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MADRAS RECORD OFFICE

Government of Madras

Public Works

DEPARTMENT

G.O. No.	2711	Press
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Dated	11-10-	4876.
		195-

Not to be folded or roughly handled

No. 126. Read the following endorsement of the Chief Engineer for Irrigation, dated Ootacamund, 4th October 1876, No. 206 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, dated Kurnool, 22nd September 1876, No. 92.

August Reports.

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

MADRAS IRRIGATION AND CANAL COMPANY.

UPPER DIVISION.

Monthly Report for August 1876.

Water.—There is an abundant supply; up to this rain has had no effect on the height in canal. It has been nearly 4 feet at Soonkesala all through the month, and is now raised to 4·2, and at Jupaud bridge 3·7.

The excavation of the silt seems to have been successful. The gauges showing the depth of water are much more uniform than hitherto.

2. *Rain.*—There has been very little during the month—

At Soonkesala	...	...	...	...	...	2·10
Kurnool	...	...	...	...	...	1·50
Jupaud	...	...	...	...	...	3·04
Velapanoor	...	...	...	...	...	3·30
Jootoor	...	...	...	...	...	2·50
Ayaloor	...	...	...	...	...	3·79
Average ...						2·7

The smallest amount was registered at Kurnool. During the whole month being in camp and travelling from one end of the division to the other, I was struck with the different appearance of the crops in different parts.

It seems that at Velapanoor a timely shower in July and a few in August have been very favorable. The cholum and crops look flourishing, but both north and south of this point failure is very common, while many fields were still unsown and all dry crops look very backward.

The total rainfall at Kurnool from June, the 1st has been 6·73 for three months.

3. *Repairs to the Canal on Capital Account.*—These will be completed during the month. Bollaveram bridge is finished except metalling.

4. *Repairs on Revenue Account.*—The sluices at No. 1 calingulah are completed except the fixing of the raising gear which has just arrived from Madras, and will be fitted to its frame and sent to Yeddaroer in a few days.

Other works are being steadily proceeded with, chiefly raising banks at Kadrabagh, Tongadancha tank, and in a few other places. Early in the month a leak occurred at Terrigopully in the upper bank close to the aqueduct. It was in a very dangerous place; but soon stopped, and has since been properly mended. I was at Velapanoor and posted off immediately on hearing the news.

It was not even necessary to lower water in the canal.

The principal work has been the 6th Section. We were hindered by a breach which occurred just above Lock No. 5. At this part of the canal water has only twice been let in, and then only

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for a few hours. The banks are of black cotton, and, as the want of rain has left them unusually dry after the unusually hot season, cracks must have widened out. The cost of repairing this breach will not be more than 200 Rupees or £20. When water is let in regularly to this part of the canal the banks will become seasoned.

Water had been let in on this occasion to float the new balance beams down to the Lock No. 4.

The balance beams are fitted on Locks Nos. 1, 2, 2-A, and 3, and are being put up at No. 4. I hope in a few days to be able to work the gates down to Velapanoor, but, as no more beams are coming, the work will stop here.

The valves seatings however will be finished throughout the whole range of locks and many other necessary minor repairs.

It has been determined to divert the Vagoo at Chabole into the Canalla tank by cutting a drain from the bridge towards the Sumbavaram culvert and turning the water to the south instead of into the culvert and Vagoo north of the bridge which does not run into the tank.

5. *Distribution.*—I feel confident that there will be a considerable increase on the whole in my division. In some places ryots are driven to cultivate wet crops, as nothing else would thrive; and it is really astonishing that in such a dry season the irrigation is not doubled.

It would seem natural that when dry crops are failing all round and withering for want of a little water that the ryots should take water for them; but in spite of complaints and down-right loss of whole crops, tickets for only 33½ acres have been received in my office. At Satanicotta my Overseer reports that the ryots are now all regretting that they did not take water before their crops are withering, and now it is too late.

The ryot seems to have an idea that canal water will injure the fields. It cannot be supposed that he would refrain from saving his whole crop on account of the Rupees 2 per acre which he would have to pay.

6. The preparations we have made are quite sufficient to supply a very large area, and in an emergency the work of constructing small channels would be given to coolies or contractors almost without limit.

It is natural to suppose that in such a season as this we should find the Revenue Officers foremost in the field endeavouring to get the ryots to save some of their crops.

In my late tour through the division from Kurnool to Ayaloer I have not found that any thing of the kind has been done; but I may be wrong.

In Ramalkotta the Tahsildar has made a tour through the villages between Kurnool and Soonkesala encouraging the ryots to increase irrigation, which, as I reported last month, has much fallen off on that side; but, as he seems to have sympathized with them on the so-called high rates for the water, the good he may have done is rendered doubtful.

7. Water has been taken freely for the sugar, saffron, and betel under Nundial tank which is quite empty.

It is supplied under Rule VI, Clause 8, at the monthly rate by means of channels through the dry bed of the tank, and it is daily expected that a demand for water for paddy also will arise. Paddy has been sown and will very shortly suffer unless rainfall or irrigation water is used.

The tanks at Ayavarcodoor and Byapcodoor are dry, but paddy is sown below them. The villagers applied for water for a part only of the ayacut. It appears to me that when the whole ayacut of a tank is drying up for want of water, it would be best for the whole of the ayacut-holders to apply at once. It is very inconvenient and a dead loss to supply certain fields applied for and to keep water out of the others, and I trust the whole piece will be supplied puts me rather in the position of a Doctor who, when he is sent for, is obliged to attend the patient and take his chance of payment afterwards. On this principle water will be given where possible.

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8. Cannalla tank was empty a few days back; but the ryots are unwilling to take water from us as they are under the impression that they have a right to water for nothing, owing to the question of the tank-supply which has been much discussed, but is still unsettled.

9. With the exception of the 1st and 2nd ranges, I have not received the estimate of total irrigation to be expected and in consequence of the new arrangements whereby the Curnams may record applications; tickets for which are afterwards given, the true state of irrigation is not shown by the tickets received.

