(1) Number of pages 10

(2) Date of repair 2-4-2-71

(3) Initials of the Referencer

MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 2517
~~R.P. No.~~
Press
~~Mis.~~

Dated 30-10-1876 ~~196~~ .

Not to be folded or roughly handled

603

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

No. 120. 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 Soonkesula all through the month, and is now raised to 4.9, and at Jupaud bridge 3.7.

The excavation of the sill 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 Soonkesula	2.10
Kurnool	1.50
Jupaud	3.02
Velgode	3.30
[illegible]	2.50
Ayaloor	6.79
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 Velgode a timely shower in July and a few in August have been very favorable. The cattle and crops look flourishing, but both north and south of this, total failure is very common, while many fields were still unsown and all dry crops look very backward.

The total rainfall at Kurnool from June has hitherto been 6.79 for three months.

3. *Repairs to the* [illegible].—These will be completed during the [illegible] [illegible] is finished [illegible] remaining.

4. *Repairs on* [illegible] *Account.*—The sluices of No. 2 [illegible] were completed except the fixing of the [illegible] gear which was just received from Madras, and will be fitted to its frame and sent to [illegible] in a few days.

Other works are being steadily proceeded with, chiefly raising banks [illegible] [illegible] and in a few other places. Early in the month a leak occurred at [illegible] in the open [illegible] to the aqueduct. It was in a very dangerous place [illegible] stopped, and has since been properly repaired. I was at Velgode and [illegible] on hearing the news.

It was not then necessary to divert water in the [illegible].

The principal work has been the [illegible] Section. We were hindered by a breach which occurred [illegible] above lock No. 6. At that [illegible] had been let in, and [illegible] 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 have widened out. The cost of repairing the breach will not be more than 200 Rupees = £20. When water is let in regularly to this part of the canal the banks will [illegible].

Water had been let in on this occasion to float the new balance beams down to the Lock No. 2.

The balance beams are fitted on Lock No.s 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 flagstones down to [illegible], but, as no more beams are coming, the work will stop here.

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

It has been determined to divert the [illegible] at [illegible] into the Cannalla tank, by cutting a drain from the bridge towards the Sumbavaram culvert and turning this water by the south instead of into the culvert and [illegible] of the bridge which does not run into the tank.

5. *Irrigation.*—I feel confident that there will be a considerable increase on the whole in my division. In some places they were forced to [illegible] 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 the 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 downright loss of whole crops, tickets for only 83 acres have been received in my office. At [illegible], my Overseer reports that the ryots are most set on regarding that they [illegible] take water before their crops are withering, and now it is too late.

The ryots seem 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 no case would the work of constructing small channels [illegible] be given to coolies or contractors [illegible].

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

In my late tour through the district from [illegible] to [illegible] I have not found that anything of the kind has been done; but I may be wrong.

In [illegible] my Overseer had made a tour through the villages between [illegible] and [illegible] [illegible] which, as I reported last month, has [illegible] on the [illegible], as he seems to have [illegible] with them, [illegible] the [illegible] water. [illegible] he may have done so [illegible].

7. Water has been taken from the canal, [illegible], and [illegible] under [illegible] tank which is quite empty.

It is supplied [illegible] by means of channels through the [illegible] of the tank. It is [illegible] and 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 [illegible] and [illegible] are dry, but paddy is sown below them. The ryots are applying for water for a part only of the [illegible]. It appears to me that when the whole [illegible] of a tank [illegible] of water, it would be best for the whole of the [illegible] to apply at once. It is very inconvenient and a dead loss to supply certain fields [illegible] water out of the others, and I trust the whole [illegible] will be supplied. It [illegible] in the [illegible] of a [illegible] to attend the sick [illegible] the [illegible] of [illegible] [illegible] water will be given where

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 Overseers 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 6th to 22nd August 1876.

(Signed) C. H. WILKS,
Company's Engineer.

