M.R.O. 1—10,006—28-2-50.

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE

Government of Madras

Public Works DEPARTMENT

G.O. No.	1651 (2)	Press
B.P. No.		Mis.
428-289		
429		
Dated	19-6-1874	195 .

Not to be folded or roughly handled

Read the following papers :—

No. 428. Endorsement of the Chief Engineer for Irrigation, dated 22nd May 1874.

From Captain H. BAILEY, Officiating District Engineer, Salem, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Salem, 9th May 1874, No. 32.

I HAVE the honour to forward, herewith, copy of a letter from the Tripatore Range Officer, reporting the breaching of the large Tripatore tank.

One copy of letter.

2. An estimate for the repair of the tank has been called for, but the Range Officer has, in the meantime, been authorized to proceed with the work on emergency in anticipation of sanction.

From Mr. W. H. HISCOX, Executive Agent, Tripatore Range, to Captain H. BAILEY, Officiating District Engineer, Salem, dated Tripatore, 6th May 1874, No. 79.

I BEG to inform you that I have just returned (4 P.M.) from inspecting the large Tripatore tank, which breached about two hours previously in four parts. The tank has a road passing over its bund. It was consequently of very good section. Calingulah is a very long one also and on a pretty low level. Between 4 and 5 feet of water actually passed over the bund before the level lowered and exposed the breaches. The breaches are large. An attempt was made to save the tank, but under the circumstances proved futile.

The Department Public Works in this Range have no rain gauges. The Tahsildar states that the rainfall from 6 A.M. on the 5th instant to 6 A.M. on the 6th instant was over 13 inches. It is still raining.

Further particulars hereafter. In haste for the post.

No. 428A. From Captain H. BAILEY, Officiating District Engineer, Salem, to Lieutenant-Colonel J. MULLINS, R.E., Chief Engineer for Irrigation, dated Salem, 15th May 1874, No. 33.

WITH reference to my letter No. 32, dated 9th May 1874, I have the honour to forward, herewith, copy of a letter from the Tripatore Range Officer, reporting on the damage done to tanks, etc., in his Range by the cyclone of the 6th instant.

One copy of letter.

From Mr. W. H. HISCOX, Executive Agent, Tripatore Range, to Captain H. BAILEY, Officiating District Engineer, Salem, dated Camp Vaniembady, 9th May 1874, No. 88.

I HAVE the honour to report upon the damage done in this Range by the heavy rains experienced on the 5th and 6th May 1874.

2. From the 2nd to the 4th instant the sun was not visible, the sky was overcast, but no rain fell. On the morning of the 5th instant, the rain commenced with a drizzle, increasing in density of downpour until the evening, when it began to rain very hard, unaccompanied by wind. It continued thus until 1 A.M. on the 6th instant, when the wind rose and blew most boisterously torrents of rain, until 8 A.M. The wind then ceased and the rain dwindled into a drizzle, which finally ended about 11 P.M. that night. The Department Public Works have no rain gauges in this Range ; but in a conversation with the Tripatore Tahsildar, he told me that he measured about 13 inches of rain between 6 A.M. on the 5th instant, and the same hour on the 6th instant.

3. The rainfall must have been something enormous, for the consequences in this Range were more disastrous than those which resulted from the floods which accompanied the cyclone of May 1872. Much damage was done to house property. Many of the houses in Tripatore which were built of brick in mud, not alone mud walls, fell to the ground. In the village of Mattrapully, the Police station-house, only built last year, together with the Constables' huts situated some distance away from the river bank, were flooded and swept away, and so were all the villages situated any ways near the river banks. At Vaniembady the Palar river was in unprecedented high flood, and much damage, I believe, was caused to life as well as to property. The Vapumpett stream, which crosses Trunk Road No. 1 about a mile south-east of Vaniembady, overflowed its banks, and inundated the country for a considerable distance on either side of it, where the level of the country was low; a village close by the road was entirely ruined, and it is said one child was lost in the flood. The Department Public Works bridge which crossed the above-named stream was entirely washed away; and so was the Railway line and a girder bridge situated not 400 yards distant.

