M.R.O. 14—10,000—21-4-22.

MADRAS RECORD OFFICE.

Government of Madras.

Revenue DEPARTMENT.

G.O. No. 1520 Press / Mis.

186-187

Dated 12-7-1862.

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department, 12th July 1862.

No. 186. Read the following Proceedings of the Board of Revenue, dated 26th May 1862, No. 3,383:—

Read the following letter from G. A. BALLARD, Esq., Acting Collector of Tanjore, to W. HUDLESTON, Esq., Secretary to the Board of Revenue, Madras, dated 24th April 1862, No. 143.

To Board 20th June 1861.
Proceedings of Board 6th July 1861.
Do. of Government, 16th September 1861.

SIR,

1. With reference to the correspondence noted marginally, and to a letter lately addressed to me by the District Engineer, dated 18th March 1862 (covering a report from the First Assistant District Engineer, dated 5th March 1862), I have the honor to submit the following remarks:—

2. The main questions discussed in the papers above quoted are, the best method of rendering the great supplies of yearly spontaneously produced salt found at Vedarniem available for the market, and the advisability of greater concentration in the manufacture of salt generally in this District.

3. The Vedarniem salt is formed in large crystals, pure and white, and can be collected and stored on the spot for less than Rupees 3 per garce.

Sales of Vedarniem Salt.

	Home.	Inland.	Exportation.	Total.
	Mds.	Mds.	Mds.	Mds
1266	23,157	...	4,000	27,157
1267	22,181	150	14,280	36,611
1268	23,186	...	28,320	51,506
1269	20,128	43	...	20,171
1270	27,170	81	21,120	48,371
Average in garce.	193	210	96	306
Average in garce for the same Faslis in the whole District.	3,227	1,772	293	5,292

Salt manufactured at the other pans costs Government Rupees 10-10-0 or more. As, however, the price to the merchant is the same, as notwithstanding its superior appearance this salt does not, at present, seem to be preferred to the common manufactured article in the home or inland market, and as the communications with Vedarniem inland and to the sea are very bad; the sales at these pans have never been great, and the gains that would accrue to Government from the saving in the cost of production of this salt was purchased largely, have never been realized to any great extent.

4. Before going further, I would observe that, as it seemed to me that the estimation in which Vedarniem salt was held had hardly been sufficiently considered, I sent samples to the Collectors of Trichinopoly, Salem, and Coimbatore, the Districts which are our principal consumers, requesting them to ascertain and inform me how the salt was liked.

5. Mr. McDonell informs me that some of the principal traders of Trichinopoly expressed themselves favorably with regard to it, though qualifying their approbation by the declaration that an inferior quality of salt at a slightly lower price would always command the market.

6. Mr. Arbuthnot informs me that the sample is not preferred to the Merkanam salt obtained from South Arcot, now in use at Salem. The merchants, he consulted, considered it inferior in quality though whiter in appearance; but they added that, if sold at two measures more a Rupee than Merkanum salt (which is sold at 11½ measures a Rupee) it would command a ready sale.

7. I regret that I have not yet heard from Coimbatore.

8. In this District the salt is not, at present, fancied. A merchant who took some specially for trial sale at Tanjore declares he had to get rid of it at a discount, and there has been some lying for sale at Negapatam for several months which is passed over, and the black Negapatam salt taken in preference.

9. But, whilst I do not wish to blink this part of the question, I should be sorry to see undue weight attached to it; considerable interests are involved at Negapatam in keeping

Vedarniem salt out of the market. I can hardly tell how far these have operated. The prejudice against this salt may, and, I believe, will disappear when it becomes more common. A small decrease in the selling price would give it the command of the home and inland market. For export, it is decidedly preferred and it appears to find favor in Bengal. I believe therefore we may calculate, with certainty, on a greatly improved demand, if proper steps to facilitate the sale are adopted.

10. I propose to consider,

(1.) How and at what rates Vedarniem salt can be best brought into the market.

(2.) To what extent it would be possible to concentrate production of salt at Vedarniem

(3.) The financial and general bearings of any schemes the above considerations may suggest.

11. As to the first point; from previous correspondence it may be gathered,

Collector to Board, 20th June 1861.

(1.) That the vicinity of Vedarniem itself from the distance at which vessels have to lie, is not a convenient place for shipping.

Collector to Board, 20th June, paragraph 14.
Board's Proceedings, 6th July.
District Engineer to Acting Collector, 18th March 1862, paragraph 4.

