the lower portion of the Pullairu	27th Nov. 1865, No. 3,581.	1,01,050 0 0	12,492 0 0
4. Sloping down the banks of the Seetanagaram Channel.	21th December 1861 ... 17th June 1862 ... 7th March 1865 ... 18th December 1865 ... 30th July 1866 ...	2,76,404 0 0	18,551 0 0
5. Constructing first class Lock at Duggerala	19th Nov. 1863, No. 3351.	27,800 0 0	...
6. Strengthening the head sluice of the Kistna Anicut	27th March 1865, No. 331.	9,700 0 0	1,676 6 1
Total..		...	70,629 6 1

6. During the past year, Fusly 1276, I inspected many of the irrigation works and roads, and beg to offer a few observations on them.

*Proceedings of the Madras Government, Public Works Department,
23rd July 1867.*

7. *Commamoor Channel*.—This channel has been completed from Duggerala to the Chinna Ganjam salt road, and water was admitted this year as far as Santa Ravur, within five miles of the terminus. I passed up it in January from the latter village to Chabrole.

8. Crossing, as it does, the entire drainage of the country, it is not to be wondered at that, at some points, it causes injurious floods.

9. This is very noticeable at Swarna, where the course of a jungle stream is intercepted, and the whole surrounding country inundated. The calingulah in the channel bank is evidently not on a low enough level to carry off the flood; an under-tunnel at this point would seem to be essential.

10. The same remark is applicable to Kunkalamurru and other points; the level at which the canal has been carried will not admit of all the local drainage passing in and out. Several fine calingulahs have been provided for the discharge of the heavier floods.

11. Besides intercepting the drainage the canal also intercepts the local traffic, and in many points absolutely cuts off the villagers from their fields. As a temporary expedient, I have proposed the supply from the Local Funds* of a number of ferry boats to be stationed at different points along the canal, but these can only be looked on as temporary expedients, and bridges of some kind must be supplied; at present there is no bridge over this channel between Chabrole and the Chinna Ganjam road, a distance of nearly forty miles.

12. The want of bridges is felt more or less throughout the delta, and as the construction of masonry bridges, high enough to admit of the passage of boats, at sufficiently short intervals, over channels which flow on a level with, and in many cases above, the surrounding country, would involve an enormous outlay of money, and the loss of so much time as to render their completion almost hopeless, I would very strongly urge that attention should be turned towards devising some simple form of drawbridge or shifting Ponton bridge for crossing the delta channels; at present the people are put to great shifts to get about the country at all, carts being practically useless.

13. The Commamoor channel commands a very large extent of country suitable for irrigation in the Bapatla talook, which will gradually all be brought under cultivation.

14. In the upper reaches the Nallamada calingulah and Kolimarla aqueduct are both very fine works indeed.

15. The Lock at Duggerala is in progress; when complete, the Commamoor channel will be connected with the Nizampatam main canal for navigation as well as for irrigation purposes.

16. The Nizampatam main canal was opened for navigation in its whole length last year, but it is only during the current season that its benefit has been fully shewn; an increase in the salt sales at Nizampatam during the season of 70,000 Rupees was the result.

17. *Pullairu*.—The works on the Pullairu are rapidly advancing; at Kowtaram the channel may be said to branch into three, the Pullairu, the Polraze, and Bantumilly channels.

18. The masonry works at this point are well advanced, and the three main ducts below that point almost complete; eventually they will supply water and navigation to the entire country south of the Colair lake, but the canals above this point all require extensive widening.

19. *No. 2, Western Bank Channel*.—This work has made good progress. Four calingulals have been completed during the year, and the widening has been carried on between its head and Kollur to a large extent.

20. The aversion of the people to convert their dry lands into wet on this channel has prevented the returns from being so large as was expected.

21. *Vellatur Channel, a branch from the above*.—The new head sluice to this channel and the under-tunnel for the Munnangho drainage having been completed will render it very efficient.

22. *COMMUNICATIONS*.—Under this head a sum of Rupees 8,980 was spent during the year, for metalling Hyderabad road from Bezwada to Ibrahimpatam. This work was finished.

23. *Road from Vellatur towards Sandole*.—This is a part of the coast road. The embankment has been nearly completed to Kanagala from Vellatur; the tunnels remain to be built.

24. *Chabrole and Ponnur road*.—For a very few miles this road requires gravelling in places. This can be done from the maintenance allowance granted. The bridge at Chabrole on this line is a very fine work just finished; the approaches are, however, steep and would bear improvement.

25. *Chabrole to Tenali via Jagarlamudy*.—There is a good road from Jagarlamudy to Tenali, it requires making from Chabrole to the former place, and would not be a costly work.

26. *SALT ROADS*.—*Inkole and Chinna Ganjam Salt road*.—A broken bridge on this road was under re-construction when I saw it; the line is an important one for salt traffic, and I think should be widened; in parts it is very narrow and steep.

27. *Bantumilly and Argole via Gulwada*.—This road is frequently breached by floods in many places; the attention of the Department of Public Works Officers has been drawn to this with a view to the construction of rail-lims, which are perhaps more suitable than bridges for the escape of heavy floods of short duration.

28. *REPAIRS*.—*Irrigation works*.—A sum of Rupees 60,506 was spent for repairing and clearing the irrigation works noted in the margin; of this sum Rupees 50,970 were expended upon the repairs of main and branch channels and in clearances; and Rupees 14,159 were laid out upon the repairs of the Kistna Anicut.

