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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

REVENUE DEPARTMENT

G.O. No.
S.P. No.

984

Press.
Mis.

Dated

28-6-1978

107

Not to be folded or roughly handled

GOVERNMENT OF MADRAS.
REVENUE DEPARTMENT.

23th June 1878, No. 984.

Read the following paper:—

No. 342. From C. J. LYALL, Esq., Under Secretary to the Government of India, Department of Revenue, Agriculture, and Commerce, (Fisheries,) to C. G. MASTER, Esq., Secretary to the Government of Madras, Revenue Department, dated Simla, 15th June 1878, No. 13.

In compliance with the request contained in your letter, No. 813, dated the 29th ultimo, I am directed to forward No. 3,033, dated the 20th November 1877. copy of a communication from the Government of Bengal and enclosures regarding experimental bonded salting enclosures for fish-curing operations in Goalundo.

ENCLOSURE No. 1.

From W. H. GRIMLEY, Esq., Officiating Secretary to the Board of Revenue, L. P., to the Secretary to the Government of Bengal, Revenue Department, dated Fort William, 31st October 1877, No. 732-B.

With reference to G.O., No. 1,663, dated 14th June last, I am directed to submit, for the information of Government, copy of Memorandum, No. 565, dated 27th August 1877, and of its enclosures, from the Commissioner of Dacca, reporting on the experiment of curing fish with salt, under a drawback of Rs. 2-12-0 a maund, within an enclosed space at Goalundo.

2. The report of the sub-divisional officer Mr. Posford is clear and complete; and the Board are of opinion that the success which has so far attended the experiment of curing fish at Goalundo reflects considerable credit on that officer. The thanks of the Board have been communicated to him through the Commissioner.

3. The proposal to increase the pay of the darogah from Rs. 10* to Rs. 20 per month has the approval of the Board, in consideration of the nature of the duties which the darogah is required to perform; and they accordingly recommended it, as well as the continuance of the experiment at Goalundo for another year, for the sanction of Government. The existing preventive establishment is noted on the margin, and is paid by the contractors engaged in curing the fish. The addition to the salary of the darogah now proposed will also be paid by the contractors.

Allowance to excise darogah for general	Rs.
superintendence	10 a month.
4 peons, at Rs. 6 each	24 ..
Total	34

4. Upon receipt of Mr. Posford's report under notice, the Board instituted an inquiry through the Health Officer of Calcutta with a view to ascertain if the fish as cured under the experimental system and imported into Calcutta is superior to similar fish cured in the ordinary native method with salt for which full duty is paid. In the report received from Dr. Payne, the following remarks occur:

* No. 1,014, dated 15th September 1877.
"The quality of the salted hilsa fish imported from Goalundo during the present season and sold in the Calcutta markets has been found, on examination, to be far superior to that of former imports from the same place. In fact, the imports during the last season were also of the same superior quality. The fish is more firm without that disagreeable and ammoniacal smell which was the result of the curing by the old process. The public much prefer the hilsa fish cured under the new method, as evidenced by the fact that large quantities are bought up for the purpose of being pickled, i.e. made into 'tamarind fish.'"

ENCLOSURE No. 2.

Memorandum by F. B. PEACOCK, Esq., Officiating Commissioner of the Dacca Division,
dated Dacca, 27th August 1877, No. 565.

Copy submitted to the Board of Revenue, with reference to their letter

No. 51-B, dated 22nd May 1877.
 " 74-B, " 26th June "
 " 97-B, " 21st August "

No. 51-B, dated 22nd May 1877.
 " 74-B, " 26th June "
 " 97-B, " 21st August "

been a decided success, and I would recommend its being continued certainly for another year at all events, by which time the industry will probably be well established. It seems likely, too, that as the fish cured in the enclosure receives more salt than that cured privately outside, and consequently keeps good longer, the former will gradually supplant the latter in the market. Should this be the case, it will probably enable us to reduce the amount of the drawback now allowed on the salt used. I endorse the recommendation made by the local officers that the darogah's pay should be raised from Rs. 10 to Rs. 20 a-month, the increase being paid by the contractor.

ENCLOSURE No. 3.

so that the salters, and through them the consumers, appear to have derived a fair proportion of the benefit from the reduction.

5. Assuming that no more fish is salted during the season, the contractors will, according to Mr. Posford's calculation, have obtained a gross profit of about Rs. 2,500 on the 2,572 maunds of salt sold, and after deducting Rs. 1,000 in round numbers for cost of construction of godowns, preventive establishment, &c., the net profit would be about Rs. 1,500. The darogah in charge of the godowns has frequently very arduous as well as rather unpleasant duties to perform, and I agree with Mr. Posford in thinking that if the experiment is continued next year, as I presume it will be, the contractors should be required to provide the pay of the darogah at the rate of Rs. 20 per mensem.

ENCLOSURE No. 4.

From J. POSFORD, Esq., Deputy Collector of Goalundo, to the Collector of Furreedpore,
dated Goalundo, 15th August 1877, No. 98.

