M.R.O. 14—10,000—21-4-22

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1756	Press Mis.
23 : 24	
Dated 3 : 9 : 18 6/.	

Not to be folded or roughly handled

No. 23. Read the following Proceedings of the Board of Revenue, dated 22nd July 1861, No. 3,913 :—

Read letter from the Collector of Madura, dated March 7th 1861, No. 81, submitting his Deputy Collector's Salt Report with his own remarks thereon.

(In Cons. 12th March 1861, No. 1,564.)

In Cons. 4th August 1860, No. 3,803.

1. Ordered that the above letter with its enclosures be submitted to Government, with reference to their Proceedings, dated 3rd August 1860, No. 1,291, Revenue Department.

2. The Deputy Collector first proceeds to describe the form of the various Salt pans in the District, and the Board are glad to observe from the Collector's remark that endeavours are being made to reduce them to one uniform size.

3. There appears to be too many places of manufacture and sale in the District, and the Board are of opinion that they might be very considerably reduced in number without any disadvantage. In fixing on those to be retained, care should be taken that they are accessible by means of the four roads described in paragraph 17 of the Deputy Collector's report.

4. In describing the process of manufacture, it is stated that evaporation is allowed to take place in the salt beds for a week or eight days. This period is far too short for the production of really fine Salt, as nothing tends so much to produce a white and large-grained description of Salt as a lengthened period of evaporation in the salt bed of well prepared and highly concentrated brine. The attention of the Deputy Collector should be given to the remarks of Major DeHavilland, forwarded in Mr. Bayley's report, and he should be instructed to give effect to them.

5. At some of the pans the Salt manufactured appears to be of rather an inferior description, but the only means of remedying this very general defect in all Districts is invariably to reject all Salt which is not of first rate quality. Were this plan generally adopted, the manufacturers would very soon realize the fact that their own interests were involved in the production of a good article, and more attention would be devoted by them to this object. The Deputy Collector himself also should be constantly on the move through his Salt Division, and should everywhere give instruction and encouragement to the manufacturers.

6. In this District, as in others, the question of having stone platforms which was mooted in the Ganjam District, has been negatived both by the Collector and his Deputy. The present system requires, of course, constant repairs which are executed by the Department Public Works, and delay is very often the result of repairs being made by a different Department than that most interested in them being rapidly and efficiently performed. The Board would suggest that all repairs in the Salt Department, not of a very important nature, should be done or directed by the Revenue authorities by which the Department Public Works would be relieved of a considerable number of petty works which they now have to perform, and which would be equally well executed by unprofessional persons.

7. The Collector has called the attention of the District Engineer to the state of the roads giving egress from the Salt pans, and the Board trust that the necessary repairs are now in progress. The main lines of road alluded to in paragraph 17 should first be put in order, as those pans which are accessible only by cross roads, quite impassable from want of repairs, such as those at Kadukai, Morkulam, and Titandadanam, had better be given up as places of manufacture.

8. The Dittum fixed for last year's manufacture was 7,050 garces, being more than 4,000 in excess of the highest Dittum on record, and the Board are glad to hear that the whole of this quantity was stored, and there seems a fair prospect of the Board's orders for having two year's supply on hand being carried out in this District.

9. Spontaneous Salt is very largely produced in the District, and there is little doubt that the poorer classes who live in the vicinity of the swamps where it is generated consume this description of Salt alone, to the great detriment of the revenue. It is difficult to estimate what quantity can be procured ; but as its collection will certainly not cost more than Rupees 5-11 per garce, the whole of it should be gathered and taken to the nearest store. Perhaps the most

simple mode of collection would be to do it by contract, and the new Police must be looked to see that its clandestine collection by the Ryots does not take place for the future.

10. The duties of the manufacturers in this District appear to be more heavy than in many others although they have been relieved to some extent. The Board concur with Mr. Levinge in considering that they should have nothing whatever to do with the sale. This question is intimately connected with that of the Kudivarum which is yet under consideration.

11. There seems to be no disposition for export trade in the Madura District, and as the Deputy Collector observes, until this manifests itself among the trading community, it is unnecessary to be at any expense for the purpose of connecting the pans with the sea coast.

12. The Collector will explain why he omitted to notice the Deputy Collector's assertion that the export price of Salt was Rupees 135 per garce. Should this be correct, it is quite sufficient to account for the non-export of Salt from the Madura District, but it is in direct opposition to the orders of Government and the Board, that the export price of Salt throughout the Presidency should be Rupees 15 per 100 Indian Maunds. The Board are the more at a loss to understand such a misconception having taken place, as in every statement showing the Salt available for export trade in the various Districts, a note is added giving the price as above.

13. Malpractices in the Salt Department can only be checked by efficient superintendence. The Deputy Collector, however, is wrong in supposing that the use of the heaped mercal was ever recognized in the Madura District.

14. A mistaken leniency such as that described in paragraph 35, in which case the Peons should certainly have been dismissed, is sure to lead to inefficiency in every Department; and with such an inferior staff as is generally attached to the Salt Department, it is absolutely necessary that every proved dereliction from duty should be severely punished.

15. There is but one means of checking the importation of earth salt from Pudocottah, viz., a strict supervision by an efficient Police of the boundary line. The Deputy Collector's proposal to limit the manufacture within that State is quite out of the question.

