M.R.O. 14—13,000—27-9-34

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 2711 Press ~~Mis.~~

285. 286

Dated 16—11—1867.

Not to be folded or roughly handled

2711

Proceedings of the Madras Government, Revenue Department,
16th November 1867.

Read the following papers:—

No. 285. Proceedings of the Board of Revenue, dated 3rd January 1867, No. 12.

Read again Government Order, dated 15th November 1866, No. 3,105, Revenue Department, communicated to Acting Collector of Madras, with Board's Proceedings, dated 19th idem, No. 8,356.

With reference to the above Government Order, approving of the proposed arrangement for increasing the salt manufacture in the neighbourhood of Madras, the Board resolve to call on the Acting Collector to report in detail the arrangements proposed for the distribution of the new salt pans at Kattupally and Voyaloor.

No. 285A. Proceedings of the Board of Revenue, dated 9th April 1867, No. 2,242.

Read the following letter from the Collector of Madras, to the Secretary to the Board of Revenue, dated Sydapet, 15th January 1867, No. 9.

1. In their Proceedings, dated 15th November 1866, No. 341, in the Revenue Department, the Government sanction the construction of 875 additional salt pans along the margin of the Northern Canal. In connection with this work the Board desire information on certain points. They wish to know whether there is any land adapted for salt pans along the Northern Canal in addition to that which will now be taken up. Upon this point Mr. Cockerell reported to the Board in a letter dated 31st August last, No. 266. He stated that there is a great deal of land which can be occupied for salt pans still available along the Northern Canal.

2. In connection with this part of the subject, I have the honor to propose a slight modification of the arrangement proposed by Mr. Smith, and accepted by Mr. Cockerell, with regard to the location of some of the 875 pans. It was arranged that 114 of them should be at Cuttiwak, and 154 at Ennore. Now both these places are on the eastern side of the canal, and the pans in the villages would be skirted by the high road from Madras to Ennore, and therefore might entail some extra trouble in guarding. To obviate this inconvenience, I would now suggest that the pans in question be put on the other side of the canal, on the ground which, I am given to understand, is well adapted for the purpose, and which is unoccupied and available in Shadiancooppam. The construction of these pans in this locality will be as convenient as regards accessibility from Madras as their formation at Cuttiwak and Ennore, and will have the advantage of placing them in a line with pans already formed and working, and in a spot where fresh pans, if any further new ones are eventually made, must be situated.

3. With respect to the question put by the Board as to the capacity of the Madras platforms, and of the advisability of adding to them, I have the honor to enclose a map sent me by Mr. Smith, with a letter from him explaining it, and answering all the other questions of the Board. The platforms existing hold 22,89,600 Indian Maunds of salt. With the additions suggested by Mr. Smith, and which, I think, are expedient additions, they would store 27,93,600 Indian

Maunds of salt, even under the present system of heaping. But this system, I think, can be improved. I shall have the honor to make a proposition about it later. I beg that I may be authorized to have an estimate made at once for the proposed additions. The Map shews their location. The addition E. is land now used by the Municipal Commissioners to shoot the refuse of the town upon. The same is the case with part of the land at D.

4. With regard to the Tramway, I have the honor, in reply to the inquiry of the Board upon the point, to state that this line of rail has not affected the sale of salt as yet. It has only carried in all Indian Maunds 24,749 of salt, from the date of its opening, in May 1865, to October last year.

5. As regards the supply of boats on the Northern Canal, I have the honor to state that I see no reason to suppose it will not equal the demand. I imagine that men will be forthcoming to make any quantity of salt it may be found desirable to make, and that fresh boats, if necessary, will be placed upon the canal to carry it. For the present, at all events, I should not be disposed to alter the existing arrangements about boats. Mr. Rozario has punctually supplied them, and until he fails to satisfy the Salt Department, I should not wish to disturb his contract.

From the Deputy Collector in charge of Salt, to the Acting Collector of Madras, dated 21st November 1866, No. 295.

1. With reference to your Endorsement on the Proceedings of the Board of Revenue, dated the 15th ultimo, No. 7,413, I have the honor to submit the following replies to the inquiries made by the Board on the subject of increasing the manufacture of salt at the northern pans, to supplement the stock at the Madras Kotar.

2. In paragraph 10, the Board wish to be informed whether all the sources of supply up to Katur, (the furthest pans towards the north) have been exhausted; and if not, they desire that no time be lost in occupying all available ground between Madras and Katur, in addition to the localities pointed out by this department.

3. In reply to this inquiry, I have the honor to state that land adapted for conversion into salt pans is available to a very large extent, especially on the west side of the canal, from Cotton's cutting to Katur, as pointed out in the report* you recently made to the Board, advocating the necessity of a survey of the land. Excellent ground is also available between Katur and Pulicat; and there is no question that the manufacture of salt along the canal may, as reported by you, "be very largely augmented." The plan, which will doubtless accompany the Survey report, will shew at one view all the available ground on the eastern and western sides of the canal; and so much of the land as may be necessary can be selected for the purpose of salt manufacture, in the event of its being hereafter required.

*Dated 31st August 1866, No. 266.

4. I would here, however, respectfully venture to suggest that no fresh land be actually taken up for manufacture in the north, until the effect of opening out the 275 pans, recently recommended for distribution, is ascertained. It appears to me that, with this further number, the manufacture in the north will provide a supply of salt fully equal to the quantity that can be stored on the platforms at Madras, even with the additions which it will be necessary to make to them, and to which I shall refer in a subsequent paragraph of this letter. I am also very doubtful whether a sufficient number of coolies can be obtained to work the pans, if they should be indefinitely increased. Owing to various causes, among which may be enumerated emigration, extensive Casuarina plantations, and deaths from cholera and fever, labor in these localities is limited; and a large number of the coolies employed on the existing pans are inhabi-

tants of distant villages, the better portion of whose working hours is lost in coming from, and returning to, their villages. With the 875 pans above adverted to, the total number of pans in the north will be 5,475; and allowing three men for four pans, there will be required upwards of four thousand men to efficiently work the pans! Under these circumstances, and looking to the fact that ample land is available for increasing the manufacture when absolutely necessary, I would respectfully suggest a cautious procedure in this matter; for, if the impression which I entertain as to the scarcity of labor be well founded, the distribution of fresh pans may probably result in the discontinuance of manufacture at some of those hitherto in full operation. I may add, that I recommend this course with greater confidence, inasmuch as I hope to shew, in a separate letter, that the demand on the northern salt, to the extent of 5½ lacs of maunds, exported from Madras* and Ennore† during the past year, may hereafter be met to a considerable extent by an arrangement involving the abolition of the export depôt at Covelong, and the establishment of one in lieu, for the exportation of southern salt, at an eligibly situated locality about four miles south of the Madras Custom House, affording facilities for the salt being conveyed thereto direct by canal.

	Maunds.
*	2,18,944
†	3,44,047
	5,62,991

5. The Board wish also to know (paragraph 10) how much salt can be stored on the platforms at Madras, observing that it will be useless to make more salt than there is room or provision for, and adding that should it be necessary, the platforms must be increased to hold at least from twenty-five to thirty-five lacs of maunds.

