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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. / B.P. No.	2309	Press / Mis.
Dated 3. 10. 1876		196 .

Not to be folded or roughly handled

No. 113. Read the following endorsement of the Chief Engineer for Irrigation, dated Ootacamund, 4th September 1876, No. 175-W :—

From J. H. LATHAM, Esq., Chief Engineer and Manager of the Madras Irrigation and Canal Company, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation and Joint Secretary to Government, Fort St. George, dated Kurnool, 26th August 1876, No. 82.

July Reports.

I HAVE the honor to forward, per book post, the copies of the Upper and Lower Divisional Engineers' Reports, together with my own, for the month of July 1876.

MADRAS IRRIGATION AND CANAL COMPANY.

UPPER DIVISION.

Monthly Report for July 1876.

WATER reached Lockinsula on the 10th and was let into Jootoor head sluices on the 10th and soon reached the 111th mile, the end of the Upper Division. The water has been kept more than usually high for the time of year in the hope that the great scarcity of rain might induce ryots to take it very largely; but they object to use the canal water even for rice until rains have fallen.

2. The want of rain in June was noticed in my last report; it is even more unusual to find such a dry July following it. The total rainfall during the month was at

	Inch Dec.
Kurnool	1·80
Jupaud	2·00
Ayaloor	2·34

The showers that have fallen have scarcely been sufficient to allow of the dry crops being planted; in fact, many fields have remained up to this unsown, and the season must be looked upon as most unfavorable to such crops; and yet the reports received from the ranges are not satisfactory as to irrigation.

3. REPAIRS TO THE CANAL ON CAPITAL ACCOUNT.—In the first 17 miles the three altered bridges are completed, and the new bridge at Singaveram up to level of the roadway.

The altered bridge at Bollaram has been delayed owing to the presence of cholera in the surrounding villages. The approaches are quite ready for traffic.

The Moochoomurry bridge is completed. In some of the above works proper metalling has to be put in as well as side walls. It is found in practice that it would be a waste of money to do this work till after the rains when the roadway settles down, and after being remade the metalling is put on and the side walls built.

4. REPAIRS ON REVENUE ACCOUNT.—*Calingulah No.* 1.—The new sluices are nearly completed, but await the raising gear standard. The screws are on their way from Madras.

The high banks on the upper side near Kadrabagh aqueduct are being raised.

The principal works are in the 6th Section. On the 31st July 1876 thirteen teak logs for balance beams arrived at Kurnool; since then as I write thirty-one have reached Lockinsula.

Teak pieces for renewing the frames under the valve winches have been made and sent to Velapanoor, and the work has been commenced in earnest. There are seventy balance beams to replace, and four at Jootoor, also about seventy raising gear to put into thorough repair. This work naturally takes up much of the time of the staff.

Generally the banks have to be raised in many places, and this work will at once be taken in hand.

G.O. No.
B.P. No.
Press
Mis.

The winds were so high on the 26th, that the waves in Tongadancha tank unloosed the kunker revetment and carried it down the slope as the wash receded; the waves then began to cut the bank. I immediately posted off to the place, and having seen all safe, made arrangements for making up the revetment. It will require examination next dry season.

5. *Irrigation Repairs.*—The widening of the C channel, near Bilculgoodoor, which was found necessary last year, has been nearly completed. In many places 2 feet of hard rock had to be excavated. The water passing through the channel is intended to supply some important villages in the Nandial Taluq; in fact, all lying between the Kondaur and Caulee above the junction.

Many small road crossings over channels are being built; and much work has been done by bankers in clearing out silt from the main irrigation courses and remaking subsidiaries.

Irrigation.—The prospects would seem to be good. The weather very favorable to increase in the use of canal water, and in Nandikotkur in the 3rd and 4th Ranges considerable increase is certain, but the reports from the 1st and 2nd Ranges and the 5th and 6th are not satisfactory.

In the first two ranges the area is somewhat limited. It was always said that from Kurnool to Soonkesala the want of communications between the villages and the fields beyond the canal was the cause of discontent and consequent falling off of late. Four new roads over the canal have been made, and the prospects in the four villages in which they are situated are said to be very poor.

The comparison for first crops is as follows:—

			1875-76.	1876-77.
Singayeram (new bridge built)				
Niduzur (bridge widened and second-class approaches 25 feet wide)			37·27	14
Moongalpaud	do.	do.	127·30	100
Massa Masseed	do.	do.	66·71	55
			49·23	25
			280·51	194

This is not however certain. A continuance of dry weather would oblige them to sow paddy or take water for dry crops.

In Satanicota there is considerable falling off. The Reddy says that for two years no water-rate has been collected, and, if they take water this season, the payment for all will come upon them at once and ruin them. This has been said, and, if true, it should be ventilated. I have on former occasions been asked why, when the ryots were all ready to pay, no demand was made.