4. The Government bridge referred to above was a single semi-elliptical arched bridge of 30 feet span, with very high and long approaches leading to it. The water rose above the roadway of the bridge which is 29 feet above the bed of the stream. It flowed over the whole length of the embanked approaches, and cut a breach in it 60 yards wide. This breach ought to have saved the bridge, but I suppose the waterway of the latter must have been choked up with trees and brushwood, the concussion and strain from which must have caused its speedy collapse. The bridge was a well built one. The materials as well as the workmanship were excellent. It is said to have been built in 1858. The Overseer's shed, a nice little bungalow lying near it, was also washed to the ground.

5. The Vapumpett jungle stream also crosses the road between the Vaniembady Railway Station and the town of Vaniembady, across which a three-arched bridge of 15 feet span was destroyed, leaving only the two abutments and wing-walls standing, and these also were cracked. The bridge was well built, and would bear comparison with any of the Railway works in the vicinity.

6. The Railway line which also crosses the Vapumpett stream, and across which a girder bridge of four spans of 30 feet each was built, was entirely washed away, not a vestige of the bridge now exists, except a portion of one of its wing-walls. The embankment on either side of the bridge was also breached for a distance of 40 or 50 yards. The Railway line for a quarter of a mile on either side of the above break was also considerably damaged, the water having flowed right over the embankment, although there were several other openings in the same valley, which aided in the discharge of this enormous flood. I have however to state that the flooding of the Vapumpett stream was not the result of the breaching of tanks within its catchment basin. I have inspected many of the large tanks in the same valley, above the Railway line, and have found them to be in *statu quo*. No tanks in this valley have as yet been reported breached by the Revenue Authorities.

7. All the irrigation works fed by streams receiving the drainage from the Yagalari Hills suffered more or less damage. The rain on these hills must have been heavier than elsewhere. The breached works reported up to date are named below :—

Tripatore Taluq.

1. Tripatore large Tank.
2. *Caramanthoor* Tank.
3. Madapully Tank.
4. Perumapet Tank.
5. Muthumputty Hissa Anicut.
6. *Eroonampet Yagalari* Tank.
7. Moothumputty Tank.
8. Keelcoopum Tank.
9. Pothoor Anicut.
10. Vengalapooram Dam.
11. *Coottysevoornuttum* Tank.
12. Aundavadynuttum Nagamma Tank.
13. Reddyvalasai Alleyery Tank.
14. Nacharcoopam Ootari Tank.
15. Do. Soobbinaicken Coottay tank.
16. Oodyamathoor Tank.
17. Thippasamudram Tank.

Proceedings of the Madras Government, Public Works Department,
19th June 1874.

Uttencherry Taluq.

1. Korakamputty Tank.
2. Vellalaputty Tank.
3. Nochiputty Tank.
4. Do. Vanan Coottai Tank.
5. Veelakuppum Tank.
6. Thallapady Tank.
7. Theerthagherry Valasai Tank.
8. Mullamputty Tank.
9. Sholagherry Tank.

8. It will be observed that many of the tanks repaired last year have again breached this year. They have not all been inspected, so that I cannot state whether they were breached in exactly the same places or not. I am told that the breaches in most of them have occurred near their calingulahs, and not in the same places that were repaired during last year. It is evident that the waste weirs are inadequate to discharge floods of this description, and in submitting estimates for their repairs care will be taken to provide for their extension, or reducing their level as may appear expedient.

9. All those tanks marked with a star are important ones, and have much revenue depending upon them. Of these the Tripatore tank is the most important. It yields a revenue of Rupees 3,740 per annum, and it has an important road, the road from Tripatore to Allengayem, passing over the whole length of its bund. There are four deep breaches in the middle of the bund, measuring 94 yards, 14 yards, 36 yards and 48 yards long each, 28 yards of the calingulah was swept away; the remaining stones of the existing apron have all been displaced, and one sluice was removed from its position into the bed of the fields. The length of the calingulah was 150 yards, and the average height of the bund above high water mark is about 12 feet; width of bund at top 6 to 7 yards; rear slope 2 to 1. The water literally flowed 5 feet deep over the whole length of the bund, which is about 1¼ miles long, before it lowered sufficiently to expose the breaches. This tank was last breached thirty years ago.