10. A copy of applications made up to date through the Company's officers is sent herewith.

11. The health of the staff has been good, a few cases of fever only have occurred. The staff were paid from 5th to 22nd August 1876.

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

Rain Register for the Month of August 1876, at 6 a.m. daily.

Date.	STATIONS.					
	Soonkesala.	Kurnool.	Jupaud.	Velapanoor.	Jootoor.	Ayaloer.
1st	...	...	...	...	...	...
2nd	...	...	...	...	...	...
3rd	...	...	0.37	2.45	0.30	0.50
4th	...	...	...	...	...	0.10
5th	...	...	...	0.10	2.00	0.80
6th	...	...	...	...	...	0.10
7th	...	...	...	...	...	0.30
8th	...	...	...	...	...	0.05
9th	...	...	...	...	...	0.80
10th	...	0.20	0.10	...	...	...
11th	...	...	...	...	...	0.04
12th	...	...	...	...	...	...
13th	...	...	...	...	...	...
14th	...	...	...	...	...	...
15th	...	...	...	...	...	...
16th	...	...	0.07	1.50	0.40	...
17th	...	0.50	0.30	0.05	...	...
18th	...	...	...	...	...	...
19th	...	...	...	...	...	...
20th	...	0.30	0.13	0.17	...	0.10
21st	...	...	...	...	...	...
22nd	...	...	...	...	...	0.20
23rd	...	...	...	...	...	0.15
24th	...	...	...	...	0.20	0.50
25th	...	1.10	0.19	0.95	0.25	...
26th	...	...	...	...	...	...
27th	...	...	...	...	...	...
28th	...	...	...	...	...	...
29th	...	...	...	...	...	0.15
30th	...	...	...	0.10	...	...
Total...	2.10	1.50	3.04	3.30	2.50	3.79

KURNOOL,
4th September 1876.

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

Proceedings of the Madras Government, Public Works Department,
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Statement showing the Area applied for Water up to 31st August 1876, and the Area cultivated during season 1875-76.

No.	Name of Villages.	Area as per Tickets received up to 31st August 1876.	Area cultivated in 1875-76.
Ramalcottah Taluq.			
1	Soonkesala	3 68	8 08
2	Kontalpaud	...	3 31
3	Yeddaroer	29 04	57 61
4	Gopalsingavaram	14 08	39 37
5	Nidgoor	96 63	140 15
6	Moongalpaud	49 56	80 01
7	Manidialpaud	23 71	54 76
8	Roja	7 50	19 41
9	Kurnool	7 68	18 27
10	Kulloor	...	453 88
11	Joharapooram	32 92	70 88
Total ...		261 80	945 73
Nundicokoor Taluq.			
1	Pasapala Rudravaram	...	16 92
2	Poodoor	...	41 13
3	Uloor	45 44	50 31
4	Satanicotta	64 02	91 46
5	Malayala	74 15	112 72
6	Muddigatla	16 21	44 97
7	Bejevievenulu	20 84	23 65
8	Nagatoor	162 32	147 20
9	Moovakonda	33 92	145 15
10	Veerapooram	2 00	56 03
11	Vellala	...	19 96
12	Mochoomurry	2 38	376 21
13	Palamurry	21 11	57 61
14	Beeravole	42 66	48 24
15	Pratacotta	85 76	287 57
16	Pagalial	20 91	78 93
17	Gannapavaram	140 95	358 88
18	Toomnaloor	5 57	7 84
19	Thatipaud	62 75	71 67
20	Bollavaram	45 03	25 32
21	Bunnoor	68 74	85 87
22	Terrigopala	...	11 54
23	Chatlajootoor	59 69	127 92
24	Chillimalla Rudravaram	114 36	221 96
25	Pamulpaud	56 49	286 41
26	Cumbalpullu	...	62 08
27	Tudicherla	...	75 91
28	Muddoor	...	42 91
29	Banamookkala	...	13 26
30	Mittakundala	...	15 76
31	Vanala	...	30 75
32	Vempenta	...	32 37
33	Velapanoor	...	119 20
34	Regadigoodoor	...	49 93
35	Korrapalur	...	41 41
36	Iyavaripally	...	8 61
Total ...		1,145 30	3,287 69

Much irrigation on this 5th Range, but no tickets have yet been sent me.

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Statement showing the Area applied for Water, &c.—(Continued).

No.	Name of Villages.	Area as per Tickets received up to 31st August 1876.	Area cultivated in 1875-76.
Nundial Taluq.			
1	Bilkalgoodoor	...	219 98
2	Pessaravoy	...	46 45
3	Paramatoor	...	28 72
4	Gadivamula	...	5 35
5	Boganam	...	2 36
6	Gadigaravemula	...	4 00
7	Karrimadoola	12 97	218 45
8	Boodanoor	...	52 12
9	Chindacoer	...	9 51
10	Tirripaud	8 86	15 85
11	Korratamuddi	...	9 51
12	Kakanoor	...	23 60
13	Poolimuddy	14 65	29 71
14	Bundiatmakoor	...	12 20
15	Yerragoontla	55 55	63 79
16	Parnapully	...	3 67
17	Eranapaud	45 20	19 36
18	Iyavarecodoor	31 41	37 18
19	Byapacoodoor	1 00	21 02
20	Nundial or Cottapally	113 86	*913 35
21	Bollavaram	4 12	12 46
22	Billalapooram	...	20 14
23	Noonipully	54 66	113 55
24	Chabole	45 09	138 43
25	Poosaloor	...	11 58
26	Beemavaram	2 20	0 00
Total ...		389 57	2,032 34
Grand Total ...		1,799 67	6,265 76

* Includes 756-52 areas under Nundial tank.

KURNOOL,
4th September 1876.

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

LOWER DIVISION.

Report for the Month of August 1876.

Owing to the unseasonable dryness and heat of the weather, the cracks in the banks have been very numerous and of unusual size, requiring some skill even on the part of the Overseers to treat properly. The Engineer and Overseer can easily be deceived by bad work; the men employed to stop these cracks used frequently to treat them in a very superficial manner, large gaping figures extending completely through the banks being neatly covered with a lid of earth.

