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MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 2271 Press / Mis.

281-82

Dated 12 7 1882.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 12th July 1869.

No. 281. Read the following Proceedings of the Board of Revenue, dated 12th June 1869, No. 4,213 :—

Read the following letter from the Officiating Collector of the Kistna District, to the Acting Secretary to the Board of Revenue, dated Tenali 11th May 1869, No. 138.

I HAVE the honour to submit my report on the Salt roads of the Kistna District, during the year 1868-69.

2. There are four Salt divisions in this district which I will take each in turn.

I.—PONDRAKA.—The present Salt Cutcherry is at Bantumilly, but a new one has been sanctioned in Government Order, dated 14th April 1869, No. 1,012, Revenue Department, at a cost of Rupees 2,000, to be erected on the Kotamparra platform.

3. There are two Salt stations in this division, (1) Yendapally and (2) Chinna Pandraka, situated respectively at a distance of three and four miles from Bantumilly. The Imperial Road No. IV. between Arugollu and Bantumilly has an annual maintenance grant of Rupees 1,440. The length is 32 miles. This road is used by the Lumbadies resorting to this station from the Nizam's Territories. The Superintending Engineer reports that the road was kept in fair order during the year 1868-69 at a cost of Rupees 1,247, but it requires raising in some places, and the construction of tunnels across certain streams intersecting it, for which an estimate, amounting to Rupees 3,660, was sanctioned in Government Order, dated 17th December 1868, Public Works Department. Funds for the same are about to be applied for from the reserve. This road at present terminates at the Bantumilly channel. It should be carried on through the Bantumilly village up to the Salt platforms. These platforms are mounds of earth raised on the swamps, and have at present no roads or approaches of any kind. In Government Order, dated 18th January 1868, No. 143, Revenue Department, recorded in Board's Proceedings, dated 22nd January 1868, No. 525A, the sum of Rupees 2,630 was sanctioned for the extension of the road to the platforms, but there has been so serious a falling off in the sales of this division, that the execution of the work has been suspended, and also the erection of the new Cutcherry sanctioned.

4. The salt at this station is spontaneous. The salt ryots who collect it are paid Rupees 3-12-0 per garce Kudivaram. This salt being heavier than other salt, and the crystals of larger size, used to be preferred by the Lumbadies because better suited for transport. Since the introduction of weighing instead of measurement the Inland and Home sales have completely fallen off, and even the quantity taken by the Lumbadies this year exhibits a great decrease, as shown in the accompanying Statement :—

Fuslies.	Retail.	Wholesale.	Total.
1270	2,62,351	62,400	3,24,751
1271	2,87,206	25,581	3,10,787
1272	87,111	1,53,600	2,40,711
1273	80,307	1,99,200	2,79,507
1274	1,05,222	46,800	1,52,022
1275	59,957	1,42,800	2,02,757
1276	5,524	2,46,950	2,52,475
1277	14,465	1,18,009	1,32,474

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5. The decrease in the sales of Fuslies 1,274 and 1,275 was due to a deficiency in the quantity of salt in store, as several heaps were washed away by the Cyclone of 1864, and the amount manufactured next year proved insufficient. The increase in sales in Fusly 1276 is attributed to the prevalence of an idea that the wholesale purchasers of heaps stored by measurement would be large gainers, in comparison with the purchasers of heaps stored by weighment. It was in this year that the system of storing by weighment was introduced.

6. There are two other causes also why the execution of the roads sanctioned for this station has been deferred.

1*st*.—The mouth of the Kotteru Salt creek, near Pedda Gollapalem, which supplies the swamps of this Salt station with sea-water, has lately become closed, and it is doubtful whether it will be possible to restore and keep it open. I have requested the professional opinion of the Executive Engineer.

2*nd*.—It has been under contemplation to abandon the Salt station at Yendapally, and concentrate our salt stores in this division at Chinna Pandraka where the Cutcherry is proposed to be built. In this case the scheme of roads proposed would require to be revised.

