

(1) Number of pages _____

(2) Date of repair _____

(3) Initials of the Referencer _____

MADRAS RECORD OFFICE.

Government of Madras.

DEPARTMENT.*Public works*

G.O. No. 3220	Press ~~Mis.~~
181-182	
Dated 10 - 11 - 1864.	

Not to be folded or roughly handled

*Proceedings of the Madras Government, Public Works Department,
10th November 1864.*

N 181. Read the following Proceedings of the Madras Government in the Revenue Department :—

Requesting that some more economical method than that now proposed may be devised to protect the Salt pans in the Canjam District, referred to in the Proceedings of the Board of Revenue, No. 6,793 of October 1864. (Here enter 3rd November 1864, No. 2,026.)

No. 182. ORDER THEREON, 10th November 1864, No. 3,220

Referred to the Superintending Engineer, 1st Division, who will be requested, in communication with the Collector, to devise a more economical method of protecting the Salt pans.

(True Extract.)

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

To the Superintending Engineer, 1st Division.
" Board of Revenue.

Exd. S. T. Augustin.

*Proceedings of the Madras Government, Revenue Department,
3rd November 1864.*

No. 44. Read the following Proceedings of the Board of Revenue, dated 14th October 1864,
No. 6,793.

Read the following letters :—

From G. S. FORBES, Esq., Collector of Ganjam, to W. HUDLESTON, Esq., Secretary to the
Board of Revenue, dated Chetterpur, 17th August 1864, No. 187.

1. I have the honor to submit the following remarks on Government Order No. 1,168,
dated 6th July last, (Salt), copy of which has been furnished to me by the Executive Engineer.
2. Adverting to Mr. Clarke's remarks on the quality of the salt at Ganjam, it is necessary
to explain that the salt manufactured at Ganjam, Oomeravelly, and Munsurcottah (and especially
at the latter place) can never be of the same whiteness as that made at Itchapur and Nowpadah,
and will generally be of smaller grain; because the soil at these last named places is composed
of a tenacious clay mixed with sand, whereas the Oomeravelly, Munsurcottah, and Ganjam pans
are formed of soil of a more soluble and lighter description; and when this is the case the con-
stant surface-ripple raised by the strong southerly winds which blow along the whole sea-board
during the manufacturing season leads to a slight admixture of sedimentary matter which colors
the salt, and probably interferes to a certain extent with perfect crystallization. It should be
understood however that salt, slightly colored by the soil and comparatively small in grain, is
not necessarily either bad or unwholesome. The manufacture at Munsurcottah was discontinued
this year, and the store remaining on hand will ere long have been sold off.

3. I think the Board must be aware that I have always paid much attention to the quality
of the salt manufactured in this District, as well as to the conditions under which it finds its way
to distant markets. The first step towards improvement in the manufacture was taken in
1859, when I put a stop to the practice of removing salt daily. In 1861 I obtained the sanction
of Government to destroy a considerable quantity of salt containing a large proportion of sand
and earth, and forbade the removal of salt from the pans after an exposure of less than five days.
The neglect of this rule is sure to occasion a deterioration in the salt, and when the present
Treasury Deputy Collector obtained six months' leave, and Mahomed Ali, then Superintendent
at Ganjam, acted as Salt Deputy, his place having been taken by a substitute who was inex-
perienced in the work, the quality of the salt fell off. This result is in no way attributable to
Mahomed Ali, the present Superintendent of Nowpadah, who is quite as deserving of confidence
as the present Deputy Collector, and is not inferior to him either in intelligence or zeal. I may
observe also that it is not always expedient to reject salt because it is small or slightly
discolored, much depends on the possibility of replacing it by better before the season closes.
I much regret that Mahomed Ali had not the opportunity of entering on any personal explana-
tion on the subject of his temporary administration with Mr. Clarke during that gentleman's
stay in Ganjam.