10. Trunk Road No. I. did not suffer much damage beyond the destruction of the elliptical arched bridge alluded to. In many parts the gravel and metal were washed off the road and gullies formed; but the damages otherwise were not much, and do not warrant my applying for an additional grant for its repair.

11. Trunk Road No. V. suffered more than Trunk Road No. I. Many parts of the road in embankment have been breached, and large gullies have been formed in other parts. The Kacungcuray tank, belonging to a Mittahdar, along which bund this road passes, has been breached in four or five places. Traffic is here impeded. The Mittahdar has been requested by the Tahsildar to carry out the repairs thereto as early as practicable. I beg to request that you will be pleased to apply to the Local Fund Board for an extra grant of Rupees 1,000 to be allotted to this road to place it in *statu quo*.

12. That part of the Samulputty and Cuddalore road in this Range has not suffered much. The rain has consolidated all the old material on it. But at the 12th mile, where it crosses the Theerthagherry Valasai tank (a Government tank,) traffic is, I learn, impeded through the breaching of the tank bund. The cost of the repairs of this breach however will be charged to "Imperial Funds" under the heading of "Agricultural Repairs."

13. In conclusion, I beg to state that I have issued strict and urgent orders to the Overseers to do their best endeavours to repair all damage to irrigation works especially before August, so that the tanks may again refill and cultivation may not be impeded to the detriment of the revenues of the State.

Submitted for the information of Government.

2. Special attention should be given to the provision of adequate surplus weirs. A rain gauge should be established at the Range head-quarters, and a

record of all rainfall, and particularly of extraordinary falls should be carefully maintained.

(Signed) J. MULLINS, Lieut.-Colonel, R.E.,
Chief Engineer for Irrigation.

No. 429. ORDER THEREON, 19th June 1874, No. 1,656.

IRRIGATION, No. 34. ORDERED to be recorded.

(True Extract.)

Lieut.-Colonel, R.E.,
Joint Secretary to Government.

To the District Engineer, Salem.
" Chief Engineer for Irrigation.
" Revenue Department.
To all other District Engineers.

Exd. S. T. Austin.

Spare Copies

No 79 Tripatore, 6th May 1874.

From

The District Engineer

To

Salem.

Sir,

I beg to inform you that I have just returned (4 P.M.) from inspecting the large Tripatore Tank which breached about 2 hours previously in 4 parts. The tank had a road passing over it bund. It was consequently of very good section. Callingulab is a very long one also and on a pretty low level. Between 4 and 5 ft. of water actually passed over the bund, before the level lowered and exposed the breaches. The breaches are large. An attempt was made to save the tank, but under the circumstances proved futile.

The D.P.W. in this range have no rain gauges. The Tahsildars state that the rainfall from 6 A.M. on the 5th instant to 6 A.M. on the 6th instant was over 13 inches. It is still raining.

Further particulars hereafter -

No 32 District Engineer's Office,
Salem, 6th May 1874.

From

The Offg: District Engineer

To of Salem.

The Chief Engineer

Sir, for Irrigation.

I have the honor to forward herewith copy of a letter from the Tripatone Range Officer reporting the breaching of the large Tripatone Tank.

2. An estimate for the repairs of the Tank has been called for, but the Range Officer has, in the mean time, been authorized to proceed with the Work on Emergency, in anticipation of sanction.

I have the honor to be,

Sir,

Your most obt. Servant,

A. Bailey Captain,

Offg: District Engineers

Enclosures 1
Copy of
letter

Sgd/

Sir haste for the post.

I have &c.

Signed / H. A. Maddox,
Executive Agent.

/ True Copy /

A. / Bailey Captain,

Offg: District Engineer.

Ltr. & Encl.

Enclosure No 1 in
letter No 32 Dated 6th May
1874 from the District
Engineer of Salem.

Copy / 1874.

Sgd/

A. Bailey Captain.

Offg: District Engineer.

No. 88

Tripatore Range Office,
Camp Vaniambady 9th day 1874

From

The Officer in charge of
Tripatore Range.

To

The District Engineer.
Salem.

Sir,

I have the hon'r to report upon the damage done in this Range by the heavy rains experienced on the 5th and 6th inst. 1874.

