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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

REVENUE DEPARTMENT

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Not to be folded or roughly handled

679
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GOVERNMENT OF MADRAS.
PUBLIC WORKS DEPARTMENT.

28th February 1878, No. 167 I.

Irrigation.

Read the following paper :—

No. 77. Endorsement of the Acting Deputy Chief Engineer for Irrigation, dated Fort St. George, 19th January 1878, No. 12 I.

From J. H. LATHAM, Esq., Chief Engineer and Manager, Madras Irrigation and Canal Company, to the Chief Engineer for Irrigation, dated Kurnool, 2nd January 1878, No. 1.

- * 1. Upper Division.
- 2. Lower do.
- 3. Donipad Sub-division.
- 4. Chief Engineer's.
- 5. Abstract of Irrigation.

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

MADRAS IRRIGATION AND CANAL COMPANY.

UPPER DIVISION.

Monthly Report for November 1877.

As already stated in my last report a breach occurred at Yeddaroor at 5 miles 44 chains. This was the site of a former breach in 1863-64 I think, and consequently the outside of the bank was very deep. At the inner side the ground was level with the bed level, i.e., 14 feet below the top of bank; at the outer toe it was 30 feet below this. Water never ceased running through for a few days it was very low.

The small breach at 3 miles was also stopped, but owing to the treachery of the soil a leak sprung out again; it was soon stopped effectually.

Water did not fail at any sluice below Kurnool; it is now 5.9 at Jupad bridge.

2. The rains have been almost nil, except the rain of the 2nd, when 4 inches fell at Sunkesala.

3. There are several acres for which ryots had applied for water, but did not use it. There are not wanting signs that a brisk demand will spring up in a month's time; especially for some of the late sown fields of jonna. I have already seen a field or two in a withering state at Terrigopully, but these were above the canal. In the 3rd and 4th ranges applications are beginning to come in again, as well as in the 5th; especially the villagers of Bileulgoodoor are anxious for a flooding to the dry crops. Yesterday more than 50 acres were recorded; but as the Reddy and Curnam are both suspended for three or four months, there is a difficulty in getting the necessary revenue details.

It appears that directly the dry crop begins to droop the ryots take water; this is a good sign. I hope many will venture to sow again although all chance of rain is over.

4. Having undertaken to distribute the English relief money in a few villages of Ramalkota and Nundikotkur, I am glad to report that it is quite difficult to find sufficient individuals to whom help ought to be given. This is especially the case in the latter taluq, where the coolies are all employed in cutting grain, and, except a few old people and children unable to work, all are well looking and apparently well fed. These villages are all commanded by the canal and distress has never been so severe as in others; moreover the ryots have saved their cattle.

5. The health of the staff is if anything worse than last month owing to the continued prevalence of fever. From Sunkesala to Ayaloor wherever I go I hear the same reports; very considerable mortality has occurred in the villages.

As an instance to show how I am situated in the 1st and 2nd Ranges from Sunkesala to the 40th mile, there are four employes; of these my Overseer reports himself sick from fever, the Sub-Overseer at the breach also unable to work, another Sub-Overseer in hospital, and another sick with dysentery. The Amin in the same ranges is constantly attacked, and lately when inspecting the village of Ulloor, I was obliged to give up in despair owing to the sickness

of the Overseer, Amin and Curnam. In almost every village I have found the Curnams unable to attend.

6. Tappal arrangements have failed principally from the runners having continually been seized with fever on the road.

7. The construction of the new plank houses proceeds very slowly owing principally to prevailing sickness. One at No. 9 calingulah is finished except the roof, and arrangements are made with contractors for others; one at No. 9 calingulah in the 7th Section has been brought up to basement level.

8. As I hear the Toorcherla extension scheme is sanctioned, I am making preparations to carry on the necessary surveys as rapidly as possible. My Surveyor has recovered and is now with me at Velapanur; I hope by January to have more assistance.

The Poolmuddy branch is nearly completed, but earthwork only; it is about ten miles long. Out of the eleven bridges over this channel two 3-arched ones are three-fourths completed, three with eight and nine vents are nearly finished. Stone is collected at the sites of the others, but the masons have all returned to Kurnool sick.

9. Locks Nos. 8 and 9 have had the balance beams and straps fitted on to the gates, and the valve gear put in order.

The work at the Lockinsula natural calingulah is at a stand still for want of apolies, and the contractor for the high banks of Toorcherla main channel after completing about three-fourths of the work has broken down.