(2.) That, independently of the above, the plan of opening cuts from the Vedarniem pans to the eastern coast, though apparently simple and economical, is deemed impracticable on professional grounds, as it is doubted whether such cuts could be kept open through a single high tide.

(3.) That Negapatam, as a Railway terminus and likely to be a port of consequence in other respects, should also be a Salt depôt on a large scale.

Mr. Fraser's report and District Engineer to Acting Collector, 18th March 1862, paragraph 2.

(4.) That the construction of a tramway is out of the question as independently of other considerations, it would probably cost 4½ lacs of Rupees.

(5.) That there are considerable natural facilities for opening a Canal from Negapatam to Vedarniem extending also south to Kodikarai.

(6.) That, as part of the larger scheme or even as an independent work, the opening of the Canal from Vedarniem to Toputorai on the Adapar is worthy of consideration.

Dated 5th March 1862, to District Engineer of Tanjore.

12. With regard to a Canal from Negapatam to Vedarniem and Kodikarai, Mr. Fraser has given a full and interesting preliminary report. Natural water communication, that only requires improving, already exists for a great part of the distance; no regular estimate of the cost can be given without further examination of the line; but it seems navigation for boats of six to eight tons, such as are at present used in the rivers in the vicinity may be provided for about one lac of Rupees. The freight of salt by this route from Vedarniem to Negapatam would be Rupees 3-8-0 per garce, and its price to Government stored at Negapatam, without* preliminary storing, would be about Rupees 7-8-0 per garce as shown in the margin.

* In this case the capacity of the boats must be accurately ascertained, the salt thrown in wholesale and only measured in detail at the Negapatam platforms.

Per garce.	Rs.	A.	P.
Collecting at Vedarniem	2	0	0
Loading, freight to Negapatam and unloading	4	8	0
Storing at Negapatam	1	0	0
	7	8	0

Collecting at Vedarniem	2	0	0
Storing at do.	1	0	0
Freight, &c., to Negapatam as above	4	8	0
Storing at Negapatam	1	0	0
	8	8	0

I take the freight as 3-8-0. Mr. Fraser says 3-8-0 from Toputoria to Negapatam. Vedarniem is 4 miles further off, but I believe the Salt might be conveyed for this rate the whole way.

13. If the salt is stored at Vedarniem, its cost there will be Rupees 3, and if taken from these stores and re-stored at Negapatam, its cost at the Negapatam platforms (with the canal open) will be Rupees 8-8-0, whilst a considerable quantity may advantageously be taken direct to Negapatam. I am of opinion there should be large stores at Vedarniem also, from which supplies may be taken to Negapatam or elsewhere at any season as required. It would not

do to store the whole supply at such a distance from the place of production as Negapatam, and though we look to it as our chief exporting depôt, vessels may also, when the weather is favorable, load to a considerable extent off the mouth of the Adapar. Further, with the communication to Kodikarai and the south open, the demand on Vedarniem stores will be considerable in that direction.

District Engineer to Acting Collector, 18th March 1862, paragraph.—

14. The preceding paragraphs contemplate the canal opened through, but the work, even if commenced at once, will not be completed for two or three years. An estimate was prepared by the District Engineer for opening a cut from the present pans to Toputorai, amounting to Rupees 14,750. This, as a portion of the larger work, I would strongly advocate, but I do not think that Toputorai should be looked to as a depôt. The platforms should certainly be on the canal at the Vedarniem pans. Then if sea-going boats of from 6 to 8 or 10 tons, which, I believe, are used in the rivers and coast to some extent, could come by the canal along the Vedarniem platforms, they could convey unstored salt past Toputorai, down the Adapar and up the coast to be stored at Negapatam for* Rupees 9 per garce. If stored in the first instance at Vedarniem a Rupee a garce must be added.

	Rs.	A.	P.
* Collecting and loading at Vedarniem	2	8	0
Freight to Negapatam	5	0	0
Unloading and storing at Negapatam	1	8	0
	9	0	0

15. If the canal does not admit of sea-going boats loading at the platforms, the transport becomes much more expensive as changes en route each add their quota, and then more detail preliminary measurement becomes necessary to guard against fraud and pilfering by the way and contingencies may arise causing delay, so that preliminary storing becomes necessary as there would be risk in keeping salt unstored for any time. Even without storing at Vedarniem a garce taken by canal to the Adapar, shipped on a dhoney off Toputorai and stored at Negapatam, would be too expensive to be profitable; with storing at Vedarniem the cost by the time it was stored at Negapatam would be prohibitive.

† 1. With Canal opened through.