I mention this to show what a great deal of time and attention the Overseers should expend on this work, in order to satisfy themselves of the safety of the banks.

2. A small breach occurred during the early part of the month in the left bank near Lock No. 3 (mile 119-74). It seems to have been caused by vermin and not by a crack. The supply of water was not stopped, it was only lowered for a day.

3. Since my return from leave I have been along the whole of the Lower Division, making arrangements for strengthening the weak and unsound banks, and satisfying myself that the Overseers (two of whom have been recently appointed) thoroughly understand their duties. Before the end of next month I hope to raise the water to full navigation level; it is now being raised at intervals.

4. There has been an abundance of water at my command, enough for any extent of land that I may be called up to irrigate.

The rivers, streams, and tanks are almost perfectly dry, except those rivers which receive the Toongabudra water by means of the canal.

5. Until an additional quantity of water was sent down the Kondair there was insufficient water at the Adymapally anicut (across the Pennair) for the 10th Section Irrigation.

A deficiency of water in the Pennair has, I believe, never been experienced before.

6. I enclose the monthly table of rainfall.

The fall has been unusually scanty, but we have yet to get the September rains which are always the heaviest.

7. *Irrigation.*—The ordinary irrigation is already in excess of last season's, and all the Overseers report that the demands for water for wet crops will be larger in nearly every village.

This is not attributable to the drought; that has not, I feel certain, influenced the irrigation at present (the 6th September) in the least.

8. I visited many villages in the Sirwell and Koilkuntla taluqs this month, and I find that wet cultivation is steadily increasing and will increase if the ryots are encouraged, cautiously advised, and not dissuaded from using the water, on the supposition that it is bringing discomfort, radical changes, and additional work on to the shoulders of the heads of the village. Some of these latter with a self-constituted governing body of rich men (who, with little trouble to themselves, make large profits out of the dry crops); get terribly annoyed if a few poor or moderately rich men determine to raise a little money by cultivating a valuable crop by means of canal water.

9. A village (Jungalapally), about which I wrote in a last season's report, has so far recovered from its antipathy and apathy as to increase its irrigated area fivefold, and to adopt the canal water for drinking purposes, several of the villagers having contributed a few Annas, and constructed a rough drinking fountain supplied by an irrigation channel.

10. In another village (Buttoloor) I found the value of canal water fully appreciated. All the available land, considered by the ryots suitable for irrigation, is being gradually brought under its influences. Some Brahmins requiring a channel of some considerable length said, if requisite, they would bind themselves to irrigate their land for a number of years.

11. There are several other villages where irrigation has obtained a firm footing, and I believe could not be dispensed with.

Its sure, though slow, expansion in this case is attributable to two causes only, want of manure, and a simple, cheap, and easy means of disposing of the produce, beyond the home consumption.

12. In a few out-of-the-way villages the value of rice is hardly understood. The ryots, whose fathers have never eaten any other grain than cholum, corra, or perhaps raggy, regard irrigation as a luxury. The rich men of the village, with several others from adjoining, but not commanded villages, select the best ground, and an extent is irrigated averaging an acre per man. There is not the slightest intention of growing the rice for sale, as they do not care for the trouble of taking it to the best markets, incurring perhaps a three or four days' journey.

13. In only one or two villages, I have found a surely and unexpected determination to have nothing further to do with canal water.

A singular instance is Dhoor; since the canal was opened for irrigation, the betel gardens, 26-00 acres in extent, have been supplied with canal water until the present season. The owners of all the gardens, with the exception of one (which can be supplied by a channel from the Dhoor tank), have declined to take canal water; and all through the hot weather, these extraordinary men have been ceaselessly laboring to keep their gardens moist with buckets full of water raised from wells by the aid of four bullocks and generally three men. The expense of keeping the rude machinery alone in order is far more than the Company's water rate (I have the same

apparatus myself to water my garden, and I can make this statement with certainty). Their reason for discontinuing using the canal water is, as I learn from themselves, that it does not agree with the plants.

The most likely is that they are under an impression that a question which the 1874-75 Settling Officers did not dispose of themselves, owing to their having different opinions as to the rate clause applicable for such crops, was not disposed of as they had learnt to expect.

They openly resented the charges; as the very next day the decision of the vexed question was known, the whole of the betel gardeners brought their tickets (for the ensuing season) to me during settlement and asked that they should be cancelled. These tickets were again sent to me through the Acting Deputy Collector with a request that they might be withdrawn from 1st January.

Tickets had been issued to the ryots for the whole crop as in preceding years; but they at the 1874-75 wished to be charged, not according to their application, but according to the time the water had been taken. By the former the charge would be Rupees 12, by the latter the charge should be 6 Rupees + 7½ Rupees, as water was supplied in the month of May.

14. The cultivation of Mundla paddy has been greatly extended this season in the Sirwell taluq. In Pathacondacoar there are more than 300 acres, and in Lingundinny there are more than 70 acres; about 50 acres more than last year. A conviction that Mundla paddy can be grown free of charge has gained ground since last season. Many ryots sow a small patch of good paddy surrounded by Mundla paddy; apply for water only for the small piece, and allow the surplus to fall on the Mundla paddy with impunity.

As I have probably 1,000 acres of this crop in this taluq alone depending upon the canal alone for water, for which no application will be made, it will be necessary to keep a large staff of amins and bankers on the watch to detect cases of water-stealing.

Nobody but a canal officer knows how easy it is for water to be taken without discovery. The chances are that in so many cases there will be no discovery, and that there will be no discovery until some days after the offence; when detection can be defied, amongst the numerous methods adopted for stealing water is to wait until a shower of rain falls; the water taken is then said to be rain water.

15. In the Prodatoor taluq the cultivation of Mundla paddy has decreased, almost disappeared; clear proof was obtained last season of a large area of this crop having been watered surreptitiously, and therefore charged.