6. On this point, I have the honor to state that the present platforms (*vide* the accompanying sketch) are capable of containing 22,89,600‡ maunds of salt, and I beg to suggest that the portions marked DD and E, which will together hold a further quantity of 5,04,000 maunds, be converted into a store-ground, and added to the platform CC, on the east of the canal. This will involve the removal of the latrines F and G, and the rubbish platforms at H and I, situated respectively on D and E; and as the ground is Government land, and is urgently required for salt purposes, the Municipal Commissioners should be requested to select, without delay, other sites for latrines and for the deposit of the town-sweepings.

	Maunds.
Present platforms.	
‡ AA and BB	15,69,600
CC	7,20,000
Proposed additions.	
DD and E	5,04,000
Total...	27,93,600

7. To adapt the additional pieces of ground to our purposes, it will be necessary to erect wooden bridges over j and k at the northern and southern ditches of platform CC, and a masonry bridge over the Trevelyan cut at l. These means of communication are necessary to admit of the access of the salt servants to the different platforms, as well as to facilitate the passage of carts from the Wall-tax road to CC, through the bridge at m, in course of construction. It will likewise be necessary to convert the open drain at nn in DD into a covered one; to fill up the gaps in the Black-town wall in D, and to extend the wall from o, the end of platform CC, to the Basin bridge; to erect a gate at q in DD, and walls on each side of it, with guard-houses at r in DD, at s in CC, and t in E; to construct two roads on DD and E for the passage of salt carts, and a small tiled Cutcherry, with a verandah all round, at u in CC, for the protection from the weather of salt servants, manufacturers, and retail merchants.

8. If these arrangements appear worthy of adoption, the Public Works Department should be requested to commence, on emergency, the additions recommended to the existing platform on the east of the canal, so as, if possible, to render them available for the storage of salt early next year.

9. As the existing platform CC, with the proposed additions DD and E, will contain 12,24,000 maunds of salt, it will not be practicable to dispose of so large a quantity by exportations and by retail home and inland sales, which together will not probably exceed four lacs of maunds per annum, leaving a permanent annual stock of about eight lacs undisposed of, and taking up the ground which fresh salt should occupy. Some measure should, therefore, be devised

for providing an outlet for this salt, and it occurs to me to suggest an arrangement by which we may, at any time, clear the platform of the whole of the salt, if necessary.

10. I understand that the Railway Department have it in contemplation to establish a station near the Wall-tax road south of the Elephant Gate, and to extend their salt line of rail from W in platform AA to the contemplated station, erecting a bridge over the canal at X. It seems to me that it would be advantageous to both the Salt and Railway Departments, if a single line of rail, with turn-tables, were laid down from Y, through CC and DD, to the proposed station-house; and if you should be of the same opinion, perhaps you will be good enough to move the Government, through the Board, to suggest to the Railway Department the advisableness of establishing the proposed short line of rail.

11. I have shewn that if the proposed additions to the platforms should be sanctioned, there will be store-room at Madras for 27,93,600 maunds. The quantity manufactured at the existing pans in the north, during the season now closed, is 23,50,000 maunds; and if to this be added the 5,25,000 maunds expected to be obtained from the newly-to-be opened 875 pans, there will altogether be a quantity slightly in excess of that which the platforms, with the additions proposed, can contain at one time. But as large quantities are daily carried away by rail, &c., the platforms, old and proposed, can be made available, by management in the storing, for the reception of from 30 to 35 lacs of maunds, as desired by the Board.

12. With reference to paragraph 13 of the Proceedings, I have the honor to state that I can obtain no information as to the extent to which the Tramway to Conjeveram has affected the salt trade at Covelong and Cheyur. I am inclined to think, from the small sales at the former place, that the greater, if not the entire, portion of its salt is consumed within a limited extent of country; and that the increase in the sales, noticed by the Board, is the result of a larger local consumption, consequent on arrangements made by this department, to prevent the generation of spontaneous salt. As the salt conveyed by the Tramway is entirely Madras salt, the trade at Cheyur, the bulk of which, however, passes in a south-westerly direction, may, to some slight extent, be affected by the Tramway; but there is no reliable, nor indeed any, information available on this point, and in its absence, it seems idle to speculate on the question.

13. As to the traffic on the Tramway, it appears that since the opening of the line, in May 1865, to October 1866, 21,749 maunds of salt have been conveyed between Arconum and Conjeveram, and that for the last month or two, large quantities have been purchased at the latter place by Koravers, and carried inland to Sheverum, Wallajahbad, &c. I am indebted for this information to Messrs. Arbuthnot & Co., Secretaries and Agents of the Tramway Company, whose letter, with its enclosures, I have the pleasure herewith to submit. It will be seen, from the Statement entered in the margin, that the traffic on the line during six months of the current year, has more than doubled that of the year preceding during a larger period.

Months.	1865.	1866.
	Maunds.	Maunds.
May	161	2,132
June	1,813	1,313
July	76	1,312
August	984	1,968
September	878	2,296
October	984	2,891
November	656	...
December	820	...
Total ...	5,874	11,911

14. With reference to the last paragraph of the Board's Proceedings, I have the honor to state that there will be no difficulty in future as regards the supply of a sufficient number of boats for the conveyance to Madras of the increased quantity of salt proposed to be manufactured at the northern pans. The greatest number of boats we shall require is probably 250. It appears from the enclosed statements, forwarded to me by the Superintendent of Toll at the Basin, that there are 486 boats, of from 16 to 40 tons burden, now plying on the canal between Madras and Doogarazapatam; besides 512 boats of from 1 to 16 tons burden. Of these 336 one-ton boats are used chiefly in passenger traffic, and are hardly adapted for the salt service. Mr. D'Rozario has been our contractor hitherto, and has satisfied the requirements of the department. As the manufacture, however, has so largely increased, it appears desirable, for

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many reasons, to obtain our supply of boats by public competition. I therefore lately submitted for your approval an advertisement inviting tenders, and shall be obliged by your causing it to be inserted in the Gazette as early as practicable.

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1. The Board are satisfied with the details furnished by the Collector, and they agree to his proposal to open pans on the western rather than on the eastern side of the canal.

2. They also consider necessary all the measures suggested by Mr. Smith in his letter forwarded with the above; and they authorize the Collector to take steps for carrying them into execution without delay.

3. The Collector's attention is drawn to paragraph 2 of the Government Order of 15th November 1866, No. 3,105.

No. 285B. Proceedings of the Board of Revenue, dated 2nd July 1867, No. 4,129.

Read the following letter from the Acting Sub-Collector in charge Madras District, to the Secretary to the Board of Revenue, dated Sydapet, 21st May 1867, No. 116.