16. The Deputy Collector is in favor of retaining the pans at Tharakudi which it has been proposed to abolish, but the Board question whether it would not be advisable not only to abolish these pans, but several others which are inconveniently situated, and so concentrate the places of manufacture and sale. In all probability it would be found that four divisions, with perhaps five outlying stations, would amply provide for all the wants of the District.

17. The Board are averse to the Collector's proposal stated to have been made in paragraph 40 of his letter to Mr. Pelly. The proper course seems to be for the Division Kacheries to collect all the money and remit it direct to the Treasury at Madura.

18. The augmentation of Establishment applied for in paragraph 40 of the Deputy Collector's report is unnecessary, as the usual accounts can be sent direct to the Collector's Office, and the Deputy Collector's Establishment was not framed with the idea of their being checked in his Office, though it is his duty to pay due attention to their preparation in the Division Offices.

19. The proposal contained in the last paragraph of this Report has been very properly negatived by Mr. Levinge; neither the Amildars nor the Deputy Collector should have magisterial powers, and the Board believe with Mr. Levinge that the Deputy Collector will find ample employment in his own Department to occupy "his leisure hours," the duties of which, if performed in an efficient manner, will leave very little time at the disposal of the Officer conducting them.

(A true Extract.)

(Signed) R. A. DALYELL, *Sub-Secretary.*

No. 24. ORDER THEREON, 3rd September 1861, No. 1,756.

1. With these Proceedings the Board of Revenue submit the report of the Deputy Collector of the Salt Department in the Madura District. The Collector's remarks are entered in the margin of the report.

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

2. There is little calling for notice from Government, most of the report being taken up with ordinary routine matters, and the Board's remarks being of a general character.

3. The number of pans in the District is fourteen, or about one to every six miles of coast. This, as the Board remark, seems an unnecessarily large number. It is not clear from paragraph 3 of their Proceedings, whether they intend to leave the reduction of the pans to the local Officers. This, however, is manifestly a matter which they should themselves consider and submit for the orders of Government.

4. The quality of the salt produced in the Madura District is said to be generally inferior. This may be owing in some degree to the unusually large manufacture ordered last year to replenish the scanty stock in store. But probably carelessness in the process of manufacture, and the use of water from wells sunk in the sand are the chief causes. It is impossible for the Government or the Board to deal with this subject effectually. The Collector should have fair samples of the salt received into store sent to him by the Deputy Collector, and all of inferior quality should be steadily rejected. The pans are said to sell for from 400 to 1,200 Rupees per acre, and, if this be correct, they constitute a valuable property, and there ought to be no hesitation in rejecting bad salt.

5. The question of allowing the Salt Department to execute petty repairs to the salt works will be considered with Mr. Clarke's report.

6. The Deputy Collector gives a most unfavorable report of the Salt roads in Madura. The Chief Engineer's immediate attention will be called to the subject, and he will be requested to state, why with the large Public Works establishment kept up in Madura the roads have been so neglected.

7. Spontaneous salt is largely produced in Madura, and it is essential that measures should be adopted to gather it on account of Government wherever this can be profitably effected, and elsewhere to destroy it. The new Police can scarcely be expected to watch the swamps where this kind of salt is produced, and temporary guards must be applied for by the Collector whenever they are required. In Madura the cost of collecting this kind of salt is less than 6 Rupees, while the "Kudiwaram" alone at the regular pans is a little above 11 Rupees per garce. There is, therefore, an ample margin of profit on spontaneous salt. The collection of this salt by contract might be tried, and in some localities it might be desirable to open a place of sale, and store at a convenient spot on the nearest line of traffic so as to save the cost of transport. This would in fact be to convert what is now an occasional into a regular source of supply. The Board will take the subject into consideration, and arrange decisively with the Collector what mode of procedure should be adopted; mere general suggestions will lead to no practical result. This kind of salt has been shown by chemical analysis to be perfectly wholesome, and its crystals being large it is well adapted for inland traffic.

8. The extra duties which in Madura and in other Districts devolve on the manufacturers, must be considered in connection with the Kudiwaram, which has, of course, been regulated with reference to these incidental labors. The manufacturers certainly should have nothing to do with the measuring of salt into store, their interests being antagonistic to their duty, and the furnishing of treasure guards and escorts might also be given up. But the many miscellaneous duties customarily connected with the pans, such as covering the heaps, repairing the platform—fences, &c., ought to be required of them until the general question of their remuneration has been decided. In many places the manufacturers completely monopolise the labor of the locality, and the question will resolve itself into that of paying them extra for the work done rather than relieving them of the obligation of doing it.

9. The importation of earth salt from Poodoocottah has already been noticed by the Deputy Collector of Tanjore, and the subject has been referred for the report of the Collector of Madura.

10. The Government look to the personal exertions of Deputy Collectors for the suppression of malpractices in their Districts. If they visit their pans with regularity and are accessible to the people, no material frauds either on Government or traders in salt can go on

undetected, and, as the Board rightly remark, all proved derelictions from duty and integrity should be visited with exemplary punishment. Such practices, as the systematic levy of a cess on traders, and excessive storage of heaps, cannot be carried on with impunity with an active and intelligent Deputy Collector in sole charge of the Department.

11. There is no necessity for the salt accounts to pass through the Deputy Collector's Office when this would involve material delay, but whenever the Deputy Collector visits a pan he should examine the original accounts carefully, and see that they are properly kept; and to prevent falsification he must have an opportunity of examining those sent to the Collector. The Board should ascertain what accounts the Salt Deputies usually receive in the different Districts and prescribe definite rules on the subject, as it is essential that these Officers should effectively check this as well as every other branch of the Department.