7. There has been already excavated a channel up to the Kotamparra platform of the Chinna Pandraka station, but it requires to be deepened and a basin constructed at the terminus for boats. If this were done, salt from this station might be conveyed by water to Bezwada, and if an Inland depôt were established there, I have no doubt that it would speedily revive the prospects of Pandraka.

8. I visited this station in April, and weighed a heap of salt to ascertain whether there was any excessive wastage to account for the disfavor which this station has acquired. In one heap of Fusly 1276, I found a deficiency of 76 maunds or 6½ per cent., and this appears to be the average rate of wastage. The salt ryots came in a body to complain that the rate of Kudiwaram paid them Rupees 3-12-0 per garce was insufficient remuneration.

9. II.—Mangenapudi.—This Salt station is situated five miles to the north-east of the town of Masulipatam, but there is no made road. The line lies over a loose sandy tract which is very difficult for bandies and bullocks. A good road is very much needed, as it is from this station the town of Masulipatam and the neighbouring talooks obtain their supplies of salt. The spontaneous salt of Pandraka is not approved of for Home consumption, as the traders find it so heavy; and as they buy by weight and sell by measurement, they prefer a more bulky and less heavy salt.

10. The Salt depôt might have the advantages of water communication extended to it by the excavation of a branch channel from the basin of the Bezwada and Masulipatam Navigation canal. The distance is about five miles. If another branch were to take off near Dodlapalem lock and be carried in a south-east direction through the Kona swamp it would serve two additional purposes :—

1*st*.—It would prevent the spontaneous formation of salt on the swamp measuring about half a mile in length and a quarter mile in breadth, where we have either to destroy the salt annually or place guards for watching it.

2*nd*. The channel might be made the means of irrigating an extensive area both of Government and Zemindary land.

The Salt Deputy Collector reports that the following existing salt tracks are

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in good order :—

1. A road round platform No. 1, north-east of Mangenapudi.
2. A road from platform No. 2 to Dandudari, to meet the highway on the north-east.
3. A road to connect platform Nos. 1 and 2.

I have not been able to visit this station, but hope to do so shortly.

11. III.—Nizampatam.—This Salt depôt is also the single port for exportation of salt by sea. The construction of the Nizampatam canal from Bezwada to a large lagoon about three miles from the village of Nizampatam has also provided inland water communication for this Salt station, and affords facilities for the establishment of an Inland Salt depôt at Bezwada.

12. There is a road from Nizampatam to Guntoor thirty miles. Between Guntoor and Sandole it is reported to be in fair order, but between Sandole and Nizamptam ten miles, the road which lies over a heavy loose sandy tract, requires to be repaired. A bridge should also be built on this road across the Nizamptam Canal.

13. With regard to the minor roads of this Salt station there are :—

1*st*. Road leading from a palmyra bridge near Nizampatam through the Salt works to platform No. 3, on the west of the town. This is a part of the road between Nizampatam and Bapatla.

2*nd*.—Road leading from platform No. 1 to the Magadaramma Salt Creek.

14. During the last year, Rupees 32, out of Rupees 50 sanctioned, were spent on the repairs of these roads, which are reported by the Salt Deputy Collector to be in good order.

15. A bank raised between the Magadaramma Creek and the Salt pans to prevent their being submerged by tidal water, is also used as a road from the palmyra bridge on the first road to platform No. 1 to the south of it.

16. In paragraph 9 of Government Order, dated 29th May 1865, No. 1,128, Revenue Department, Government have sanctioned the construction of a new line instead of No. 1, about half a mile lower down, with a bridge large enough for carts to cross. This new road, it is proposed should start from the street at the south of the village near the present Salt Cutcherry, and should be carried up to the point where the present road meets the road to Bapatla. It is further proposed that the road should be connected with each of the platforms by good approaches.