Tanks...	...	...	...	131
Main Channels	...	...	...	7
Branch do.	...	...	...	116
Locks...	...	...	...	7
Sluices	...	...	...	11
Calingulals	...	...	...	13
Anicut	...	...	...	1
Drainage Channels	...	...	...	15

29. During the Jummahbundy of Vinukonda talook, I ascertained the existence of a large number of ruined tanks and inspected some of them; they formed the subject of the correspondence noted in the margin with the Board. I have called upon the Sub-Collector, Head Assistant Collector, and the General Deputy Collector to send reports on the state of the ruined tanks in their respective divisions, which, when received, will be submitted to the Board.

30. *COMMUNICATIONS*.—The different roads and navigable canals were repaired during the year at a cost of Rupees 23,897.

31. *BUILDINGS*.—Some of the Civil buildings were repaired at a cost of Rupees 4,535.

32. *Miscellaneous Public Improvements*.—Good-water channel from Sultana-garam bridge to Robertson's pettah has been completed. About one-third of the work of extension of good-water conduits in the town of Masulipatam was completed.

33. Owing to the closing of the canals for clearance during the hot season, the supply of drinking water has been cut off just when most needed during the past and present seasons; it is to be hoped that it may be possible, in future, to devise some remedy for this.

34. The irrigation works of the delta, of course, far exceed all others in importance in this district; they are progressing as rapidly as the supply of funds and labour will admit under the very able staff of officers now employed upon them. The want of labour is what is chiefly felt, and it is an annually increasing difficulty. I concur with the Superintending Engineer not only in thinking an increase of rates necessary, but that it will in the end prove economical; there is a great demand for water in some parts of the district, but until the upper reaches of the canals, especially on the Masulipatam side, are enlarged, too great increase in the area of cultivation cannot be permitted. The supply of water even now is at times insufficient to meet the demand.

35. The navigable canals, so far as they go, are in admirable condition. The roads of the district are but few. The Bezwada and Hyderabad road is in good order, and that from Bezwada to Gunttoor also; but roads in the delta are very difficult and very expensive to make and to maintain; the new Road Cess will in time enable the District Officers to effect some improvement.

1. Resolved that the foregoing letter be submitted for the information of Government, with the following remarks.

2. The Collector remarks in paragraphs 7 to 15 on the progress of the Commamoor channel, and also calls attention to the inconveniences to which it has given rise, by intercepting the passage of streams and thereby causing floods, and by interfering with the traffic of the district.

3. The Board recommend that the attention of the Superintending Engineer be directed to the necessity of remedying these evils as soon as practicable.

4. The Board also approve of the suggestion contained in paragraph 11 as to the supply of ferry boats, and they agree also as to the desirableness of the

Proceedings of the Madras Government, Public Works Department
23rd July 1867.

construction of bridges devised so as to meet the difficulty which masonry or iron fixed bridges would occasion by intercepting the navigation unless to a great height.

5. The Board would, therefore, suggest that plans for drawbridge on the system proposed by Mr. Thornhill, be called for by Government.

6. The Board have noticed with much satisfaction, in paragraph 16 of the Report, the large increase in the salt sales which has followed the complete opening of the Nizampatam main canal.

7. The Collector reports, in paragraphs 17 and 18, fair progress in the works at Kowtaram on the Pullairu, but points out that the canals above that point require widening.

8. The attention of Government is requested to the Collector's suggestion in the 24th, 25th, and 26th paragraphs of his letter, in which the Board concur.

9. From paragraph 33 of the Report it appears that, owing to the closing of the canals for clearance during the hot weather, the supply of drinking water is cut off, just when it is most needed. This is a serious matter, and demands early attention, and the Collector will be requested to give his opinion as to what means should be adopted to remedy the evil.

10. The Board consider the report to be, on the whole, very satisfactory.

No. 565.

ORDER THEREON, 23rd July 1867, No. 2,217.

ESTABLISHMENT, No. 56.

1. Communicated to the Superintending Engineer of the 2nd Division, whose attention will be called to the remarks in paragraphs 7 to 15 of the Collector's letter regarding the Commamoor channel, and he will report what measures he would recommend for remedying the evil caused by the interception of the drainage, and the means best adapted for crossing the several delta channels.

2. Colonel Winscom's attention will also be drawn to the proposals in paragraphs 24 to 27 for improving certain roads in the Kistna District.

(True Extract.)

Major, R. E.,

Under Secretary to Government.

To the Superintending Engineer, 2nd Division.
,, Revenue Department.
,, Board of Revenue.

Exd. S. T. Augustin.

Public Works Department.

2217
71
PROCEEDINGS of the MADRAS GOVERNMENT.

Under date the 23rd July 1867

Read the following

2579-
Proceedings of the Board of Revenue
(Here enter No 4165 dated 4th July/67)

N
W
Communicated to the Superintending Engineer of the 2^d Division whose attention will be called to the remarks in paras 7 to 15 of the Collector's letter regarding the Commamoor Channel, and he will report, what measures he would recommend for remedying the evil caused by the interception of the drainage, and the means best adapted for crossing several delta

channels

Colonel Wrenn's
attention will also be
drawn to the proposals
in paras 24 to 27 for
improving certain roads
in the Kistna District -

6 To the Supy & 2 Divs
8 - Revenue Dept
8 - Board of Revenue

Desp. 24/7/67
33

10/11/67

564-565

105

P. W. 1867. Department.
Pro. of Govt. for Suby
No. 2217

PROCEEDINGS OF GOVERNMENT. *Madras*

Dated 23rd. July 1867

Communicating with
instructions to the Sup^r.
Eng^r of the 2^d. Division the
Pro. of the Board of Revenue
on the Collector's report on
Public Works in the Puduk
District for 1866/67

M. 564-565