12. The Government have already ruled that it is wrong in principle to give magisterial powers to Officers in the position of those of the Salt Department, who would thereby be judges in cases in which they have a personal interest.

(Signed) J. D. SIM,
Secretary to Government.

In Cons. 12th March 1861, No. 1,564.

From V. H. LEVINGE, Esq., Collector of MADURA,
dated Tenkarai, 7th March 1861, No. 81.

I beg to transmit the report submitted by my Salt Deputy in conformity with the orders of Government, dated 3rd August 1860, No. 1,291, together with my remarks thereon transcribed in red ink in the margin of the report.

Dated 15th February 1861, No. 9.

Enc. 1.

From RAMA RAO, Deputy Collector in charge of Salt Departm
To V. H. LEVINGE, Esq., Collector of MADURA,
dated 15th February 1861, No. 9.

I have the honor to submit the report called for in the Proceedings of Government, dated 3rd August 1860, No. 1,291, on the salt administration of this district.

2. I took charge of the department on the 28th June last.

3. During my last tour in December and January past along the depôts, I went down examining the heaps stored, and forward herewith a Memorandum (Enclosure A), exhibiting the result.

Situation of the Pans.—4. Along a sea coast of 88 miles and in the limits of the Zemindaries of Ramnad and Shevagungah are formed 14 salt pans with an inner pan. Their names and distances one from each other, with the extent of land occupied by the beds, and other particulars are shown in Enclosure B.

Endeavours will be made to have the beds made all of the same size, but this will be difficult owing to the expense of filling up and the depth of excavation required in some places.

5. The salt beds vary in size, in some they are 15 feet by 9 feet, while in others they measure 30 or 36 feet by 15 feet, and so on.

The ryots can well afford to protect their own property.

6. The beds at Kudakai and Morkulam are situated by the side of two jungle streams, which are likely to overflow and destroy them during high freshes. The streams should, therefore, be dammed and their courses diverted, as also that of another stream passing by the Kalianakari pan, where a few beds have been swept away by water.

7. In some of the pans (Titandadanam, &c.,) the beds are scattered. At Vattanam, Kadukai, &c., the earth dug out from them, from time to time, has been thrown on their embankments to the height of three or four yards. These circumstances render it impossible for the watching peon on the scaffold to have a vigilant eye on what is going on in all the beds during a manufacturing season. I have forbidden such practice for the future.

Orders have been sent to make the ryots remove these mounds which should not have been permitted.

8. A certain number of the beds forms a "karrai," the size of which is the same in all the localities, being equal to nearly quarter of a kani. In this the ryot holds an alienable right. The value of a "karrai" is from Rupees 100 to 300.

A salt karrai is nearly equal to quarter kani.

* 1. Ukandankudi.
2. Uppur.
3. Vairavanathapatam.
4. Attankarai.
5. Morkulam.
6. Valinokkam.
7. Mutturegunathapatam.
8. Mukkaiyur.
9 Tharakudi.

† 1. Titandadanam.
2. Kalianakari.
3. Vattanam.
4. Soliakudi.

The use of sea water.—9. In nine* of these pans the beds are watered from springs dug out for the purpose, and in four† sea water is conveyed through channels, for the spring water here is not sufficiently impregnated with saline particles to produce salt. At Manakudi and Kadukai partly sea and partly spring water is used.

10. The Board in their Proceedings, dated 8th June last, No. 2,728, have called my attention to the opinion offered by Mr. Thomas while in charge of the Department, that "water direct from sea perforates and destroys the flooring of the salt beds." From

personal observation, I am led to state the remark does not appear to be well founded. On the contrary, I think the practice is not without its advantages, for where it exists I find the production to be superior in quality and the crystals large neither am I aware of its being less wholesome or distasteful. It is on the contrary much liked by the people. It is therefore my humble opinion that the use of sea water is preferable.

I agree with the Deputy Collector. The salt made from sea water or from a mixture of salt and sea water appears excellent and is thought so and freely purchased and used.

PROCESS OF MANUFACTURE.—11. The operation of manufacture commences thus:—In October the beds as well as the petty reservoirs lying by them are filled with water, which evaporates by the commencement of the manufacturing season in February. At this time the reservoirs are cleaned and the beds befitted and rammed quite hard. The element is first let into the reservoirs, where it is retained for acquiring saline properties and then into the beds, and after a week or eight days' solar evaporation the salt is formed. This is scraped when there is a little water over, *viz.*, two inches deep at Kalianakari, Vattanam and Soliakudi, and four inches deep in the rest. Care is also taken in removing the saturated puddle from time to time, for without such precautionary measures, the salt turned out becomes brownish. Of late a practice sprung up which I have put a stop to. The salt scraped is kept in the embankments, and instead of letting it there till dry, they brought it to the lower platform, and the salt being damp becomes discolored by the mixture of mud.

I think this was done to prevent theft from the embankments. The effect of Ram Row's order must be watched.

QUALITY OF THE ARTICLE.—12. The salt manufactured at Manakudi and Attankarai is good and white, while at the other pans, especially at Morkulam and Mutturegunathapatam, it is of inferior description, brownish in appearance and of small crystals.