16. The Curnams in the Kurnool District have not yet received their remuneration. It would certainly have been an encouragement to have given it to them before this season commenced.

17. My report for this month is unavoidably late, as I found it necessary to spend a great deal of time in out-door work, at the expense of my office work.

18. *Health.*—Cholera is still prevalent. A store peon, an overseer's wife, and a contractor here died from it.

There is little fever about. Two of my clerks have suffered slightly from it, but the remainder of the staff enjoy good health.

19. *General.*—Already symptoms are appearing of distress on account of the draught. If the rains hold off much longer, there is a great likelihood of all the dry crops perishing. The ryots are exceedingly tardy in resorting to the canal for water, but wait and wait for rain while their crops are sickening before their eyes.

Beggars are becoming numerous. I often hear of grain-looting cases.

Should grain continue to get dearer, employments for the poorer classes can be found on the canal.

DHOOR,
9th September 1876.

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

*Proceedings of the Madras Government, Public Works Department,
11th October 1876. No. 2,711.*

Register of Rainfall during the Month of August 1876.

Date.	Yalloor.	Chintacotta.	Rajelly.	Dhoor.	Adimyalay.	
August 1876.						
1st ...	...	...	...	...	...	1876.
2nd ...	...	...	...	...	...	...
3rd ...	0.15	...	...	...	...	...
4th ...	0.80	...	...	...	...	...
5th ...	...	0.29	...	0.27	0.05	1875.
6th ...	...	0.22	2.09	2.33	...	...
7th ...	...	...	2.04	...	...	...
8th ...	...	...	2.60	...	...	...
9th ...	...	...	...	0.45	0.50	1874.
10th ...	...	...	...	...	...	...
11th ...	...	...	0.15	...	...	1873.
12th ...	...	...	...	...	...	...
13th ...	...	...	...	...	...	...
14th ...	...	...	...	...	...	1872.
15th ...	...	...	...	...	...	...
16th ...	...	...	...	...	...	...
17th ...	0.35	...	0.03	...	...	1871.
18th ...	...	...	...	0.05	...	...
19th ...	...	...	...	...	...	...
20th ...	...	0.52	...	...	...	1870.
21st ...	...	...	...	0.03	...	...
22nd ...	...	...	...	...	...	...
23rd ...	...	...	...	...	...	...
24th ...	0.35	...	0.10	...	...	1869.
25th ...	0.30	...	...	0.50	0.35	...
26th ...	...	0.05	0.30	0.24	0.12	...
27th ...	...	...	...	0.81	0.40	...
28th ...	0.17	0.04	...	...	...	...
29th ...	...	0.52	2.10	2.00	1.05	...
30th ...	...	...	...	...	...	...
31st ...	...	...	...	0.16	...	...
Total ...	2.12	1.64	9.37	6.91	2.47	

DHOOR,
9th September 1876.

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

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

This is the driest year recorded in Kurnool.

Up to the end of August the rain during the year was less than any previous years,* and since then only 0.05 inches have fallen. There have however been showers in the neighbourhood.

In Kurnool, cholam, the staple food of the poor here, rose to 12 measures (about 36 lbs.) the Rupee, but fell a day or two ago to 14. There is nothing in the conduct of the ryots and soucars by whose money the land is tilled to show that they are short of grain, or that they wish it to be more plentiful than it is. The working ryots and laborers are in distress, and require relief works starting; in fact, petitions from the wealthy as well as poor for relief works, and that in villages whose fields are left unsown under the Company's channels near Koilacotta, have reached the Local Fund Board. The wealthier ryots, by repeated experience, well know how to work a "famine" to most local advantage.

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On the 12th September I wrote to the Collectors of Kurnool and Cuddapah offering irrigation free to any field of good land they might recommend for dry crop in villages where the people seemed to doubt the benefit of irrigating dry crop, one field of under ten acres in each village.

The divisional reports give much interesting detail. Years ago no one could have conjectured that in a year of scarcity, as a rule, in the land amply permeated by canal and channels bringing water within reach of every field, something like half the fields would be left unsown, in half the crop would be allowed to wither away and perish for want of water, the Governmental tanks would remain dry which the canal was made to fill, and only a fraction of about 5 per cent. of the land irrigable would be tilled under irrigation. Yet that, in general terms, is the actual case. No doubt in Nundicotkoor and Nundial taluqs the frequent, though scanty, showers will prevent total loss of crop, and enable some of the poorer grains and gram to grow well. Both the Collectors and Engineers have been out in camp during this month (September) giving personal attention to the critical state of things.

I visited Ooty during this month in order to be of any use I could towards putting the revenue accounts on a definite system from the 1st October, when the present running account will cease. I have therefore been unable to visit the district since the date of the divisional reports.

(Signed) J. H. LATHAM,
KURNOOL,
21st September 1876.
Chief Engineer and Manager.

SUBMITTED for the information of Government.

2. The returns received from the Collectors of applications for water are up to July only and show—

Kurnool ... 115.45 acres.
Cuddapah ... No returns received.

These returns are usually behind hand as regards the actual extent of land applied for. In the upper division of the canal which is entirely in Kurnool, the Divisional Engineer had received application for water for 1799.67 acres up to the end of August.

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

No. 127. ORDER THEREON, 11th October 1876, No. 2,711.

IRRIGATION, No. 17.

ORDERED to be recorded.

(True Extract.)

Major-General, R.E.,
Secretary to Government.

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

Exd. A. Grubert.
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Madras Irr. and Co. Co.
Upper Division

Monthly Report for August 1896

1. Water. There is an abundant supply; up to this rain has had no effect on the height in Canal. It has been nearly 4. ft. at Soonkhesala all through the month and is now raised to 4.2, and at Jupaud Bridge 3.7.

The excavation of the silt seems to have been successful. The gauges showing the depth of water are much more uniform than hitherto.

2. Rain. There has been very little during the month

At Soonkhesala	2. 10
Kurnool	1. 50
Jupaud	3. 04
Velapanoor	3. 30
Gratoor	2. 50
Ayaloor	3. 79

16. 23

Average — 2. 7.