17. Approaches to platform Nos. 2 and 4 are not required, as both these platforms will be abandoned as soon as the new platform has been raised, sanctioned by Government in Government Order, dated 23rd May 1867, No. 1,168, Revenue Department. Funds were provided for this purpose in last year's Budget, but the original estimates were found to have been prepared at too low rates, and the work had to be deferred. Revised estimates have now been put in hand, and I will shortly be submitted for sanction.

18. IV.—Chinna Ganjam.—There is an Imperial Salt road between Inkole on the Trunk Road and Chinna Ganjam ten miles in length. It has an annual maintenance grant of Rupees 800. This road was kept in repair in 1868-69 at an expense of Rupees 800. The Superintending Engineer remarks that it is very narrow

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and requires a great deal to be done to render it a respectable road. It is not metalled, and the traffic on it tries it very severely.

19. This road again though nominally to Chinna Ganjam runs at present only as far as Kadanakudura. If it is to be of any use at all, it is most important that the extension of 2¼ miles so as to bring it up to the road from the village to platform No. 5 should be carried out as soon as possible; the only reason why it was allowed to stop short of its proper destination appears to have been the difficulty of carrying the road over the sand ridge. Mr. Thornhill addressed the Superintending Engineer on the 22nd April 1868, No. 71, requesting that an estimate might be prepared for the continuation of this road, and pointing out that at present the toil of crossing the ridge is so great that it is said that much traffic which would otherwise come to Chinna Ganjam is diverted to other channels. The sand ridge is not a mile in width, but the sand is very deep and the labour of dragging carts across it is immense. A road to be of any use must be substantially made. Mr. Thornhill has offered the following suggestions in the above letter.

20. "I would suggest that the sand along the line of roadway should be excavated to about half a yard in depth, and that black mud from the Ramperu to a yard in thickness should be laid in the excavation, the mud being carefully tamped down with a slight admixture of sand as it is laid. When the whole earth has been laid the roadway would be about half a yard above the surrounding sand; the sand from the excavation should be carefully sloped up to the surface of the road.

21. "A good coating of kanker or gravel should be laid on the top. I fancy that earth so treated with ordinary repairs would form a solid mass that no traffic would cut through. Kanker I fancy is procurable in the swamps on the seaside.

22. "The drift is not very heavy in the sand ridge at that point; but I would suggest that a tripple line of screw pines at intervals of 40 or 50 yards on each side should be planted, and the intervals filled with palmyras or other trees. If aloes or any other hardy plants could be planted close to the side of the earth they might serve to prevent the earth from spreading laterally. This second ridge is full of water at a certain depth, and trees of all sorts flourish greatly when once they take root. After crossing the sand ridge, a few hundred yards of low ground intervene before another ridge of hard dry earth is reached. The road should run straight to this second ridge and then turn to the right past the Deputy Collector's Bungalow till it joined a raised roadway leading from Chinna Ganjam to the platforms. The estimate should provide for a good road to each of the chief platforms, the exact line being determined in consultation with the Salt Deputy Collector who would probably undertake the work when sanctioned. The above should be an Imperial charge, and should if possible be submitted for sanction in time for its being included in the next Salt Budget.

23. "For the port of Motupalli, a road should branch from the above where the latter turns to the right along the ridge. The distance is about two miles, and the work will be tolerably simple till it nears the port where the sand drifts are very heavy. To protect the road from these drifts it will probably be necessary to plant screw pine and palmyras on a large scale to windward of the road. This branch would be fairly chargeable to Local Funds."

24. At the Chinna Ganjam Salt Station there are two minor roads:—

1. From the village in an easterly direction by platforms Nos. 2 and 3 up to No. 5.

2. From Ankamma Cheruvu (tank) on the south-east of the village to platform No. 4.

On these two roads during 1868-69 only Rupees 15 were expended out of Rupees 150 sanctioned, but the Salt Deputy Collector reports both to be in good order.

25. Another road is proposed to connect platforms Nos. 2 and 3. Provision has been made for this in the current year's Budget, and the work will be commenced on receipt of the sanction of Government.

