

(1) Number of pages 4
(2) Date of repair 12.2.1981
(3) Initials of the Referencer _____

TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

G.O. No.	3545	Press.
B.P. No.		Mis.
Dated	22.6.1877	197 .

Not to be folded or roughly handled

82

GOVERNMENT OF MADRAS.

PUBLIC WORKS DEPARTMENT.

7th June 1877, No. 63 I.

Irrigation.

Read the following paper :—

No. 19. Endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 6th June 1877, No. 40 I.

Read the following letter from Major J. O. HASTED, R.E., Superintending Engineer, Kistna, to the Chief Engineer for Irrigation, dated Masulipatam, 29th May 1877, No. 30 :—

I HAVE the honor to report on the damage caused by the cyclone of the 19th instant, the occurrence of which was reported by telegraph.
On 19th instant.

2. I am not yet able to trace the path of the storm, but it is supposed the centre passed the coast line to the north of Masulipatam, and having been myself at Bezoarah on the 19th, I know that it passed over that place, and then, I believe, over Guntur. The storm commenced, after three days of cool cloudy weather with north easterly winds, with the wind north to north-east, and as it proceeded, the wind veered to south-east, south, and south-west; the lull at Bezoarah was remarkable, the wind dropping in a few minutes, and an almost dead calm lasting for upwards of an hour, when the wind rose most suddenly from the opposite quarter to that in which it had lulled and blew a heavier gale than at first.

3. The rain-fall was very heavy in places, but remarkably partial. I have not yet received the rain registers, but the reports state that from 1 to 2 inches fell at Masulipatam, 3.9 inches at Bezoarah, 10 inches at Nizampatam, 6.26 inches at Nallavada (the next lock), 7.7 inches at Bapatla, and 8 inches at Narasarowpet. These falls were in two days, the 18th and 19th, but principally in little over twenty-four hours.

4. In the Eastern Delta, very little damage has been done. There was considerable alarm felt in Masulipatam, but the storm occurred during neap tides, and at high water; the direction of the wind was contrary to the advancing waves, so the sea water only just reached the sea dyke and did no harm. The wind seems here to have been moderate, only a few trees were blown down, huts partially unroofed, pandals blown away, &c. At Bezoarah I should judge the wind was stronger; more trees and huts are blown down, and many tiled roofs show signs of disturbance. I much feared the floating plant would receive damage, but every care was taken to secure the vessels at the commencement of the storm, and I do not think any harm was done. Altogether a small outlay, probably not more than Rupees 500, will suffice to repair the damage done to public buildings. The only building which was quite wrecked is the swimming bath at Bezoarah, which is kept up by subscription.

5. In the Western Delta, the principal damage was done; but the Repalli Taluq (No. 1 Division) seems to have escaped easily, as only damage to lock sheds and destruction of trees is at present reported. It is the Commamur canal that has principally suffered. From the 30th to 35th mile the bank seems to have been more or less washed away (in the 34th and 35th miles, entirely); nine breaches between the 36th and 42nd miles; six breaches west bank and east bank entirely destroyed in 29th mile, and six between 25th and 27th miles. Four masonry sluices destroyed. All the drainage

channels are damaged. Seven breaches in Cherukur tank bank, and a palmyrah bridge destroyed. Twenty-two breaches in Moorkondapad tank. Irrigation channels breached, and also roads in many places. At the Sakicalva outlet, where work was just being commenced, all the chunam collected, value Rupees 440, was washed away. On the extension of the Commamur canal, the Famine Relief Work, the work was entirely flooded, and the Santaravoor lock, where concrete was being put down, was submerged; from 300 to 400 bags of rice are reported to be entirely spoiled, and all the sheds are in ruins.

6. From the Guntur and Narasarowpet Divisions it is reported that a few tanks have breached, and that the roads have suffered.

7. Lieutenant Boddy states that he estimates the cost of repairs to Commamur canal at 20,000 Rupees, but allows that he has not hitherto discovered the full extent of damage done. I have instructed him to proceed forthwith with such repairs as may be necessary to fit the canal to carry water for irrigation; and as regards the relief work, to find employment for all who want work on baling, till other work is available. The numbers on the relief work decreased from 2,765 on the 18th to 382 on the 22nd, and I think many of the coolies will not return to our work, but will find employment in agricultural operations. I hoped to have had the extension of canal completed next month, but I fear there is now no chance of its being completed this season.

8. I am unable to account for so much damage having been done to the Commamur canal, but I am inclined to think that the rain on the night of the 18th was sufficiently heavy to bring down the drainages in flood, and that the cyclone south-west wind acting on the canal water raised above its proper level, beat the banks away, and this water suddenly released, swept over the country below, breaching the irrigation and drainage channel banks in its course.