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

Dates.	STATIONS.					
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1st	...	...	...	...	0·30	0·10
2nd	...	...	0·37	2·45	...	0·10
3rd	...	...	...	...	2·05	0·8
4th	...	...	...	0·10	...	0·10
5th	...	...	...	...	...	0·30
6th	...	...	...	...	...	[illegible]
7th	...	...	...	...	...	0·80
8th	0·20	0·10	...	...	...	...
9th	...	...	...	...	...	0·44
10th	...	...	...	...	...	...
11th	...	...	...	...	...	...
12th	...	...	...	...	...	...
13th	...	...	...	...	...	...
14th	...	...	...	...	...	...
15th	...	...	...	...	...	...
16th	...	0·07	2·50	0·40	...	...
17th	0·50	0·35	0·15	...	...	...
18th	...	...	...	...	...	...
19th	...	...	...	...	...	0·15
20th	0·30	0·13	0·17	...	...	...
21st	...	...	...	...	...	...
22nd	...	...	...	...	...	0·70
23rd	...	...	...	...	...	[illegible]
24th	...	...	...	...	0·20	0·10
25th	1·40	0·19	0·05	0·25	...	...
26th	...	...	...	...	...	...
27th	...	...	...	...	...	...
28th	...	...	...	...	...	...
29th	...	...	...	...	...	0·25
30th	...	...	...	...	0·10	...
31st	...	...	...	...	...	...
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

(Signed) C. H. WILKS,
Company's Engineer.

NELLORE,
10*th September* 1876.

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

Statement showing the Area applied for Water up to 31st August 1876 and the Area cultivated during [illegible] *1875-76.*

No.	Name of Villages.	Area as per Tickets received up to 31st August 1876.		Area cultivated in 1875-76.		
	Ramalcottah Taluq.					
1	Sunkesula	5	68	8	68	
2	[illegible]			2	51	
3	[illegible]	29	04	57	[illegible]	
4	[illegible]	11	16	20	32	
5	Nidjoor	27	15	100	11	
6	[illegible]	19	15	16	01	
7	Mamidalapad	21	71	31	75	
8	[illegible]	7	51	19	[illegible]	
9	[illegible]	7	68	18	27	
10	Kalloor			63	[illegible]	
11	[illegible]	37	92	70	38	
	Total ...	201	90	346	72	
	Nundicotkoor Taluq.					
1–30	[illegible]	[illegible]		[illegible]		[illegible]
	Total ...	[illegible]		[illegible]		

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

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	Billalgoddoor ...	...		219	98	
2	Pesaravoy ...	...		46	45	
3	Pammatoor ...	...		28	72	
4	Gadivemula ...	...		5	35	
5	Bogaram ...	...		2	30	
6	Gadigaravemula ...	...		4	00	
7	Kurrundoola ...	12	17	218	15	
8	Boodmoor ...	...		52	77	
9	Chinthmoor ...	...		9	61	
10	Tirnpad ...	9	88	15	81	
11	Kurgalmuddi ...	...		9	51	
12	Kakanoor ...	...		26	60	
13	Poolivandly ...	14	05	29	71	
14	Bundlamoodoor ...	...		19	20	
15	Yernagoonta ...	55	55	63	79	
16	Parumpully ...	...		3	07	
17	Erunapund ...	46	20	19	05	
18	Dramanooldoo ...	31	41	87	13	
19	Byrasaroor ...	1	00	21	02	
20	Nandial or Ballagotty ...	118	86	*913	36	* Includes 736·52 acres under Nundial tank.
21	Bollavaram ...	8	12	12	46	
22	Bollalaguntta ...	...		20	14	
23	Noonpully ...	54	66	113	35	
24	Chabolu ...	45	19	135	48	
25	Pocoloor ...	...		11	36	
26	Brahmavaram ...	2	90	6	00	
	Total ...	389	67	2,032	39	
	Grand Total ...	1,769	67	6,285	76	

Kurnool,
4th September 1876.

(Signed) C. H. WELKS,
Consultancy 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 usually going at them in a very superficial manner, large gaping fissures extending completely through the bank 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 [illegible]). It seems to have been caused by vermin and not by a crack. The supply of water was not stopped. [illegible] 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 [illegible] tion level; it is now being raised [illegible].

4. There has been an abundance of [illegible] er 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 Toongabudra water by means of the canal.