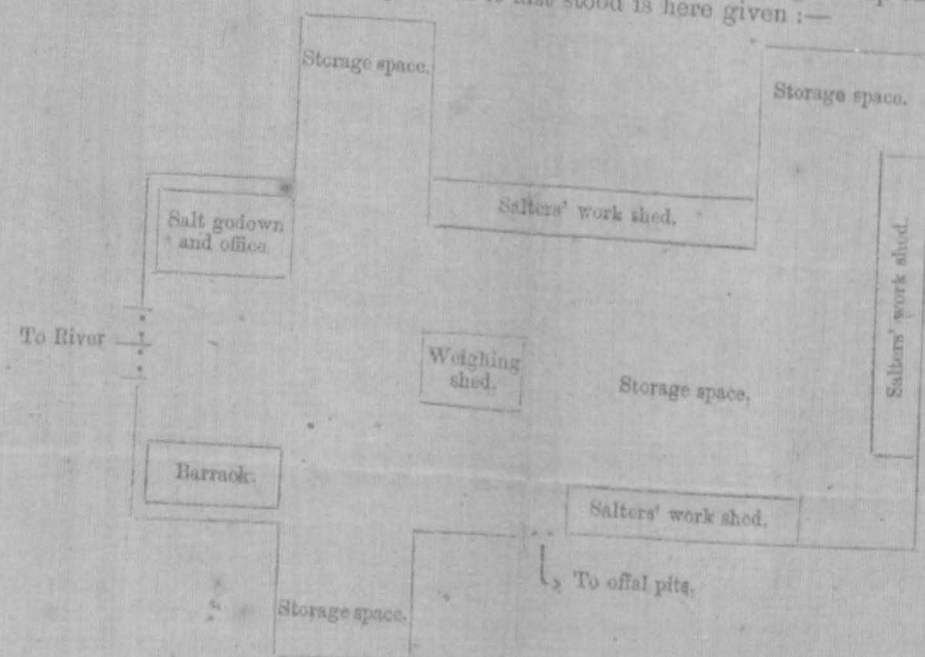
I HAVE the honor to submit a report* on the working of the bonded enclosure for curing fish at Goalundo for the present season. No final report appears to have been submitted for last year, and an opportunity is thus given for comparing the results of the past three years during which the salting has been open :—

* Required by Government of India, No. 4, of 7th June 1877, to Bengal Government.

From 1st June to 19th August 1875	...	...	About 2½ months.
" 1st April to 10th August 1876	...	...	" 4½ "
" 7th April to 30th September 1877	...	...	" 6 " (will be).

unsatisfactory, especially if the drawback were allowed at the place of purchase. The salt might be sold at Nulchitty and the boat sent off any where, while we might be told it had sunk in a storm. By the present arrangement an account is kept by the darogah of the salt issued. The peons see that none is carried out of the enclosure. The full duty is paid for all salt brought in, and a bill is sent up every month for the drawback of Rs. 2-12-0 a maund. It is returned after being passed by the Commissioner, and the contractors draw the amount from the sub-treasury here.

8. *Enclosure.*—The enclosure has of necessity to be somewhere near the river. The gateway faces the river, and near it within the fence are the barrack and salt godown. The enclosure is about 80 feet wide, but in length it varies according to the number of salters to be accommodated. Wings had to be thrown out this year in which to put storage jars. The salting sheds form the greater part of the other three sides of the place. In the centre is a shed in which the fish and salt are weighed. Room has also to be found for the large earthen jars in which the cured fish is stored before being packed away for export. During the past month the buildings had to be pulled down, but they are now being set up further away from the river. A rough plan of the place as it last stood is here given:—



The refuse of the fish is taken out by a side gate and buried in pits dug close by. Pains are taken to keep the place clean and free from effluvia, but after one or two busy days and nights some stench is at times unavoidable. During this season the practice has been to continually sweep out the place and throw down sand brought from the chur near by.

Altogether 27 salters use the salting, but they are never all at work on the same day.

9. *Salters.*—The greatest number of salters who cured fish in the enclosure in any one day was:—

In 1875 ...	...	...	...	11 men on 21st July.
In 1876 ...	...	...	...	19 „ on 13th June.
In 1877 ...	...	...	...	22 „ on 15th „

It was not always that so many were at work. Sometimes no work would be done, sometimes only one or two men would bring in fish. During the latter part of June last, however, the work was heavy, and the number of salters curing fish was some 15 to 20 a day. Some of these men employ several workmen to assist them.

10. *Fish.*—The only fish cured is the hilsa. I am told that other sorts do not take the salt well, and even if salted do not keep. The following table will show the fish cured month by month, and indicate the uncertainty of the coming of the shoals:—

	1875.	1876.	1877.
	Mds. S. C.	Mds. S. C.	Mds. S. C.
April ...	...	629 12 12	...
May ...	...	1,660 17 0	2,285 27 12
June ...	593 10 0	2,521 33 4	8,235 36 0
July ...	769 18 6	23 17 0	279 16 0

These figures represent cured fish. The actual weight of the fresh fish would be about one-fourth more. Since the 3rd July no work has been done, but it is expected there will be another haul during this month or the next. The greatest amount of fish brought into the

salting in a single day this season was 787½ maunds on the 27th June. The next largest amount was on the 9th June, 482½ maunds. These numbers show a vast increase on the work of 1876, when the largest amount was 315½ maunds on June 13th, and still more on that of 1875, when the biggest day's work was 71½ maunds on the 10th July.

11. On inquiry I find that nearly all the fish cured in the bonded enclosure is sent away by rail to Calcutta, or at any rate down the Eastern Bengal Railway line. A good deal is said to go to Mughah in Hooghly, and to be taken thence by *baparies*. It also finds its way into bazaars in Jessore and Nuddea. I find, on reference to the Eastern Bengal Railway authorities, that since the beginning of May up to the end of July nearly 24,000 maunds* of salted fish have been taken by rail from Goalundo, but in this is included the amount sent off by independent salters. These men still continue their work, using less salt than those in the enclosure, with the result that their fish does not keep good so long.

