

Public Works (1898) Department.

G.O., No. 1874 W

DATED 25 July 98

[Despatch Abstract.]

Improvements to Negapatam Port

Pro: Marine Dept. Approving Note by the Chief Engineer, P.W.D., in regard to the probable diversion of trade to Nagore & the proposed — and advising that the 3 Stations praying for a screw pile pier for Negapatam, be performed that everything will be done to improve the facilities for landing & shipping at that port, Commenced to the S.E. V Circle in the reference to Para 2 of the order.

S.G. V which costs
nothing (to be
returned)

GOVERNMENT OF MADRAS.

MARINE DEPARTMENT.

READ—the following papers :—

From the Presidency Port Officer, Madras, dated 13th April 1898, No. 500/138G.
From Messrs. Adamson, MacTaggart & Co., Negapatam, dated 14th April 1898.
From the Presidency Port Officer, Madras, dated 3rd June 1898, No. 1825/199G.

Note by the Chief Engineer, Public Works Department.

In connection with the proposed Negapatam-Nagore extension of the South Indian Railway, the Presidency Port Officer was requested in G.O., No. 268, Marine, dated 13th April 1898, to verify the statistics given of the former trade of Nagore, and to ascertain and report the views on the subject of the Landing and Shipping Dues Committee at Negapatam, with special reference to the necessity for the contemplated improvements to the latter port, if the proposed railway extension is carried out.

2. The papers read above contain the required information. It will be seen from the Presidency Port Officer's letter, No. 1825/199 G, dated 3rd June 1898, that the statistics put forward by the advocates of the port of Nagore in regard to collections are very much exaggerated, and that there is at present very little prospect of a revival of trade at that port; that its superiority over Negapatam depends on the flood water brought down by the Nagore river; and that, if this * is cut off, the superiority will vanish. There is thus very little likelihood of any great diversion to Nagore of the trade of Negapatam, which possesses greater facilities for the landing, shipping and storage of cargo.

* I am not aware that there is any prospect of this, immediate or otherwise.

3. The proposed improvements to Negapatam may thus be considered independently of any rivalry that may be expected on the opening of the railway to Nagore.

4. The local merchants strongly advocate the construction of a pier at Negapatam in the position shown in blue pencil on the accompanying sketch plan, and this was the view held by the committee which sat in 1891—*vide* G.O., No. 175, Marine, dated 2nd May 1891. The pier was estimated to cost Rs. 2,50,000 and was to be 700 feet long running out into 2 fathoms of water at low tide, *i.e.*, well beyond the line of surf. There is no doubt whatever that, looking to the extreme difficulty of keeping the bar open and the river clear of silt, a pier would make Negapatam independent of all such difficulties, and be the best solution of a very vexed question, provided that it could withstand the heavy seas to which it would be occasionally exposed, and provided that boats could work alongside it in all ordinary weather. Local merchants are confident of its success on both these points, but I cannot say that I entirely share that confidence. The roadstead is very open and exposed to severe gales, and I consider it more than probable that the pier might at any time be wrecked, and that with anything like a sea on it would be impossible to work boats alongside it. I quite admit, however,

that if we cannot secure more stable conditions in the bar and river, a pier is the only alternative, and the sooner it is constructed, in the interests of this important port, the better. No serious attempt has yet been made to secure the above-mentioned stable conditions, and I propose to attempt this before considering the question of the pier.

5. The present state of the matter may be briefly described as follows :—

(1) The entrance to the river is impeded by a bar which is constantly shifting its position according to wind, weather and season of the year. Sometimes it is favourable to navigation, sometimes it is very much the reverse.

(2) Inside the river between the mouth and landing ramp, silt and sand is constantly being deposited owing to insufficiency of land or tidal water scour. This is shown on the tracing annexed.

(3) The result has been that, when conditions are most unfavourable, boats have the greatest difficulty in getting in and out, and often have to wait for hours before doing so.

(4) To remedy these defects, a trial timber groyne was run out in 1894 from the nose of the spit marked thus (x) on the tracing to the point marked E in blue, to concentrate tidal scour on the bar. This groyne was most effective, and so long as it remained intact, I understand that the conditions of entrance and exit were sufficiently favourable. In November last, however, this groyne was breached by a heavy sea at the point marked "breached mouth" on plan, the immediate result being that the whole of the ordinary mouth of the river from E to jetty wall on north silted up high and dry, and the only exit, and a very tortuous one, at that was through the breach in the groyne. At the same time the silt in the river accumulated considerably owing to diminished scour. This state of things is well illustrated by the two photos attached, the one showing the breach in the groyne and the other the state of the river above it.

(5) All this greatly increased the difficulties of landing and shipping and directed the renewed attention of the merchants to the necessity for a pier.

(6) I inspected the port in March last in company with the Presidency Port Officer, and decided that the first thing to be done was to replace the groyne which had done so much good until it breached, with something so substantial that it might hope to survive a heavy sea, and secondly, to train the river so that scour whether of land or sea water might be concentrated sufficiently to remove the silt. With these objects in view, I ordered estimates to be prepared for a masonry nose in the position marked in yellow on the accompanying tracing. These estimates have just been submitted by the Superintending Engineer, V Circle, and have proved to be prohibitive in cost. I have therefore issued the further instructions contained in Memo. No. 507 D., dated 20th June 1898, and I propose to await the result of these before taking any further action.

6. In addition to the fixing of the sand spit by a groyne as above described, I think it will be necessary to concentrate as much tidal ebb as possible on the river at Negapatam to scour out the sand and silt which is constantly accumulating therein. A reference to the attached sketch map will show that tidal water enters the system of canals and natural backwaters in the neighbourhood of Negapatam at two places to the southward marked A and B in red pencil.

Now if sluices with swing shutters are built at the points C and D (marked in red pencil) which will allow tidal water to enter *via* A and B, but will prevent its return by the same route, a very largely increased volume of water must ebb *via* the Negapatam river as its only exit, and should produce sufficient scour not only to keep the river between mouth and landing stage much clearer of silt but to have a good effect on the bar. Colonel Smart estimates the cost of this proposal at about Rs. 70,000 and I propose to investigate it as soon as the question of the groyne is disposed of.

(Signed) W. B. DEWINTON,
Chief Engineer.

1st July 1898.

ORDER—No. 577, Marine, dated 5th July 1898.

His Excellency the Governor in Council approves the proposals of the Chief Engineer, Public Works Department, and will await the result of the measures proposed by that officer. Meanwhile, the petitioners will be informed that the Government is not losing sight of their interests, but intends to do all in its power to improve the facilities for landing and shipping at the port of Negapatam.

2. With reference to paragraph 6 of the Chief Engineer's note, the Superintending Engineer, V Circle, will be requested to report whether he cannot fit up, at moderate cost, some experimental sluices, so that the proposed scheme may be tested before great expenditure thereon is incurred.

(True Extract.)

A. Kumari

Under Secretary to Government.

To the Presidency Port Officer.
„ the Public Works Department, with four enclosures.
„ the „ Railway Branch.
„ Messrs. Adamson, Macartaggart & Co.



Nagasaki
Shimizu beach in fog
November 1897



Negative.
Henry's office
landing wharf.
November 1897