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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Revenue DEPARTMENT

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GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

20th July 1877, No. 184 I.

Irrigation.

Read the following paper:—

No. 112. Endorsement of the Chief Engineer for Irrigation, dated Fort St. George, 12th July 1877, No. 100 I.

From J. H. LATHAM, Esq., Chief Engineer and Manager of the Madras Irrigation and Canal Company, to the Chief Engineer for Irrigation, dated Kurnool, 30th June 1877, No. 73.

I HAVE the honor to forward, per book post, Upper and Lower Division Reports, together with my own, for the month of May 1877.

MADRAS IRRIGATION AND CANAL COMPANY.

UPPER DIVISION.

Monthly Report for May 1877.

In my last report it was stated that the Toombudra water rose and ran over the anicut on the 29th and 30th April and 2 feet of water was let into the canal.

On the 7th May it was 6 inches over the crest and rising; one under-sluice was opened and the level began to fall.

On the 20th it was $3\frac{1}{2}$ feet below crest of anicut; seven under-sluices were then opened, as heavier freshes were expected towards the end of May, and it is difficult to open these shutters when water is high in the river.

On the 22nd the river began to rise at 4-30 p.m.

On the 23rd it was 6 inches over the anicut with seven under-sluices open.

2. On the 11th water had been allowed to run over the dam at the town sluice.

On the 24th the head sluices were opened so as to let in 2 feet 6 inches of water on sill, on the 25th 4 feet, and on the 26th $4\frac{1}{2}$ feet, since which it has again fallen on account of the decrease in the river. The result is that at present (4th June) water is filling Puggadial tank, so that when the permanent freshes come there will be no delay in sending down the water. These freshes during the hot weather are unusual. A copy of the Seonkaseia Water Register for May is appended.

3. In the early part of the month the weather became hotter; from the 16th till the 25th it was very much cooler, and we had rain at Kurnool on the 18th and 19th at night, amounting to 2.72 inches. This was due to the late cyclone which occurred at that time and in which 21 inches were recorded at Madras. Since the 25th it has become very hot again.

4. There is naturally a feverish anxiety about the water. Crops have been sown in many places and, should rain not fall till July, it is feared failure will ensue. The crop sown is a kind of corra, which should be reaped in less than four months after sowing: some cholam also has been sown; but no attempt will be made to sow wet crops till July.

5. It is a question whether the too early advent of the water with a chance of failure before the regular monsoon sets in say in July, is a greater evil than the prolonging of the

present misery. But from the local accounts it appears that very serious inconvenience and much sickness is experienced from the want of drinking water. This extends to many villages along the canal and especially to Nandial, where petitions for water for the tank are already preparing. Cattle also are very much in want of it, and grass will begin to grow in many places if water comes down.

6. *Repairs.*—The two new head sluice shutters have been put in place; the training wall from calingulah No. 9 scouring sluices has been carried up above 2 feet or more for the whole length which is 589 feet.

The repairs to bank at 3 miles are finished and calingulah No. 1 outlet taken in hand. The plaster and puddle at No. 1 wall at Parthapur have been finished.

Muddigutta bridge approaches have been finished to 1 foot above water line.

In the lower ranges bankers have been working at task-work, and have done a fair amount of work in improving tank revetments, clearing silt from cutverts, from channels, &c.

7. Surveys and plans have been made of Lockinsula with reference to the natural calingulah which requires attention. Plans and estimates for the completion of Poolanddy Branch channel have been sent in. So incessant has been the work of preparing, checking and correcting last season's Irrigation Accounts in order to be ready for settlement that I am almost left single-handed.

The experience of the past year will teach us to avoid in future much useless expenditure of time and paper.

8. *Settlement.*—The wet crops for Nandial will be finished immediately; this part of the work can go on as fast as the Deputy Collector's Clerks are able to copy the returns; but it is impossible to say what time the dry crops will take us, overwhelmed with settlements of four or five taluqs he is making head against it as fast as practicable. His difficulties have been immensely increased by the famine. While the Company's officers were hard at work trying to register the crops flooded generally without the assistance of Curnams, the Tahsildars were entirely employed on relief works, and had apparently no control over the Curnams. The consequence is that virtually our accounts must be taken, and it appears that the Curnams have taken our accounts almost exactly from the Amin. To add to the difficulty the Deputy Collector himself was absent from his division for some time at the critical period, having been called to Cambum on special duty.