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

[illegible] ficiency of water in the Pennair in [illegible] I believe, never been experienced before.

6. I enclose the monthly table of rainf[illegible]

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

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

This is not due [illegible] to the drought; this has not, I feel certain, influenced the irrigation [illegible] date (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 make little trouble to themselves, make large profits out of the dry crops) get terribly annoyed if a few poor or moderately well 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 ([illegible]) I found the value of canal water fully appreciated. All the available land, commanded by the cross channels for irrigation, is being gradually brought under its influence. Some Brahmans proposing 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.

In such villages [illegible] is attributable to two causes only, want of means and a suitable class, 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, cumbu or varagoo (raggy), regard irrigation as a luxury. The [illegible] of the villages with several others from adjoining [illegible] villages, sow the best ground, only 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, requiring perhaps a three or four days' journey.

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

A singular instance is Dhone, since the canal was opened for irrigation the betel gardeners, [illegible] acres in extent, have been supplied with canal water until the present season. The owners [illegible] for gardens when the canal [illegible] can be supplied by a channel from the Dhone tank have declined to take canal water [illegible] through the hot weather these extraordinary men have been obstinately resorting to [illegible] with buckets full of water raised from wells by the aid of [illegible] only three feet. The expense of keeping the [illegible] the Government water rate I have the same

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

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

They openly resented the charge; as the very [illegible] the decision of the vexed question was known, the whole of the betel gardeners brough[illegible] tickets (for the ensuing season) to me during settlement and asked that they should be can[illegible] Their tickets were again sent to [illegible] through the Acting Deputy Collector with a reque[illegible] they might be withdrawn [illegible] January.

Tickets had been issued to the ryots for the wh[illegible] ops as in preceding years, [illegible] the 1874-75 wished to be charged, not according to [illegible] application, but according to [illegible] the water had been taken. By the former the ch[illegible] would be Rupees 12, by the latter the charge should be 6 Rupees + 7½ Rupees, or water a[illegible] pplied in the month of May.

14. The cultivation of Mundla paddy has been [illegible] ly extended last season in the Sirwell taluq. In Pallaconda[illegible] there are more than 300 [illegible], and at Lingandinny there are more than 70 acres; about 50 acres more than last yea[illegible] conviction that Mundla paddy can be grown free of charge has gained ground since las[illegible] ason. Many ryots sow a small patch of good paddy surrounded by Mundla paddy; apply [illegible] water only for the small piece, and allow the surplus to fall on the Mundla paddy with impun[illegible]

As I have probably 1,000 acres of this crop in [illegible] taluq alone depending upon the canal alone for water, for which no application will be mad[illegible] will be necessary to keep a large staff of maistries and lascars on the watch to detect cases of w[illegible] stealing.

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

15. In the Proddatoor taluq the cultivation [illegible] Mundla paddy has decreased, almost disappeared; some relief was obtained last season o[illegible] large area of this crop having been watered surreptitiously, and therefore charged.

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

17. My report for this month is unavoidably [illegible], as I found it necessary to spend a great deal of time in outdoor work, at the expense of my [illegible] work.

18. *Health.*—Cholera is still prevalent. A [illegible] peon, an overseer's wife, and a contractor succumbed from it.

I am in little fever about. Two of my clerks h[illegible] suffered slightly from it, but the remainder of the staff enjoy good health.

19. *General.*—Already symptoms are appear[illegible] of distress on account of the drought. If the rains hold off much longer, there is a gr[illegible] likelihood of all the dry crops perishing. The ryots [illegible] exceedingly backward in resorting to the canal for water, but wait and wait for rain while their crops are withering before their eyes.

Grains are becoming dearer. I know [illegible] grain-looting cases.

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

DHONE,
9th September 1876.

(Signed) J. G. [illegible]
[illegible] Engineer.

Proceedings of the Madra[illegible] [illegible]nment, Public Works Department,
11th O[illegible] [1]876. No. 2,711.

Register of Rainfa[illegible] [illegible] the Month of August 1876.

