

6. In the Bander Taluq, the damage to works has not been very great. The chief mischief has been done in the unfortunate Divi Division again and the Tahsildar writes, after traversing the greater part of it, that he has seen of the crops either dry or wet very little that remains uninjured. The rice that was got into the ground early does not appear to have suffered much; but those fields, that were in the course of transplantation or had only been transplanted a short time before, have entirely lost their crops; and unfortunately the season generally in the division was later.

7. The Tahsildar estimates that the loss of wet crop will entail a remission of at least Rupees 11,000; and he adds that land bearing an assessment of Rupees 8,000 has not only lost its dry crop, but has been so cut up by the water that it will not be possible this year to get it ready for pyra or later crop. This, however, is a matter on which, I think, he is mistaken. He reports great loss of cattle in the division from the wet, and absence of pasture, saying that the number of deaths is upwards of 2,000. A good deal of damage has been done to the lands of the Davaracotta Estate now under attachment for arrears of revenue, and I believe that the Estates of the Wallur and Nuzid Zemindars have also suffered. Three large breaches were made in the Bander Canal, chiefly in consequence of the influx of water into the Ellore Canal from the Budamair.

8. The Budamair, a hill stream, having its source in the hills about Kondapalli, is carried under the Ellore Canal about eight miles from Bezwada. There appears to be nothing like sufficient opening to discharge the flood-water that came down, and it consequently rose and over-topped the aqueduct, so entering the canal. It also breached the canal nearer Bezwada and ran back up to Bezwada, whence it went down the Bander Canal. The Ellore Canal was again breached on the other side and the Collair Lake by that means, and the flood waters of the Tamilier filled, inundating all the country about it and the Lankas in it.

9. For four miles the Canal banks are described in being simply "riddled with breaches" and the amount of silt deposited in the canal quite choked it up for a distance of 2,000 yards, and traffic was entirely stopped. Mr. Peters has shown great energy and activity in exerting himself to get done what was needed in repairing the canal.

10. The Gudivada Tahsildar reports that the water in the Collair lake rose higher than it had ever done before, and the Upputair, its escape, not only was unable to carry off the flood water, but itself also overflowed. The flood water reached the town of Gudivada and there did damage to some houses. The Tahsildar's examination was made on a Sangadi or boat, as the cultivated land was five, seven, and even eight feet under water in the villages around the Collair lake. The cultivated lands in the lake itself were not only in places not visible, but also not to be reached by the poles with which the Sangadi was pushed along. The loss of cattle is reported to be about 1,000 drowned, and about 6,000 died of disease consequent on the wet. Until the water is run off, it is not possible to make an exact estimate of the injury that has been done, but I suppose damage has been done to land paying about Rupees 50,000 to Government. The roads in this Delta have been damaged, but these are mud banks at present, and their repairs will not cost very much.

11. Altogether this rain-fall, which no where exceeded eight inches in the twenty-four hours, and in the place where it was greatest, was only ten inches in four days, has done damage to Government alone to an amount of little less than 1 lakh of Rupees; for, I believe that the repairs necessary to the canals will not cost less than Rupees 20,000. The defective drainage throughout the Deltas has been the main cause of all this damage: and I am strongly of opinion that in lieu of further extending our irrigation schemes in the Kistna, all our attention should be turned to improving the drainage. The irrigation schemes, as they stand, if not complete in themselves, furnish ample water for the wet cultivation that is in existence; while the improvement of the drainage would render fit for wet cultivation, land that would amply suffice for the population that increases at the rate that the population of this district is doing. The almost absolute impossibility that exists in getting labour for the Public Works of the district, tends to show in my opinion that there is as much land now under cultivation as is necessary for the people.

12. As a method of assisting the Villagers on the Collair to recover some of their losses, I am about to address the Superintending Engineer on the feasibility of re-placing the old dam on the Perantalu Kanama, and so retaining sufficient water in the lake to enable the ryots to undertake the Dalwa cultivation, which they have been obliged to forego since the dam was removed. I shall address the Board more fully on this subject, when I have received Mr. Smith's views on the matter.