13. This variety in quality is attributed to the local peculiarities of the soil; but, I should think, it is also owing to the mixture of mud and inattention on the part of the ryots in not taking the necessary precautions while scraping as mentioned in the preceding paragraph. At Morkulam, they say, it is the result of the beds being newly formed. The unusually large quantity (7,050 garces) fixed as dittam for the last year may have had something to do with the matter, as in exerting for the entire manufacture thereof the quality of the staple was a little lost sight of. But in future dealing somewhat more strictly with the ryots by rejecting all inferior salt without payment, I trust a considerable improvement may be effected in this respect.

The quality can be improved by the Deputy Collector moving about and watching during the manufacturing season.

THE PLATFORMS.—14. The Board in their Proceedings, dated 28th September, No. 4,444, refer to the special attention and report of the departmental Deputy Collectors, the "interesting" question of forming platforms of stone. The Government have already observed that "the mode is hardly practicable in the majority of the salt manufacturing localities." This impracticability is very aptly applicable to this district also. In all of our pans, the existing platforms of earth are sufficiently high for storage, economical and simple, and with trifling but timely repairs will quite answer our purpose. The grounds around them are not swampy or low. The change would only entail an unwarranted and a very considerable expenditure on the Government Revenue in these days of financial difficulties.

Stone platforms are not required in this district.

15. The present platforms have lately been under repair. Those at Attankarai, Soliakudi, and Vairavanathapatam have been almost completed. At Tirandadanam and Kalianakari they have been only raised, but not beaten down: nor are their sides sloped and turfed. At Vattanam the work is not finished but is progressing. At Tharakudi it is going on very slowly, while at Mutturegunathapatam, where there are about 1,000 garces stored on the ground, not at all. At Uppur the lower platform has been raised in front of the Kotar where it will be convenient for the merchants to halt in their carts. This was unnecessary, inasmuch as to the west of the Kotar there is natural high ground which would supply the place as well. At Morkulam there is no scaffold for the watcher, nor

The District Engineer has been requested to expedite these repairs.

hut for accommodating the Choukidar and his peons. These should be provided. In the other pans also where they exist, they are greatly in want of repair, and when the repairs are executed, which I request be done as early as practicable, the Kotars at Soliakudi and Attankarai should be erected to the west and north-west respectively of the platforms, as the paths leading to those existing are excavated and impassable for carts.

HEAPING.—16. The salt heaps are at present of semi-spherical shape. After the salt is heaped and beaten till united together, it is encased in a covering of clay, which is four inches in thickness. This mode is found generally to protect the salt from the action of the weather, except when the continual fall of rain would not allow of replastering them with earth. I have not to propose any changes for the future on this point.

This mode of covering answers very well in this district if the covering is attended to before and during the rains.

THE ROADS.—17. The pans are flanked all along by Road No. 8, whose utterly disgraceful condition I have already brought to your notice. It is in some parts nothing more than a mere track through heavy sand, intercepted here and there by unbridged streams. The northern pans are reached by three principal roads from the interior. The first commences in Coimbatore and passing by Dindigul, Nattam, Kanakudi and Kattivayal meets the coast road (No. 8,) at Narambal; the second line runs *viâ* Madura, Sivaganga, Kalaiyarkoil and Thiruvadanai to the coast; the third road also passes by Madura, but runs *viâ* Manamadura and Ramnad. The southern pans also are reached by this last line. The next important road is that passing by Theruchuli Kamudai, and which terminates at Sayalacudi, which is a good selling pan. The roads are generally in a very dilapidated condition (especially the second and third lines) which I think is the greatest and perhaps the only impediment to the extension of inland trade. It is absolutely necessary they should be put in a good state of repair.

The attention of the District Engineer has been called to the state of these roads, and copies of paragraphs 17, 18 and 19 furnished.

18. The branch roads leading to the Kotars of Kadukai and Morkulam are out of order and have not been included in the estimate sanctioned by Government, under date the 5th December last. I beg to recommend that steps be taken for their repair.

19. To the north of Titandadanam there runs a creek across the road, which is always full of water. On this account, and as there are pans close by attached to the Tanjore district, merchants do not resort to it from that direction. To reach the pan from the other sides there is only one way, *viz.*, Road No. 8, and in passing through it, Vattanam and Kalianakari have to be passed, and unless the sales at these two places are prevented no purchasers come to Titandadanam. To illustrate this, it will suffice to say that the salt manufactured in Fasli 1267 were selling till late. I therefore beg to propose re-opening a deserted road, communicating with Titandadanam from Nedumaram and Sanawaiyal in Anumanthakudi taluq of Ramnad district, and passing by the marginally noted villages. It may, I think, be rendered usable during dry season at an inconsiderable cost and in a short time; and to make use of it in rainy season also, two or three tunnels should be constructed and the top of the Kalingula of Orur tank covered with stones.

Panichakudi, Audavurani, Sithamangalum, Nilumalakimangalum, Puliur, Mandalukottai and Orur in Orur taluq of Ramnad, and Marungur in Teruvekampat taluq of Sevagungah.

20. In connection with this subject, I beg to suggest that all estimates for restoring salt roads sent to you for counter-signature be forwarded to me for information and such suggestions as the state of the roads may demand.

		RS.	A.	P.
Kudiwarum charges.		34,937	10	9
Salary	do.	12,126	8	11
Sundry	do.	847	15	3
		47,912	2	11

21. The average revenue of salt during the last five years, is Rupees 4,18,939-3-2 inclusive of Kudiwarum, &c. charges, amounting to Rupees 47,912-2-11, as per margin.

