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(2) Date of report —————

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MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1123	(9)	Press
B.P. No.			Mis.
Dated	5-1-57		1876

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
3rd May 1876.*

No. 83. Read the following endorsement of the Chief Engineer for Irrigation,
dated Ootacamund, 2nd May 1876, No. 29. —

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, dated Ootacamund, 1st May
1876, No. 35.

March Reports.

I have the honor to forward herewith copies of the Upper and Lower Divisions
Reports, together with my own, for the month of March 1876.

MADRAS IRRIGATION AND CANAL COMPANY.
Upper Division.

Monthly Report for March 1876.

This gauge in the canal at the Sankarala head of the Upper Division, but on the
morning, this was scarcely sufficient to keep water running through the Upper Division, but on
the evening of that day the Teambhra water began to rise. On the 23rd it was 10.5 on all of
head dikes and running over the ancient crest.

2. As soon as possible 100 of water was let into the canal and afterwards 12; but on the
26th a leak occurred at 5 miles 50 chains in a bank principally composed of Sankarala earth. The
water was immediately lowered to 2.5 in the canal, but only for a few hours, as the leak was soon
stopped. It occurred at a point which is dry even as to be repaired. It is perhaps the
weakest bank in this division, and it has been determined generally to place a padlo slope over
the whole length in which this danger is and has been used.

3. The whole of the ground crops in my division, except in the 6th and 7th sections, have
been reported safe. It is uncertain how far the crops in these sections have suffered. The water ceased
to flow into the Teambhra main channel on the 12th, so that unless saved by the local rains,
which were very heavy at Velupur (2.50 inches on the 15th and 16th), it is feared some will
be lost before the fresh supply in the canal could have reached them. The Teambhra fresh
water was first perceptible at Lankinsala on the 21st, owing to the time taken to fill the large
tanks on the way.

4. The sudden increase of water will interfere with our preparations for annual repairs,
but on the 30th April the canal will be entirely closed for that purpose, and every effort made
to complete as much as possible during the month of May.

5. The two new bridges (Sankarala and Mankinurthy) have been built up as far as
possible, and but for this late fresh the piers would have been by this time well forward. The
foundations however cannot be put in till May.

6. *Mankinurthy Bridge* — Owing to the failure of earthwork contractor, the lower approach
is still incomplete.

7. *Sankarala Bridge* — The railings are nearly finished. The earthwork of the lower
approach is delayed on account of the water in the canal. The earth will be taken from inside
the tanks.

8. *Mankinurthy Bridge* — The railings are finished and the earthwork of the approach
very nearly done.

9. *Teambhra Bridge* — The upper and lower approaches are more than half completed.
This work was very heavy. The railings have not yet been put in place.

Proceedings of the Madras Government, Public Works Department,
8th May 1876.

10 The staff were paid from 3rd to 13th March 1876. The register of rainfall is herewith sent:

(Signed) C. H. WILKS,
Commissary Engineer

Register of Rainfall during the month of March 1876, Registered at 6 A.M. daily

Month and Date.	Rainfall at Cochin		Rainfall at Karikal		Rainfall at Jodhpur		Rainfall at Veluppur		Rainfall at Jodhpur		Rainfall at Ayahar	
	Inches	Decimals	Inches	Decimals	Inches	Decimals	Inches	Decimals	Inches	Decimals	Inches	Decimals
1st March 1876												
2nd												
3rd												
4th												
5th												
6th												
7th												
8th												
9th												
10th												
11th												
12th												
13th												
14th												
15th												
16th												
17th												
18th												
19th												
20th												
21st												
22nd												
23rd												
24th												
25th												
26th												
27th												
28th												
29th												
30th												
Total	0	05	0	20	0	10	0	10	0	20	0	25

KURNOOR,
18th April 1876.

(Signed) C. H. WILKS,
Commissary Engineer

Lower Division.

Report for the Month of March 1876

During the month most of the bankers have been engaged on the canal works, and good progress has been made in crack-stopping, trimming, draught-making, as well as repairing channels although the heat has been so intense, many of the hardest coolies complain of being kept in it; the work has been carried out in a far more satisfactory manner than in any previous month.

2 The locks and machinery in the 9th section have all been thoroughly examined.

3 The iron necessary for the completion and repair of the machinery, will shortly be on the spot, while other minor alterations and additions are now being carried on. The repairs to floors, chambers, and flooring is being carried on, and with the exception of the reuniting of the calls of Locks 2 and 3, 9th section, the repairs will consist only of painting and plastering.

Proceedings of the Madras Government, Public Works Department,
8th May 1876.

The raising of the banks between Locks 6, mile 176 71, and 7, mile 177 33, and between Locks 7, mile 177 33, and 8, mile 178 51, I hope to start in a few days.

4 Sections have been made which show them to be in places to be barely 1 foot 6 inches above full water level, and less than 6 feet wide.

5 Thirty-one thousand five hundred square feet of the ancient have been pointed; on which sixty-four barrels of cement have been used, the proportion of the pointing mixture being, at first, three parts sand, two cement, and one unslaked lime; this was very strong, hard, and did not crack; but the quantity of cement consumed was so large, averaging one barrel for 300 square feet, that I had to alter it to a weaker mixture of one cement, three-quarters unslaked lime, and two and a-quarter sand.