10. Mr. A. L. Dunphy reports as follows:—

"The fever has stopped almost all work during the month. Each one, if not all, of my bankers being attacked more or less severely, as also my Overseers, Writers and Tindals. My own immediate servants and lascars have all been and are now suffering from this fever. My own health is good."

Also "Irrigation. - I have opened three gaps in main canal bank, two at Bandiatmakur and one at Enripad. In doing this I felt sure the particular urgency of the case demanded it. It has been not only the means of saving at the least 100 acres of paddy which would otherwise have been lost, but I believe it has also tended to establish and increase the feeling amongst the ryots concerned of more reliance on the Canal officers."

11. I am inclined to think that, if the ryots had sluices instead of the gaps, there would be more reliance on the annual supply of canal water than by occasionally cutting banks for them. Permission has however been granted by the Chief Engineer after the cessation of the rains to supply certain fields by cutting through the banks.

I hope many new sluices will be built in time as irrigation will be greatly improved thereby. In my own range I believe twenty might be built with advantage.

12. There has been no case of interference with our water reported to me. In fact there is such an abundance that the difficulties are not brought forward; I expect shortly when the supply begins to fail we shall hear again of these troubles.

13. Mr. A. L. Dunphy is engaged in reticulating two villages; with this exception nothing of the kind has been done. All the staff are urgently employed where not sick and the crops are far too high to allow of satisfactory work of the kind.

14. The staff were paid from 3rd to 12th November 1877.

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

P.S.—I have at last received the closed accounts for 1876-77. Although still there remains a little difference to settle on account of Government demands for old irrigated fields. The total acreage is 50,052; the net amount for my three taluqs 134,474-10-6. Remissions were a little under three per cent. of the whole amount. It is necessary to state that a large number of applications were cancelled at the settlement; these would have raised the percentage of remissions very considerably if treated as such. It may be asked how there should be any remissions in such a year as the last and after the liberal offer of Government in the matter of dry crops, but as has been reported the very prolonged and difficult settlement proves that matters were gone into very thoroughly. No doubt a more thorough investigation of doubtful cases has saved the Government a few rupees. The Government settlement officer was in a difficult position; it must never be forgotten that those who settle the amounts to be charged on the part of Government are the very tax-gatherers themselves. There was a great tug; three interests at work. It was very hard to saddle Government with fines and water-rates; it was evidently almost impossible to collect the rate from the ryot; at the same time the Company were the last who should suffer when the water was really the only cheap article in the market.

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

LOWER DIVISION.

Report for the Month of November 1877.

The month has been dry and hot for November, and at the close of the month the men had to turn their attention to the cracks which began to appear. The banks, however, are in very fair condition and hardly show any effects of the past rains. Much of the bankers' time has been expended upon felling trees standing on the banks; removing all such trees is a very long job and interferes greatly with the ordinary work. I have succeeded in selling many of these trees to ryots who cut down and remove them themselves.

2. The rainfall return for the month is enclosed. No rain fell at Adimayapully and adjacent villages during the month, and it is here more rain is yet wanted for the dry crops. Near Maidkoor and Cheyapad (P.T.) more rain is also needed. In the black cotton soil villages near Jungalapully (J.T.) too much rain has fallen.

3. The Pennair has been unfordable for several days; for fourteen days bandies have been unable to cross. This long continuation of freshes is unusual. The greatest depth of water over the anicut reached 2-60 feet on the 6th November 1877. The anicut pointing has not been injured in the least.

4. The breach through the Ooppalur (J.T.) bridge approach has been completed, and as the bank has been widened and raised to normal dimensions, I think it will stand any future extraordinary fresh in Koondair.

5. The dry paddy crops were all supplied during the month; many acres of this kind of paddy have existed for two-and-a-half months without irrigation. Raggy is yet being transplanted and sown in some few instances. All crops are in very good condition, with the exception of a few acres of new land paddy and some 50 or 60 acres of new raggy which are being devoured by insects.

6. I enclose the monthly abstract of irrigation for the Cuddapah District. The 'estimated unrecorded' in column No. 9 is large as the ayacuts of tanks which have only recently applied are included. It may be useful to continue to give the estimated revenue, as there is a marked monthly increase in some of the items and every month the estimate will bear revision.