9. The health of the staff has been fair.

10. The staff were paid from 2nd to 14th May 1877.

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

P.S.—Two and three quarter inches rain fell at Ayalore on the morning of 6th June, and now (7 P.M.) there are signs of rain to the south.

AYALORE,
7th June 1877.

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

Lower Division.

Monthly Report for May 1877.

I have had very little time this month to devote to the conservancy of the canal, nearly all of my time being occupied by the water-rate settlements and their preparation; but I have been able to make a brief inspection of the Upper Sub-division and some of the main channels. I find the repairs which were mainly performed by the staff, done very well, particularly the masonry repairs. This year I have found it an excellent and economical plan to make my own chunam, instead of purchasing the rubbish chiefly manufactured for the use of Dhobies, and to employ my own staff, with a skilled workman at each work, to guide them. The contract system for petty and detached works (and even for large works) is a bad one, unless you have that rare commodity—a faithful and energetic Maistry.

2. Towards the latter part of this month and the early part of June, the rainfall has been unusually heavy, and nearly all the land and adjacent to the canal has been ploughed up, and the ryots seemed hardly prepared for the rain, and are

I think, sowing hastily and rashly. I passed through several villages during the rains of the 8th to the 12th June, and met coolies carrying hastily brought seed grains to distant villages. (The grains seem to be scarce.) The intention seemingly is to get a short or two and a half months crop by the aid of the rains, which certainly appear promising, and then sow the usual wet and garden crops. I never remember seeing really good specimens of these crops in any year, except of course jonna, unless they were irrigated. Every year a proportion of these crops receives two or three floodings from the canal, for which the ryots pay Rupees 2. Others prefer to rest contented with their indifferent crops, in preference to paying the exorbitant sum of Rupees 2 to improve them. It is a pity that the ryots will not yet see the advantage the canal gives them and sow their wet (five or four months) crop first and afterwards the short crops.

3. In addition to these crops I see that mundla paddy is being extensively sown. This is a crop which, in proximity to the canal and channels, is, in the eyes of the ryots, free from charge. According to their and indeed most of the subordinate Revenue officials' views, it subsists entirely upon rain water and subsoil leakage, and the idea, and even the supposed act, of taking water is considered absurd, as it is not required. The advantage taken by the ryots of this idea is astonishing. Fields frequently found covered with water, evidences of recent floodings, come before the Amin constantly; yet the Amin can prove nothing, and the Ryots pretend that the overflowing of the channel is not his doing and is hurtful to his crop. It is a fact that these crops can exist on subsoil leakage, but the leakage must be excessive, and such which according to my judgment would more than suffice for second-class crops. Such crops are as fairly irrigated as any.

4. Canal subsoil crops, as they are represented in the Revenue Accounts, are simply fields which are matured by the uncontrolled water from neighbouring irrigated fields, from the water which is supposed to ooze through the banks of the numerous channels; why water should be raised to the banks is not considered an important matter, and from water over which it is supposed the Canal Officers have no control.

5. Although the late season has been so exceptionable, I have registered in the Sirwell Taluq 302 acres of good fair crop, mostly mundla paddy, corra and areca, upon which the Company can make no claim for water-rate. All of these had to be recorded as sub-soil leakage cases, as the Amins could provide no evidence of water having been taken. In addition to this I recorded 192 acres of mundla paddy and raggy in one village, Pathacondocoor, under the "unapplied" head, as water was seen standing on the fields, and other satisfactory evidence was given by the Amins; but it is urged by the Reddi, Curnam and villagers that these are subsoil cases. A plan which I have in preparation will show the position of these fields and the channels and the means by which the water was obtained.

6. I think it would be a good plan to class once for all all lands under the canal as "subsoil," which it can be shown are affected purely by subsoil leakage, and make no charge for second-class crops grown on them. As it is, the subsoil leakage cases crop up and extend in villages some two or three miles distant from the canal. A field which in one year may have been irrigated in the usual manner may in the next be remitted as a subsoil case.

7. By arrangement I met the Special Deputy Collector, A. Ramachandra Row, on the 10th May at Sirwell for the purpose of holding a settlement on the Irrigation Revenue for 1876-77. The accounts were not closed until the evening of the 28th May 1877, as the questions to be gone into were very tedious, and were rendered complicated by the badly prepared and insufficient accounts prepared by the Curnams. I think it impossible for the settlement to have occupied less time; hampered as the Deputy Collector was with the land settlement and famine duties, I think he could not at any other time have shown more patience and consideration in settling the Company's accounts. The settlement seemed to give satisfaction on all sides.