13. I have also decided to postpone the sale of any more of the grazing lands about that part and in the lunkas, as, should the Dalwa crop be grown, I should have to cancel the sales.

14. I have not been able to depute any European Officer to inspect the last three taluqs on which I have reported, but as soon as Mr. Campbell has completed a tour he is making around the northern part of his charge, I shall send him down to Gudivada and when my Assistant, who I see, has been gazetted arrives, I shall myself proceed to Divi.

15. I am glad to say no loss of human life has been reported.

This report will be submitted to Government for their information.

2. The damage done by the floods seems to have been confined to the four Delta taluqs, but it is clear that no accurate Estimate of the extent to which the crops have suffered can be at present framed.

3. The Collector will report again when the actual result is better known.

4. The special attention of Government is called to the Collector's remarks in paragraph 11 on the defective drainage of the Delta. This important point has often been noticed before; and the Board fear the attention of Engineers has not been sufficiently directed towards it. In their Proceedings of the 25th July 1870, No. 3,112, the Board, in reviewing the causes which have impeded ryots from availing themselves of the facilities for irrigation afforded by the anicut said:—
"The drainage of the Delta is admitted on all hands to be incomplete and this

*Proceedings of the Madras Government, Revenue Department,
4th January 1873.*

has compelled the relinquishment of water in many instances." It is certainly of very great importance that a free outlet for flood-water should be provided both on the North and on the South of the Kistna not only to save the crops from destruction but also in a sanitary point of view.

No. 4.

ORDER THEREON, 4th January 1873, No. 2.

Miscellaneous.

THESE papers will be communicated to the Department Public Works with reference, particularly, to paragraph 11 of the Collector's report.

2. The Board will request the Collector to report whether he requires any extra assistance in conducting the Settlement of the year, owing to the numerous claims for remission which will arise. If so, a Deputy-Collector could be temporarily appointed to the district.

(True Extract.)

(Signed) D. F. CARMICHAEL,
Secretary to Government.

Court of 1873. Madras.
REVENUE.

To
THE PUBLIC WORKS DEPARTMENT,
Secy. Secy. Secy.

Dated January 11th.

Recd.

Ind.

G. O., 4th January 1873, No. 2.

JANUARY.

Nos. 3-4.

Damage caused by floods in Kistnah District.—Proceedings Board of Revenue, submitting the Collector's report on this subject, communicated to the Public Works Department Collector to report whether he requires any extra assistance in conducting the Settlement of the year.

No. 3



Revenue Department

Proceedings of the Board of Revenue
dated 16th December 1872.

Read the following

No. 2751.

From

G. D. Lemmon Esq.

Ag. collector, Kistnah district.

To

J. Grove Esq.

Secretary to the Board of Revenue
Madras.

Sir,

I have the honor to report on the damage that has been caused in the district by the recent floods induced by the rains that fell in the latter part of September and the beginning of October last.

2. The taluqs that have suffered are Bapatla, Repalli, Bandur and Gindivada. Bezvada has suffered to a slight extent, and Guntur, but these two not sufficiently to call for any special report.

3. Commencing with the Bapatla taluq. I see by the reports of the Range

Range Officer, which Mr. Smith has sent me for perusal, that the Jommanore channel has been breached in many places, not badly. The Jommanore tank sluice has been destroyed. At Kalangula a little lower down has been destroyed; and a good deal of work that had been done in the way of strengthening the banks of the channel has been washed away. The Ramfarn drainage channel has been breached in four places, but three of these breaches are believed to have been the work of the pyots. Of the roads in this taluk, a short piece from Ponnur to Bapatla has been damaged at the bridge over the Tungabudra; that from Buddam to Harlapalem has been damaged at the salt creek; the road from Enhole to Hadavacuduru is also injured.