Acres.		Estimate.				
				RS.	A.	P.
10,142	Crops up to date	...	...	37,636	0	0
5,700	Second crops and indigo after November	...	...	19,950	0	0
	Miscellaneous revenue, grazing, fishing, &c.	...	...	763	12	0
	Do. do. after November	...	...	160	0	0
	Total	...	...	58,509	12	0

7. Out of the ten thousand and odd acres irrigated up to date, 341 acres have been irrigated by stealth and discovered by the Company's servants. I think I am right in stating that not one of the cases was detected or reported by a Curnam or Revenue official. This is really a large area to be irrigated in this way, after the cautions the ryots have had and the admonitions the Curnams have received from all quarters. If I were to go into detail I could show that there was just the bare possibility of these cases being detected, if I were to take off the special bankers employed to watch the doubtful cases. The plan now adopted is for the banker to immediately report any water stealing to the Overseer, Amin or Curnam, whoever is nearest; this expensive method is successful, and several respectable ryots with raggy and other crops under their wells have been caught stealing water. Although none of these cases have been discovered by the village Curnams, they have with few exceptions when present in their villages accompanied the Canal officials to the spot, signed the statement of the case and verified the details.

8. The utmost vigilance that can be bestowed by my staff is ineffectual in preventing the diverting of water into tanks. Beginning with Cheyapad tank, part of the ayacut of this tank was by some breach of a kind deprived of its supply. Without saying anything to either Curnam or Amin, the ryots diverted the canal water to their fields, until I suppose they could repair the breach. This tank as well as some others I noticed seemed to retain their water level almost without fluctuation, although the water was being freely used for irrigation and was and is pouring through holes in the calingulahs. I therefore have had the difference between the water-level and the calingulahs crest measured every three days. For eight days, and I dare say for many days before, although there was no natural supply running into the tank, the water kept at 6 inches below the crest notwithstanding irrigation going on, considerable leakage, absorption, and evaporation. No sooner was it known that the water was being gauged than it began to fall at the rate of 1 inch in three days, which is barely equivalent to the

reduction by evaporation. There is not the least doubt that a very large quantity of water has been at times intentionally diverted into the tank, but the difficulty with a large tank commanded by three or four large canal channels and a mass of irrigation, is not to stop the water running into the tank but to detect persons sending it in. The two tanks of Palumpully (C.T.) have received supplies in this manner, but the Overseer himself caught a man in the act of turning the water into one of them and has by my instructions laid a complaint before the Magistrate. Two men have also been caught turning water into Mittaloor tank. Without exaggeration I can say that upon the slightest symptoms of laxity of vigilance or the absence of the Overseer, water will most assuredly be diverted into the tanks. There is great need of water just now, and there is little fear of discovery and punishment; so the risk is run generally with success. It seems unjust that so large a revenue should be lost because the village authorities are so lazy and indifferent, and the ryots so unscrupulous. I have appended a list of tanks whose water levels are effected by the canal with the depth of water as taken at different dates. Of these twelve tanks the Madkoor tank has I believe thrice been filled by natural supplies, but it lies above the canal and failed at the end of November. Sivapuram tank also failed at the end of the month, and so also every tank near the canal has failed including also the gigantic Patha Cuddapah tank with its 1,500 acres ayacut, which until it be connected with the canal will be useless every season. The Burra Coonta, a small tank of Palumpully, is now having its supply augmented by the canal paddy-fields above it. I represented to the ryots that every other tank near their village had failed and that it was unfair to expect to get the canal water for nothing; but they refuse to apply, as they know that the irrigation above the tank is considerable, the leakage from which will suffice for them, notwithstanding the measures the Overseers may endeavour to take. Each of the tanks commanded by the canal should be provided with a gauge, and if the supply has been found to increase during dry weather, the Company should I think be credited with the supply which finds its way in. This seems the only way of defeating those ryots who think it no sin to steal water. Each tank has I believe its water-marks showing the difference of level for each month during which water is supplied; so that if the marks show that for two months only one month's water has been used, it may be concluded that a month's supply has found its way into the tank from the canal and should be charged.

The dry crops in the canal villages are not good, several require rain, many are infested with insects, and the present cloudy weather is very unfavorable for the ripening of the grain.

9. Only one criminal case has been instituted this month, although when time will permit the Overseers have six or seven to bring before the Magistrate; the mere laying of the complaint of the single case referred to occupied the Overseer's time one whole day, half of which was spent in the Cutcherry of the Magistrate (P. Ayanger, 1st-class Magistrate of Cuddapah).