In the 5th and 6th Ranges containing the whole of the Nandial Taluq and a few villages of Nandikotkur the ryots seem to have been partly paralized by the frequent occurrence of cholera and the want of rain.

It appears that out of 28 villages in Nandial

5 villages will take no water.

8 do. have taken water for a few fields.

Most of these villages are well acquainted with irrigation, having tanks belonging to them.

15 remaining will irrigate *after the rainfalls.*

28

I am inclined to think the Returns sent me are not accurate enough to give a correct idea of the probable irrigation.

The staff was paid from 8th to 18th July 1876.

(Signed) C. H. WILKS,
Conservancy Engineer.

Proceedings of the Madras Government, Public Works Department,
9th September 1876. *No.* 2,400.

2302/2

Rain Register of Upper Division for the Month of July 1876. *Registered at 6 a.m. daily.*

Date.	Soonkesala.	Kurnool.	Jupand.	Vellapanoor.	Juttoor.	Ayalcer.
1st	...	...	...	...	...	...
2nd	...	...	...	...	0·10	...
3rd	...	...	...	...	...	...
4th	...	...	...	...	...	...
5th	...	...	0·10	...	...	...
6th	...	...	...	...	...	...
7th	...	...	...	...	...	...
8th	...	...	...	...	...	...
9th	...	...	...	...	...	0·27
10th	...	...	...	...	...	0·40
11th	...	...	0·40	0·20	...	0·07
12th	...	0·26	0·40	0·10	...	...
13th	...	...	...	...	...	...
14th	...	...	...	...	...	...
15th	...	...	...	...	...	0·22
16th	...	...	...	...	...	...
17th	...	...	...	...	...	...
18th	...	...	...	...	...	0·05
19th	...	...	...	...	...	...
20th	...	...	...	...	...	0·08
21st	...	...	...	...	...	0·38
22nd	...	0·05	...	...	...	0·10
23rd	2·00	1·24	1·00	0·40	0·30	0·03
24th	...	0·12	0·10	...	...	0·54
25th	...	0·05	...	...	...	...
26th	...	...	...	...	...	...
27th	...	...	...	...	...	...
28th	...	0·08	...	...	...	...
29th	...	...	...	...	...	...
30th	...	...	...	...	...	...
31st	...	...	...	...	...	0·21
Total ...	2·00	1·80	2·00	0·70	0·40	2·34

VELLAPANOOR,
11*th August* 1876.

(Signed) C. H. WILKS,
Conservancy Engineer.

LOWER DIVISION.

Report for the month of July 1876.

As soon as the water reached the Lower Division it was admitted; it entered the canal on the 14th July 1876, and reached the 9th lock in the 9th section on the 27th July 1876, without interruption except a check for seven hours owing to a small breach occurring in the left bank in the 119th mile.

Water was admitted in the 10th Section on the 16th July 1876, without accident.

The internal repairs to the canal were completed before the water was admitted. The season promises to be an unusually dry one; up to the end of this month the scarcity of rain is unprecedented so far as I can ascertain.

I enclose the monthly table of rainfall, and another showing the annual fall recorded at this station for this and preceding years.

Irrigation under the canal has commenced, but up to the present no wet crops under other sources are in the ground, or are likely to be sown for some time, as the tanks are quite dry and there seems no promise of rain yet.

Proceedings of the Madras Government, Public Works Department,
9th September 1876. *No.* 2,400.

The customary time for sowing both dry and wet crops is now past, and it seems that the ryots do not as yet consider the unusual *absence* of rain and unpromising state of the weather, any thing to cause alarm, or as an inducement to make an uncertainty, a certainty by applying to the Company for water.

I think it is very possible the Collector of Cuddapah may ask for a small supply of water to be run into each of those tanks, commanded by the canal, so as to enable the ryots to make a start; after the consumption of this supply, should the rain still hold off, another quantity can be sent in.

As a great portion of my privilege leave (which I availed myself of on 3rd June 1876) was occupied by the duties attending the *Lower Division*, the Chief Engineer kindly relieved me of all charge on the 13th July 1876, and continued to act for me until the 6th August 1876.

DHOOR,
11th August 1876.

(Signed) J. O. DUNPHY.
Acting Conservancy Engineer.

Register of Rainfall at Dhoor Station from 1*st January to* 31*st July in the following years.*

Years.	Total Rainfall from 1st January to 31st July.	
1869		
1870	12	12
1871	10	13
1872	5	21
1873	10	91
1874	5	30
1875	21	45
1876	8	63
	...	93
Total ...	74	68

(Signed) J. O. DUNPHY,
Acting Conservancy Engineer.

Rain Register of Lower Division for the Month of July 1876.