4. Samples of the newly manufactured salt are frequently sent to me for inspection. The
enormous increase in this branch of revenue, which exceeded twelve lacs during the last Fusly,
is due substantially to three causes: 1st, the
manufacture of a supply sufficient to meet the
wants of the inland market, 2nd, improvement

Note—Mr. W. Knox increased the manufacture in 1858, and
in the following year the first market increase took place.

in the quality of the salt, 3rd, the great advantages afforded to inland commerce by the roads we
have opened in Kimerly, Gumsur and elsewhere. The concurrent operation of these causes has
brought purchasers in great numbers and from long distances to our pans, and the rapid rise in
the revenue is not attributable to the individual exertions of the Deputy Collector, (however
otherwise deserving of credit) the steady increase having commenced long before his appointment
to the District.

5. With reference to paragraph 8, in which Government notice an opinion expressed by
Mr. Clarke to the effect that the cost price of salt at Itchapur should be reduced from
Rupees 9-6-0 to a lower amount, I beg to refer the Board to my letter dated 18th February 1863,
No. 11, in which the grounds for fixing the present price are given in detail. With deference to
Mr. Clarke's opinion, I am satisfied that Rupees 9-6-0 per Garco is, if any thing, a lower price

than the Government ought to pay for salt either in Ganjam or any other District, and in the present state of the labor market, a low rate of remuneration will either lead the manufacturers to throw up their occupation, or they will make up for the reduction by increased activity and ingenuity in pilfering.

6. It is a mistake to suppose that the road from the District Trunk line to Sonapur, and which passes near the Itchapur pans, has still to be made. It was complete when Mr. Clarke visited the pans, and since that time this branch line has been connected with the platform by a short cross road.

7. As regards the expediency of opening a road from the Ganjam port and salt-pans along the north bank of the river, and passing through Poobaccondah and the Hatghur estate to the interior of the District, I beg to inform the Board that estimates were sent in and approved in 1859; but that these estimates have been struck out of every subsequent Budget in disregard of repeated representations both by myself and the District Engineer, and notwithstanding that at the close of each of these successive years lacs of Rupees have in the aggregate remained unspent out of the grants made to various Districts.

8. I have also recommended on various occasions that a road should be opened from the port of Sonapur in the neighbourhood of the new pans through the rich estates in the interior of this part of the District; as far as I am aware this line has never been ordered to be surveyed.

9. I believe it would be easy to excavate the canal from Nowpadah platform to Bapana-pandu at no great cost; but we have no demand for salt to be exported to Calcutta, and so long as the market there is cheaply supplied with English salt there is nothing whatever to be gained by the export of salt for Calcutta from Madras Depôts.

10. I subjoin a list showing the names and services of the Salt Superintendents and others. I believe there is but one inefficient person at present in the Department, and his services will be dispensed with on the final closing of the Munsoorottah sales.

ENCLOSURE No. 1.

List showing the names and services of the Salt Superintendents.

Names of the Cotahs.	Name of the Superintendent.	Length of Service.		
		Y.	M.	D.
Oomervelly...	Pakanaly Venkatarania	17	3	15
Nowpadah...	Mahomed Ali...	27	6	24
Itchapore...	Medapally Gopalkrishnama.	30	0	20
Munsoorottah...	Karamaly Khan	11	6	29
Ganjam...	M. Broome...	9	2	3

From G. S. FORBES, Esq., Collector of Ganjam; to W. HUDLESTON, Esq., Secretary to the Board of Revenue, dated Chatterpoor, 23rd August 1861, No. 101.

1. I have the honor to acknowledge Board's Proceedings No. 5,097 of the 5th instant, forwarding Government Order on Mr. Clarke's Report on the salt works of this District. This Report has never been furnished to me. I obtained, however, from the Executive Engineer copy of the Government Order on it, and have already addressed* the Board on the subject.

2. The Board will find that on most of the points referred to in their present Proceedings, I have anticipated their call for explanation. I proceed therefore to notice those which remain.