	Rs.	A.	P.
Collecting at Vedarniem	2	0	0
Loading freight and unloading at Toputorai	2	0	0
Storing at Toputorai	1	0	0
Loading freight to Negapatam and unloading	4	8	0
Storing at Negapatam	1	0	0
	10	8	0

2. With Canal from Vedarniem to Toputorai.

	Rs.	A.	P.
Storing at Toputorai as above	5	0	0
Loading freight to Negapatam and unloading	6	0	0
Boat hire to Negapatam, platform and storing	1	10	0
	12	10	0

16. Storing† at a Toputorai depôt for after transmission to Negapatam under *any* circumstances would hardly be a paying method. The only advantage in having a depôt at Toputorai would lie in the case of extensive shipping of salt off the mouth of the Adapar being probable, but it has already been remarked that it is better for various reasons to look to Negapatam as our great shipping port. Casual vessels desiring to take in salt at this part of the coast could, with their cut open, easily do so from the Vedarniem stores.

17. The Deputy Collector in charge of salt informs me that, by using sea-going boats of the description alluded to in paragraph 14, he could take salt from the Vedarniem stores and store it at Negapatam for Rupees 11-4-0, and that he thinks that, by contracting‡ on a large scale, he may get it considerably cheaper. I do not know enough of the capabilities of the boats and rates ruling to express a very decided opinion, but, from what I can learn, I am not sanguine that much reduction in this cost is possible. Of course the sea route is liable to interruptions from which a canal is free.

‡ The effect of this by the other routes would probably proportionately lessen the cost, so it hardly affects comparison.

18. I have hitherto only contemplated Government undertaking the transport of the salt from Vedarniem; but if we could get private traders to purchase the article at the Vedarniem platforms, as we store it there at a cost of Rupees 3, there would be a clear gain of Rupees 7-10-0

on every garce sold. Now if, instead of carrying the salt ourselves, we by making a fair deduction in the selling price, induce private traders, to avail themselves of the opened communication and come and take it on the spot, undoubtedly a greatly increased sale at the Vedarniem platforms would be the result. We sell manufactured salt at Rupees 180 per garce, and ship it at Rupees 18 for export trade. If at Vedarniem we sold it at Rupees 176 for home and inland, and at Rupees 14 for export, we should still gain Rupees 3-10-0, over every garce of manufactured salt in the first case, and rather more in the other. I know that, as an experimental measure, the Board have sanctioned (*vide* Proceedings, 6th February 1862) an allowance of Rupees 6 per garce on wholesales of salt in heaps of 10 garce at Vedarniem in addition to the usual discount of Rupees 5 per cent. on such sales. A merchant is now in treaty to take salt on these conditions. There has not been time to test the efficacy of the arrangement, but the discount only being allowed wholesale is a clog, and the want of communication not to be got over. A less deduction allowed on all sales, with easy access opened, would have a very much greater effect. Private traders would work cheaper than Government can expect to do, and the principle of getting the salt into their hands as soon as possible is certainly a correct one.

19. I am of opinion, therefore, that the cheapest and surest way of throwing Vedarniem salt into the market, is by opening a canal between the pans and Negapatam and Kodikarai; that, as far as possible, the salt intended for export, or general sale at Negapatam, should be taken direct and stored there; that there should also be large stores at Vedarniem; that salt can be stored at Vedarniem under Rupees 3 per garce; that with the canal open through, it can be stored at Negapatam (without preliminary storing) at Rupees 7-8-0 by the same route from Vedarniem *stores* at Rupees 8-8-0; that with canal to Toputorai by sea boats (without preliminary storing) at Rupees 9; by same route from Vedarniem stores at Rupees 10; but that, in no other way, can it be surely and remuneratively sold by Government at Negapatam; and that by lowering the sale prices at Vedarniem, the sales might be greatly increased, and a considerable profit yet secured to Government.

20. I proceed to consider the question of concentrating the production of salt at Vedarniem; there are now, in this District, five "divisions," in each of which are several depôts, so that salt is manufactured, stored and sold by Government at no less than twenty-one places along the coast. At the minor depôts, the operations are exceedingly petty. At some the salt is very inferior, and speaking generally, I believe that many of these depôts might be abolished with advantage. It was my intention to have given attention to this question during a proposed tour on the coast, but my sudden departure from the District prevents this; and I have not yet come to conclusions in detail as to which of the pans and storing depôts it would be most advisable to do away with.

21. A statement is submitted showing the manufactures and sales at the several depôts in the District for the last five years; distinguishing the sales on the home, inland, exportation and French Government accounts; I may venture a few remarks as to the probable future demand.