8. I enclose an abstract of the extent and amount in the Kurnool district, according to the settlement papers.

9. Health amongst the staff, &c., along the canal has been pretty good, except only in the village of Chintacoota, in this village for several days the deaths from cholera averaged five each day. From what I could gather it appears to have emanated from the starving paupers who had recourse to the lowest possible description of refuse for food.

10. I have been unusually unwell this month; at times being unable to carry on my duties regularly. It was therefore a great satisfaction to hear that Mr. Maltby had been posted to this division as an Assistant Engineer, as the work is as likely to be as heavy this next season as last. The staff were paid from the 6th to 16th May.

DURGA.

13th June 1877.

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

Chief Engineer's Report for May 1877.

THE Engineers have been so much engaged in examining their works and preparing plans and estimates of special repairs necessary, and also in carrying out the annual settlement of water-rate due for last season, that there is little work to report upon in May.

2. The two newly appointed Assistant Engineers landed in Madras on the 22nd ultimo, and have arrived at their stations on the canal. Their arrival is very opportune.

3. The canal is now (20th June) being opened; the depth of water in the canal at Soonkosala being 5-3 feet. The percentage of mud in the river at Kurnool has decreased daily, but is still five against four in the canal at Kurnool; hence about 10,000 cubic yards of mud enter the canal hourly, of which 2,000 cubic yards are deposited in it between Soonkosala and Kurnool. Probably this mud when dry would occupy about a quarter the space it does when precipitated by storm; but even if only 500 cubic yards of solid mud are being deposited hourly between Kurnool and Soonkosala, an expense is being incurred by this opening of the canal to a muddy local fresh, which would not be justifiable every year.

4. Three demands for money earned by the canal have been made on the Kurnool and Cuddapah Treasuries as ordered by Government, of these Cuddapah has paid on one only, Kurnool on two*; I have been therefore obliged to curtail expenditure to the very utmost, and have not in the Cuddapah Treasury enough for this month's expenses of the Lower Division.

5. The settlement completed in Sirwell indicates that the net earnings will be as usual about 2 per cent. under the gross demand.

KURNOOL,
20th June 1877.

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

MADRAS IRRIGATION AND CANAL COMPANY.

Register of Rainfall during the Month of May 1877.

STATIONS.												Remarks.
Date.	Soonkotehla.	Kurnool.	Jayal.	Vallajunur.	Jebur.	Ayaloor.	Yaloor.	Chausavoot.	Rajooly.	Dheer.	Admanagappally.	
4th	..	0.29	..	..	..	..	..	..	..	..	..	Rainfall at Dheer from 1st January to 31st May.
17th	..	..	0.26	..	..	..	..	..	..	..	..	
19th	..	..	..	..	..	..	..	..	..	0.50	0.55	
19th	..	0.50	1.50	0.05	..	..	1.2	1.00	2.00	0.45	0.30	
20th	..	0.50	1.22	0.30	0.70	1.00	1.05	..	..	..	..	
23rd	..	..	..	..	..	0.26	..	..	..	..	..	
24th	..	..	..	..	..	0.32	..	..	..	..	..	
31st	..	..	..	..	..	..	..	..	..	0.14	..	
Total	0.50	2.02	1.05	0.70	1.00	1.63	1.25	1.50	2.00	1.09	0.55	
												(Signed) J. O. DUNNHY, Conservancy Engineer.

KURNOOL,
20th June 1877.

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

SUBMITTED for the information of Government.

Orders have recently been passed with a view to expedite the settlement of the demands on account of earnings made by the Chief Engineer and Manager.

No. 163 I, dated 11th July 1877.

(Signed) JOHN MULLINS, Colonel, R.E.,
Chief Engineer for Irrigation.

No. 113.

ORDER THEREON, 20th July 1877, No. 184 I.

ORDERED to be recorded.

(True Extract.)

[Signature]

Colonel, R.E.,

[Signature]

Joint Secy. to Govt., P.W.D.,

Irrigation Branch.

To the Chief Engineer for Irrigation.
" Chief Engineer and Manager, Madras Irrigation and Canal Company.
" Collector of Kurnool.
" of Cuddapah.
" Revenue Department.

Exd. E. C. Shunker.

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Col. of 1877
PUBLIC WORKS.

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PAID BY THE GOVERNMENT

1 August

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JULY.

Nos 112-118.

7. 2. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31.

Report of the Upper and Lower
Divisions of the — for May 1877, recorded.

No. 4378
Command to the
Board of Revenue

29. August/77