3. Paragraph 4. The Board direct me at once to carry out Mr. Clarke's suggestion for leading and ditching salt pans at Itchapore and elsewhere. I would carry out their wishes directly if I had the means, but as my Salt Budget has been cut down from 2,000 to 1,000 Rupees, I have scarcely sufficient to meet the necessary expenses of the works. I had an estimate prepared some months ago (which I now send to the Board) for surrounding the new pans with such

* Letter only sent.

a ditch or canal as should at once afford protection to the works, access to salt water, and facility of moving salt. The cost of the work however is such that I abandoned the intention of submitting it to the Board, being unable to obtain money even for more urgent District works:

4. The Board will have observed from my earlier letter that I differ with Mr. Clarke in the opinion he has expressed regarding the price which should be given for salt, and I must add that I consider the Itchapore salt is exceedingly good and worth its cost.

5. Paragraph 5. Steps have already been taken to improve the approach to two of the three platforms at Nowpadah. This had been already completed, at the time of Mr. Clarke's visit. Casuarina trees have been planted, or are being planted, at the different pans.

6. Paragraph 6. Reservoirs of fresh water will be added or enlarged at each of the stations when our funds permit; something has already been done in this way.

Paragraph 7. (Already disposed of).

Paragraph 8. A new supply-channel is being excavated by the Salt Deputy Collector to the Oomeravelly pans. I am of opinion that the price of salt per Garce should no where be less than 9 to 10 Rupees.

* 10th August 1861, with letter No. 188.

7. Paragraph 9. An estimate has been submitted* for a Cutcherry at Itchapore; one will also be submitted for Oomeravelly.

8. Paragraph 11. The manufacture at Nowpadah was restricted last year to 50,000 Maunds with reference to the large supply in hand there. The estimated quantity however has not been reached in the manufacture of the past season* (owing to cloudy weather) at most of the pans, and there is no superabundant supply at Ganjam, Oomeravelly, or Itchapore:

18	months	at Ganjam.
11	"	at Munsoorottah.
6	"	at Itchapore.
30	"	at Nowpadah.
7	"	at Oomeravelly.

9. Paragraph 12. My attention has long been directed to the points noticed here. Salt is now both stored and received by weight, so that the latter named practice (over-storing) will necessarily cease.

ENCLOSURE No. 1.

From Lieutenant-Colonel O. W. S. CHAMBERS, R. E., Superintending Engineer, 1st Division, to G. S. FORBES, Esq., Collector of Ganjam, dated Dowlaishwarem, 11th March 1861, No. 2,327.

1. In accordance with your letter of the 20th January 1861, No. 5, I do myself the honor of forwarding to you an estimate of the cost of surrounding the Salt pans and the platform at Itchapore with a moat; of bridging the same with seven timber-bridges; and of regulating its supply of water by means of a two-vented masonry sluice; the whole amounting to 15,600 Rupees.

2. Captain Philipps informs me that Itchapore is an exceptionally favorable locality for the establishment of a moat, and that the cost of similar works at the other pans of the District, should the system of surrounding all the pans by canals, which is advocated by you, be universally carried out, must not be measured by the present estimate.

3. No doubt each locality where salt is manufactured must, with reference to the proposed excavation of canals round it, be treated on its own merits, and will require to be separately estimated for if a correct idea of the cost of the improvement of the whole pans of the District is to be; obtained but Captain Philipps is in error in thinking that because Itchapore pans and platform, at which one lac of Rupees of salt can be manufactured and stored would cost 15,600 Rupees, it would therefore be necessary to expend ten times that sum in putting moats round areas capable of making and storing ten lacs of Rupees of salt; of course the expense might be one and half lacs or much more; but *ceteris paribus* the larger the area enclosed by a moat the less would be the proportionate cost of enclosing it, and if the experiment is to be carried

4 *Proceedings of the Madras Government, Revenue Department,*
3rd November 1861.

out under the most favorable circumstances you should select the largest pans in the District to try it on, remembering always that the circle is the figure of the greatest area with the least periphery.

4. I do myself the honor of enclosing Captain Philipps' letter for information, and of begging that it may be returned to me on perusal.

(True Copy.)

(Signed) G. S. FORBES, Collector.

1. Resolved that the foregoing letters be submitted to Government, with reference to the Orders of Government, dated 6th July 1861, No. 1,168.