1. I have the honor to acknowledge the receipt of the Board's Proceedings of the 9th ultimo, No. 2,242, approving of Mr. Fane's proposal to open new pans on the western rather than on the eastern side of Cochrane's Canal. This involves the abandonment of Kattupally, Ernavur, and Cuttiwak as places of manufacture. The distribution lists for the new pans at Voyalur and Attiput, the only places not affected by the recent Order, are herewith forwarded, as required in Board's Proceedings of the 3rd January last, No. 12. The number of pans originally sanctioned was 875 as shewn in the margin. This will be now reduced to 307, a number obviously insufficient to produce the increased quantity of salt required to meet the enhanced sales in the Madras Kotar.

G. O., 15th November 1866, No. 3,105.

* Cuttiwak, Ernavur		268
Attiput...		177
Kattupally		300
Voyalur...		130
		875
Deduct.		
Kattupally	300	
Cuttiwak	114	
Ernavur	154	568
		307

2. To make up this deficiency, I beg to support the recommendation of the Salt Deputy Collector that new pans be opened at Vichur, Shadiancooppam, Sattiangadu, and Manali, all on the western side of the canal.

3. At Vichur, Mr. Smith says, there is land on the west of the canal which can be made into 220 pans; this land adjoins Vallur, from which it is separated by a branch of the Cortilliar, and the only expense necessary to convert it into salt pans, is that of excavating two channels, one in the centre and another along the entire length of its western boundary. The channels will be useful for irrigation and navigation, while the excavations from the western channel will be deposited along its entire length so as to form a dam to prevent the drainage of the adjacent low land to the west, flowing into and injuring the pans. The channels and the

dam, the Deputy Collector estimates, can be finished for a sum not exceeding Rupees 3,750.

4. At Shadiancooppam and the other villages waste lands convertible into 430 pans are available as shewn in the margin. Salt was manufactured in these places formerly, but the pans appear to have been resumed, and a compensation of Rupees 3,381-15-0 granted to the Manali Shrotriemdar, which is still disbursed at this Office.

Shadiancooppam	100
Sattiangadu	160
Manali	170

5. These tracts of land are, Mr. Smith states, well adapted for salt manufacture, and being nearer to Madras than any of the existing salt stations, there will be a large amount of saving in boat-hire as shewn below :—

Divisions.	Boat-hire for 100 Indian Maunds.			Boat-hire for conveying to Madras 2,58,000 Indian Maunds of salt from.		
	RS.	A.	P.	RS.	A.	P.
Shadiancooppam ... ... Sattiangadu ... ... Manali ... ... Vallur	0	10	0	1,612	8	0
Attiput	1	4	0	3,225	0	0
Ennore	1	4	7	3,319	1	0
Pulidiwak	1	4	4	3,278	12	0
Kattupally...	1	10	6	4,273	2	0
Voyalur	1	15	9	5,119	11	0
Katur	1	15	10	5,133	2	0
	2	1	4	5,375	0	0

6. I therefore request that Mr. Smith's proposal to open pans in these places be sanctioned. A Tabular Statement shewing the establishment that will be required for the supervision of the manufacture at the proposed localities as well as at Attiput and Voyalur is herein enclosed. From this it will be seen that the total establishment—Revenue and Police—for conducting the manufacture and guarding the salt, amounts to Rupees 529 per mensem. An estimate prepared by Mr. Smith of the cost of excavating new channels at the following places, inclusive of those at Vichur, is appended :—

Village.	Number of channels.	Length.	Average breadth.	Height.	Cubic yards.	Estimated cost.		
						RS.	A.	P.
Manali	1	666	7½	2	9,990	1,248	0	0
Sattiangadu	1	766	7½	2	11,490	1,436	0	0
Shadiancooppam	1	1,733	7½	2	25,995	3,249	0	0
Vichur	2	1,586	7½	2	23,790	3,750	0	0
						9,683	0	0

At Attiput a channel has already been made, and at Vichur a dam will be constructed by the manufacturers themselves. The cost of the work to be undertaken by Government is thus estimated by Mr. Smith at Rupees 9,683, which sum I request may be placed at his disposal. I enclose a statement shewing the net revenue expected from these works, as required in Government Order, 20th March last, No. 864.

7. The cost of these channels will be recovered as soon as a portion of the salt has been received into store.

8. With reference to paragraph 2 of the Proceedings under reply, I beg to state that the Municipal Commissioners have been written to with reference to paragraph 6, and the Superintending Engineer, regarding paragraphs 7 and 8 of Mr. Smith's letter, No. 295, embodied in the above Proceedings.

ENCLOSURE No. 1.

ABSTRACT.—Cost of the Revenue and Police Establishments required for the additional salt pans.

ENCLOSURE No. 2.—Distribution Lists.

ENCLOSURE No. 3.

ABSTRACT.—Statement shewing the net revenue expected from the works as required in Government Order, 20th March 1864, No. 864.

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1. The Board would wish it to be more clearly explained, than has been done in the foregoing letter, how their order referred to affects Kattupally.

2. They are under the impression that Kattupally is on the west of the canal, and that there are already pans there. They do not see why these should not be increased by the addition of 300 new pans.

3. If 300 new pans are made at Kattupally, it is only necessary to provide for 268 elsewhere, in lieu of those proposed to be placed at Ennore and Cuttiwak. The Board think that these might, as suggested, be formed on the low lying land south of, and adjoining Vallur, provided their location on this spot would not subject them to inundation from the Cortilliar when the floods come down that river in July or August, which is the middle of the manufacturing season. The Board observe that it is proposed to keep out the water by a bund, but they do not understand how an embankment, sufficiently strong for this purpose, can be constructed for the small cost stated in paragraph 3 of the foregoing letter. They would be glad, before submitting the Collector's general proposition to Government, to have his opinion on this point.

4. With regard to the land south of the Lock, the Board are not yet in possession of sufficient information to enable them to pronounce upon the expediency of breaking ground there. Before deciding this point they would wish to have a professional opinion, as they have been led to understand that the manufacture of salt in this locality might be interrupted in the heights of the hot weather by a deficiency of water in the canal.

5. This question, however, does not press for an immediate solution, because, if it is determined to carry out the additions at Kattupally, the remaining fresh pans required for this year can be placed between the Lock and Vallur.

6. Wherever fresh pans are made, whether at Kattupally or elsewhere, the Collector will take care that it is well understood that Government, in allotting them to private individuals, reserve the right of closing them at any time without giving compensation.

No. 285C. Proceedings of the Board of Revenue, dated 29th October 1867, No. 7,041.

Read the following letter from the Acting Collector of Madras, to the Secretary to the Board of Revenue, dated Sydapet, 17th September 1867, No. 309.

1. I have the honor to acknowledge the receipt of the Board's Proceedings of the 2nd July last, No. 4,129, and in reply to furnish the following explanation.

2. The Board's Proceedings of the 9th April last, No. 2,242, sanctioning Mr. Fane's proposal to open new pans on the western rather than on the eastern side of Cochrane's Canal, does not involve the abandonment of the existing pans at Kattupally, which, as believed by the Board, is on the west of the canal.

3. The land proposed to be newly opened at Kattupally is, as represented by Mr. Smith, unsuited for salt manufacture. It is subject to flood, and the soil is of a porous kind, and Mr. Smith, who has again inspected the spot, is still of the same opinion.