10. A table showing the progress of reticulation is appended.

11. Health of staff is not good; fever is very prevalent indeed. I had a sharp and severe attack during the end of the month, and two of the Overseers have had similar attacks occasionally.

12. The staff was paid from 6th to 15th November 1877.

CAMP, GOODDOOR,
8th December 1877.

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

Register of Rainfall for the Month of November 1877.

Month and Date.	Sunkesala.	Kurnool.	Jupad.	Velapoor.	Jootoor.	Ayaloor.	Yalloor.	Chintacoonta.	Rajolly.	Dhoor.	Adimayapully.
November 1st ..	..	..	..	..	..	0.18	..	..	..	0.13	..
" 2nd ..	4.0	0.90	..	..	..	0.18	0.05	..	0.64	..	..
" 3rd ..	..	..	0.57	..	0.13	0.04	0.20	..	0.40	0.42	..
" 4th ..	..	..	..	0.20	..	..	..	..	0.33	..	..
" 16th ..	..	..	..	..	..	..	..	..	..	0.14	..
" 25th ..	..	..	..	..	..	..	..	..	0.17	..	..
Total ..	4.0	0.90	0.57	0.20	0.13	0.40	0.25	..	1.64	0.79	..
1869. 1870. 1871. 1872. 1873. 1874. 1875. 1876. 1877.											
Rainfall at Dhoor from 1st January to end of November ..											
24.96 25.60 15.98 15.15 26.94 61.33 23.87 8.04 26.08											

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

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

DONIPAD SUB-DIVISION.

Monthly Report for November 1877.

The rainfall this month has been very slight, 0.25 at Yalloor head works and 0.80 at Chintacoonta; these falls occurring during the first few days of the month.

2. The fever mentioned in the last report has been fatal in the case of one of the bankers (Boya Narasanna No. 168), who leaves a wife and six children behind him, but on the whole it has much decreased, and the health of the staff is good taken altogether.

3. The crops are good and are being reaped in all directions. The ryots are asking how long they may expect water in the canal, with an evident anxiety to plant second crops, and in one village I am informed that there are likely to be applications for 2,000 acres.

4. The rainfall having been so small during the past rain, that the late dry crops are beginning to feel the want, and it is not at all improbable that the ryots will apply for single floodings at the monthly rates, in fact they have done so in some cases.

5. The reticulation during the past month has got on but slowly owing to the height at which the crops are standing.

6. I subjoin a table of the rainfall for Yalloor head works and for Chintacoonta stations.

7. The staff has been paid on the 5th and the 7th instant.
(Signed) H. E. MALTBY,
Assistant Conservancy Engineer.

CAMP, 6TH LOCK,
7th December 1877.

Chief Engineer's Report to accompany the Divisional Reports for November 1877.

The irrigation up to date has reached about—			
12,755 Acres wet at, say, Rupees 5 =	Rupees	63,775	
4,428 " garden " " 4 =	"	17,712	
19,216 " dry " " 2 =	"	38,432	
600 " monthly " " 1 =	"	600	
3,000 " tanks, &c. " " 2 =	"	6,000	
Total ..			1,26,529

2. Much further increase is not likely till the monthly rates come into operation on the 1st January, though there is no doubt that irrigation would be profitable already to thousands of acres of dry crop. Pilfering of water is in some villages very easy, and in some states of the crop very difficult to detect if kept out of sight of the tracks. There are good grounds for hope that the Revenue Department will become more successful in securing the revenue against this as the rules provide. Of 341 acres reported to have been detected under surreptitious irrigation in the Lower Division, none was detected by a Revenue official; and it is difficult to suppose that the official's influence to prevent such irrigation can be habitually exerted with due effect in the absence of a single case in which he records perseverance in it. It is satisfactory to find that the Curnams are now attentive and ready to witness and record such irrigation when brought to their notice by Canal officers.

3. As a general result of the Famine expenditure upon roads, I am glad to say that the main road through the Kurnool District has been vastly improved and only needs some stream crossings and a little time to be a good road for all weathers.