12. The system of weighing the fish has been described above. Experiment has shown that in reality seven and a-half seers of salt may be made to do for a maund of fish, and that the wastage of fish in curing is nine and one-third seers per maund. I have therefore directed that in future the fish should be weighed as it is brought into the enclosure, and that eight seers of salt should be issued for each maund of fresh fish. The odd half seer will go in wastage. Possibly nine seers will be found necessary. Hitherto the quantity used has generally been from nine to ten seers a maund.

13. The system of curing the fish is simple enough. The salters and their men work in groups of three. One man scrapes and cleans the fish, another cuts it into slices, and the third rubs the slices in salt. The cured fish is then packed away in large jars that hold eight or ten maunds each. When sent off by rail it is taken from these jars and packed in mat baskets that hold a maund of fifty seers each. Sometimes the fish is cut into slices, sometimes all but sliced through, so as to leave intact the back of each fish. When the fish is altogether cut up into slices rather more salt is used than when it is only partially divided.

13a. *Checks.*—The darogah in charge of the enclosure is also excise mohurrir in this sub-division, and furnishes a security of Rs. 500. There are also the peons to see that salt is not taken away from the enclosure. Without downright connivance on the part of the darogah and peons, it does not appear possible to smuggle out any salt except in very small and dirty quantities, not worth the while of dishonest parties taking trouble about. The salt godown is furnished with double locks, so that no salt can be removed without the knowledge of both the manager and darogah. The weighing of the fresh fish and the issue of salt at the rate of eight seers a maund will be an additional check, and will perhaps induce salters to be more careful with the salt. I have been at various times in the salting, and after seeing the work going on am by no means surprised at the amount of salt used. On the 9th July, on counting over the full jars, I estimated that there must be something like 100 tons of cured fish in stock—an unusually large amount, but just then there was great pressure in the rice trade, and salters had a difficulty in getting waggons to send away their fish.

14. This leads to a remark on the business done by individual salters. Some do more and some less. Gogan Nikari and his partners, for instance, aided by their workmen, could cure fish enough to charter a railway goods van for a single consignment, some 200 maunds. Others, I find, on the busiest day cured 190 maunds, 124 maunds, 114 maunds, respectively. Other salters who cure as much or more than Gogan aforesaid are Jakki and Hakim Nikaris, Asimuddin, and Shorup Nikaris, and others. I am told that the salted fish realises in Calcutta Rs. 4 or 5 a maund.

15. A brief account of the salting from the time it was first set up may not be out of place. On the recommendation of the Board of Revenue* Goalundo was selected among other places as one of the sites for the experiment of curing fish with salt. Some difficulty was met in finding parties ready to supply the salt and set up the houses wanted. This was overcome, but the parties (the present contractors) declined to bear the cost of the preventive establishment. The Bengal Govern-

ment† met this by sanctioning the cost of the darogah and peons, Rs. 34 a month for six months. The buildings were accordingly set up, and work began on the 2nd June 1875. Owing to the encroachments of the river work was stopped, and the buildings were pulled down in the latter part of August following. The salting was in a convenient place, close beside the railway line on raised ground. The Company's officers kindly brought round a lot of ashes and engine refuse which proved very useful in keeping the place clean and free from effluvia. Reports were submitted from time to time on the work, and, as above shown, some 1,360 maunds of fish were cured and Rs. 900 refunded to the contractors by way of drawback

* Board's No. 239.B of the 24th April 1874, to Bengal Government.

† No. 671 of 16th March 1875, to Board.

of duty. A final report was submitted in September 1875. The Board considered the experiment likely to prove a success, and the Bengal Government sanctioned the establishment being kept up till September 1876. Scales and weights were furnished by the Board in December of that year.

16. The salting was again set up and opened on the 1st April 1876, close by the railway line, and engine refuse was used with the same effect as before. Much more fish was cured, viz., 4,835 maunds, and more than Rs. 3,300 was refunded as drawback of duty on salt. For the time the salting was open the average amount of fish cured in each month was about 1,070 maunds, as against about 545 maunds of the previous year. The enclosure site was washed away in the middle of August, and the work was accordingly closed for the season. The Commissioner then directed that the contractors should be asked to defray the cost of the darogah and peons, which they agreed to do.

17. In February last the requisite sum Rs. 204 was advanced by the contractors. The buildings were set up on the outer chur, on the bank of the Pudda, early in April, but work did not begin till the 2nd May, the shoals of hilsa not having come about till then. Work has gone on rather by fits and starts. Very little or nothing would be done sometimes for days, and then for a time work would go on night and day. Nothing has been done since the 3rd July, but more than 10,800 maunds of fish has been cured this season, and more than Rs. 7,000 refunded as drawback of duty. The average amount of fish cured in the four months ending 7th July amounts to 2,700 maunds a month. As above noted, another rush of work is expected before the season closes. Owing to the rise of the river the buildings have had to be removed. They have been all but completely set up again on higher ground midway between the present bazaar and the new river-side railway station.

18. *Success or non-success of the experiment.*—It is not for me to decide whether the use of salt in curing fish has proved a success or otherwise, but the following facts may be of some use in coming to a conclusion. Besides the salters who use the bonded enclosure, there are a number of others who have cured fish at Goalundo for many years. They have never used the Government salting, and I can never get out of them any particular reason why they do not. They use only about five or six seers a maund in curing their fish, which does not keep good so long as that cured in the bonded enclosure. They send fish away by boat to places in Pubna, Bogra, Mymensing, Dacca, Tipperah, as well as by rail to Calcutta and Hooghly. Perhaps it is that they are connected with the people in those districts, and prefer to come here in the season and set up their huts and work without any supervision as to issue and use of salt. I do not see that their number is on the increase or decrease. In spite of their work, however, the average amount of fish cured in each month in the bonded enclosure has risen from 545 maunds to 2,700 maunds during three seasons. Should the salters be disappointed about another haul of fish this year and no more work be done, still the increase of the present season will be great, and the average will be 1,800 maunds a month for six months.