4. Under these circumstances, the new pans at Kattupally have to be abandoned.

5. The Board approve of the proposal to open pans on the low land adjoining Vallur, provided their location on this spot would not subject them to inundation from the Cortilliar floods in July or August. There is not, Mr. Smith says, much reason to apprehend damage from the Cortilliar inundation at this period. The manufacture generally ceases in August, and the floods escape into the canal mainly through the southern branch. There will not, thus, be much necessity for an embankment, and should one be required at any time, owing to an unusual rise of water, the ryots have agreed to construct it at their own cost. I therefore beg to support Mr Smith's recommendation for the allotment of the 220 pans already proposed, as well as 110 more as shewn in the margin, for which waste land is available at Vichur and Vallur. Two boat and irrigation channels are required to be excavated, nearly one mile in length, at a cost of Rupees 4,065.

Vichur...	80
Vallur..	30
Total...	110

6. Between Kattupally and Vallur there is land available for eighty pans, which, if approved of, may be allotted for salt cultivation at an outlay of Rs. 1,863, for the excavation of a boat and irrigation channel.—*Vide* sketch annexed to paragraph 5 of Mr. Smith's letter.

7. At Pulidiwak land, convertible into 120 pans, is available in three localities. No fresh outlay is necessary to convert these into pans, as the channel lately excavated at that place and the old channel are sufficient to irrigate this land also. At Ennore there is land for seventy pans, fifteen at one place, and fifty-five at another.—*Vide* sketch, paragraph 7, Deputy Collector's letter* enclosed. The former involves no expenditure, but the latter requires the excavation of a channel 4,398 feet long, at a cost of Rupees 4,398.

*Requested to be returned.

8. A statement of the number of new pa[illegible] which is now proposed to be opened, together with the cost of channels necessary to irrigate them, and the probable quantity of salt that may be produced, is herewith annexed. From this the Board will observe that 907 new pans, being thirty-two pans more than the number originally sanctioned, can be opened. The cost of these channels has been roughly estimated by Mr. Smith, and, if the Board approve of these suggestions, I propose intrusting Mr. Smith with the work. In the meantime I have desired Mr. Smith to obtain regular estimates from the Department of Public Works, and will submit them to the Board when received.

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9. These channels,* as estimated by Mr. Smith, will cost Rupees 13,226, and they have to be excavated before the commencement of the next manufacturing season, as explained in the last paragraph of my letter of the 6th instant, No. 294. Early sanction is therefore solicited for placing at my disposal the sum required for the works.

*With the one at Attiput.—*Vide* paragraph 5, Collector's letter, No. 241, of the 7th August 1866.

10. As the number of pans, now proposed to be opened, is more than the number sanctioned, the Board will observe that there is no necessity for resorting to the ground on this side of the lock.

11. With regard to paragraph 6 of the Proceedings under reply, I beg to state that all lands, allotted during the last few years for salt cultivation, have been granted on the express understanding that no compensation is to be allowed if the manufacture is at any time closed.

12. The increase in the extent of the pans will, of course, add to the labor and responsibility to the establishments, and I therefore beg the favorable consideration of the Board to Mr. Smith's proposed addition to the establishment in point of numbers and increase to the salaries of the principal servants, as shewn in the accompanying tabular statement. Mr. Smith has appended sketch plans of the ground to his report, which shew clearly the localities where he proposes to open the new pans.

13. They are, for the most part, in close proximity to existing pans, and will afford a great additional field for manufacture, without materially adding to the cost of guarding.

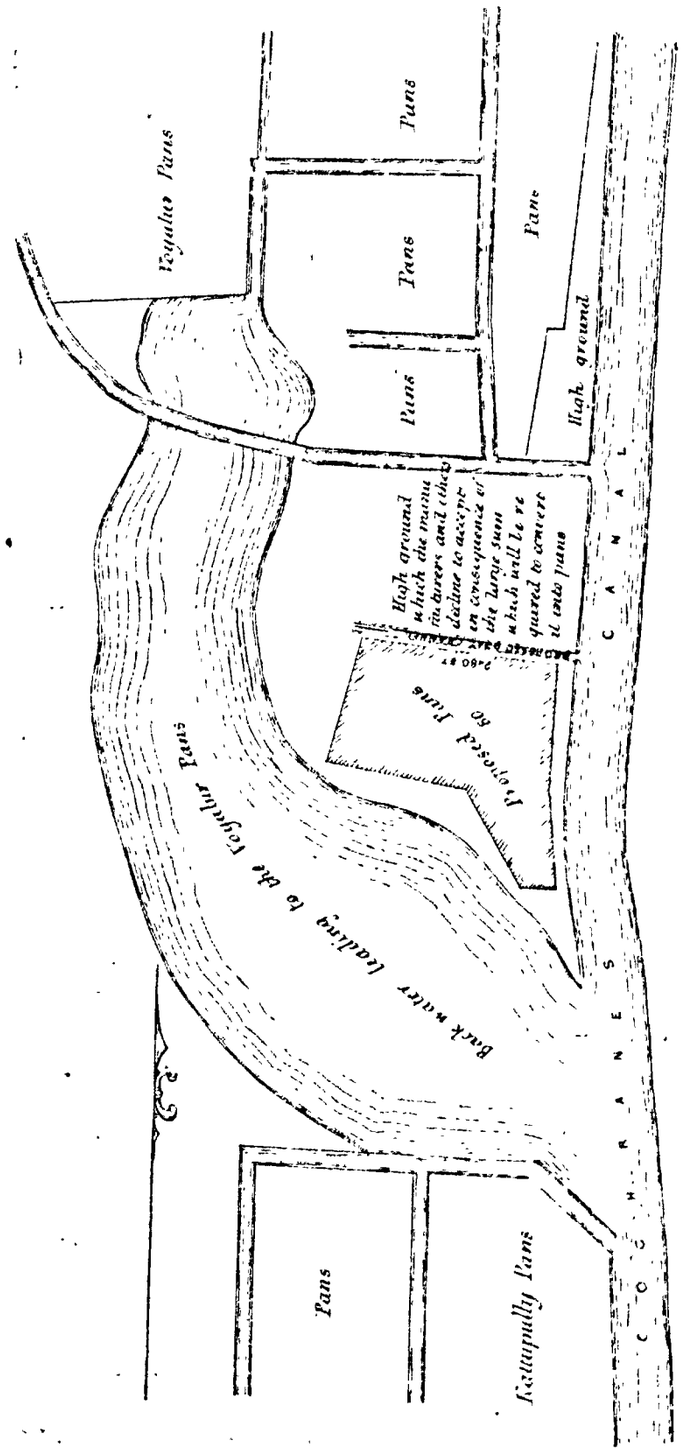
From the Deputy Collector in charge of Salt, to the Acting Collector of Madras, dated 10th August 1867, No. 172.

1. With reference to your Memorandum of the 11th ultimo, I have the honor to submit the information required by the Board in their Proceedings of the 2nd idem, No. 4,129.