2. From the 2nd to the 4th inst. the days were fine, the sky was overcast, but no rain fell. On the morning of the 5th inst. the rain commenced with a drizzle, increasing in density of downpour until the evening, when it began to rain very hard, unaccompanied by wind. It continued thus until 9 a.m. on the 6th inst, when the wind rose and blew most boisterously torrents of rain, until 8 a.m. the wind then ceased and the

No. 88

Dy. Conservator of Forests
Salem

Dy. Conservator of Forests
Coimbatore

No. 1722, dt. 12th Nov. 1874.
Received 14th Nov. 1874.

Dy. Conservator of Forests
Salem

No. 632
Dated 14th Nov. 1874.
Received 16th Nov. 1874.

Dy. Conservator of Forests
Coimbatore

Tripatore Range Office
Camp Vaniambady 9th day 1874

From

The Officer in charge of
Tripatore Range.

To

The Dy. Conservator of Forests
Salem.

Sir,

I have the hon'r to report upon the damage done in this Range by the heavy rains experienced on the 5th and 6th inst. 1874.

2. From the 2nd to the 4th inst. the days were fine, the sky was overcast, but no rain fell. On the morning of the 5th inst. the rain commenced with a drizzle, increasing in density of downpour until the evening, when it began to rain very hard, unaccompanied by wind. It continued thus until 9 a.m. on the 6th inst, when the wind rose and blew most boisterously torrents of rain, until 8 a.m. the wind then ceased and the

the rain dwindled into a drizzle, which finally ended about 11 p.m. that night. The D.P.W. have no rain gauges in this Range. But in a conversation with the Tripatore Jahsildar, he told me that he measured about 13 inches of rain, between 6 a.m. on the 5th Instant, and the same hour on the 6th Inst.

3. The rainfall must have been something enormous, for the consequences in this Range were more disastrous than those which resulted from the floods which accompanied the cyclone of May 1872. Much damage was done to house property. Many of the houses in Tripatore which were built of brick in mud, not alone mud walls, fell to the ground. In the village of Mattrapully, the Police Station House, only built last year, together with the Constables huts situated some distance away from the river bank, were flooded and swept away, and so were all the villages situated

amongst near the rivers banks. At Vaniembady the Palar river was in unprecedented high flood, and much damage I believe was caused to life, as well as to property. The Vaymputt stream which crosses the Trunk Road No. 1 about a mile South East of Vaniembady, overflowed its banks, and inundated the country for a considerable distance on either side of it, where the least of the country was low, a village close to the road was entirely ruined, and it is said one child was lost in the flood. The D.P.W. bridge which crossed the above named stream was entirely washed away, and so was the Railway line and a girder bridge, situated not 400 yards distant.

4. The Government bridge referred to above, was a single semi-elliptical arched bridge of 30 ft. span with very high and long approaches leading to it. The waters rose

above

above the roadway of the bridge which is 29 ft. above the bed of the stream. It flowed over the whole length of the embanked approaches, and cut a breach in it 60 yards wide. This breach ought to have saved the bridge, but I suppose the waterway of the latter must have been choked up with trees & bushwood, the concussion & strain from which must have caused it to speedy collapse. The bridge was a well built one. The material as well as the workmanship were excellent. It is said to have been built in 1858. The Overseer's shed a nice little bungalow lying near it, was also washed to the ground.

5. The Vapumpett jungle stream also crosses the road between the Vavinebady Railway Station and the town of Vavinebady, across which a three arched bridge of 15 ft. span was destroyed, now only the 2 abutments and wingwalls standing, and these also were cracked.

The bridge was well built, and would bear comparison with any of the Railway works in the vicinity.

6. The Railway line which also crosses the Vapumpett stream, and across which a girder bridge of 4 spans of 30 ft. each was built, was entirely washed away, not a vestige of the bridge now exists, except a portion of one of its wing walls. The embankment on either side of the bridge was also breached for a distance of 40 or 50 yards. The Railway line for a quarter of a mile on either side of the above breach was also considerably damaged, the water having flowed right over the embankment. Although there were several other openings in the same valley which aided in the discharge of this enormous flood. I have however to state that the flooding of the Vapumpett stream, was not the result of the breaching of tanks within its catchment basin, I have inspected many of the large

large tanks in the same valley, above the Railway line, and have found them to be in status quo. No tanks in this valley, have as yet been reported breached by the Revenue Authorities.