19. The duty paid on the salt used under Government auspices is eight annas a maund after the drawback has been refunded. More than 2,500 maunds of salt has been used, and this would represent Rs. 1,250 of duty. It is a question whether this 2,500 maunds would have been used were it not for this salting, or whether it would be worth while to keep it in bond on the chance of getting Rs. 3-4-0 a maund duty at some time or other. Here it is natural enough to observe that a lot of independent men use salt that pays full duty, cure a lot of fish, and decline to join the Government salting, where they might get their salt at about half price. The question might, therefore, be asked, why the Government salting should be kept up.

20. Still the increase in the work of the salting is very large. Including the salt used, something like 480 tons of preserved provisions have been sent away to various places where people do not readily get fish. The cured hilsa is not very tempting stuff to look at or smell of, and curiosity has not yet led me to taste it. But buyers are found, and it is no doubt valuable as a condiment, even though it may not be so much devoured as fresh fish. Rotten fish is, I believe, about as bad as poison. The hilsa cured in the salting remains good for months, and there can be little doubt that had not the 10,000 odd maunds of this season been cured and preserved, it must most of it have been wasted.

21. In conclusion, I beg to bring to your notice the good service done by the darogah Madan Mohan Bhattacharjya. In the event of the salting being kept up, I hope you will be able to recommend additional remuneration for him of Rs. 10 a month for five months of the season, from May to September. When work is heavy he has to be up night and day, and to weigh salt and fish amid an abominable stench of fishy blood and filth. The contractors, I am sure, make profit enough not to mind the additional expense of Rs. 50.

No. 3,033.

COPY, with copies of the enclosures, submitted to the Government of India in the Department of Revenue, Agriculture, and Commerce, for information, with reference to Mr. Lyall's letter, No. 4, dated 7th June 1877, with the remark that the Lieutenant-Governor concurs in the commendation bestowed on Mr. Posford by the Board of Revenue, and considers that the degree of success which has attended the experiment was mainly due to the excellent arrangements made by him.

By order of the Lieutenant-Governor of Bengal,

H. J. REYNOLDS,

Secretary to the Government of Bengal.

CALCUTTA,
REVENUE DEPT. (MIS. REVENUE),
20th November 1877.

No. 343.

ORDER THEREON, 28th June 1878, No. 984.

Separate Revenue, No. 36.

Salt.

COMMUNICATED to the Board of
Revenue in continuation of G.O., 29th
May 1878, No. 812.

(True Extract.)

(Signed) C. G. MASTER,
Secretary to Government.

To the Board of Revenue.
„ the Commissioner of Salt Revenue.

Exd. C. Howarth.

Department of Public Health, Calcutta.
For the purpose of curing fish at Goalundo, the Government of Bengal is forwarding papers from the Government of Bengal regarding—

No. 842-843.

G.O. No. 1014, dated 15th September 1877.

Recd.

Dated June 28th.

THE BOARD OF REVENUE.

Secy. Secy. Secy.

REVENUE.

Boat of (1878) Goalundo

No. 732B., dated Fort William, the 31st October 1877.

From—W. H. GRIMLEY, Esq., Offg. Secretary to the Board of Revenue, L. P.,
To—The Secretary to the Government of Bengal, Revenue Department.

With reference to Government order No. 1663, dated 14th June last, I am directed to submit, for the information of Government, copy of memorandum No. 565, dated 27th August 1877, and of its enclosures, from the Commissioner of Dacca, reporting on the experiment of curing fish with salt, under a drawback of Rs. 2-12 a maund, within an enclosed space at Goalundo.

2. The report of the Sub-divisional Officer, Mr. Posford, is clear and complete; and the Board are of opinion that the success which has so far attended the experiment of curing fish at Goalundo reflects considerable credit on that officer. The thanks of the Board have been communicated to him through the Commissioner.

3. The proposal to increase the pay of the darogah from Rs. 10* to Rs. 20 per month has the approval of the Board, in consideration of the nature of the duties which the darogah is required to perform; and they accordingly recommended it, as well as the continuance of the experiment at Goalundo for another year, for the sanction of Government.

	Rs.
Allowance to excise darogah for general superintendence ...	10 a month.
4 peons at Rs. 5 each	24 "
Total	34

The existing preventive establishment is noted on the margin, and is paid by the contractors engaged in curing the fish. The addition to the salary of the darogah now proposed will also be paid by the contractors.

4. Upon receipt of Mr. Posford's report under notice, the Board instituted an inquiry through the Health Officer of Calcutta with a view to ascertain if the fish as cured under the experimental system and imported into Calcutta is superior to similar fish cured in the ordinary native method, with salt for which full duty is paid. In the report* received from

Dr. Payne, the following remarks occur: "The quality of the salted hilsa fish imported from Goalundo during the present season and sold in the Calcutta markets has been found, on examination, to be far superior to that of former imports from the same place. In fact, the imports during the last season were also of the same superior quality. The fish is more firm, without that disagreeable and ammoniacal smell which was the result of the curing by the old process. The public much prefer the hilsa fish cured under the new method, as evidenced by the fact that large quantities are bought up for the purpose of being pickled, i.e. made into 'tamarind fish.'"