6 The work proved to be far heavier than was anticipated, as after the old and loose mortar had been picked out, some of it being very bad, little better than sand, there were also some very large and deep joints to fill, there were besides some joints, a foot deep in places, which had been loosened by the sinking of the masonry and washed out by the water passing over it.

7 In front of the ancient, where I thought it necessary, 210 cubic yards of as large stones as can be collected have been thrown in, and will no doubt protect it considerably during the heavy freshes.

8 Those parts of the canal banks which are likely to be cut or endangered by the action of the drainage water have been inspected, and preparations are being made to build dry stone walls and groins to divert and receive the force of the water.

9 The Pankala Wanka, which runs through the aqueduct at the 183 12 mile, is one of these, against which precautions must be made. The masonry wall originally built to protect the bank is now in a weak state, and may be swept down at the first flood. I hope to replace this before the rains with a wall of greater height and strength, and of much greater length.

10 Nothing can be done towards the removal of silt in the first part of the 9th section, and the 10th section before the 30th April, as water will be required for the crops.

11 All the new wood required for the locks has now been supplied, including two teak balance beams for Lock No. 3, 25 x 17 x 1 in the 8th section, these will be sent up the canal as soon as there is more water.

12 The supply of water, except in the 10th section, where the usual height has been maintained, began to diminish on about the 6th March, but a larger quantity of water came down, reaching Dhor on about the 15th; there was 1 foot of water over the Pennar Anicut on the 19th instant, water is still decreasing, but I am daily expecting more from the Upper Division, as there was an additional supply (by the means of the Toongabudra) let through the Sankavala head sluices on the 22nd March.

13 Irrigation.—Applications for indigo are still being made, and in Chennai the measurements are still incomplete so that this month the entire season's irrigation cannot be given.

14 In the Probatore taluk the demand for water for indigo was unusually great, but the supply of water in the canal was insufficient; there are several indigo fields which require a second flooding, but until the expected water comes from the Upper Division I shall be unable to supply them.

15 Indigo is a very highly prized crop with the ryots in Probatore and Cuddalore taluks, especially with those who cultivate paddy. I believe there is no better time for sowing this crop than in March, provided there is sufficient water available to enable it to get two floodings at proper intervals. The plant, if properly attended to, will be in a strong and healthy condition to withstand the monsoons. Many crops that are sown at the usual time are often destroyed by the rains, if they be heavy, or become diseased, or the quality is much deteriorated by it.

8th May 1876.

16. The practice of wearing indigo in the fall is soon after the paddy is cut is very ^{the} extensive, and will undoubtedly become a custom under the existing conditions, though it may be more profitable to try it than observing this custom, if he can.

17. The molasses was in Manila, it goes off out water from the canal to a small island, and by the time two loadings or thereabouts have been obtained from it, it is taken to the paddy, the remains of the plant making a valuable and often the only manure.

19. The inquiry into the waterborne transmission of the disease, which was started in the water in Malabar, mentioned in my last month's report, has resulted in an accumulation of some 200 cases, the evidence being insufficient to connect them

19. The rysts of Vengannagarapally, Pochuttore taluk, who were charged with obstructing and making use of threats of personal force against the Officers while recovering the grain for which water had been stolen, have all been severely punished, even being fined to the extent of Rs. 100 to 10.

20. Another case, in which two Malas of Bichampally, Chittagong taluk, were punished for cutting an irrigation channel, has resulted in their being punished with two months' imprisonment each.

21. There has also been another case: some boys of Dhoke drawing water for their cattle went to the canal one night, and with a crowbar knocked a hole through the arch of a culvert. They were interrupted in the act by two barbers, who had been placed there to watch. The case was placed in the hands of the Police Inspector of Dhoke, who promptly discovered the culverts, and brought them to justice, and on the evidence of the barbers and a witness produced by him, each of the two men charged were punished with three months rigorous imprisonment.

22. The result of the 6 cases will, I hope, be a caution to the ryots, and not only check the more serious offences, but stop to a great extent the increasing practice of taking water for irrigation purposes without application.

23. The lower 14.5 on staff were paid before the 16th for February.

26 There has been little change thus far.

25. The weather has been occasionally cloudy, but unusually hot, the temperature with the thermometer being 102° at midday.

111-0000

3.1 April 1966

(Signed) J O DUNPHY,
Acting Commandant R. G. Division

Chief Engineer's Report to accompany Daily Diagrams of Engineering Records for March 1876

The date upon which the river Tezcuibulco fell to low water, entirely diverted into the canal at Barcelona, i.e., the date of closing the gate on the lake, on the stream there, was—

In 1876, the 2nd January

.. 1971 .. 1972

.. 1873 .. 2-11 April

.. 1876 .. 1877

The ample continuance of water last year did not extend to supplies on similar conditions this year, but in fact the supply this year fell off more rapidly than usual. By the middle of the month (March) many acres of crop were nearly at the last gage, and Engineers and Overseers were forced by postponing try to whatever they would. On the 19th, however, rain fell enough to cause freshes in the Pomme, Klamath, and Kikin rivers, and the flows were turned on to the fields, and saved the crops. On the 21st at 8 p.m. a fresh came down the Tualatin, which was admitted into the canal; and after slowly filling up, brought a more regular supply to the river as it was in time to supplement the local freshes. The only second crops reported as withered are a few acres of paddy in Potho and other and Allapella, in the Seward field.