4. The portion of this road in the Cuddapah District includes the 40 miles necessary to open up the canal district by enabling the traffic to reach Cuddapah on the railway. It has been neglected except where some ill sorted and unbroken material is piled along the road side. After so much time for arrangements, so many reconsiderations and change of plan, and transfers of departments, it is significant to see that a main road of the first class of which 80 miles have been remodelled in the Kurnool District, should have been I believe unwittingly but deliberately left with the 40 miles necessary to join it with the railway scarcely touched. Its state for the 15 miles I myself saw this month was that so graphically described by some newspapers as characterizing the roads in Bulgaria, where a mile or two take a week's work out of the cattle and carts which pass through it. In the wet weather it would be impassable. It is the emblem of collision of departments. The Government determined the necessity for the road I believe in 1856, and it has been more than 20 years under construction. The local officers, also both of the Revenue and Public Works Departments, have at various times expressed their wish to get it completed. I do not mean to imply that the failure of the canal is attributable to the bad state of this road, but I believe that both as a feeder to the railway and as a main road of access to the canal it would financially benefit every department.

5. The entrance to the Koonder valley from Cumbum has also been repaired. The Ramnagar pass towards Gooty via Pyapully is virtually as it was before the famine. Some cross roads have been executed more or less, but seem scarcely with particular inquiry. Most valuable work has been done in roads of access to villages; scores of them have been thus benefited.

6. The Government have offered Mr. Edward Gibson the appointment to take charge of the irrigation under the canal. I think no more satisfactory appointment could have been made.

7. The Tumbudra has fallen rather rapidly, but still stands at a level with the crest of the Sunkesala anicut, while five under-slucies are fully opened. The probability is that water will be available till the middle of March if not required for the Delta irrigation.

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

Abstract of Irrigation up to end of November 1877.

District.	Talūq.	CLASS OF IRRIGATION.				Total.	Tanks supplied.	Estimated unrecorded Irrigation.	Remarks.
		1st Class.	2nd Class.	3rd Class.	Month-ly.				
1	2	3	4	5	6	7	8	9	10
		ACRES.	ACRES.	ACRES.	ACRES.	ACRES.		ACRES.	
Kurnool ..	Ramalakota ..	806-06	362-94	944-79	..	2,113-79	..	40-00	
	Nandikotakur ..	2,695-11	1,127-00	7,753-41	13-91	11,589-13	..	100-00	
	Nandial ..	2,683-17	759-85	3,195-28	2-24	6,640-54	..	900-00	
	Sirwell ..	2,001-80	631-70	2,794-90	23-87	5,382-27	..	390-00	
	Koilkootla ..	209-30	130-21	2,076-62	..	2,476-13	..	65-00	
	Total ..	8,395-44	3,001-70	16,764-70	40-02	28,201-86	..	1,495-00	
Cuddapah {	Jamalmaduga ..	31-64	55-51	526-27	..	613-42	..	196-00	
	Prodatoor ..	2,280-27	958-01	1,031-96	33-41	4,313-65	..	980-00	
	Cuddapah ..	2,075-16	457-93	959-25	520-60	4,013-04	..	516-00	
	Total ..	4,387-07	1,471-45	2,517-68	554-01	8,940-11	..	1,692-00	
	Grand Total ..	12,782-51	4,473-15	19,282-28	594-03	37,141-97	..	3,187-00	

KURNOOL,
17th December 1877.

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

SUBMITTED for the information of Government.

(Signed) P. MONTGOMERIE, Major, R.E.,
Ag. Dy. Chief Engr. for Irrigation,
for Chief Engr. for Irrigation.

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

No. 78. ORDER THEREON, 28th February 1878, No. 167 I.

ORDERED to be recorded.

2. The attention of the Collector of Cuddapah will be drawn to the remarks made by the Chief Engineer, Madras Irrigation and Canal Company, on the state of the portion of the Cuddapah and Kurnool road in the Cuddapah District.

(True Extract.)

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

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

Exd. E. C. Shunker.

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12/3

Revenue 1878 Dept

No 1114
IRRIGATION.

Gobt. of 1878 Madras.

PUBLIC WORKS.

To

THE REVENUE DEPARTMENT.

&c. &c. &c.

No 679

Communicated to the

Board of Revenue whose attention
will be called to para 2 of the
foregoing Order.

Dated February 28th.

Issued

Recd. 12 March

Encl.

G. O., 28th February 1878, No. 167 I.

By Mr.

FEBRUARY.

No 77-78.

No 679. 15 March 1878

Madras Irrigation and Canal Company.
Monthly report for November 1877
recorded; the attention of the Collector of
Cuddapah drawn to the state of the
Cuddapah and Kurnool road in the
Cuddapah District.

With Order

M. S. S. S.

15 March 78

17 To the Board of Revenue