No. 565, dated Dacca, the 27th August 1877.

Memo. by—F. B. PEACOCK, Esq., Offg. Commissioner of the Dacca Division.

Copy submitted to the Board of Revenue, with reference to their letters noted on the

margin. Mr. Posford has submitted so very full and exhaustive a report on the whole subject, that he has left me little or nothing to say. The experiment has, in my opinion, been a decided success, and I would recommend its being continued certainly for another year at all events, by which time the industry will probably be well established. It seems likely, too, that as the fish cured in the enclosure receives more salt than that cured privately outside and consequently keeps good longer, the former will gradually supplant the latter in the market. Should this be the case, it will probably enable us to reduce the amount of the drawback now allowed on the salt used. I endorse the recommendation made by the local officers, that the darogah's pay should be raised from Rs. 10 to Rs. 20 a month, the increase being paid by the contractor.

No. 481, dated Furreedpore, the 21st August 1877.

From—C. C. QUINN, Esq., Offg. Collector of Furreedpore,
To—The Commissioner of the Dacca Division.

With reference to your letter No. 206, dated 31st May last, I have the honor to forward a very full and interesting report from Mr. Posford on the curing of hilsa fish at Goalundo.

2. The experiment appears to have proved entirely successful, if success is to be measured by the amount of business done. The present season is not yet over, and another haul of fish is expected before operations are brought to a close; the figures are therefore incomplete, but they nevertheless show an increase in fish cured from 4,835 maunds last year to 10,800 maunds this year; the corresponding increase of salt used in the process being from 1,208 maunds to 2,572 maunds.

3. This year also the whole cost of the establishment was defrayed by the contractors, who provided the godowns and office accommodation as well.

4. It appears from Mr. Posford's calculation that the duty refunded was divided thus between the contractor and salters:—

					Rs.	A.	P.
Contractor ...	...	...	...	...	1	2	9
Salterns ...	...	...	...	...	1	9	3
Total duty refunded ...					2	12	0

so that the salters, and through them the consumers, appear to have derived a fair proportion of the benefit from the reduction.

5. Assuming that no more fish is salted during the season, the contractors will, according to Mr. Posford's calculation, have obtained a gross profit of about Rs. 2,500 on the 2,572 maunds of salt sold and after deducting Rs. 1,000 in round numbers for cost of construction of godowns, preventive establishment, &c., the net profit would be about Rs. 1,500. The darogah in charge of the godowns has frequently very arduous, as well as rather unpleasant duties to perform, and I agree with Mr. Posford in thinking that if the experiment is continued next year, as I presume it will be, the contractors should be required to provide the pay of the darogah at the rate of Rs. 20 per mensem.

No. 98, dated Goalundo, 15th August 1877.

From—J. POSFORD, Esq., Deputy Collector of Goalundo,
To—The Collector of Furreredpore.

I HAVE the honor to submit a report* on the working of the bonded enclosure for curing fish at Goalundo for the present season. No final report appears to have been submitted for last year, and an opportunity is thus given for comparing the results of the past three years during which the salting has been open:—

From 1st June to 19th August 1875	...	About 2½ months.
" 1st April to 10th August 1876	...	" 4½ "
" 7th April to 30th September 1877	...	" 6 " (will be).

During the present season the work of curing fish actually began on the 2nd May. Previously to that date the supply had not been abundant enough for the starting of work. The shoals of hilsa come in from time to time, and there is always a large demand for fresh fish, not only for Goalundo itself, but for the Calcutta market and some places on the Eastern Bengal Railway line. The railway took off 26,631 maunds of fish to Calcutta during 1876, and a somewhat larger quantity in the previous year. Thus the work of the salting is chiefly confined to these times when the fish is abundant and very cheap.

2. The following table will show the results of the three seasons 1875, 1876, and 1877.

* No. 45B, to the Commissioner of Dacca, of fish May 1877.

The present season is not quite done, but the Board of Revenue† wishes to ascertain whether the experiment should be continued any longer, and thus information is given up to the end of July last.

Dates on which work began and ended.	Fish cured.			Salt used.			Drawback drawn.		
	Mds.	s.	c.	Mds.	s.	c.	Rs.	A.	P.
12th June to 6th August 1875 ...	1,362	28	6	329	34	14	907	2	0
2nd April to 11th July 1876 ...	4,835	0	0	1,208	18	0	3,323	3	5
2nd May to 3rd July 1877 ...	10,800	39	12	2,572	27	0	7,074	13	6

The fish represents cured fish minus scales and refuse. This was found by estimating each batch of fish brought in, issuing salt, allowing the salters to salt their fish, then weighing the salt that remained, then weighing the salted fish, and deducting therefrom the salt actually used. For instance, one Gogan Nikari might bring in fish estimated at eight maunds. The darogah in charge would then issue to him two maunds of salt. The fish would then be cleaned, scraped, sliced, and salted, and it would be found twenty seers of salt remained unused. The salted fish would then be weighed and found to be 7 maunds 20 seers. Of this 1 maund 20 seers would be salt actually used and weighed along with the cured fish. The amount of fish would be thus six maunds.

3. Expenses.—During the seasons of 1875 and 1876 the preventive establishment was paid by Government, but during the present season the contractors for the supply of salt have deposited enough to pay the darogah and peons their wages for six months, Rs. 204. Thus the bonded enclosure has during the present season cost Government nothing except the drawback on the salt. This drawback has up to date amounted to Rs. 7,074-13-6, a considerable sum.