4. In regard to the loss of crops, the Tahsildar reports that all the water-courses and channels that run into

into the Ramfarn swamp brought down a vast quantity of water, inundating the crops of 13 villages that he particularly specifies, and of others in the low lying part of his taluk. The whole country was under water between Bapatla and Shiva Ganjam, where there is a good deal of wet cultivation, chiefly the "Sanalu" or spring channel wet lands. The Tahsildar has made no estimate of the loss that the pyots have sustained, but I am not sanguine that the necessary permission on the approaching Jambhanti will be less than Rs 10,000.

5. In the Repalli taluk, in consequence of the precautions taken by Messrs. Sage and Norris, no serious damage has occurred to the irrigation works, and the Tahsildar reports that the crops about Arambaka are in a fair state, as the water is running off. Near towards the Krishna river about Hanagala, the crops were reported still

still under water. on 19 October, but the water was running off and as the tops reaching were found to be still healthy-looking, it is hoped that the loss of crop will be only a partial one. Some of the wet crop that has been under water 13 days is said to be still alive! The crop under the phandole Hottawada has died under this water. About phandole and Yajiti the water was said to be standing $5\frac{1}{2}$ feet deep on the wet lands and all about Buddam; there was a great deal of water all over the country and the Pomer and phandole road has been breached. The Tahsildar gives no estimate of the loss of crop and in fact it must be difficult to do so, as until the water has run off, it is impossible to say what crop is alive or what has perished.

b. In the Bander taluq, the damage to works has not been very great

great. The chief mischief has been done in the unfortunate Divi division again, and the Tahsildar writes, after traversing the greater part of it, that he has seen of the crops, either dry or wet, very little that remains unimpaired. The rice that was got into the ground early does not appear to have suffered much; but those fields that were in the course of transplantation or had only been transplanted a short time before, have entirely lost their crops, and unfortunately the season generally in the division was later.

The Tahsildar estimates that the loss of wet crop will entail a remission of at least Rs 11,000, and he adds that land bearing an assessment of Rs 8,000 has not only lost its dry crop but has been so cut up by the water that it will not be possible this year to get it ready for pyra or later crop. This

This however is a matter on which I think he is mistaken. He reports great loss of cattle in the division, from the wet and absence of pasture, saying that the number of deaths is upwards of 2000. A good deal of damage has been done to the lands of the Davaracotta Estate, now under attachment for arrears of revenue, and I believe that the estates of the Walhur and Nigid Zamindars have also suffered. Three large breaches were made in the Bander canal, chiefly in consequence of the influx of water into the Ellore canal from the Budumair.

8. The Budumair - a hill-stream having its source in the hills about Hondapalli - is carried under the Ellore canal about 8 miles from Bezwada. There appears to be nothing like sufficient opening to discharge the flood-water that came down, and it

it consequently rose and overtopped the aqueduct, so entering the canal. It also breached the canal near Bezwada and ran back up to Bezwada, whence it went down the Bander canal. The Ellore canal was again breached on the other side, and the fallair lake by that means, and the flood waters of the Tamluk filled, inundating all the country about it and the Lankas in it.

9. For four miles the canal banks are described as being simply "riddled with breaches" and the amount of silt deposited in the canal quite choked it up for a distance of 2000 yards, and traffic was entirely stopped. Mr. Peters has shown great energy and activity in exerting himself to get done what was needed in repairing the canal.