22. The dittam fixed for last year was 7,050 garces, almost all of which (exceeding that of the highest Fasli 1267 on record by about 4,093 garces) were stored. The quantity remaining on hand at the beginning of this year was 6,164 garces, and the quantity ordered to be manufactured

in it is 4,200 garces. The sales of the last year was 3,153 garces. The current year's dittam may be collected without difficulty, so that I have every hope of meeting the wishes of the Board and Government to have two years' supply on hand.

SPONTANEOUS SALT.—23. The principal sites in which salt is produced spontaneously are given below :—

1. Bampari Tharavai.
2. Palaiyar stream... ... Half mile from Valinokkum.
3. Sippiar..... Close to Morkulam.
   Mayakulum Tharavai. } 2 miles to the west of do.
   Do. pond.... }
4. Nakanathasamudrum ; Kalimankudi, Periapatam, Karani, Puthumadum mouth of the Vaighai and several other swampy patches lying detached in that strip of land, extending from about six miles to the east of Morkulum and four or five miles to the east of Attankarai to Mandapam.
5. Thevakili and Panchakili Tharavais in the island of Rameswarum.
6. Nayar three miles to the south of Vairavanathapatam.
7. Kottaikkaraias to the South of Manakudi ; Pichavas between Manakudi and Kadukai.

24. There are certain others which are, I understand, very small and where the produce is so scanty that it is not worth while to collect it. The spots are now covered with water and *may produce* salt this year. I say " may produce," because the production is uncertain, *i. e.*, not every year generally.

25. Spontaneous salt having scarcely been collected except at Rameswarum and there too not within the last 15 years, it is difficult to estimate with any approach to accuracy the probable yield. However, I do not think it will exceed 90 or 100 garces.

26. The largest of the spots mentioned above is the Bampari Tharavai, a plain of about 4 miles in length and 1½ miles in breadth, extending from Valinokkum to a little beyond Muttu-regunathapatam. Only four Cavilgars are allowed to guard it. Consi-dering the extent of the Tharavai or swamp itself, it is not difficult to conceive how inefficient this small guard will be in preventing the depredation committed upon the salt, as is the case here and in almost all the Tharavais. It may not be too much to say that the poor classes living in such neighbourhoods consume spontaneous salt alone, and the enquiries I made while on circuit to Rames-warum where some of the large Tharavais are situated, strengthen my belief. Only a few of the spots are in such reasonable prox-imity to the regular pans as to enable the Choukidars to extend their surveillance over them also. The rest are at present alto-gether unwatched. I think temporary guards should be appoint-ed to all the extensive spots, wherever salt is produced in them.

The bed of spontaneous salt in the Bampari Tharavai extends about four or five miles in length and half mile in breadth ; hitherto it was attempted to be watched by four se-poys whose services have been dis-continued ; in some places the salt may be one foot thick, it forms in large flakes and ought to be sold by weight as the expense of breaking it into small crystals for measuring would be very great ; the place where it forms is difficult of access for bandies.

The Tharavai is a sort of back-water—the salt only forms in very dry seasons and after it has formed one or two good showers destroys it again.

27. From the bed of stream near Morkulam, about 10 garces of spontaneous salt were col-lected and sold in September last. The salt was in large compact masses, the breaking and collecting of which cost the laborers greater pains than it would have been necessary had the salt to be merely scraped. The collection cost Rupees 5-11-0 per garce, but when the salt in the othe places is collected, I think the ryots of the adjacent villages may be induced to take up the work for a moderate compensation.

28, The salt referred to was better in quality than that produced in any of the artificia pans, and will be the more so if taken with proper care. On this point, I propose to report fur ther after another year's experience.

THE DUTIES OF THE RYOTS.—29. The works the manufacturers used from time immemorial to perform in addition to the manufacturing of salt, are enumerated below :—

1. They convey the salt from the beds to the platforms.
2. Measure it into store.
3. Plaster the heaps with clay.
4. Open the heaps for sale.
5. Measure all quantities sold.
6. Repair the plastering whenever it is washed away by rain.
7. Furnish parties to watch the platforms in addition to watching the pans.
8. Do. do. watch the treasure accumulating with the Choukidars.
9. Furnish parties to convey the treasure from salt Chouki to the treasury of the salt Amildar, involving distances varying from 6 to 36 miles.
10. Repair the hedge and ditch around the platforms.

For the past few months the ryots were relieved from Nos. 7 to 10. It has pleased you to recommend the abolition of the practice of requiring from them Nos. 3, 4 and 5 also (*Vide* para-graph 10, letter to Mr. Pelly, dated 16th August 1860.) All they have now to do are Nos. 1, 2 and 6. From paragraph 32 it will be observed that great facilities are afforded for frauds by the ryots performing the duty of measuring salt. Moreover, it is certainly not prudent to allow a ryot to measure his own salt, for even with the utmost possible experience it is impossible to make him measure properly.

Government will always be de-frauded till weighing is introduced.

THE KUDIWARUM.—30. The price the Government pay to the manufacturer for his salt is Rupees 11-2-0 $\frac{26}{100}$ per garce of 424 mercals or 120 Indian maunds, throughout all the pans. I am not disposed to recommend any increase of the Kudiwarum. You are aware the expense the manufacturer incurs in procuring implements and hiring out laborers does not exceed 19* Rupees for every 10 garce, which and no more a single individual is capable of storing in a year, of nine months during which only the manufacturing season lasts. The Kudiwarum for the same is Rupees 111-4-9 ; deducting therefrom the cost of Rupees 19, there remains Rupees 92-4-9, which I think is a profitable margin. This will be a little enhanced by the reliefs now afforded and recommended, for then he will have to procure only a less number of coolies than he did hitherto, and his expenses will thereby be curtailed.