4. The contractors supply the salt, find the funds to pay the preventive establishment, erect the godown for the salt, the barrack for the peons, the sheds for the salters, and the fence around the enclosure, and also pay for the lighting of the barrack and the cleaning of the place. They are as before† Kali Prasad Bandhopadhyay, Chandra Kanta Ghosal, and Raj Chandra Sirkar. The first named has a power-of-attorney from the other two, and superintends the work relating to the salt.

5. The preventive establishment consists of a darogah on Rs. 10 a month, who is also excise mohurir in this sub-division at Rs. 20 a month, and four peons on Rs. 6 a month each. The darogah keeps one key of the salt godown and the managing contractor the other.

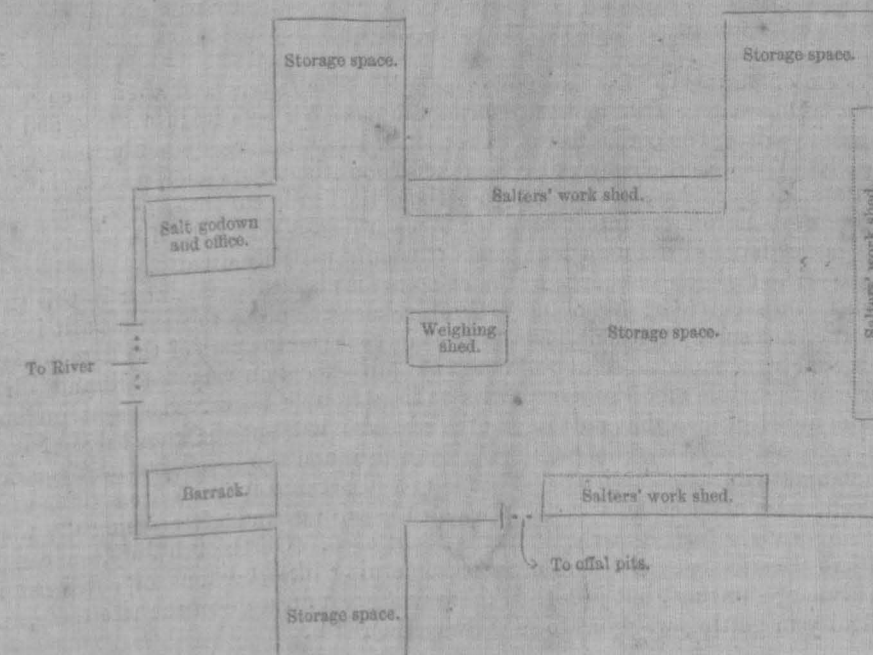
6. The contractors are remunerated on the average Rs. 4-4 a maund. The contractors get a drawback of Rs. 2-12 a maund from Government, and thus the salt costs them Re. 1-8 a maund. They retail it to the salters at Rs. 2-10-9 a maund, and thus make a profit of Re. 1-2-9 a maund. From this they have to meet the various expenses above noted, which may be set down as follows:—

	Rs.
Wages of superintending partner ...	20 a month.
" enclosure servants ...	20 "
Cost of lighting and stationery ...	2 "
" sweepers ...	18 "
" darogah and peons ...	34 "
Total ...	94 "
or for six months (about) ...	570
Add cost of enclosure buildings, including those now set up afresh ...	400
Grand total expenses ...	970

There is also the cost of transport of salt to the godown, which will reduce the contractor's gross profits to about Re. 1 a maund.

7. Salt.—The contractors buy the salt where they please, and it appears the safest plan to allow them to do so. To obtain it from a licensed warehouse and have it forwarded by rail must give rise to some trouble and annoyance. Conveyance by boat would be still more unsatisfactory, especially if the drawback were allowed at the place of purchase. The salt might be sold at Nulchitty and the boat sent off anywhere, while we might be told it had sunk in a storm. By the present arrangement an account is kept by the darogah of the salt issued. The peons see that none is carried out of the enclosure. The full duty is paid for all salt brought in, and a bill is sent up every month for the drawback of Rs. 2-12 a maund. It is returned after being passed by the Commissioner, and the contractors draw the amount from the sub-treasury here.

8. Enclosure.—The enclosure has of necessity to be somewhere near the river. The gateway faces the river, and near it within the fence are the barrack and salt godown. The enclosure is about 80 feet wide, but in length it varies according to the number of salters to be accommodated. Wings had to be thrown out this year in which to put storage jars. The salting sheds form the greater part of the other three sides of the place. In the centre is a shed in which the fish and salt are weighed. Room has also to be found for the large earthen jars in which the cured fish is stored before being packed away for export. During the past month the buildings had to be pulled down, but they are now being set up further away from the river. A rough plan of the place as it last stood is here given:—



The refuse of the fish is taken out by a side gate and buried in pits dug close by. Pains are taken to keep the place clean and free from effluvia, but after one or two busy days and nights some stench is at times unavoidable. During this season the practice has been to continually sweep out the place and throw down sand brought from the chur near by.

Altogether 27 salters use the salting, but they are never all at work on the same day.

In 1875	...	...	...	11 men	on 21st July.
In 1876	...	...	...	19 "	on 13th June.
In 1877	...	...	...	23 "	on 15th "

It was not always that so many were at work. Sometimes no work would be done, sometimes only one or two men would bring in fish. During the latter part of June last, however, the work was heavy, and the number of salters curing fish was some 15 to 20 a day. Some of these men employ several workmen to assist them.

10. *Fish*.—The only fish cured is the hilsa. I am told that other sorts do not take the salt well, and even if salted, do not keep. The following table will show the fish cured month by month, and indicate the uncertainty of the coming of the shoals.