10. The Gardivada Tahsildar reports that the water in the fallair Lake rose higher than it had ever done

done before, and the Effpntain; its
escape, not only was unable to carry
off the flood water, but itself also
overflowed. The flood-water reached
the town of Gudwada and there
did damage to some houses. The
Tahsildar's examination was made
on a Sangadi or boat, as the
cultivated land was 5. 7. and even
8 feet under water in the villages
around the Jollair Lake. The
cultivated lands in the Lake itself
were not only in places not visible
but also not to be reached by the
poles with which the Sangadi
was pushed along. The loss of
cattle is reported to be about 1000
drowned, and about 6000 dead of
disease consequent on the the wet.
Until the water is run off, it is not
possible to make an exact estimate
of the injury that has been done,
but I suppose damage has been done
to

to land paying about Rs 50,000 to
Government. The roads in this
Delta have been damaged, but
there are mud banks at present,
and their repairs will not cost
very much.

11. Altogether this rainfall,
which nowhere exceeded 8 inches in
the 24 hours, and in the place
where it was greatest, was only
10 inches in 4 days, has done
damage to Government alone to an
amount of little less than 1 Lac of
rupees; for I believe that the
repairs necessary to the canals will
not cost less than Rs 20,000. The
defective drainage throughout the
deltas has been the main cause
of all this damage; and I am
strongly of opinion that in lieu
of further extending our irrigation
schemes in the Delta, all our
attention should be turned to
improving the drainage. The
irrigation

irrigation schemes, as they stand, if not complete in themselves furnish ample water for the wet cultivation that is in existence, while the improvement of the drainage would render fit, for wet cultivation, land that would amply suffice for the population that increases at the rate that the population of this district is doing. The almost absolute impossibility that exists in getting labor for the Public Works of the district tends to show in my opinion, that there is as much land ^{now} under cultivation as is necessary for the people.

12. As a method of assisting the pillagers on the foilair to recover some of their losses, I am about to address the Superintending Engineer on the feasibility of replacing the old dam on the Perantala Komama, and so retaining sufficient water in the Lake to enable the ryots to undertake

undertake the Dalwa cultivation, which they have been obliged to forego since the dam was removed. I shall address the Board more fully on this subject, when I have received Mr. Smith's views on the matter.

13. I have also decided to postpone the sale of any more of the grazing lands about that part called in the Lankas, as, should the Dalwa crop be grown, I should have to cancel the sales.

14. I have not been able to depute any European officer to inspect the last three tadags on which I have reported, but as soon as Mr. Campbell has completed a tour he is making around the northern part of this charge, I shall send him down to Gudwada and when my Assistant, who I see has been gazetted, arrives, I shall myself proceed to Divi.

15. I am glad to pay no loss of

of human life has been reported.

Madras District
Collectors' Office.
Madrass
16 November 1872

I have &c.
signed / G. D. Lemmon
Sd/- Collector.

This report will be submitted to Government for their information.

The damage done by the floods seems to have been confined to the four Delta taluqs, but it is clear that no accurate estimate of the extent to which the crops have suffered can be at present framed.

The collector will report again when the actual result is better known.

The special attention of Government is called to the collector's remarks in para 11 on the defective drainage of the Delta. This important point has often been noticed before

before, and the Board fear the attention of Engineers has not been sufficiently directed towards it. In their Proceedings of the 25 July 1870 N. 5022/242, the Board, in reviewing the causes which have impeded ryots from availing themselves of the facilities for irrigation afforded by the Amma, said, "The drainage of the Delta is admitted on all hands to be incomplete and this has compelled the relinquishment of water in many instances." It is certainly of very great importance that a free outlet for flood-water should be provided both on the North and on the South of the Krishna, not only to save the crops from destruction but also in a sanitary point of view.

(True copy & Extract)

J. Gole
Secretary.

~~G. D. Lemmon~~
The Secretary to Government
Revenue Department.

REVENUE DEPARTMENT.

14 May 1873.

No. 4004.

77.2

From

Board of Revenue

Dated

16th December

1872.

FOR ORDERS.

The report should be com-
municated to the B.P.W.
We must wait for
further particulars. We
cannot spare another
Asst. for the Col. but
we might give him one
or two Acting D. & F. clerks.

O. 210 August 1872-8

Revenue 1872 D. & F.