9. I fear the repairs will not be carried out as quickly as I should wish, as we have found out the ordinary labor of the district is not now procurable. It seems somewhat remarkable that, bordered as we are on three sides by famine districts, we should not be able to get laborers, but so it is. I have not half the number of men at work that is usual in May, and even liberal rates on the extension of the Commamur canal have failed to attract labor. Most of the tank-diggers are said to have gone to the East Coast Canal, and I suppose that the ryots who have had wonderfully good crops in the Delta, and sold them at three times their usual price, have made so much money that they are finding food and employment for the coolies. I have certainly observed that there is considerable activity in clearing charitable tanks at the expense of private individuals.

10. Since the cyclone the weather, which had been unusually cool for the time of year, has changed. Westerly winds set in at once, and have continued ever since, and the heat has been greater here than has been known for years; if, as seems probable, this portends freshes in the river and monsoon rains before long, I am afraid we shall have some difficulty in commencing irrigation in Bapatla Taluq this season.

SUBMITTED for the information of Government. Major Hasted's report of the effects of the cyclone of last month shows that except at, and in the neighbourhood of, the Commamur canal, the damage sustained by the Delta Irrigation Works was but small.

2. With regard to the Commamur canal, some miles of which have been very extensively damaged, it may be gathered from the report that it is the old part of the canal, the means of passing upland drainage across which are notoriously inadequate, which has suffered greatly not only from breaches but from the action of the wind on the impounded water. Had the cross drainage works, which are provided for in the completion estimates about to be submitted to Government, been in existence, there would have been no accumulation of water and probably no damage whatever

beyond a little washing down of the earthslopes and a little silt carried into the canal at the inlets.

3. It is unfortunate that the requirements of the irrigation under the canal this season will necessitate the execution of work in the way of repairs which will be of only temporary utility. The Superintending Engineer has already been instructed to arrange for the immediate construction of as many of the inlets and outlets as can be carried out this season, and as they are simple and inexpensive works they can be rapidly built after the materials have been collected. They will prevent a recurrence of damage wherever their levels are suited or can be temporarily adapted to the present full supply level of the canal.

4. It may be hoped that when the country has dried up, the value of damage done may be found less than it has been roughly calculated to amount to.

5. It is very desirable that the actual water levels in the several miles of the canal should be ascertained and recorded. It should be ascertained what the water levels above Jagarlamudi lock were; what water had to be passed over the lock weir there to relieve the first reach, which, in the 8th mile, receives the drainage of the Guntur river or nullah, which drainage is intended to be passed entirely under the canal into the Toongabudra; what the water levels were above and below the Kollinurla aqueduct, on the first part of the Nakkavagu drainage, which is to be supplemented by an inlet and outlet 1,300 feet in length; and generally, all information bearing on the sufficiency of the cross drainage arrangements as designed should be carefully collected.

6. As far as possible in carrying out repairs, the requirements of the re-arranged canal should be considered, e.g., much of the canal has to be widened and this widening will provide soil for the repair of the banks. A transcript of the Notes on the completion estimates down to the end of the third reach at the 32nd mile will at once be sent to the Superintending Engineer, and for the remainder of the canal as soon as ready.

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

To the Joint Secretary to Government,
Public Works Department, Irrigation Branch.

No. 20. ORDER THEREON, 7th June 1877, No. 63 I.

RECORDED. It is hoped that the Superintending Engineer may be able to make a more favorable report of the state of the Commamur canal and of the prospects of irrigation under it in the course of this month. It is observed from the Superintending Engineer's telegram, dated 5th instant, that a large part of the labor which was dispersed by the rain had returned to the canal. Care should be taken to make as much of the repair work as possible useful towards the permanent improvement of the canal.

(True Extract.)

John Mullins

Lt.-Col., R.E.,
Joint Secy. to Govt., P.W.D.,
Irrigation Branch.

To the Chief Engineer for Irrigation.
" Superintending Engineer, Kistna.
" Revenue Department.
Exd. T. O'Connor.
Spare Copies

Revenue Department
No 2993
IRRIGATION.

3545-
Govt. of 1877 Madras.

PUBLIC WORKS.

To

THE CHIEF ENGINEER FOR IRRIGATION.

&c., &c., &c.

Dated June 7th.

Issued

Recd.

21 June

Encl.

G. O., 7th June 1877, No. 63 I.

JUNE

Nos. 19-20.

No. 3545
Comd to the
Board of Revenue

22nd June

Commanur Canal, Kistna District.
Report of the damage caused by the cyclone
of 19th May to the Delta Irrigation Works,
particularly the —, recorded with remarks.

is to the R of Revenue 20-6-77.

indulgent