7. All the Irrigation works fed by streams receiving the drainage from the Agalavi Hills suffered more or less damage. The rain on these Hills must have been heavier than elsewhere. The breached works reported up to date are named below:—

Tripatore Taluq

1. Tripatore Large Tank
2. Caramanthoor Tank
3. Madapully Tank
4. Perumapet Tank
5. Muthumpetty Periya Anicut
6. Perumapet Agalavi tank
7. Moothumpetty Tank
8. Velloopum Tank
9. Pothur Anicut
10. Vengalapooram dam.
11. Coothperoomuttum tank
12. Aundavadymuttum Nagamma tank.
13. Reddyvalasai Aboyery tank
14. Nachiarcooppam Ootan tank
15. —— Do —— Sookbinaickan Cottay tank.
16. Codyanallhoor tank
17. Thippadammedram tank.

Uttangherry Taluq.

1. Voorakampetty tank
2. Vellalpetty tank
3. Nachipetty tank
4. —— Do —— Varan Cottai tank
5. Kurlathippum tank
6. Kallapady tank
7. Kurrthangherry Valasai tank.
8. Vellampetty tank.
9. Sholaghirry tank.

8. It will be observed that many of the tanks repaired last year, have again breached this year. They have not all been inspected, so that I cannot state whether they were breached in exactly the same places or not, I am told that the breaches in most of them have occurred near

near their Caliguelas, and not in the same places that were repaired during last year. It is evident that the waste weirs are inadequate to discharge floods of this description and in submitting Estimates for their repairs care will be taken to provide for their extension, or reducing their Crest as may appear expedient.

9. All those Tanks marked with a star, are important ones, and have much revenue depending upon them. Of these the Tripatore Tank is the most important. It yields a revenue of Rupees 3740 per annum. and it has an important road, the road from Tripatore to Allengayem passing over the whole length of its bund. There are 4 deep breaches in the middle of the bund, measuring 94 yds. 14 yds, 36 yds. and 48 yds. long each, — 28 yards of the Caliguela was swept away; the remaining stones of the existing apron have all been displaced; and one sluice was removed from its position into the bed of the fields. The length of the Caliguela was 150 yards; and the average height of the bund above H. W. M is about 12 ft; width of bund at top 6 to 7 yards; rear slope 2 to 1. The water literally flowed 5 ft deep over the whole length of the bund, which is about 1¼ miles long, before it lowered sufficiently to expose the breaches. This tank was last breached 30 years ago.

10. Trunk Road No 1 did not suffer much damage, beyond the destruction of the elliptical arched bridge alluded to. In many parts the gravel & metal were washed off the Road, and gullies formed; but the damages otherwise were not much, and do not warrant my applying for an additional grant for its repair.

11. Trunk Road No 2 suffered more than Trunk Road No 1. Many parts of the Road in embankment have been breached, and large gullies have been formed in other

other parts. The Kaccangaranay Tank, belonging to a Mittahdar, along which bund this road passes, has been breached in 4 or 5 places. Traffic is here impeded. The Mittahdar has been requested by the Talukdar to carry out the repairs thereto, as early as practicable. I beg to request that you will be pleased to apply to the Local Fund Board for an extra grant of Rs: 1000 to be allotted to this Road, to place it in station.

12. That part of the Sannadhutty and Cuddalore Road in this Range, has not suffered much. The rain has consolidated all the old material on it. But at the 12" mile where it crosses the Thrunthagherry Valasai Tank (a Government Tank) traffic is, I learn, impeded thro' the breaching of the tank bund. The cost of the repairs of this breach however will be charged to "Imperial Funds" under the heading of "Agricultural Repairs".

13. In conclusion, I beg to state that I have issued strict and urgent orders to the Overseers, to do their best endeavours to repair all damage to Irrigation works especially before August. So that the tanks may again refill, and cultivation may not be impeded, to the detriment of the Revenues of the state.