Date	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
August 1876.					
1st	...	...		...	...
2nd	0.15	...		...	...
3rd	0.80	...		...	...
4th	...	0.59		0.27	0.03
5th	...	0.22		2.36	...
[illegible]	...	...		0.45	0.60
16th	0.05	...		...	...
17th	...	...		0.05	...
19th	...	0.52		...	...
20th	...	...		1.08	...
23rd	0.35	...	[illegible]	0.88	...
24th	0.30	...		0.50	0.17
25th	...	0.05	[illegible]	0.24	0.40
27th	0.07	0.03		...	1.05
28th	...	0.12	2.[illegible]	0.00	...
31st	...	...		0.18	...
Total	2.12	1.64	[illegible]	[illegible]01	2.47

Rainfall of Dhone [illegible] during the last eight years.

1876	1875	1874	1873	1872	1871	1870	1869
7.84	15.05	29.44	9.47	18.60	6.05	11.10	15.23

Dhone,
2[illegible] September 1876.

(Signed) J. O. [illegible],
Acting [illegible] Engineer.

Chief Engineer's Report to [illegible] Divisional Reports for August 1876.

The rainfall this year [illegible] 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 division the people [illegible] there rose to 12 annas [illegible] in the conduct of the [illegible] [illegible] or grain, so that they wish it to be more plentiful [illegible] are in distress and require [illegible] work [illegible] petitions from the [illegible] to work as well as wait for relief works and that in villages where [illegible] Company's channels from Kollebailu [illegible] experience will know how to

* Rain since 1st January to end of August [illegible]

Proceedings of the Madras Governme[nt,] Public Works Department,
11th October 1876. [N]o. 2,711.

On the 12th September I wrote to the Collecto[rs of Kur]nool and Cuddapah offering irrigation free to any field of good land they might reco[mmend] for dry crop in villages where the people seemed to doubt the benefit of irrigating dry [crop], one field of under two acres in each village.

The divisional reports give much interesting de[tail] [illegible] Years ago no one could have con[jec]tured that in a year of scarcity, as a rule, in the [illegible] [illegible]ly permeated by canal and channels bringing water within reach of every field, somethi[ng] [illegible] half the fields would be left uncultivated, in half the crop would be allowed to wither away [illegible] [p]erish for want of water, the Government tanks would remain dry which the canal was [able] to fill, and only a fraction of [illegible] 5 per cent. of the land irrigable would be tilled under [irri]gation. Yet that, in general terms, is the actual case. No doubt in Nandikotkur and N[illegible] [illegible] allows the request, [illegible] though scanty, showers will prevent total loss of crop, and enable so[me] [illegible] the poorer grains and grain to give well. Both the Collectors and Engineers have been [illegible] [illegible] during this month (September) giving personal attention to the critical state of thing[s].

I visited Ooty during this month in order to b[e of] any use I could towards putting the revenue accounts on a definite system from the 1st O[ctob]er, when the present running account will cease. I have therefore been unable to visit [the d]istrict since the date of the divisional reports.

Kurnool,
21st September 1876.

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

SUBMITTED for the information of Governm[en]t.

2. The returns received from the Collec[tor]s of applications for water are up to July only and show—

Kurnool ...	116.65 acres.
Cuddapah ...	No returns received.

These returns are usually behind han[d as] regards the actual extent of land applied for. In the upper division of the c[anal], which is entirely in Kurnool, the Divisional Engineer had received application[s] [illegible] for 1793.37 acres up to the end of August.

(Signed) J. H. N. MULLINS, Lt.-Col., R.E.,
Chief Engineer for Irrigation.

No. 18[illegible], [illegible] ORDER THEREON, 11th October 1876, No. 2,711.

IRRIGATION, No. 17.

[illegible] to be recorded.

(True Extract.)

[illegible] 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, [illegible]

[illegible] A. Graham.

[illegible]

(5) Initials of the Referencer

Revenue Departm

No 4538

Govt. of Fort St. George

PUBLIC WORKS

30

OCTOBER

No 2517
Communicated to
the Board of Revenue

30-10-

New No. Stott. 170-1—Old No. M.R.O. 1—10,000—10-6-03

(1) Number of pages

(2) Date of repair

(3) Initials of the Referencer