The smallest amount was registered at Kurnool. During the whole month being in Camp and travelling from one end of the Division to the other I was struck with the different
(appearance

appearance of the Crops in different parts.

It seems that at Velapanoor a timely shower in July and a few in August have been very favourable. The chollum and crops look flourishing but both North and South of this point failure is very common while many fields were still uncrow and all dry. Crops look very backward. The total rainfall at Kuruvil from June the 1st has been 6.73 for 3 months.

3. Repairs to the Canal on Capital Account.

These will be completed during the month. Bollavaram Bridge is finished except metalling.

4. Repairs on Revenue Account.

The Sluices at No. 1 Leasingula are completed except the fixing of the raising gear which has just arrived from Madras and will be fitted to its frame and sent to Yeddarees in a few days.

Other works are being steadily proceeded with. Chiefly raising banks at Kadrabagh, Songadancha. South the month a leak occurred at the Aqueduct. It ~~occurred~~^{was} in a very dangerous place; but ~~was soon~~^{was soon} stopped.

stopped and has since been properly minded. I was at Velapanoor and posted off immediately on hearing the news.

It was not even necessary to lower water in the Canal.

The principal work has been the 6th section. We were hindered by a breach which occurred just above Lock No. 5. At this part of the Canal water has only twice been let in and then only for a few hours. The banks are of black cotton and as the want of rain has left them unusually dry after the unusually hot season, cracks must have widened out. The cost of repairing this breach will not be more than 200 Rs. or 200 Rs. When water is let in regularly to this part of the Canal the banks will become seasoned.

Water had been let in ~~on~~^{on} this occasion to float the new balance beams down to the Lock No. 4.

The balance beams are fitted on Locks Nos. 2, 2A and 3 and are being put up at No. 4. I hope in a few days to be able to work the gates down to Velapanoor but as no more beams are coming the work will stop here.

The valves seatings however will be finished throughout the whole range of locks and many other necessary minor repairs.

(It

It has been determined to divert the
nagoo at Chahole into the loanalla
tank by cutting a drain from the
bridge towards the Sumbavaram
bulvert and turning the water to
the south instead of into the Culvert
and nagoo north of the bridge which
does not run into the tank.

Distribution

5. I feel confident that there will
be a considerable increase on the
whole in my Division. In some
places ryots are driven to cultivate
wet crops as nothing else would
thrive; and it is really astonishing
that in such a dry season the irri-
-gation is not doubled.

It would seem natural that
when dry crops are failing all in
round and withering for want of
a little water that the ryots should
make complaints, and down right loss
of whole crops, tickets for only
33½ acres have been received in my
office. At Sataricotta my Overseers
reports that the ryots are now
all regretting that they did not
take water before their crops are
withering and now it is too late.

These ryots seem to have an idea
that Canal water will injure the
fields. It cannot be supposed

(that

that he would refrain from saving
his whole crop on account of the
Rs 2 per acre which he would have
to pay.

6. The preparations we have made
are quite sufficient to supply a very
large area and in an emergency the
work of constructing small channels
would be given to Coolies or Contractors
almost without limit.

It is natural to suppose that in
such a season as this we should find
the Revenue officers foremost in the
field endeavouring to get the ryots
to save some of their crops.

In my late tour through the Division
from Kurnool to Ayaloor I have not found
that anything of the kind has been done;
but I may be wrong.

In Ramalhatta the Tahsildar has
made a tour through the Villages bet-
-ween Kurnool and Soan Kesala, encour-
-aging the ryots to increase irrigation,
which as I reported last month, has
much fallen off on that side; but as
he ~~seems~~ seems to have sympathized with
them on the so called high rates for
the water the good he may have done
is rendered doubtful.

Water has been taken freely for
the sugar, saffron and betel under
Mundial tank which is quite empty.
It is supplied under Rule VII

(Clause 8.

believe 8. at the monthly rate by means of channels through the dry bed of the tank and it is daily expected that a demand for water for paddy also will arise. Paddy has been sown and will very shortly suffer unless rainfall or irrigation water is used.

The tanks at Ayavarttadon and
Byapoodon are dry, but paddy is sown
below them. The Villagers applied for water
for a part only of the Ayacut. It
appears to me that when the whole Ayacut
of a tank is drying up for want of water;
it would be best for the whole of the
Ayacut holden to apply at once. It
is very inconvenient and a dead loss
to supply certain fields applied for
and to keep water out of the others
and I trust the whole piece will
be supplied. It puts me rather in
the position of a Doctor who when
he is sent for is obliged to attend
the sick and take his chance of
payment afterwards. On this principle
8. Cannalla tank was empty a
few days back; but the ryots are un-
willing to take water from us
as they are under the impression that
they have a right to water for
nothing, owing to the question of the
tank supply which has been much
discussed but is still unsettled.

9. With the exception of the 1st and 2nd ranges I have not received the estimate of total irrigation to be expected and in consequence of the new arrangements whereby the burnams may record applications; tickets for which are afterwards given, the true state of irrigation is not shown by the tickets received.

received.
10. A copy of applications made upto date through the Company's Officers is sent herewith.

11. The health of the staff has been good
a few cases of fever only have occurred.

The staff were paid from 5th to 22nd.
August 1846.—

/Signed/ L. H. Wilco
Condernancy Engineer

True copy)

M. M. M. M. M.

Madras Irrigation N. 6.
N^o 92. Chief Engineer & Manager's Office
Kumbakonam 22nd September '76

To The Chief Engineer for
Irrigation
Fort St. George
Sir,

August Reports.

I have the honor to forward per
Book Post, the copies of the Upper
and Lower Divisional Engineer's Reports
together with my own for the month
of August 1876.