*Proceedings of the Madras Government, Public Works Department,
8th May 1876.*

2. The anxiety caused to the ryots by the scarcity of water will, it is hoped, teach them a lesson; and impress them with the importance of sowing the first crop early if they wish to secure a second crop.

3. The miscellaneous revenue of the canal, collected by the Company's officers (and excluding what on A lands, and sale of water for other purposes than cultivation, both of which are collected by the Revenue officers) is about 12000

• Estimate for 1926-27 of a season of the preceding year	100
Rest of Salting of Camp	150
Rest of Salting of all Tanks	600
Rest of Salting of all Tanks	270
Rest of Salting of all Tanks	270
Rest of Salting of all Tanks	600
Rest of Salting of all Tanks	1,010

being reared experimentally where lock keepers or slave keepers are available to put
water trees in the vicinity of their stations, but it will be some years before they bear any fruit.
part of the settlement for 1876-76 being completed by the end

4. There is every prospect of the
of May.

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

CONFIDENTIAL

129: April 1876.

(S 850-1) J. H. LATHAM.
Chief Engineer and Manager.

Submitted for the information of Government.

Upper Division Report, paragraph 2—The bank in the 6th mile, in which a leak occurred, has given trouble on several previous occasions. It might have been anticipated that ere this the canal water would have deposited enough silt on the slope of the bank to ensure its being water-tight. As the leak appeared with 42 feet of water, and 8 feet depth is the full supply, it will be necessary to do what may be required to render the bank perfectly safe.

Paragraph 5.—It is said, first, that the Singavaram and Mochumurry bridges have been built up as far as possible, and afterwards it is intimated that the foundations (of the piers?) cannot be put in until May. The latter would indicate that the progress has been very small.

Lower Division — It would have been well to state the cause of the very low level of the banks in certain miles.

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

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

ORDER THEREON, 5th May 1876, No. 1,123.

No. 81.

IRRIGATION, No. 13.

Received and communicated to the
Superintending Engineer, Kistna, and
District Engineer, Nellore, in connection

Proceedings of the Madras Government, Public Works Department.
8th May 1876.

with the entire diversion of Teombedra and Pennair water into the Company's Canal, which, as there have been no reports of short supply at the Kistna and Pennair Anicuts, it is presumed was unobjectionable this year.

(True Extract.)

(Signed) G. W. WALKER, Major-General, R.E.
Secretary to Government.

To the Chief Engineer for Irrigation

- 1. Chief Engineer and Manager, Madras Irrigation and Canal Company.
- 2. Superintending Engineer, Kistna
- 3. District Engineer, Nellore
- 4. Engineer of Irrigation Company's Anicuts

Ed S T A 100

8th May 1876

8th 20

Enclosure 4

Submitted for the information
of Government.

Upper Division report para 2
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given trouble on several previous
occasions. It might have been
anticipated that ere this the
canal water would have de-
posited enough silt on the
slope of the bank to ensure
its being water tight. As the
leak appeared with 4.2 feet of
water and 8 feet depth is the
full supply it will be necessary
to do what may be required
to render the bank perfectly
safe.

Para 5. It is said first that the Ling-
nam and Mooschurry bridges
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as possible, and afterwards
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 cannot be put in until
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 to state the cause of the
 very low level of the banks
 in certain miles.

lower division

Col. J. S. Colwell Esq.
 Chief Engineer for
 Irrigation

Catmon
 2nd May 1876

To
 The Secretary to Govt
 P.W.D.

423. Public Works Department

MADRAS GOVERNMENT

Under date the 8th May 1876

Read the following:-

31st 9 22 May 76

Recorded and
 communicated to
 the Superintending
 Engineer, Kistna and
 District Engineer, Bellary
 in connection with
 the entire diversion
 of Coombudra and
 Pennair water into
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 short supply at

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It would have been
to state the cause
very low level of
in certain miles.

1876 Department
28-3395
The Chief Engineer for
Irrigation

held 2nd May } 1876
Received 10th May }
Amount 11 15-20

Continued
Chief Eng.

Obtained
2nd May 1876

To
The Secretary to

Submitting reports
of the Officer and Lower Division
of the Madras Irrigation and
Canal Company for March
1876.

No 1123. Public Works Department.
PROCEEDINGS of the MADRAS GOVERNMENT.
Under date the 8th May 1876.
Read the following -

From the Chief Engineer for
Irrigation 3rd May 1876

Recorded and
communicated to
the Superintending
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District Engineer, Bellary,
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-jectionable this year.

4.45

The Chief Engr. for Survey
Chief Engr. ^{with 1st Engr.} Manager
J. D. C. C.
Asst. Engr. Huston
Asst. Engr. at Dallas
Examiner of Log Books

1893/4

12.53/11