2. The explanation called for regarding Kattupally has been rendered necessary by the statement made in the first paragraph of Mr. Burnell's letter, that the Board's order to open new pans on the western side of the canal "involves the abandonment of Kattupally."

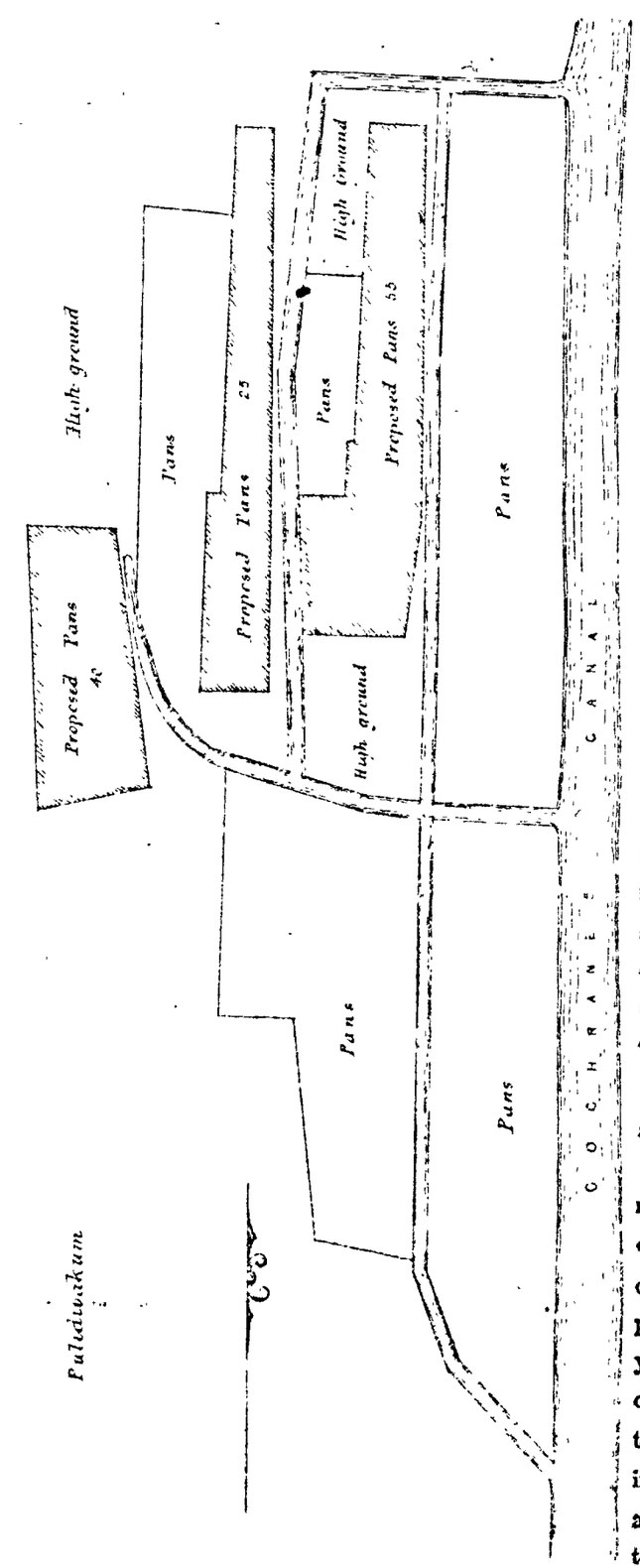
3. This the order does not do, Kattupally being, as believed by the Board, on the west of the canal. A recommendation was however made by me for the abandonment of the 300 *additional* pans there proposed to be opened; but it was based on the ground stated in the following extract from my letter, dated the 28th February last, No. 55:—

"The land proposed to be opened at Kattupally is not suited for salt manufacture. At the "time I inspected it, and up to a very late period, it was completely submerged, and the quality "of its soil could not be ascertained. I now find that it is of a porous character, and therefore "unsuited to the manufacture of salt."

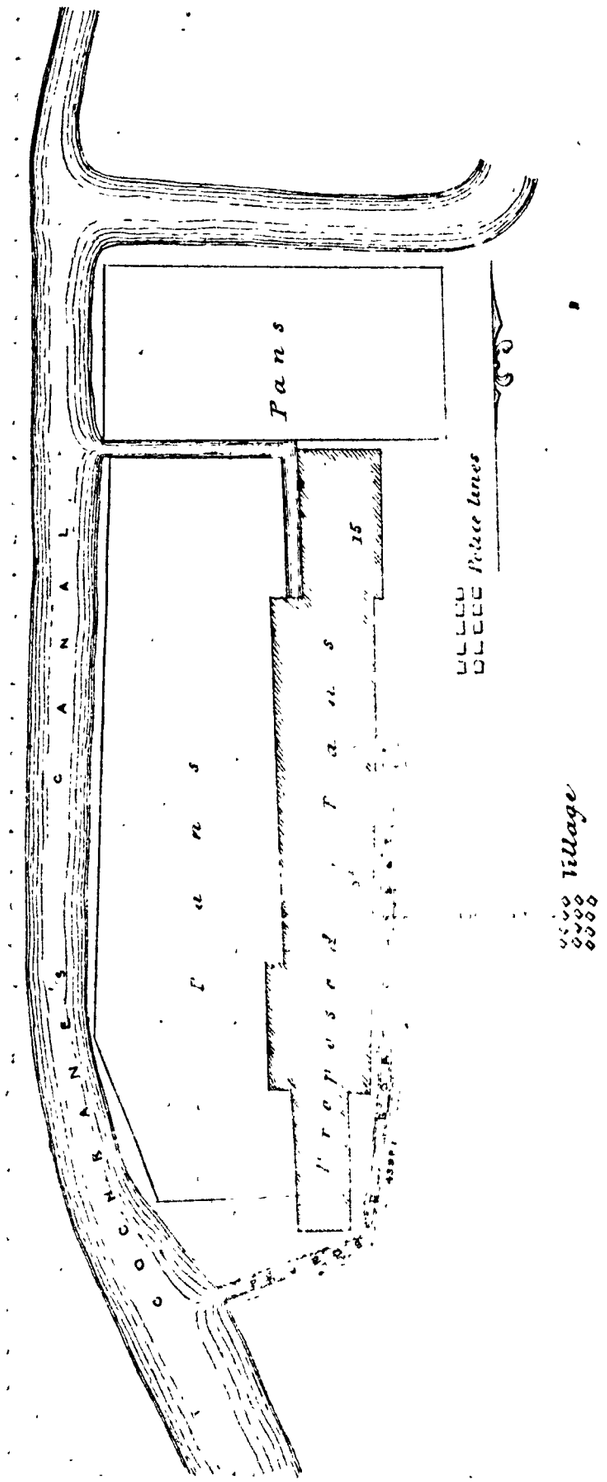


4. I have since the receipt of the Board's Proceedings again carefully examined the locality, in company with the Superintendents of Vullur, Attiput, Pulidivakum, and Voyaloor; and we are unanimously of opinion that no new pans should be opened in that locality. Indeed, looking to the shelving character of the land towards the canal, there is great reason to apprehend, from levels taken by an Overseer of the Public Works Department, that if a branch boat and irrigation channel were excavated from east to west, as originally proposed, it would drain the large sheet of water which forms the only source of supply to the Voyaloor pans, and jeopardize manufacture in a locality which yields a large return.