* *Vide* Enclosure C.

EXPORT TRADE.—31. I am quite alive to the importance the Government and Board attach to an extension of export trade. No such trade has hitherto been pursued owing to the same price (Rupees 135 per garce) being fixed as for inland consumption. This is a great drawback to the carrying on of a trade by sea. This has come to light in the course of my enquiries on the subject of supplying salt to Canara. Scarcely any contractor offered himself without hesitation even for transporting the salt. I have endeavored to explain to the merchants how profitable the trade may prove to them. Attankarai and Vattanam are much suited for exporting purposes ; Titandadanam, Kalianakari, Manakudi and Valinokkam stand next. There are no roads from these platforms to the sea, nor would I recommend the opening of any till a trading propensity has manifested itself. Attankarai is three miles from the sea, while all the others only half a mile ; but the former has got a good anchorage.

32. MALPRACTICES.—I need not dilate upon the deeply rooted and well known system of frauds and peculations from which the salt revenue suffers. The chief part of the offenders consists of Government officials, and ryots also in some instances. The principal sources of illicit gains are two : first, the including of a larger quantity in the heap than what is brought to account and selling of the over-surplus at a reduced price to their own profit ; secondly, the levying of a fee from 1 to 4 Annas on every cart taking salt. The first of these items are effected by two means : first, by the instrumentality of the ryots who are, as I have already stated, most improperly allowed to measure

salt. The skill and dexterity these men display in measuring salt is extraordinary; by the way they plunge and shake the mercal, they can take in an excess of as much as 1 to every 10 garces, without awaking the slightest suspicion among unaccustomed and superficial observers; secondly, by a practice which is quite contrary to the Standing Orders of the Board and Government, but which appear never to have been known to be such in this district, *viz.*, that of measuring the mercal heaped. This, I understand, exists here from year to year with impunity. I have strictly forbidden its continuance. In order to show that I have endeavored and partly succeeded in putting a stop to this item of frauds, I herein enclose an Abstract (Enclosure D) showing the heaps sold from August 1860 to the end of last month, from which it will be perceived that *an increase of* G. 11, *M.* 113, *M.* 2,* *above the ayan salt, has been brought to account; whilst there was a decrease of as much as* G. 64, *M.* 55† *during the sales of the corresponding period of Fasli preceding.*

Orders have been sent to strike the mercal when receiving into store and when selling.

* Rupees.....	1,527	5	7
† Do.	8,657	4	5
	10,184	10	0

33. Scales are, I conceive, the only infallible means to prevent such illicit proceedings, and I would therefore strongly urge their early introduction.

34. Hitherto there was an unnecessary delay of three or even four days in the transmission of the returns from the Choukidars' to the Amildars' office, but in my late tour I have made an arrangement which I think might operate somewhat as a check upon commission of frauds. I have regulated the tappal which is being carried by the alavi or salt peons, in such a way that the daily transactions and reports of the previous day may reach the Amildar from all the pans by the evening of the next day.

35. I should not omit mentioning here that some salt is stolen away from the beds by the manufacturer himself with the connivance of the guards, who are merely nominal. Only three peons are allotted in each pan for watching purposes. At abont 10 P. M. on the 17th December last, Paikast Amin P. Rengaiyangar patroled the Kalianakari pan, and finding the two watch peons absent from the Kotar, came off with a mercal and some salt in it from one of the heaps. On enquiry the peons pleaded they had gone for meals, and were suspended three months each.

36. I hear a handsome quantity of earth-salt manufactured in the Puducotta state finds its way into the Government territories. The people living in the neighbourhood of that little principality, take that salt on account of the cheapness and facility of the supply, notwithstanding its unwholesomeness. No check is put on smuggling. It is true if earth-salt be found out of Puducotta limits the possessor is punishable. Scarcely such a contingency occurs. I think guards should be provided on our frontiers for this special purpose, and that some limit should be fixed to the manufacture at Puducotta to prevent the production of more than what is necessary for Home consumption, which excess manufacture alone could be the source of illicit trade.

The earth-salt is only bought by the poorest classes.

ESTABLISHMENT.—37. Having been favored for perusal and return with copy of your letter* to Mr. Pelly on the remodelling of the salt establishment, I conceive it my humble duty to state that the arrangement of the pans into "divisions" and "stations," the scale of establishment proposed for each, the opening of a tappal line along the coast, and the several other propositions excepting the closing of the Tharakudi pan therein advocated, have my entire and unqualified concurrence. I see no necessity for abolishing Tharakudi pan; it is true the heds there are overflowed by freshes in the Vaipar stream passing by, but by raising an embankment, I think they will be quite protected.

* Dated 16th August 1860.

38. The bringing to account of the spontaneous salt is now settled. The collection and storage of that produced in places adjacent to the Mutturegunathapatam division may be safely left to the Amildar, who will have sufficient hands for the discharge of the duty in the persons of his station Amin. When the salt in the Tharavais or swamps at Rameswarum is collected the quantity may be somewhat considerable. This has hitherto been destroyed under the supervision of the Sea Custom Choukidar of Pamban. It would not do to entrust the work of collection to him. He cannot be expected to devote that amount of vigilance and time which the duty would require, burdened as he is with the powers of the head of police of the island in addition to his Custom duties. About the divisions of Morkulam and Attankarai the patches producing salt spontaneously are numerous. Now that the Paikast Aminships are to be dispensed with, I would recommend a Peshkar or Amin on a monthly salary of Rupees 25 be appointed to superintend the collecting and storing of salt in the Tharavais at Rameswarum, and the patches adjoining Morkulam and Attankarai divisions. When his services may not be required there, he may be made available to move about such other places and do other casual duties.