I have the honor to be
Sir

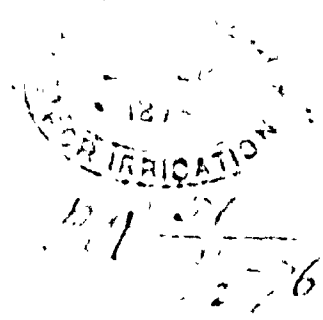
Your Most Obedt^t Servt.

John W. Latham

Chief Engineer & Manager

3. Enclosures.

Ev. 25 Aug 76. No 2286.



P.V.D.
130576
7578

To

O.E.I.

Madrass Irrigation and Canal Company
Rain Register
for the Month of August 1876
at bar-daily.

Stations						
Somasekara	Thurmon	Jupand	Yelapa	Jooloor	Ayaloor	
tils	til	til	til	0.30	0.50	
		0.37	2.65	til	0.10	
		til	til	2.00	0.80	
			0.10	til	0.10	
			til		0.30	
					0.05	
					0.80	
0.20	0.10				0.04	
til	til					
	0.07	1.50	0.40			
0.50	0.30	0.05	til			
til	til	til			0.10	
0.30	0.13	0.17				
til	til	til			0.20	
					0.15	
					0.20	0.50
					til	
1.10	0.70	0.75	0.25	til		
til	til	til	til			
					0.15	
				0.10		
Total 2.10 1.50 3.04 3.30 2.50 3.79						

cu - 6-10-76 P.M. 11-10-76
A.L. Shub 2 Oct.

Upper Division
Engineer

(Signed) G.H. Will
Conservancy Engineer

Central Irrigation & Canal Company
Lower Division
Conservancy Engineer's Office
Chicago, September 1876

Report for the Month of August 1876.

1. Owing to the unseasonable dryness & heat of the weather, the cracks in the banks have been very numerous and of unusual size; & several have still even on the part of the Conservancy been treated improperly. The Engineer & Overseers are easily deceived by bad work; the men employed to stop these cracks used frequently to treat them in a very superficial manner, - having only dipping & excluding completely through the banks being merely covered with a lid of earth.

In connection with this to show what a great deal of time and attention the Overseers should be expended on this work, in order to satisfy themselves of the safety of the banks.

2. A small break occurred during the early part of the month in the left Bank near deck 183 (Gule 117-74). It seems to have been caused by a worm and not by a crack. The supply of water was not stopped, it was only checked for a day.

3. Since my return from leave I have been along the whole of the Lower Division, making arrangements for strengthening the weak

weak and unsound Banks and satisfying myself that the Overseers (two of whom have been recently appointed) thoroughly understand their duties. Before the end of next month I hope to raise the water to full Navigation level; it is now being raised at intervals.

4. There has been an abundance of water at my command, enough for any extent of land that I may be called upon to irrigate.

The Rivers, Streams and Tanks are almost perfectly dry, except those rivers which receive the Poongabudra water by means of the Canal.

5. Until an additional quantity of water was sent down the Kondair there was insufficient water at the Adymahally Ancient (across the Pennair) for the 16th Section Irrigation.

A deficiency of water in the Pennair has I believe never been experienced before.

6. I enclose the Monthly Table of Rainfall. The fall has been unusually scanty, but we have yet to get the September rains which are always the heaviest.

Irrigation

7. The ordinary Irrigation is already in receipt of last season's, and all the Overseers report that the demands for water for wet crops will be larger in nearly every Village.

This is not attributable to the drought;—that, has not yet felt certain influence on the Irrigation, at present, (the 6th September) in the least.

8. I visited many Villages in the Sivell and Koilkunka Taluqs this month, and I find that wet cultivation is steadily increasing, and will increase; if the Ryots are encouraged, cautiously advised, and not dissuaded from using the water, ~~and~~ on the supposition that it is bringing discomfort, radical changes, and additional work on to the shoulders of the Heads of the Village. Some of these latter with a self constituted governing body of rich men (who with little trouble to themselves make large profits out of the dry crops); get terribly annoyed, if a few poor or moderately rich men determine to raise a little money by cultivating a valuable crop by means of Canal water.

9. A Village—Gungalapally, about which I wrote in a last season's report has so far recovered from its antipathy and apathy, as to increase its irrigated area fivefold, and to adapt the Canal water for drinking purposes; several of the Villagers having contributed a few annas, and constructed a rough drinking fountain supplied by an Irrigation Channel.

10. In another Village—Bustloor I found the value of Canal water fully appreciated. All the available land, considered by the Ryots suitable for Irrigation, is being gradually brought under its influence. Some Brahmmins, perceiving a channel of some considerable length, and, if requisite, they would bind themselves to irrigate their land for a number of years.

11. There are several other Villages, where Pri-
-gation has obtained a firm footing, and I
believe could not be dispensed with.

Its sure, though slow expansion in this case, is attributable to two causes only, want of -
- manner; and a simple, cheap, and easy means
of disposing of the produce, beyond the home
consumption.

12. In a few out of the way Villages the value of rice is hardly understood. The Ryots, whose fathers have never eaten any other grain than Kohlum, Corra, or perhaps Rassy, regard Irrigation as a luxury! The rich men of the Village, - with several others from adjoining but not commanded Villages, - select the best ground, and an extent is irrigated averaging an acre per man. There is not the slightest intention of growing the rice for sale, as they do not care for the trouble of taking it to the best markets, incurring perhaps a 3 or 4 day journey.

13. In only one or two Villages. I have found a purly and unexpected determination to have nothing further to do with Canal Water.