I have &c.

(Signed) W. H. Nixon,
Executive Agent.

(True Copy)
J. J. Bailey Captain,
Offg: District Engineer.

Exhibit D

Dublin Engineer's Office

No 33 Salem 15th May 1874

From

The Offg District Engineer
Salem

To

The Chief Engineer
for Irrigation

Sir,

With reference to my letter
No 32 dated 9th May 1874, I have
the honor to forward herewith Copy of
a letter from the Tripadore Range Officer
Reporting on the damage done to Tanks
&c in his Range by the Cyclone of the
6th Instant.

I have the honor to be
Sir
Your Most Obedient Servt
J. Tracy Captain
Offg District Engineer

Encl as above

Copy of letter

Col Maltby R.E.

Salem 15th May 1874

Offg District Engineer

Salem

Sir,

With reference to your letter No 33 dated 15th instant, I have the honor to forward herewith Copy of a letter from the Tripadore Range Officer Reporting on the damage done to Tanks &c in his Range by the Cyclone of the 6th Instant.

I have the honor to be
Sir
Your Most Obedient Servt
J. Tracy Captain
Offg District Engineer

Encl as above

Copy of letter

Col Maltby R.E.

Salem 15th May 1874

Offg District Engineer

Salem

Sir,

With reference to your letter No 33 dated 15th instant, I have the honor to forward herewith Copy of a letter from the Tripadore Range Officer Reporting on the damage done to Tanks &c in his Range by the Cyclone of the 6th Instant.

I have the honor to be
Sir
Your Most Obedient Servt
J. Tracy Captain
Offg District Engineer

Encl as above

Copy of letter

Col Maltby R.E.

Salem 15th May 1874

Offg District Engineer

Salem

Sir,

With reference to your letter No 33 dated 15th instant, I have the honor to forward herewith Copy of a letter from the Tripadore Range Officer Reporting on the damage done to Tanks &c in his Range by the Cyclone of the 6th Instant.

I have the honor to be
Sir
Your Most Obedient Servt
J. Tracy Captain
Offg District Engineer

Encl as above

Copy of letter

P. W. 1874 Dept.
No: 3371

From

The Chief Engr.
for Irrigation.

No. 22 May } 1874.
Rd. 5 June. }

Encl. 3.

Acknowledging a
letter from the Secy
Govt Punjaub, relative
to the damage to
canals by the storm
of the 6 May 1874.

428-429

Vide Order

Chief Engr's Office
for Irrigation
Punjaub
Lahore 22 May 1874.

To

The Secretary to Government
Punjaub
Lahore

Sir,

I have the honor to acknowledge the receipt of your letter No 1874 dated 5th instant, and to forward herewith a Report from the Executive Engineer of the Multan Canal Division, on the damage done to the canals by the storm of the 6th May last.

2. I have the honor to be
Sir
Your most obedient servant
Chief Engr for Irrigation
Punjaub

Encl 33

Executive Engineer's Office
Multan Canal Division
Dated Multan the 18th May 1874.

To

The Chief Engineer
for Irrigation
Punjaub
Lahore

Sir,

I have the honor to report for the information of Government that the storm of the 6th instant has done considerable damage to the canals in this division.

2. The following is a statement of the damage done to the Shujabad Branch, Dunya Pur Branch, Mailsi Branch, Khanewal Branch, Jahanian Branch, Shujabad Canal, Mailsi Canal, Khanewal Canal, Jahanian Canal, Dunya Pur Canal, Multan Canal, Shujabad Canal, Mailsi Canal, Khanewal Canal, Jahanian Canal, Dunya Pur Canal, Multan Canal.

Rs. 9,000

Chhamma to Khanewal

Rs. 10,000

Rs. 19,000

Executive Engineer's Office
Multan Canal Division
Dated Multan the 18th May 1874.

357 D 1
Dept. of Hist. & Mons.
PUBLIC WORKS.

Mr Asst. Supr:
Salem.

3.
19 June 1856

428-429.

Damage to lands - Salem &c

An Act to enable Thos
Dyer for Orcs. on Cotton
Farm the Dr Dyer &c
further damage to
lands by the Salem &
6th May 1874 recorded