5. The ryots, however, state that they are willing and prepared to occupy the ground between Kattupally and Voyaloor, shown in the marginal sketch, where land is available for eighty pans, capable of yielding 48,000 maunds of salt. This land, if the Board approve, may be allotted for salt cultivation, and attached to the Voyaloor division. For the reason stated in the preceding paragraph, it would not be desirable to irrigate the land from the sheet of water which forms the only, and sometimes insufficient, source of supply to the Voyaloor pans; and it is necessary therefore that a boat and irrigation channel should be excavated from east to west, north of the land, and not in its centre, to economize space for manufacture. The cost of the channel, which will be 2,080 feet long, I estimate at 1,863 Rupees, and shall be prepared to execute the work, if that sum be placed at my disposal.



6. At Pulidivakum also, consequent on the recent excavation of a new, and repair of an old, boat and irrigation channel, land for 120 pans in all, capable of yielding 72,000 maunds of salt, is available in three localities as shewn in the marginal sketch, and may be appropriated to the manufacture of salt.



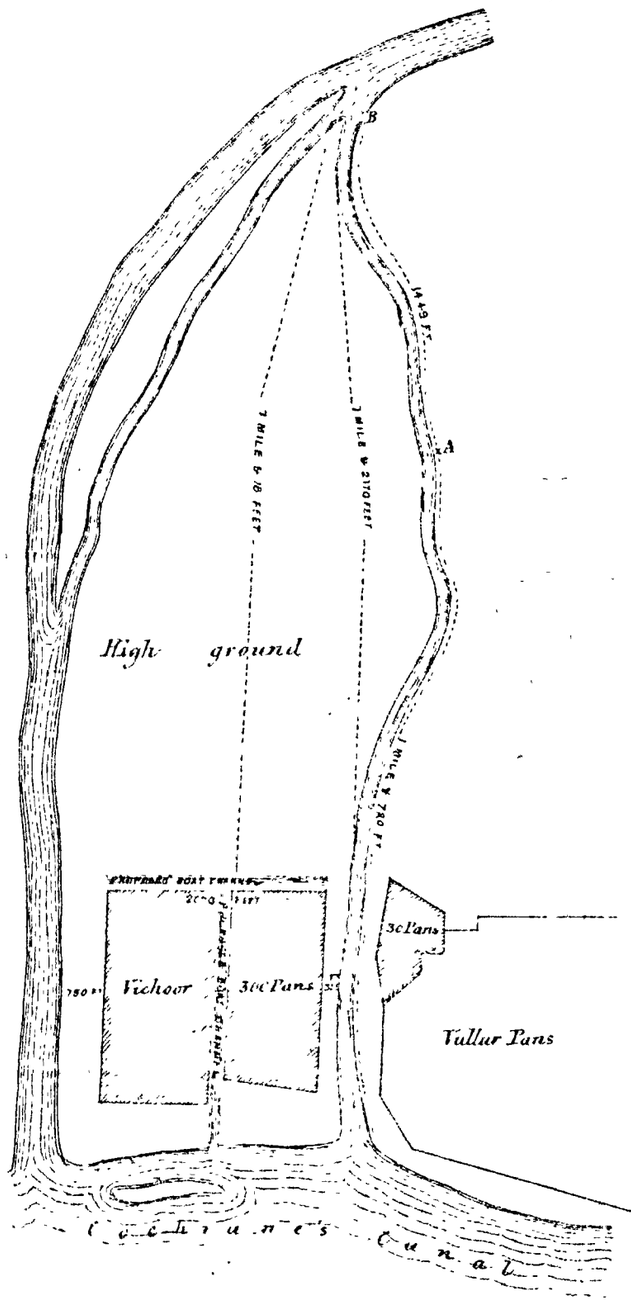
7. At Ennore, too, for a similar reason, land is now available for fifteen pans, adequate to the production of 9,000 maunds of salt. But if a boat and irrigation channel were made from the main canal, and extended eastward and northward, as shewn in the sketch, fifty-five additional pans, capable of yielding a further quantity of 33,000 maunds of salt, will not only be available, but the channel itself will serve as a cordon for the protection of more than half of the salt made at that station, and render unnecessary any increase to the present Police Guard. This channel, which will be 4,398 feet long, I am prepared to execute for Rupees 4,200, if that sum should be placed at my disposal.

8. With regard to the low lying land adjoining Vullur, referred to by the Board in paragraph 3, I beg to state that, from a further examination which I have now made, there is not much reason to apprehend its inundation from the Cortelliar floods in July

Proceedings of the Madras Government, Revenue Department,
16*th November* 1867.

Statement shewing the months on which, on account of the weather or other causes, manufacture has ceased during the last five years:—

1862	...	...	July.
1863	...	...	August.
1864	...	...	do.
1865	...	...	do.
1866	...	...	do.



or August, the latter month* being about the period at which our manufacture generally ceases. The floods of that river escape into the canal mainly through the southern and broader branch; and on the 27th of July, the day I inspected the locality, the water in the northern arm of the river extended from the canal westward up to A, and was not fresh but salt water, from which some of the southern Vullur plans are now irrigated. The Cortelliar, where it divides itself into two branches, is 1,449 feet from the point A.

9. As to the bund, the ryots state that it is not required, and that its formation will be productive of injury to the pans, inasmuch as *during the monsoon*, when almost all the northern pans are submerged, the Cortelliar floods will wash the embankment away, and deposit its debris upon the pans. They state that, in the event of there being an unusual accession of water in that river, during the *manufacturing* season, they will take measures to prevent its approaching the pans, by erecting an embankment, at their own cost, at point B, higher up the river and near their village. I beg therefore to repeat my

recommendation for the opening of 220 pans in this locality (Vichur,) and to suggest an increase to their number by a further allotment of eighty pans in the same place, and of thirty pans at Vullur; being 330 pans in all, capable of yielding 1,98,000 maunds of salt. The two boat and irrigation channels to be here excavated, extending together to 5,200 feet, or nearly one mile in length, will therefore cost 4,965 Rupees, which I request may also be placed at my disposal. I am convinced, from past experience, that these channel works will be executed with greater expedition, economy and care by this department, than by the professional department, which has more important and expensive works to look after.

10. The Board have expressed a doubt as to the expediency of breaking ground south of the lock, apprehending that the manufacture of salt in that locality might be interrupted, during the dry season, by a deficiency of water in the canal. They therefore desire a professional opinion upon the point, adding however that the question does not press for an immediate solution.

11. Without presuming to obtrude an opinion in solution of the anticipated difficulty, I may venture to submit that the resolution arrived at by the Board seems, under existing circumstances, the best that could be adopted; and I would take the liberty to suggest that Vichur be constituted for the present, the southern limit of our northern pans.