22. As regards home consumption, increased prosperity and population, and the opening of communication will naturally lead to an increased demand, though we cannot calculate on this being very rapid.

23. As regards inland consumption; probably owing to the opening of the Madras Railway, in some degree, our Salem sales show a considerable decrease. To the end of last February the sales to that District are 400 garce below those up to the same date last year. The Coimbatore sales show an increase of 100 garce up to the same date in favor of this season, but here again the rail to the Western Coast may affect the demand for salt from this District; our sales to Trichinopoly show an increase of 90 garce this year; and with the Great Southern of India Railway open, I think we may look on an increasing demand here as sure.

24. With Vedarniem salt largely available at Negapatam, I feel convinced we may look for a great increase in our export. The exports hitherto have been but trifling. Penang, Calcutta and Cochin having been our principal consumers; but on this account, Vedarniem Salt is unhesitatingly preferred, and with facility of supply increased demand is safe.

25. As far then as certainty of demand is concerned, I conceive we may with safety and profit greatly increase our production at Vedarniem; but I do not think that its spontaneous salt can even safely be trusted to as our *sole* source of supply. The salt, it must be remembered, is formed by the overflow of salt water during the high tides in May and June acted on by the strong and continuous southerly wind that prevail in April and May. Accessions of sea water are not received after June. Evaporation sets in, and if the season is dry, collections may commence in July. But a fall of an inch or an inch and a half of rain would delay operations for a fortnight; a second fall a few weeks later would cause further delay, and a third fall would prevent the possibility of collecting a large supply that year. Moreover I am told that the high southerly winds do occasionally, fail so often that a periodical failure of about once in ten years is said to be looked for by the people; and then, of course, the spontaneous production of salt fails also.

26. But if the canal is decided upon, I think it will be well worthy of consideration whether pans might not conveniently be opened along its banks between Vedarniem and Toputorai and manufacture in the usual manner carried on in the hot months. Deficiency in the production of spontaneous salt in any previous season might then be supplied, and probably a saving in establishment charges effected.

But at any rate concentration of production at Vedarniem must follow, not precede, the opening of communication. If found advisable afterwards (which, to a great extent, I think, it will be) it will increase the direct returns derivable from a canal from Negapatam to Kodikarai, and this leads us to our third point, viz., the financial bearings of the construction and opening of the Canal.

27. We have seen that salt can be stored at Vedarniem for Rupees 3, and with the Canal open at Negapatam for Rupees 7-8-0; and that, even selling at a reduced price at the Vedarniem platforms, we may gain Rupees 3-10-0 per garce. If we sell only 1,500 garce a year, and one year with another we may calculate on this quantity with certainty; and reckon only a gain of Rupees 3 per garce; we have a gain of Rupees 4,500, or 4½ per cent. on a lac of Rupees, the roughly estimated cost of the canal. But I am strongly inclined to believe that this calculation does not do justice to the scheme, and that practically, and with good management, the returns would be considerably greater. I will not do more than say that I have not overlooked the interest lost till the work is completed, or the annual cost of repairs, for these are indirect advantages connected with the scheme which must very far outbalance them.

Average of six years from 1st May 1855, to 30th April 1861.

		Import value.	Export value.
		Rs.	Rs.
From 1st May 1855 to 30th April 1856		5,87,923	13,98,143
From Negapatam.....	1856-57....	5,14,126	12,47,863
	1857-58....	4,06,025	11,61,581
	1858-59....	6,11,837	8,06,870
	1859-60....	5,30,767	9,28,377
	1860-61....	7,27,991	15,30,465
From 1st May 1855 to 30th April 1856.....		6,54,257	26,86,540
From whole District.....	1856-57....	5,78,221	27,47,910
	1857-58....	4,87,266	20,41,782
	1858-59....	7,02,392	18,76,986
	1859-60	6,00,161	20,36,052
	1860-61.....	8,50,932	29,76,945

28. The traffic between Negapatam and the Southern Ports and Ceylon is now very great, but it is interrupted for a considerable portion of the year by the north-east monsoon. But at that season as all others, vessels can ply between Kodikarai and the southern Cingalese ports. The opening of this Canal therefore would remove the interruption caused by the north-east monsoon. Boats taking up salt from Vedarniem or the produce of Ceylon from Kodikarai would return from Negapatam with rice for export from Kodikarai to Ceylon, and not from Negapatam alone, for there are several rivers of importance besides a number of smaller waters reticulating the intermediate country whose navigation, connection with the canal would facilitate and open out, whilst their drainage would be greatly improved. In connection with this part of the subject, I beg to enclose an extract from Mr. Fraser's report already frequently alluded to in this letter.