The establishments can do this; the Deputy Collector himself should move about.

39. In paragraph 40 of your letter to Mr. Pelly referred to before, it is proposed that after the abolition of the Amildars' office, two treasuries should be established: one at Tondi Sea Custom office to receive the remittances from all the pans between Titandadanam and Vairavanathapatam, and another at Kilakarai Custom office to receive money from the other pans. At present the large revenue of Rs. 4,18,939-2-11 passes through the Amildar's treasury and no less than 10,000 Rupees on an average are monthly disbursed there in making payments to the Public Works, Telegraph and Marine Departments, the Deputy Collectors and their establishments. It is therefore necessary to provide additional hands to the Choukidars of the two ports to aid them in the due performance of the duties now proposed to be transferred them. A Gumastah, Shroff, Golla and four peons will, I consider, be an ample establishment for each of the ports.

40. The third point I would beg to solicit your attention to is this—In paragraph 44 of the communication referred to, it is stated that the Amildars should send up their daily transactions to me, that I should combine and send them up in such a form as to enable the Collector to revise the salt transactions, and prepare the accounts to be sent to the presidency authorities. You are aware, I have to move continually, and that I have also the charge of the Sea Customs. I am therefore humbly of opinion that my being entrusted with the preparation of the accounts even to the extent mentioned by you, and which is exactly what the Amildar now does with his pretty large establishment, will involve in the punctual transmission of accounts great delay, which might be obviated were the accounts to be sent by the Amildars direct to the Huzur, where I believe sufficient establishment is provided for revising them. Notwithstanding this, if it is resolved that the accounts should pass through my office, I would respectfully solicit an augmentation of my present establishment by three hands, *viz.*, one Gumastah, and two Assistant Gumastahs.

The subject of this paragraph is under the consideration of Mr. Pelly and Government.

41. I would take the liberty of bringing one more subject to your favorable consideration. The manufacturers of salt live in villages close to the pans and these are under the Magisterial jurisdiction of the Sub-Magistrates of Muthukulathur, Ramnad and Tiruvadanai. Some of the villages are situated at some distances from these stations. For instance, Tharakudi, Mukkaiyur and Mutturegunathapatam are about 24, 16 and 10 miles respectively from Muthukulathur; Titandadanam 13 miles from Tiruvadanai. I have known several instances of the salt ryots being called away, or absent themselves under the pretence of being called away from the scene of their operations for several days together, either as witnesses or parties in police cases pending before the above-mentioned Sub-Magistrates. This great inconvenience has been felt especially during the manufacturing season, and to obviate which I beg to submit that the Amildars to be appointed, be, as was the case some time ago, vested with the Magisterial jurisdiction of the villages in which their ryots live, and that I as a Deputy Magistrate moving continually about, can exercise a greater control over the proceedings of the Sub-Magistrates than a stationary Deputy Magistrate can do. This measure, I am sure, will prove a great blessing to the ryot and is one well calculated to better the security of the Government salt. It will at the same time afford me some additional work to employ my leisure hours more profitably to myself and Government.

I am of opinion the Amildars should not have Magisterial power over the ryots. The Deputy Collector has plenty to do in getting the beds into compact masses, carrying out the suggestion made by himself, looking after manufactures, putting a stop to frauds, collecting spontaneous salt, &c., and putting the accounts in proper order and according to the forms in Manual.

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ENC. 2, A.

ABSTRACT.—Memorandum showing the result of the examination by the Deputy Collector of the heaps in the pans of the Madura district, February 1861.

—

ENC. 3, B.

ABSTRACT.—Statement showing the extent of lands under cultivation in the salt pans of the Madura district.

—

ENC. 4, C.

ABSTRACT.—Estimate of cost for manufacturing 10 garces of salt at the pans in the Madura district.

—

ENC. 5, D.

ABSTRACT.—Statement showing the increase and decrease in the sales from August 1860 to the end of January 1861, in the pans of the Madura district.

———

Exd. J. Tulloch.

No 1756 Revenue Dept

Proceedings of the Madras Government

Under date the 2d Sept Number 1861 Read the following Proceedings of the Board of Revenue. Here enter 22d July 1861 No 3913

Submitting with observations letter from the Collector of Madura forwarding his Deputy Collector's report on the salt Establishments of the district.

With these proceedings the Bd of Rev submit the report of the Dept Collr of the Salt Dept in the Madura District. The Collr remarks are entered in the margin of the report.

2 There is little calling for notice from first, most of the report being taken up with ordinary routine matters, & the Bd Rev. marks being of a general character.

3 The number of grams in the district is 14 or about one to every six miles of Coast. This, on the Bd Rev. remark, seems an

1861. Depatch

Enclosure in Proceedings of the Board of Revenue to the Secretary to Govt. No. 1756. dated 22d July 1861. No 3913.

Encl 4 & 2 Encl

Rec'd 1834/61

Letter from the Collector of Madura to the Board of Revenue dated 7th March 1861. No 81. regarding Salt Cases.