A singular instance, is, Dhvor. Since the Canal was opened for Irrigation, the Betel gardens 26-00 acres in extent, have been supplied with Canal water until the present season. The owners of all the gardens, with the exception of one (which can be supplied by a channel from the Dhvor Tank), have declined to take Canal water; and all through the hot weather, these extraordinary ones have

been ceaselessly labouring to keep their gardens moist with Buckets full of water raised from wells by the aid of 4 Bullocks and generally 3 men. The expense of keeping the portable Machinery alone, in order, is far more than the Company's water rate (I have the same apparatus myself to water my garden and I can make this statement with certainty.) Their reason for discontinuing using the barab water is, as I learn from themselves, that it does not agree with the Plants. It is most likely, is that they are under

that it does not agree, with the facts.
The most likely, is that they are under
an impression that a question which the 1871-75
Settling Officers did not dispose of themselves;
giving to their having different opinions as to
the rate clause applicable for such crops; was
not disposed of as they had learned to respect.
Elley publicly presented the charges; as the very
next day the decision of the vexed question was
given, the whole of the Betel gardeners brought
their tickets (for the ensuing season) to me,
during Settlement, and asked that they should
be cancelled. These tickets were again sent
to me, through the Acting Deputy Collector
with a request that they might be withdrawn,
from 1st January.
Tickets had been issued to the Ryots for
the preceding years: but they
were not according

with a second that of
 from 1st January.
 Shikab had been issued to the Ryots for
 the whole crop, as in preceding years: but they
 at the 18th 75 wished to be charged, not according
 to their application, but according to the time
 the water had been taken. By the former
 the charge would be Rs 12, by the latter
 the charge should be Rs 12 + 7 p Rs 12.75
 water was supplied in the month of May.

14

14. The cultivation of Mundla Paddy has been greatly extended this season, in the Sirwell Talug. In Pathacondaccor there are more than 300 acres, and in Aringundinny there are more than 70 acres; about 50 acres more than last year. A conviction that Mundla Paddy can be grown free of charge has gained ground since last season. Many Ryots, sow a small patch of good paddy surrounded by Mundla Paddy; apply for water only for the small piece, and allow the surplus to fall on the Mundla Paddy with impunity.

As I have probably 1000 acres of this crop in this Talug alone depending upon the Canal alone for water, for which no application will be made. It will be necessary to keep a large staff of Amins and Banters on the watch to detect cases of water stealing.

Nobody but a Canal Officer knows how easy it is for water to be taken, without discovery. The chances are that in so many cases, there will be no discovery, and that there will be no discovery until some days after the offence, when detection can be defied. amongst the numerous methods adopted for stealing water, is to wait, until a shower of rain falls; the water taken is then said to be rain-water.

15. In the Prodatoor Talug the cultivation of Mundla Paddy has decreased, almost disappeared. Clear proof was obtained last season, of a large area of this crop having been watered surreptitiously, and therefore charged.

16. The Murrums in the Murrumbidgee District have not yet received their remuneration. It would certainly have been an encouragement to have given it to them before this season commenced.

17. My report for this month is unavoidably late, as I found it necessary to spend a great deal of time in out door work, at the expense of my office work.

Health

18. Cholera is still prevalent, a store man, an Overseer's wife, and a Contractor here died from it.

There is little fever about. Two of my clerks have suffered slightly from it, but the remainder of the staff enjoy good health.

General

19. Already symptoms are appearing of distress on account of the draught. If the rains hold off much longer there is a great likelihood of all the dry crops perishing. The Ryots are exceedingly hardy in waiting for rain while their crops are withering before their eyes. Beggars are becoming numerous, I often hear of grain feeding cases. Should grain continue to get dearer, I am persuaded the poorer classes can be found on the Canal.

Signed J. C. Murphy
Jy. General Manager

M. J. and Co. Inc.
Lower Division
Register of Rain fall during the month of August 1876

Date	Gallons	Chinta Coanta	Rajahy	phoot	Adimya phally
------	---------	------------------	--------	-------	------------------

1					
2	0.15				
3	0.80				
4		0.29		0.27	0.05
5		0.22	2.00	2.35	
6			2.04		
7			2.60		
8				0.45	0.50
9					
10			0.15		
11					
12					
13					
14					
15					
16	0.35		0.08		
17				0.05	
18					
19		0.52			
20				0.08	
21					
22					
23	0.35		0.10		0.35
24	0.30			0.50	0.12
25		0.05	0.30	0.24	0.40
26				0.81	
27	0.17				1.05
28		0.04			
29		0.52	2.10	2.00	
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P.W.D.

130077

737

No.

Madras Irrigation Canal Co.Upper Division

Statement shewing the area applied for water up
to 31st August 1876 and the area cultivated
during season 1875-76.

No.	Name of Village.	Area as per tickets received up to 31 st August 1876.	Area Cultiva- ted in 1875-76.
3	<u>Pamalacotta Talug.</u>		
1	Scor Kosal	3 68	8 08
2	Kontalpaud	" "	3 31
3	Geddaroor	29 04	57 61
4	Gopalasingavaram	14 08	39 37
5	Adipoor	96 63	140 15
6	Moongalpaud	49 56	80 01
7	Mamidia Chaud	23 71	54 76
8	Raja	7 50	19 41
9	Gurnoor	7 68	18 27
10	Kulloor	" "	453 88
11	Joharapuram	32 92	70 88

Total 264 80 945 73

Mundicatkor Talug.

1	Pasapala Poodravaram	" "	16 92
2	Poodoor	" "	41 13
	Carried over.	" "	58 05

	Brought forward	"	"	58	05
3	Ulloor	45	44	50	34
4	Satamicotta	64	02	91	46
5	Malayala	74	15	112	72
6	Muddigatta	16	21	44	97
7	Dejivemula	20	84	23	65
8	Nagatoor	162	32	147	20
9	Moovakkondah	33	92	145	15
10	Veerapooram	2	00	56	03
11	Vellala	1	"	19	96
12	Moochoomurry	2	38	376	21
13	Palamurry	21	11	57	61
14	Beeravole	42	66	48	24
15	Pratacotta	85	76	287	57
16	Pagadial	20	91	78	93
17	Gannapavaram	140	95	358	88
18	Soomaloos	5	57	7	84
19	Thatipaud	62	75	71	67
20	Bollavaram	45	03	25	32
21	Bunnoor	68	74	85	87
22	Terrigopala	"	"	11	54
23	Chattajootoor	59	69	127	92
24	Chillimalla Pudravaram	114	36	221	96
25	Pamulpaud	56	49	286	41
26	Gumbalpully	"	"	62	08
27	Tudicherla	"	"	75	91
28	Muddoor	"	"	42	91
29	Banamoothkala	"	"	13	26
30	Mittakundala	"	"	15	76
31	Vanala	"	"	30	75
32	Venupenta	"	"	32	37
33	Velpanoor	"	"	119	20
34	Pegadigrachoor	"	"	49	93
	Carried over	1145	30	3237	67

Much irrigation on this
5. Range but not ticks
have yet been met me -
(Quintessence) A. H. H.