77.2004.

Proceedings of the

Board of Revenue.

dated 16th

May 1873

December 1872

Dec. 1872

Submitting report
with remarks report of
loss of tobacco &c on
damage caused by recent
floods on &c.

No. 3-4

S. O. No. 2-4 Jan 1873

for the settlement of
necessary. We should
probably have been long

in communication in regard
to the subject of
amnesty for the rebels.

Dr. J. C. Schmitt
of the University of
Michigan.

W. H. Schmitt

of the University of

Michigan. He has just
written me about the
subject of amnesty.

FOR ORDERS.

29. Pub. W. D. D. Dec 8 Jan 1873
14. Brandy & Co. D.

These papers will be
con- to the S. P. W. into
reference, particularly, to
Part II of the former Report
2. The W. D. will request the
Com. to report whether he
requires any extra assist-
ance in conducting the
Settlement of the year, owing
to the numerous claims for
remission as will arise.
If so, a Com. could be
temporarily appointed to the
District - 1872 4/11-72

18 Dec 72 R. 26. Dec 72

*Proceedings of the Madras Government, Revenue Department,
4th January 1873.*

No. 3. Read the following Proceedings of the Board of Revenue, dated 16th December 1872, No. 2,397:—

Read the following letter from G. D. LEMAN, Esq., Acting Collector of the Kistna District, to the Secretary to the Board of Revenue, dated Masulipatam, 16th November 1872, No. 2,751:—

I HAVE the honour to report on the damage that has been caused in the district by the recent floods induced by the rains that fell in the latter part of September and the beginning of October last.

2. The taluqs that have suffered are Bapatla, Repalli, Bander and Gudivada. Bezwada has suffered to a slight extent, and Guntur, but these two not sufficiently to call for any special report.

3. Commencing with the Bapatla Taluq, I see by the reports of the Range Officer, which Mr. Smith has sent me for perusal, that the Commamore Channel has been breached in many places, not badly. The Commamore Tank sluice has been destroyed. A Calingula, a little lower down, has been destroyed; and a good deal of work that had been done in the way of strengthening the banks of the channel has been washed away. The Ramparu drainage channel has been breached in four places, but three of these breaches are believed to have been the work of the ryots. Of the roads in this taluq, a short piece from Ponnur to Bapatla has been damaged at the bridge over the Tungabudra; that from Buddam to Karlapalem has been damaged at the Salt creek; the road from Inkole to Kadavacuduru is also injured.

4. In regard to the loss of crops, the Tahsildar reports that all the water-courses and channels that run into the Ramparu swamp, brought down a vast quantity of water, inundating the crops of thirteen villages that he particularizes, and of others in the low lying part of his taluq. The whole country was under water between Bapatla and China Ganjam, where there is a good deal of wet cultivation, chiefly the "Sonalu" or spring channel wet lands. The Tahsildar has made no estimate of the loss that the ryots have sustained, but I am not sanguine that the necessary remissions in the approaching Jamabandi will be less than Rs. 10,000.

5. In the Repalli Taluq, in consequence of the precautions taken by Messrs. Sage and Norris, no serious damage has occurred to the irrigation works; and the Tahsildar reports that the crops about Arambaka are in a fair state, as the water is running off. Nearer towards the Kistna River, about Kanagala, the crops were reported still under water on 19th October, but the water was running off; and as the tops re-appearing, were found to be still healthy looking, it is hoped that the loss of crop will be only a partial one. Some of the wet crop that has been under water thirteen days, is said to be still alive. The crop under the Chandole Kottawada has died under the water. About Chandole and Yajili, the water was said to be standing 5½ feet deep on the wet lands, and all about Buddam there was a great deal of water all over the country, and the Ponnur and Chandole road has been breached. The Tahsildar gives no estimate of the loss of crop; and in fact it must be difficult to do so; as, until the water has run off, it is impossible to say what crop is alive or what has perished.