	1875.	1876.	1877.
	Mds. s. c.	Mds. s. c.	Mds. s. c.
April ...	...	629 12 12	...
May ...	...	1,660 17 0	2,285 27 12
June ...	593 10 0	2,521 33 4	8,235 36 0
July ...	769 18 6	23 17 0	279 16 0

These figures represent cured fish. The actual weight of the fresh fish would be about one-fourth more. Since the 3rd July no work has been done, but it is expected there will be another haul during this month or the next. The greatest amount of fish brought into the salting in a single day this season was 787½ maunds on the 27th June. The next largest amount was on the 9th June, 482½ maunds. These numbers show a vast increase on the work of 1876, when the largest amount was 315½ maunds on June 13th, and still more on that of 1875, when the biggest day's work was 71½ maunds on the 10th July.

11. On inquiry I find that nearly all the fish cured in the bonded enclosure is sent away by rail to Calcutta, or at any rate down the Eastern Bengal Railway line. A good deal is said to go to Mughrah in Hooghly, and to be taken thence by *baparies*. It also finds its way into bazars in Jessore and Nuddea. I find, on reference to the Eastern Bengal Railway authorities, that since the beginning of May up to the end of July nearly 24,000 maunds of salted fish have been taken by rail from Goalundo, but in this is included the amount sent off by independent salters. These men still continue their work, using less salt than those in the enclosure, with the result that their fish does not keep good so long.

§ i.e. including salt, with the fish, and weight of earthen pots and baskets.

The net amount of fish sent off by rail by independent salters appears to be about 8,500 maunds for May, June, and July.

They send consignments by boat to other districts, but not, I believe, to a very great amount.

12. The system of weighing the fish has been described above. Experiment has shown that in reality seven and a half seers of salt may be made to do for a maund of fish, and that the wastage of fish in curing is nine and one-third seers per maund. I have therefore directed that in future the fish should be weighed as it is brought into the enclosure, and that eight seers of salt should be issued for each maund of fresh fish. The odd half seer will go in wastage. Possibly nine seers will be found necessary. Hitherto the quantity used has generally been from nine to ten seers a maund.

13. The system of curing the fish is simple enough. The salters and their men work in groups of three. One man scrapes and cleans the fish, another cuts it into slices, and the third rubs the slices in salt. The cured fish is then packed away in large jars that hold eight or ten maunds each. When sent off by rail it is taken from these jars and packed in mat baskets that hold a maund or fifty seers each. Sometimes the fish is cut into slices, sometimes all but sliced through, so as to leave intact the back of each fish. When the fish is altogether cut up into slices rather more salt is used than when it is only partially divided.

13a. *Checks*.—The darogah in charge of the enclosure is also excise mohurrir in this subdivision, and furnishes a security of Rs. 500. There are also the peons to see that salt is not taken away from the enclosure. Without downright connivance on the part of the darogah and peons, it does not appear possible to smuggle out any salt except in very small and dirty quantities, not worth the while of dishonest parties taking trouble about. The salt godown is furnished with double locks, so that no salt can be removed without the knowledge of both the manager and darogah. The weightment of the fresh fish and the issue of salt at the rate of eight seers a maund will be an additional check, and will perhaps induce salters to be more careful with the salt. I have been at various times in the salting, and after seeing the work going on, am by no means surprised at the amount of salt used. On the 9th July, on counting over the full jars, I estimated that there must be something like 100 tons of cured fish in stock—an unusually large amount, but just then there was great pressure in the rice trade, and salters had a difficulty in getting waggons to send away their fish.

14. This leads to a remark on the business done by individual salters. Some do more and some less. Gogan Nikari and his partners, for instance, aided by their workmen, could cure fish enough to charter a railway goods van for a single consignment, some 200 maunds. Others, I find, on the busiest day cured 190 maunds, 124 maunds, 114 maunds respectively. Other salters who cure as much or more than Gogan aforesaid are Jakki and Hakim Nikaris, Asimuddin and Shorup Nikaris, and others. I am told that the salted fish realizes in Calcutta Rs. 4 or 5 a maund.

15. A brief account of the salting from the time it was first set up may not be out of place. On the recommendation of the Board of Revenue Goalundo was selected among other places as one of the sites for the experiment of curing fish with salt. Some difficulty was met in finding parties ready to supply the salt and set up the houses wanted. This was overcome, but the parties (the present contractors) declined to bear the cost of the preventive establishment. The Bengal Government met this by sanctioning the cost of the darogah and peons, Rs. 34 a month for six months. The buildings were accordingly set up, and work began on the 2nd June 1875. Owing to the encroachments of the river work was stopped, and the buildings were pulled down in the latter part of August following. The salting was in a convenient place, close beside the railway line on raised ground. The Company's officers kindly brought round a lot of ashes and engine refuse which proved very useful in keeping the place clean and free from effluvia. Reports were submitted from time to time on the work, and, as above shown, some 1,360 maunds of fish were cured and Rs. 900 refunded to the contractors by way of drawback of duty. A final report was submitted in September 1875. The Board considered the experiment likely to prove a success, and the Bengal Government sanctioned the establishment being kept up till September 1876. Scales and weights were furnished by the Board in December of that year.

16. The salting was again set up and opened on the 1st April 1876, close by the railway line, and engine refuse was used with the same effect as before. Much more fish was cured, viz. 4,835 maunds, and more than Rs. 3,300 was refunded as drawback of duty on salt. For the time the salting was open the average amount of fish cured in each month was about 1,070 maunds, as against about 545 maunds of the previous year. The enclosure site was washed away in the middle of August, and the work was accordingly closed for the season. The Commissioner then directed that the contractors should be asked to defray the cost of the darogah and peons, which they agreed to do.