12. Under the arrangements now proposed, land will be available at the following places for 600 pans; and if to this be added the land at Attiput and Voyaloor, approved in the Order of Government, dated the 15th November 1866, No. 3,105, the total land available will be sufficient for the opening of 907 *additional* pans, capable of producing 5,44,200 Indian maunds of salt, of the annual value of Rupees 9,18,337 :—

	Pans.
Vichur and Vullur...	330
Ennore...	70
Pulidivakum...	120
Voyaloor...	80
	600
Add	
Attiput...	177
Voyaloor...	130
Total...	907

13. I beg to submit a statement shewing the cost of the additional Revenue and Police Establishments that will be required for the proposed pans. It will be seen that a further small increase to the salaries of three of the Divisional Superintendents, above the amount sanctioned by Government in their Order, dated the 15th November 1866, No. 3,105, has been entered in the statement, which also includes an increase of 10 Rupees per mensem to the salary of a fourth Divisional Superintendent, and of 5 Rupees each to two Assistant Superintendents. These increases have been proposed, in consideration of the enhanced labor and responsibility that will devolve upon the Superintendents and their Assistants, consequent on the further additions now recommended to be made to their respective ranges; and, in soliciting your attention to the following statement, shewing the number of pans that will hereafter be under their charge, and the quantity of salt that will henceforth be manufactured under their supervision, I trust that I may be permitted to

express a hope that the increases proposed will meet with your approval and support. It appears to me but fair, that augmented wages should be granted where enhanced labor and responsibility are imposed; and true policy seems to indicate the expediency of securing willing and honest service by liberal pay and fair prospect of promotion, than obtaining reluctant and faithless servitude by limited wages and scant hope of advancement :—

Divisions.	Present number of pans.	Proposed number.	Total.	Total quantity of salt at five garce per pan.	Remarks.
				In. Mds.	The Vullur Superintendent has also charge of the Ennore Depôt, where large quantities of salt are both stored and exported* under his supervision.
Vullur.....	1,013	330	1,343	8,05,800	
Attiput	1,105	247	1,352	8,11,200	
Pulidivakum.	720	120	840	5,01,000	
Voyaloor.....	1,092	210	1,302	7,81,200	
Kattur	614	.....	614	3,68,400	
	4,544	907	5,451	†32,70,600	

* Fasly. In. Mds.
1273..... 1,12,322
1274..... 1,04,677
1275..... 3,36,907

14. To recapitulate. The present proposals involve the opening of 907 additional pans, capable of yielding 5,44,200 maunds of salt of the value of 9,18,337 Rupees, with an immediate outlay of Rupees 11,028 for the excavation of branch channels, and an annual expenditure of Rupees 3,480 for revenue, and Rupees 1,689 for Police Establishment, the former being only three-eighths per cent. of the expected revenue.

15. With regard to the caution prescribed in the concluding paragraph of the Board's Proceedings, I have the honor to state that all lands allotted for salt cultivation during the last few years, have been granted on the express condition that no compensation will be allowed, in the event of the manufacture being closed; and I shall take care to enforce this condition, in respect to the lands now proposed to be devoted to salt cultivation.

16. It is of the greatest importance that the projected arrangements should be sanctioned at the earliest date practicable. The manufacture this year, owing to the unfavorableness of the latter portion of the season, has amounted to only 18,76,280 maunds, being about five lacs of maunds below the out-turn of the preceding year. If therefore additional salt is to be made, the proposed pans must be distributed in sufficient time to enable the manufacturers to commence operations, immediately after the close of the north-east monsoon.

17. In conclusion, would it be inconsistent with my position, or subversive of the respect due to the higher authority, if I ventured, with all submission, to solicit attention to the thirty-two lacs of maunds of salt of the value of 55 lacs of Rupees, which will next year be manufactured under my general superintendence, not to mention our enormous sales and the manufacture in the south? The facts involved in the question are of deep importance to me, inasmuch as they seem to hold out a fair hope that the authorities will not be unmindful of the interests of a servant, to whom is intrusted, under the Collector, the administration of a department, whose operations will shortly be developed to an extent unparalleled in the annals of Indian salt. A manufacture of thirty-two lacs of maunds, of the value of 55 lacs of Rupees, and that, in *one* district!! The announcement is startling, but will nevertheless be found to be a pleasing reality, if the arrangements now proposed are carried into effect early next year. May this gratifying anticipation be realized, and bring in its train, to your humble subordinate, a substantial mark of Government favor, which may, in some degree, compensate for the wear and tear of body and mind which the supervision of so greatly extended a charge will inevitably involve.

† These figures represent an annual value of 55,19,137 Rupees.

Statement shewing the Salt Establishment in the Northern Divisions as it exists at present, and that proposed, with reference to the extension of pans there.

Present Establishment, as finally revised by the Honorable Mr. Pelly and Mr. Clarke, as contained in Government Proceedings, dated 20th July, No. 1,845.				Additions now proposed.				
Stations.	Number of pans in existence.	Establishment.	Total.	Stations.	Number of additional pans proposed.	Establishment.	Total. Revenue	Total. Police.
			Rs.				Rs.	Rs.
Vullur Division, with Ennore Depot.	1,013	REVENUE. Rs. 1 Superintendent ... 50 1 Assistant do. ... 20 1 Do. do. ... 15 1 Clerk ... ... 15 1 Do. for Ennore Depot ... ... 15 2 Peons, at 7 Rs. each 14 6 Vettals for Ennore Depot, at 6 Rs. 36 2 Vettals, at 6 Rs. 12 10 Vettiyans, at 5 Rs. 50 —	227	Vullur and Vichur.	330	REVENUE. Rs. 1 Assistant Superintendent on ... ... 35 1 Do. do.... ... 20 2 Peons, at 7 Rs. each 14 6 Vetties, at 5 Rs. each .. .. 30 Increase to Vullur Superintendent's pay ... ... 35 — POLICE. 8 Constables, at 7 Rs. each ... ... 56 REVENUE.	134	56
Attiput...	1,105	1 Assistant Superintendent on .. 15 3 Vettics, at 5 Rs. each ... ... 15 Increase to Attiput Superintendent's pay ... ... 10 —	40	Attiput and Ennore.	247	1 Assistant Superintendent on ... ... 15 1 Peon, at 7 Rs. ... 7 4 Vettios, at 5 Rs. each ... ... 20 Increase to Ennore Assistant Superintendent's pay ... 5 Increase to Attiput Superintendent's pay ... ... 20 — POLICE. 4 Constables for Attiput, at 7 Rs. each 28 REVENUE.	67	28
Kattupally.	300	Increase to Kattupally Assistant Superintendent's pay ... ... 10 5 Vetties, at 5 Rs. each ... ... 25 —	35	Pulidivauk.	120	1 Peon, at 7 Rs. ... 7 1 Vetty, at 5 Rs. ... 5 Increase to Kattupally Assistant Superintendent's pay ... ... 5 Increase of Pulidivauk Superintendent's pay ... ... 10 — POLICE. 2 Constables, at 7 Rs. each ... ... 14 —	27	14
Voyaloor.	1,092	1 Assistant Superintendent on ... 15 2 Vetties, at 5 Rs. each ... ... 10 Increase to Voyaloor Superintendent's pay ... ... 10 —	35	Voyaloor	210	1 Assistant Superintendent on ... ... 15 1 Peon, at 7 Rs. ... 7 3 Vetties, at 5 Rs. each ... ... 15 Increase to Voyaloor Superintendent's pay ... ... 25 —	62	
			337		907	POLICE. 6 Constables, at 7 Rs. each 42	290	42 140

SYDAPET,
17th September 1867.