Read 1st time
3 Sept/61
No 23-24

un-
-necessarily large
quantity. It is also
clear from para 3
of this pass: that they
they intend to leave
the reduction of the
pans to the local
officers - This, however
is manifestly a
matter which they
should themselves
~~dispute~~ consider and not
wait for the orders
of Govt.

4 The quality of the
salt generally made in
the Madura Dist.
is said to be generally
inferior - This may
be owing in some de-
-gree to the unusually
large manufacture
which took place

~~in order~~ to replenish
the scanty stock in
store - but partly
carelessness in the
process of manu-
facture, & the use of
wells
water from ~~springs~~
sunk in the sand
~~are~~ the chief cause.
It is intended for
the Govt. or the Bd to
deal with this sub-
ject effectually -
The Collr should
have fair samples
of the salt received
into store to look to
grain by the Govt
Collr, and all the
inferior quality
should be steadily
rejected - The pans
are said to sell for
from 400 to 1200 Rs
per acre - and, if

Thus he concludes, they constitute a valuable property & there ought (therefore) & he &c &c. Station in depicting Salt

The practice of allowing the Salt Dept & execute petty repairs & the Salt works which he considered with Mr Clarkes report.

The Deputy Collr. proposes a most economical report of the Salt works in Madura - The Chief Engr. gives me. distinct attention should be called & the subject he requested

yes Sir

7. & states, they with the Collr. P. W. Es. to this moment Kept up in Madura The roads have been & repaired

Spontaneous Salt is largely produced in Madura & it is essential that measures should be adopted to foster it on account of profit. Wherefore this can be profitably effected - and also where to destroy it. The Revenue Police can scarcely be expected to watch the Swamps where this kind of salt is produced, & temporary guards must

be applied for
by the Coll.r & Lem-
mer they are required.
In Madura the cost
of collecting this
kind of salt is
less than 6 Rs - while
~~the~~ the "Kundivaram"
alone at the regular
Parus is a little above
11 Rs per parus. There
is, therefore, an ample
margin of profit on
Spontaneous salt -
The collection of this
salt by contract
might be tried in
some localities. It might
be desirable to keep
a Store of Salt, &
Sell at a convenient
spot on the nearest
line of traffic ~~might~~
~~be found~~ - & as &

save the cost of trans-
port - This would in
fact be a removal
that is now an ex-
ternal into a
regular source of
supply. The Govt will
take steps to consi-
deration, & arrange accordingly
with the Coll.r when
more definite proposals
should be submitted
from persons fit &
duly qualified by
-sessions will lead
to practical
results. This kind of
salt has
been shown by che-
mical analysis to
be perfectly whole-
some, & its large
crystals being large
it is well adapted
for Inland trade.

The Extra duties
on brick in Madura
& in other districts
devolve on the Collr.

- factures, must
be considered in
connection with the
Kindred arrangement, which
has, of course, been
regulated with re-
ference to these in-
-cidental labours -
The manufacturers
& certainly do
not like the meddling
of salt into stone their interests being antagonistic
to others duty
and the furnishing
of the stone should also
be given up. But
for the many mis-
-cellaneous duties
customarily
connected with
the harbour, such as
covering the heads,
repairing the blocks
fences
-fences &c. &c.
ought to be required
of them until the

3/ General question of
Stone Communication
has been decided.
In many places the
manufacturers
completely monopolise
the labour of the lo-
-cality and the ques-
tion will resolve itself
into that of paying
them extra for the work
done to them thus
relieving them burdens.
Interests of the
Negotiation of Duty &c.

9 The cinder taken
of Earth Salt from
Portsoken that has al-
ready been detached by
the Dept of the Admty
and Stores which has
been reserved for the
Depot of the Coy of
Gunners.

This is often the case - &
Mr Polley in his general
report did not see it

The first look to the personal exertions of Officers for the suppression of the Illicit-practices of their Districts, visit them frequently and unexpectedly, as the Board justly remark, all proved derelictions from duty & in future should be visited with Exemplary punishment. Such practices as the systematic levy of a cess on traders, and Executive Officers of Revenue detected & made, as the Board justly remark, all proved derelictions from duty & in future should be visited with Exemplary punishment. Such practices as the systematic levy of a cess on traders, and Executive Officers of Revenue

carried on with impunity, with an active & intelligent Deputy Coll^r in the charge of the Dist^t.

There is no necessity for the Collr's accounts & proofs being sent to the Board, when they could be more correctly examined in the Collr's office, but the Collr should transmit a Statement of the original accounts received, and certify that they are duly passed by the Dep^y and the receipts & disbursements must have an abstract of the Journal of the Collr. The Board should ascertain from this Statement that accounts of the Salt Departments

Madura Salt

necessarily recurs in the different districts and presents definite rules on the subject, as it is essential that these officers should strictly check this as well as every other branch of the duty.

2. The first line alludes to by which it is proposed to appoint Revenue officers in the petition of Rao Bahadur the Salt Dept. who would there by be Judges in this case in which they have a personal interest.

S. D.
14 Civil & Rev
Civil

3 aug 60 No 24

Revenue 1861 Depart.
Pro: of Govt for September.

No 1756.

Pro: of the Madras Govt.
September 1861

From B of Revd 21 Febuary 62
Ex 622 3 April 62 a No 1742

Pro. Madras Govt in the
Rev Dept 16 Oct 62 Lett 2807
a Pro.

Boards Proceedings
forwarding a report from the
Deputy Collector of Madura
on the Salt Departt of the
District, with orders thereon-

No 23 & 24-