	Brought forward	1145	30	3237	67
35	Korrapolur	"	"	41	41
36	Syavaripally	"	"	8	61
	Total	1145	30	3287	69

Mundial Salep.

1	Billkulgoor doors	"	"	219	98
2	Pesaravoy.	"	"	46	45
3	Paramatoor	"	"	28	72
4	Padavimula	"	"	5	35
5	Poganam	"	"	2	36
6	Quidigaravimula	"	"	4	00
7	Tarriniadoola	12	97	218	45
8	Boodanoor	"	"	52	12
9	Chinlacoor	"	"	9	51
10	Tirripaud	8	86	15	85
11	Korratamuddi	"	"	9	51
12	Kattanoor	"	"	23	60
13	Poclimuddy	14	65	29	71
14	Bundiatmakoor	"	"	12	20
15	Perragoratha	55	55	63	79
16	Parnapully	"	"	3	67
17	Coranapaud	45	20	19	36
18	Syavaricodoor	31	41	37	18
19	Byafrachoor	1	00	21	02
20	Mundial or Gottapally	113	86	913	35
21	Bollavaram	4	12	12	46
22	Billalapooram	"	"	20	14
23	Moanipully	54	66	113	55
24	Chahale	45	09	138	43
25	Possaloos	"	"	11	58
26	Beemavaram	2	20	0	00
	Total	389	57	2032	34

See last page for 5. Range.

Includes 756-52 areas under Mundial Tank.

Office Division of
Mundial Salep
Total 1799 87 6265 76
Signed H. H. H. H.
Price 5000



Madras Irrigation & Canal Co.
Chief Engineer & Manager's Office
Murnool 21st September 1876

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

This is the driest year recorded in
Murnool. Up to the end of August the
rain during the year was less than any pre-
=vious year and since then only 0.05

* 1866 rain 1 Jan - 31 Aug =	8.36	inches have
1867 ditto	8.71	fallen. There
1873 ditto	12.03	have however
1876 ditto	7.96	been showers
		in the neigh-

=bourhood.

In Murnool, Cholum - the staple
food of the poor here - rose to 12 measures
(about 36 lbs) the rupee: but fell a
day or two ago to 14. There is nothing
in the conduct of the ryots & Saurcars
by whose money the land is tilled to
show that they are short of grain, or
that they wish it to be more plenti-
-ful than it is. The working ryots and
labourers are in distress, and require
relief in some starting: in fact, petitions
from the wealthy, as well as poor for
relief works, and that in villages
whose fields are left unsown under
the Company's channels near Kailanth
(have

have reached the Local Fund Board. The wealthier ryots, by repeated experience, well known how to work a "famine" to meet local advantage.

On the 12th September I wrote to the Collectors of Kurnool & Cuddapah offering irrigation free to any field of good land they might recommend for dry crop in Villages where the people seemed to doubt the benefit of irrigating dry crop:— one field of under 10 acres in each Village.

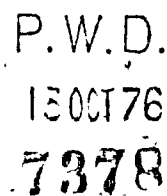
The Divisional reports give much interesting detail. Years ago no one could have conjectured that in a year of scarcity, as a rule, in the land amply permeated by banal and channels bringing water within reach of every field, something like half the fields would be left unsown, in half the crop would be allowed to wither away & perish for want of water; the Governmental tanks would remain dry which the Canal was made to fill, and only a fraction of about 5 per cent. of the land irrigable would be tilled under irrigation. Yet that, in general terms, is the actual case. No doubt in Shudicootcoor & Shudial Salug the frequent though scanty showers will prevent total loss of crop, and enable some of the poorer grains & grain to grow well.

(Both

Both the Collectors & Engineers have been out in Camp during this month, (September) giving personal attention to the critical state of things.

I visitedooty during this month in order to be of any use I could towards putting the Revenue accounts on a definite system from the 1st October, when the present running account will cease. I have therefore been unable to visit the district since the date of the Divisional reports.

John H. Latham
Chief Eng^r & Manager



P.W.D.
1300176
7378

21.12.4

Submitted for the information of Government.

The returns received from the collectors of applications for water are up to July only and show

Annals ————— 115.45 acres

Indrapat ——— no returns received

These returns are usually behind
hand as regards the actual
extent of land applied for.

In the upper Division of the Canal which is entirely in Kurnool the Divisional Engineer had received application for water for 1799.67 acres up to the end of August.

Bellevue
4 Oct. 1876

Volunteering Lt Colonel R.L.
Chief Engineer for Design.

P.W.D.

130156

737R

From

The Chief Engr. for S. Eng.

To the Secy. to Govt.

P.W.D.

Dated 4 Oct: 76

Encls 4 V.

N. 206-W.

M. & C. Cis monthly
Rept - Submits; for
information, — for August
1876.

N. 126

17

Public Works Department.

N. 2411

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Under date the 11th Oct: 1876-

Read the following:—

Endorsement of the
Ch. Engr. for S. Eng. { H. E. D. 206/4 Oct: 1876.

Recorded.

May 5/10

C. E. J. I. ✓
C. E. J. I. C. C. ✓
Recd Sept ✓

22-10-76

7370 27.

abt. of 1870 Madras.
PUBLIC WORKS.

the Chief Eng^r for Aug^r

Pass 10

Each

C. M. K. K. K. K. K. 27 //

Nos. 126/7

Not in the
30-10-1918

Madras Irrigation

and Canal Co. The

Chief Eng^r and
Manager on the upper

and lower divisions

of the ——— for the
month of August 1870

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