(Signed) G. THORNHILL,
Acting Collector.

Proceedings of the Madras Government, Revenue Department,
16th November 1867.

Statement shewing the number of new pans proposed to be opened, the cost of irrigating channels, and the probable quantity of salt that may be produced in the district of Madras.

Names of stations where salt-pans are proposed to be opened.	No. of pans to be opened.	Details of channels required, and their cost.		Quantity of salt that would be produced.	Remarks.
			Rs.	Maunds.	
Vichur and Vulloor ...	330	Two Boat and Irrigation channels...	4,965	1,98,000	
Between Kattupally and Voyaloor, and attached to the latter drain ...	80	Boat and Irrigation channels ...	1,863	48,000	
Pulidivauk	120	None	.....	92,000	
Ennore	70	Boat channel ...	4,398	42,000	
Attiput	177	Re-opening of channel	2,000	1,06,200	
Voyaloor*	130	None	.....	78,000	*To be undertaken by private individuals.
	907		13,226		

SYDAPET,
17th September 1867.

(Signed) G. THORNHILL,
Acting Collector.

1. In their Proceedings of the 15th November 1866, No. 3,105, the Government approved of a proposal for forming 875 new saltpans in the Madras District, as shewn in the margin, at a cost of Rupees 2,000. It was then estimated that an additional establishment, costing Rupees 2,280 per annum, would be necessary.

Kuttivauk	...	...	...	114
Ennore	...	...	...	154
Attiput	...	...	...	177
Kattupally	...	...	...	300
Voyaloor	...	...	...	130

Board's Proceedings, No. 12.

2. On the 3rd January 1867, the Board called for a detailed report on the distribution of the new pans at Kattupally and Voyaloor.

3. The Collector then suggested that instead of making new pans at Kuttivauk and Ennore on the east of the canal, they should be laid out at Shadiancoopum on the west of it. The Board agreed to this proposal.

Board's Proceedings, dated 9th April 1867, No. 2,242.

4. On the 21st May Mr. Burnell, who was in charge of the district, recommended that, as a consequence of the decision to locate the new pans on the west of the canal, Kattupally, Kuttivauk, and Ennore should be abandoned, and that 957 pans should be made at a cost of Rupees 9,683. He reported that the Attiput channel had already been

Board's Proceedings, dated 2nd July 1867, No. 4,129.

Attiput	...	...	...	177
Voyaloor	...	...	...	130
Vichur	...	...	...	220
Shadiancoopum	...	...	...	100
Sathancadoo	...	...	...	160
Manali	...	...	...	170
				957

excavated. The Board called for further information because Kattupally is on the west, and not on the east of the canal, and because they saw reason to fear that the proposed site at Vichur would be liable to inundation.

5. It is now reported that Mr. Burnell made a mistake in speaking of the abandonment of Kattupally, and that he should have said that it had been found that the project of making 300 new pans there must be given up because the characters of the soil had been found to be unfavorable. There seems to be no danger from inundation at Vichur. The Deputy Collector has completely revised his propositions, and now recommends that 907 new pans should be made at a cost of Rupees 11,028. The statement prepared in the Collector's Office makes the amount, Rupees 13,226, inclusive of a sum for repairs to the Attiput channel.

Between Kattupally and Voyaloor ...	80
Pulidivakum	120
Ennore	70
Between Vichur and Vulloor	330
Attiput...	177
Voyaloor	130
	907

6. The Board could have wished that the plans for extending the manufacture of salt in the district of Madras had been maturely considered at first, and that such frequent alterations had not been required; but after full consideration they are of opinion that the scheme as it now stands promises well, and they resolve to recommend that it may be sanctioned by Government.

7. In their Proceedings, dated the 15th October 1866, No. 7,413, the Board have shewn the pressing necessity for extending the manufacture of salt.

8. If the proposals now before them are adopted, it is computed that there will be an additional annual supply of 5,44,200 Indian Maunds of salt worth Rupees 9,18,337. The preliminary expenditure on works will amount to Rupees 11,028, which has been provided in the revised list submitted to Government with Board's Proceedings, dated 27th September 1867, No. 6,207. The repairs to the Attiput channel are also provided for in the list. The additional establishment proposed by the Deputy Collector will cost Rupees 430 per mensem, and the Board consider that this expenditure, with the exception of Rupees 100 for increasing the salaries of Superintendents and Assistant Superintendents, will be necessary. The annual cost on this account will therefore be Rupees 3,960.

No. 286. ORDER THEREON, 16th November 1867, No. 2,711.

Separate Revenue, No. 21.
Salt.

1. The Government approve and sanction the revised proposals for extending the salt manufacture for the Madras Depôt submitted in the above Proceedings.

2. The Board will submit the necessary tabular statement of the additional establishment required, for transmission to the Supreme Government.

(Signed) W. HUDLESTON,
Secretary to Government.

6. The Board could have wished that the plans for extending the manufacture of salt in the District of Madras had been maturely considered at first, and that such frequent alterations had not been required; but after full consideration they are of opinion that the scheme as it now stands promises well, and they resolve to recommend that it may be sanctioned by Government.

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(True Copies and Extract.)

Sub-Secretary.

To the Secretary to Government, Revenue Department,
with copies of Board's Proceedings, dated 3rd January, 9th April, and 2nd July 1867, Nos. 12, 2,242, and 4,129.

Copy to the Acting Collector of Madras,
with one original enclosure.

Pro 15 Novr/66 No 341 & 342
" 10 October/67 " 216 & 217

Rev: 1867. Department.
Pro of Govt for Novr

No. 3093.

PROCEEDINGS OF THE BOARD OF REVENUE,

Dated 29th October 1867.
Dep. 12 Novr
Rec. 13th
P. 3.
Pro. B. of Rev. 20 Feby 68
Co No 654

No. 7,041.

Requesting sanction of Government to scheme for extending the manufacture of Salt in Madras district.

No 2711. 16 Novr

No. 285-286.

No 2711.

The Govt. approve & sanction the revised proposals for extending the Salt manufacture for the Madras Dist. submitted in the above Proceedings. The Bd. will submit the necessary tabular statement of the addl. establishment required for transmission to the Sup. Govt. [illegible]

16 Novr/67

14 Copies To the Bd. of Rev. Desk [illegible]
6 Copies to the Auditor [illegible]

[illegible]