Date	Ayalcor.	Chintacoonta.	Rajoly.	Dhoor.	Adimapully.
1st	Nil.	Nil.	Nil.	Nil.	Nil.
2nd	...	...	...	...	...
3rd	...	...	0·40	...	...
4th	...	0·02	Nil.	0·10	...
5th	...	...	...	...	...
6th	...	...	...	...	...
7th	...	...	...	...	...
8th	...	...	...	...	...
9th	...	...	...	...	0·50
10th	...	...	...	...	...
11th	...	...	...	0·11	...
12th	...	0·09	...	0·12	...
13th	...	Nil.	...	...	...
14th	...	...	...	...	...
15th	...	...	...	...	...

2309/1

Proceedings of the Madras Government, Public Works Department,
9th September 1873. *No.* 2,400.

Rain Register of Lower Division for the Month of July 1876—(Continued).

Date.	Ayaloor.	Chintacoonta.	Rajoly.	Dhoor.	Adimapully.
16th	0·55	...	...	...	...
17th	Nil.	...	...	...	...
18th	...	...	...	...	...
19th	...	...	...	...	...
20th	...	...	...	...	...
21st	...	...	...	0·08	...
22nd	0·60	0·44	...	...	...
23rd	0·65	Nil.	...	...	...
24th	Nil.	...	...	...	0·03
25th	...	...	...	...	...
26th	...	...	...	...	...
27th	...	...	...	...	...
28th	...	...	...	...	...
29th	...	...	...	...	...
30th	...	...	...	...	...
31st	...	...	...	...	...
Total ...	1·80	0·55	0·40	0·41	0·53

DHOOR,
11th August 1876.

(Signed) J. O. DUNPHY,
Acting Conservancy Engineer.

Chief Engineer's Report to accompany the Divisional Reports for July 1876.

THE rainfall continues unusually small. It compares best with 1873, as follows:—

Month.	Rainfall. 1873.	Rainfall. 1876.	Remarks.
January	Nil.	Nil.	
February	...	...	
March	...	0·26	
April	...	0·97	
May	* 3·05	Nil.	* 1·40 being on the 31st.
June	2·86	3·43	
July	1·75	1·80	
August 1st—20th	2 24	0·60	
Total ...	9·90	7·06	

In the last ten days of August 1873 2·13 inches fell. Since weather prophecy has been elevated so far as to claim admission now-a-days into a report, I may say that the only showery-dropping weather this month has occurred just before, or just before and through, the changes of moon on the 5th and 19th. So far as the moon is *trustworthy*, therefore, we cannot have more security of another fortnight's drought. As in 1873, the ryots neglect to cultivate with canal water to any unusual extent.

Breach.—I have instructed Engineers to test all the banks between locks, with full depth of water. These banks may have been rather neglected, having been out of use, and both banker's and overseers having plenty to attend to elsewhere; at all events disuse has tended to make them less secure. The testing has to be regulated by the single lockman at each lock, for

neither Engineer, nor Overseer, has time to give it more than the most cursory attention. The lockmen are generally very attentive, however, during the sixteen hours a day they are awake. A breach is reported by Mr. Dunphy, caused [illegible] the keepers of No. 1 lock, 8th section, letting down water upon lock No. 2 at night [illegible] the keeper of the latter was asleep till water probably flowed over the lock gates and w[illegible]him. It has cost £5 or £6 to make good.

The laborious work of getting a definit[illegible] interpretation of the rules agreed to by both Collectors, and a definite and improved syst[illegible]m of working the Divisions carried out by both Engineers, bringing the Lower Division int[illegible] conformity with the Upper, is occupying all my spare time. The amalgamation of the Audit [illegible]nd Accounting Departments seems also to involve the execution of all the most arduous work i[illegible] those departments before I have an Accountant provided for doing it. In another month I [illegible]ope I may have something of more importance to report.

KURNOOL,
21*st August* 1876.

(Signed) J. H. LATHAM,
Chief Engineer and Manager.

SUBMITTED for the information of Government.

(Signed) JOHN MULLINS, Lieut.-Col., R.E.,
Chief Engineer for Irrigation.

No. 114. ORDER THEREON, 9th September 1876, No. 2,400.

IRRIGATION, No. 14-A.

ORDERED to be recorded.

(True Extract.)

[illegible] Colonel,
Offg. Under Secy. to Govt., P.W.D.

To the Chief Engineer for Irrigation.
" Chief Engineer and Manager, Madras Irrigation and Canal Company.
" Examiner, Irrigation and Canal Company's Accounts.
" Revenue Department.

Exd. A. Grubert.

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Govt. of {1876} Madras.

PUBLIC WORKS,

To

THE CHIEF ENGINEER FOR IRRIGATION,

&c., &c., &c.

Dated September 9th.

Issued

Recd. Oct 3d. *Encl.*

G. O., 9th September 1876, *No.* 2,400.

SEPTEMBER.

Nos. 113-114.

Madras Irrigation and Canal Company.—Endorsement of the Chief Engineer for Irrigation submitting Reports of the Upper and Lower Divisions of the — for the month of July 1876, recorded.

No 2309
communicated Letter 4/
Rec'd
Oct 13th