17. In February last the requisite sum Rs. 204 was advanced by the contractors. The buildings were set up on the outer chur, on the bank of the Pudda, early in April, but work did not begin till the 2nd May, the shoals of hilsa not having come about till then. Work has gone on rather by fits and starts. Very little or nothing would be done sometimes for days, and then for a time work would go on night and day. Nothing has been done since the 3rd July, but more than 10,800 maunds of fish has been cured this season, and more than Rs. 7,000 refunded as drawback of duty. The average amount of fish cured in the four months ending 7th July amounts to 2,700 maunds a month. As above noted, another rush of work is expected before the season closes. Owing to the rise of the river the buildings have had to be removed. They have been all but completely set up again on higher ground midway between the present bazar and the new riverside railway station.

18. *Success or non-success of the experiment*.—It is not for me to decide whether the use of salt in curing fish has proved a success or otherwise, but the following facts may be of some use in coming to a conclusion. Besides the salters who use the bonded enclosure, there are a number of others who have cured fish at Goalundo for many years. They have never used the Government salting, and I can never get out of them any particular reason why they do not. They use only about five or six seers a maund in curing their fish, which does not keep good so long as that cured in the bonded enclosure. They send fish away by boat to places in Pubna, Bogra, Mymensingh, Dacca, Tipperah, as well as by rail to Calcutta and Hooghly. Perhaps it is that they are connected with people in those districts, and prefer to come here in the season and set up their huts and work without any supervision as to issue and use of salt. I do not see that their number is on the increase or decrease. In spite of their work, however, the average amount of fish cured in each month in the bonded enclosure has risen from 545 maunds to 2,700 maunds during three seasons. Should the salters be disappointed about another haul of fish this year and no more work be done, still the increase of the present season will be great, and the average will be 1,800 maunds a month for six months.

19. The duty paid on the salt used under Government auspices is eight annas a maund after the drawback has been refunded. More than 2,500 maunds of salt has been used, and this would represent Rs. 1,250 of duty. It is a question whether this 2,500 maunds would have been used were it not for this salting, or whether it would be worth while to keep it in bond on the chance of getting Rs. 3-4 a maund duty at some time or other. Here it is natural enough to observe that a lot of independent men use salt that pays full duty, cure a lot of fish, and decline to join the Government salting, where they might get their salt at about half price. The question might, therefore, be asked, why the Government salting should be kept up.

†† The former is said to keep good for one or two months, the latter for five or six.

20. Still the increase in the work of the salting is very large. Including the salt used, something like 480 tons of preserved provisions have been sent away to various places where people do not readily get fish. The cured hilsa is not very tempting stuff to look at or smell of, and curiosity has not yet led me to taste it. But buyers are found and it is no doubt valuable as a condiment, even though it may not be so much devoured as fresh fish. Rotten fish is, I believe, about as bad as poison. The hilsa cured in the salting remains good for months, and there can be little doubt that had not the 10,000 odd maunds of this season been cured and preserved, it must most of it have been wasted.

21. In conclusion, I beg to bring to your notice the good service done by the darogah, Madan Mohun Bhattachariya. In the event of the salting being kept up, I hope you will be able to recommend additional remuneration for him of Rs. 10 a month for five months of the season, from May to September. When work is heavy he has to be up night and day, and to weigh salt and fish amid an abominable stench of fishy blood and filth. The contractors, I am sure, make profit enough not to mind the additional expense of Rs. 50.

No. 3033.

Copy, with copies of the enclosures, submitted to the Government of India in the Department of Revenue, Agriculture, and Commerce, for information, with reference to Mr. Lyall's letter No. 4, dated 7th June 1877, with the remark that the Lieutenant-Governor concurs in the commendation bestowed on Mr. Posford by the Board of Revenue, and considers that the degree of success which has attended the experiment was mainly due to the excellent arrangements made by him.

By order of the Lieutenant-Governor of Bengal,

H. J. REYNOLDS,

Secretary to the Government of Bengal.

Calcutta;

REVENUE DEPT.—Mis. Revenue,
The 20th November 1877.

Ans 27/06/78

No. 13.

FROM

C. J. LYALL, ESQUIRE,

Under-Secretary to the Government of India,
Department of Revenue, Agriculture
and Commerce,

To

The Secretary to the Government of
Madras.Suila, dated 15th June 1878.

Fisheries

SIR,

In compliance with the request contained in your letter No. 813 dated the 29th ultimus, I am directed to forward copy of a communication from the Government of Bengal, and enclosures regarding experimental bonded salting enclosures for fish-curing operations in Goalundo.

30333/116 20th Nov 77I enclose to you
I have the honour to be,
Sir,

Your most obedient servant,

Ans. 27/06/78

Under-Secretary to the Govt of India

Revenue 1878 Defaulter

No 2706

From
The Govt of India
P. A. C.

Dated 15th June 1898
Recd 24th }
Encl.

No 13

Forwarding copy of
a communication from the
Govt of Bengal, and enclosure,
regarding experimental
condensed salting enclosures
for fish-curing operations
in Goalundo.

W. H. H.

Defaulter

No 984 28 June 1898

With an order

8 Dec 38

Communicated to the Board of
Revenue in continuation of G.O. 29 May

1878 No 812

14 The Bdg Revenue
2 The Govt of India

W. H. H.

Ch 984

28 June 1898

17-6-78
28-6-78