29. This letter would have been fuller, and, I trust, more satisfactory had not my departure from the District this day obliged me to bring it to a somewhat hasty conclusion, and prevented my placing some of my views before the Board in as clear a form as I could have wished.

I conclude by heartily advocating that immediate measures be taken for the speedy commencement of the Canal from Vedarniem to Toputorai to be completed as soon as possible both to Kodikarai and Negapatam.

ENCLOSURE No. 1.

ABSTRACT.—Extract from a letter from W. Fraser, Esq., Civil Engineer, to the District Engineer of Tanjore.

ENCLOSURE No. 2.

ABSTRACT.—Statement of Salt manufactured and sales for last 5 Faslis in the District of Tanjore.

Ordered that the above letter be submitted to Government, with reference to their Proceedings, dated 16th September 1861, No. 1,834, Revenue Department, and with the Board's strong recommendation that the question of forming a line of water communication between Negapatam, Toputorai on the Adappar river, Vedarniem, Kodikarai, and the coast west of Point Calimere, be referred for early and full consideration in the Department Public Works. The advantages connected with this scheme are so palpable that the Board need only indicate the chief of them. It would give easy access to a spot where Salt of excellent quality is produced almost spontaneously in immense quantities at an exceedingly cheap cost to Government, and it would connect the Great Southern of India Railway by water with a part of the coast from which goods can be shipped easily and safely at all times of the year, including the period when Nagapatam and other east coast ports are closed by the north-east monsoon. Mr. Ballard's proposals for concentrating the Salt manufacture at Vedarniem, and forming pans there to supplement the spontaneous formation of the Salt, depend so much on the reception which the Canal scheme may meet from Government, that the Board will at present only express their opinion that many of the existing pans might with advantage be closed, and new ones opened at Vedarniem, were water communication opened with it; but on this point it would be necessary to have the opinion of the Acting Collector before any actual steps could be taken. The Board deem it unnecessary to go into the question of the cost to Government of storing Salt at Negapatam from Vedarniem, as they are satisfied that were the water communication so far improved as to render it profitable to bring this Salt to Negapatam, private enterprise would do it far more efficiently than it could be done by Government, who should look to large wholesale transactions at the place of production, and to increased revenue from customs on goods exported, for their returns from the expenditure made on the Canal works. The objection raised to the use of the Salt are probably fanciful, and its many excellent qualities would doubtless soon secure it a preference in the inland markets. The Board request the Acting Collector to forward the report of the Collector of Coimbatore on the sample sent to him so soon as he has received it.

In Cons. 17th September 1861, No. 5,933.

(A true Copy and Extract.)

(Signed) W. HUDLESTON, *Secretary.*

No. 187. ORDER THEREON, 12th July 1862, No. 1,520.

The Chief Engineer will be instructed, through the Public Works Department, to report on the proposition made in the late Acting Collector's letter in regard to opening water communication between Negapatam and Kodikarai.

(Signed) A. J. ARBUTHNOT,
Acting Chief Secretary.

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In Cons. 17th September 1861, No. 5,933.

(A true Copy and Extract.)

Secretary:

To J. D. Sim, Esq., Secretary to Government, R. D.
Copy to G. L. Morris, Esq., Acting Collector of Tanjore.
„ to G. A. Ballard, Esq.

Exd. J. Wright.

Rec^d 15^th Sept^r 61 N 174-175

Rev^e 1862. Department.
Pro: of Govt for July.
No. 1580.

PROCEEDINGS OF THE BOARD OF REVENUE.

Dated 26th May 1862.
Despatched. 2^d June
Received. 3^d June
C.2.O.L.M.D.

From Pub Works Dep^t
2^d Letter No 2527 dt
No. 3,383. 9 Sept^r 1918

Submitting letter from the Acting Collector of Tanjore regarding Vadarniem Spontaneous Salt, with the Board's remarks thereon, and recommendation, that the question of forming a line of water communication proposed by the Collector be referred for early consideration in the D.P.W.

Pro. of the B^d of Rev. dy
15 Sept^r 62. Encl 2 Ltrs

N^o 786 & 787

N^o 1520-12^th July

C 11^th July R^d

1520 R 1520.
Rec^d Chief Engineer
be instructed through that Public
Works Department to report on the
proposition made in the late Col-
lector's letter in regard to opening
water communication between
Negapatam and Kodikarai.

Govt Gt George
12^th July 62

11 Copies Ltr to Dep^t of Rev Desp^d 14^th
20 — To Pub Works Dep^t
with 2 Enclosures