2. Mr. Forbes is of opinion that the inferiority of the Salt at the Ganjam, Munurcottah, and Oomaravally pans is more apparent than real, and is chiefly owing to the inferior nature of the soil at these pans. If this is the case, it is only the more necessary that great care should be taken in forming and preparing the salt beds. A good stiff clay, well beaten in, and sprinkled over with sand, should be used for the flooring; and great attention should be paid to the concentration of the brine in the reservoirs before it is let into the beds. The Board, however, admit that there is weight in the arguments brought forward by Mr. Forbes; and after his assurance that the only inefficient person belonging to the Department will soon be got rid of, they will not recommend to Government that any punishment should be inflicted on the Superintendents of the pans where the inferior salt was manufactured. The Collector should warn these persons that if inferior salt is received into store in future they will be summarily dismissed from their situations.

3. With reference to the closing remark in paragraph 6 of their Order under reply, the Government will observe that Mr. Forbes has already discontinued the manufacture at Munurcottah. As it is not clear whether he proposes to close these pans permanently or not, he will be requested to report further on this point and in regard to the concentration of the pans at Ganjam.

4. The Board can understand the Collector's difficulties in carrying out the desired improvements as to enclosing the pans, &c., and can only trust that the Government may be able to transfer funds from some other head so as to enable Mr. Forbes's *locum tenens* to carry out the orders on these points, though, as shown in the enclosure to Mr. Forbes's letter, his doing so is likely to involve a considerable outlay.

5. On a re-consideration of the question, the Third Member of the Board is not disposed to insist on a reduction in the rate of Kudivaram at any of the pans; but a really superior salt must be made. The Board, however, will not at present recommend an increase of the price paid at the Oomaravally pans. As soon as the Collector is able to report that a superior description of salt has been manufactured, he may again bring the matter forward for consideration.

6. The improvement of the reservoirs and water-supply, the planting of trees, and the improvement of the communications, are receiving due attention from the Collector, whose remarks in paragraph 7 of his first letter above recorded are brought to the special notice of Government.

7. The estimate for the Cutcherry at Pichapore has already received the Board's sanction, and was forwarded to the Superintending Engineer, 1st Division, with the Board's Proceedings dated 20th September 1861, for submission to Government. The estimate for the similar building at Oomaravally will be submitted when received.

8. As observed by Mr. Forbes, the practice of over-storing will now undoubtedly cease, as salt will be received into store in future by weight only, and the late unfavorable manufacturing season has already had the effect of considerably reducing the quantity of salt remaining in store in excess of the usual demand.

Proceedings of the Madras Government, Revenue Department, 5
3rd November 1861.

9. Though the proposed channel from Nowpadah to Bavenpad could be easily excavated the Board agree with the Collector that, with the little prospect which now exists of a salt trade with Calcutta, he would not be justified in recommending that the outlay should be incurred.

No. 45.

ORDER THEREON, 3rd November 1861, No. 2,026.

Separate Revenue, No. 5.

The Government are satisfied with the explanation afforded in these papers on the several points noticed in their order dated 6th July 1861, No. 1,168. Paragraph 4 of the Board's Proceedings will be communicated to the Public Works Department in view to some more economical method of protecting the pans being devised.

(True Extract.)

Secretary to Government.

To the Board of Revenue.
" the Public Works Department.

Ms. A. 9. 2. 5

Ad. Goodwin

James D. Davis

Wm. B. Smith

8.2026.

Quincy Tuck

sent some specimens and
 then they were prepared, may
 be the most perfect and safe.
 Some in the Stranjan &
 prepared some in Stranjan &
 2. One in the Stranjan &
 2. One in the Stranjan &

Q 10, 3220 - 10th June 1864

Hand no. 1

2103220

Refused to the Refuse

intending Engineer 1st Division, who
will be requested, in communication
with the Collector, to devise a more
economical method of protecting
the salt pans.

Blueprints
105210127/64

[Handwritten signature]

of the late Long-st. American
Bank of New York
Jas. P. H. H. H. H.