26. The last suggestion I have to offer with regard to this station is the desirability of extending to it the means of water-communication. There is a branch channel, the western bank channel, which crosses the Imperial Road No. 5 about four miles from Chinna Ganjam. The construction of this channel would therefore be quite feasible and serve to bring this Salt Station as well as the others into communication with Bezwada.

27. I have in another report urged the experimental establishment of three Inland Salt depôts at Bezwada, Muktiyala, and Pondugal, all on the Kistna. These three points would attract a large number of traders from the interior, and the bringing salt within comparatively easy reach of the villages of the interior would popularise the trade, take it out of the hands of the few Sowcars who now are said entirely to control it, and thus reduce the price of the commodity and increase the demand and the sales at the Coast.

THIS report will be submitted for the information of Government, with reference to Government Order, dated 2nd October 1865, No. 2,379, paragraph 53. It will be observed that it goes over much of the same ground as the letter disposed of with the Board's Proceedings thereon in Government Order, 20th May 1869, No. 1,664, Public Works Department.

2. With regard to the work referred to as suspended in paragraph 3 the Board will postpone expressing any opinion until the Collector receives the advice of the Engineer with regard to Kotteru Salt Creek, when he should report fully. He should at the same time report fully as to the desirability of closing the Gendapilly station.

3. The channel excavated up to the Kotampara platform of the Chinna Pandraka station should be deepened and a terminal basin constructed as the Collector proposes.

4. The Board are not prepared at present to advocate the establishment of Inland Salt depôts.

5. The Collector should express his own opinion as to the complaint of the salt ryots at Chinna Pandraka, showing how the Kudiwarum rates compare with the wages of ordinary labour.

6. With regard to the recommendation in paragraphs 9 and 10, the Board consider that water communication between Mangenapudi and Masulipatam would be most advantageous, and recommend that the attention of the Public Works Department be called to the subject.

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7. The road from Nizampatam to Guntoor should be repaired and a bridge built across the canal.

8. The new road referred to in paragraph 16 is of importance, and should be pushed on.

9. The road between Chinna Ganjam and Inkole should be widened and improved and extended to its proper terminus where there is a communication with the platforms. The reason given for stopping the road short of the platform, namely, the difficulty of carrying it over an intervening sand ridge, shows its necessity very strongly. All Mr. Thornhill's suggestions referred to in paragraphs 19 to 23 deserve the attention of professional Officers.

10. The Board also strongly approve of Mr. Boswell's suggestion in paragraph 26.

No. 282. ORDER THEREON, 12th July 1869, No. 2,271.

CIVIL WORKS, No. 39

COMMUNICATED to the Superintending Engineer of the 2nd Division, in continuation of G. O., No. 1,664 of the 20th May 1869.

2. Lieutenant-Colonel Moberly's attention will be drawn to paragraphs 3 and 6 to 10 of the Board's Proceedings.

(True Extract.)

Colonel, R.E.,
Secretary to Government.

To the Superintending Engineer, 2nd Division,
" Revenue Department.
" Board of Revenue

Exd. E. C. Sinnker.

P.W. Dept.
No 2271.
Proceedings of the Madras Government.
Under date the 12 July 1869.
Read the following

Proceedings of the Board of Revenue - (Received under No 42137 / 12 June 1869)

Communicated to the Superintending Engr. of the 2nd Div. in continuation of G.O. No. 1664 of the 20th May 1869.

Lieutenant Colonel Moberly's attention will be drawn to paras 3, and 6 to 10 of the Board's Proceedings -

To The S. Engr 2nd Div
" Revenue Dept
" Board of Revenue

Ac 2547

Govt. of {1869} Madras.

PUBLIC WORKS.

To The Superintending Engr.
2nd Division

Dated

Read. Dec.

G. O. 12 July 1869, No. 2271

Nos. 281–282

Salt roads Proc. of the Bd of Rev. recommg the refund of the Cess on the profits of Salt roads in the Nellore Dt during 1868-69. and other Offrs concerned with instructions.