

JOINT COMMITTEE REPORT AS PER
THE HON'BLE NATIONAL GREEN TRIBUNAL (SZ), CHENNAI
ORDER DATED 14/09/2020 IN O.A.NO.28 OF 2020.

Submitted to
Hon'ble National Green Tribunal (SZ)
Chennai

December, 2020

1.0 Preamble

The Petitioner Meenava Thanthai K.R. Selvaraj Kumar, Meenavar Nala Sangam prayed to the Hon'ble National Green Tribunal that to initiate appropriate action against the 6th respondent Department of Fisheries, Government of Tamil Nadu for their illegal unauthorized constructions, reclamation and dredging activities of Tuna Fishing Harbour in CRZ Zone at S.F.No.7/4,39,40,41,42 & 49, Thiruvottriyur Kuppam Village, Ennore Taluk, Thiruvallur District, Tamil Nadu without obtaining the prior Environmental clearance as laid down under the Category "B" of Item.7(e) "Port, Harbour, Fishing Harbour" of the Schedule to the EIA Notification, 2006 and CRZ Clearance under CRZ Notification 2011."

It is alleged in the petition that Department of Fisheries, Government of Tamil Nadu is establishing a Tuna Fishing Harbour in CRZ Zone at S.F.No.7/4,39,40,41,42 &49, Thiruvottriyur Kuppam Village, Ennore Taluk, Thiruvallur District without obtaining necessary clearances and also Coastal Regulation Zone Clearances as required under EIA Notification 2006 and CRZ Notification 2011.

In order to ascertain the present status of the project, Hon'ble National Green Tribunal, Southern Zone, Chennai in its order dated 07/02/2020 vide para-9 constituted a Joint Committee comprising of District Collector, Thiruvallur, the Tamil Nadu State Pollution Control Board, State Environment Impact Assessment Authority and Senior Officer from the Tamil Nadu State Coastal Zone Management Authority to inspect the area in question and submit the factual and action taken report including any violations found before the Tribunal within a period of one month.

The Hon'ble National Green Tribunal, Southern Zone, Chennai also directed State Environment Impact Assessment Authority (SEIAA) to act as the nodal agency for co-ordination and also for providing necessary logistics for this purpose.

As per the above said directions of the Hon'ble NGT (SZ), the joint committee filed its first inspection report in March, 2020.

Subsequently, the Hon'ble National Green Tribunal in its order dated 21/07/2020, has directed that

11. "On going through the report, we find that no environment compensation has been assessed, and whether any damage has been caused to the environment / coastal area has not been mentioned. So, we feel it appropriate to direct the committee to assess the environment compensation as well and the question as to whether it has to be awarded or not can be considered by this Tribunal after hearing both sides on that aspect later.

13. The committee is directed to submit further report as directed within a period of one month from today to this Tribunal i.e, on or before 14.09.2020 through email or by e-filing at ngtszfilling@gmail.com. "

The Joint Committee has again inspected the project site of TUNA Fishing harbour by the Department of Fisheries, Government of Tamil Nadu located at Thiruvottriyur Kuppam Village, Ennore Taluk, Chennai District in the presence of Thiru Murugesan, Executive Engineer, Department of Fisheries on September 09, 2020 and submitted second inspection report during September 2020 with a following recommendation.

“In order to assess the damage caused by the Department of Fisheries, Government of Tamil Nadu to the environment / coastal area before obtaining Environmental Clearance (EC) from the SEIAA of Tamil Nadu and its consequent compensation resulting from the damages caused, the Joint committee is of the opinion that, it needs to be carried out by reputed institute/organizations working in these field”.

2.0. Orders of the Hon’ble National Green Tribunal

The Hon’ble National Green Tribunal, Southern Zone, Chennai in its order dated 14/09/2020 directed that,

15. Since, the committee members have mentioned that they don’t have the expertise to assess the environmental damage and they wanted assistance of an expert agency, we feel that it is necessary to include an expert in remote sensing for the purpose of identifying the area prior to the activities and what is the nature and extent of the damage caused and also what is the amount required for restoring the same to its original position as these details will have to be taken into account by this Tribunal these proper disposal of this case.
16. So, for that purpose we include an expert from the Institute of Remote Sensing, Anna University, Chennai as additional Member in the committee so that, the committee can with the help of the expert collect data regarding the prior position of the area. Time series satellite data from July, 19 till date can be procured for appearing the appropriate period of commencement of construction and to what extent this has been done and the committee is directed to assess the environmental compensation based on the available data and submit the further report to this Tribunal.

17. We have not issued any interim order of injunction restraining them from doing proceeding with the work.

The copy of the order is enclosed as **Annexure-I**.

3.0 Joint Inspection of the Committee

The Joint Committee comprising of the following members have again inspected the project site of TUNA Fishing harbour by the Department of Fisheries, Government of Tamil Nadu located at Thiruvottriyur Kuppam Village, Ennore Taluk, Thiruvallur District in the presence of Thiru Murugesan, Executive Engineer, Department of Fisheries on October 16, 2020.

1.	Dr. R.Sivacoumar	Member, State Expert Appraisal Committee (SEAC), Tamil Nadu.
2.	M. Malaiyandi	Joint Chief Environmental Engineer (Monitoring), Tamil Nadu Pollution Control Board, Chennai Zone.
3.	D. Eswaran	Assistant Conservator of Forests, Department of Environment, Chennai.
4.	V.Ravi	Revenue Divisional Officer, Chennai North, Chennai District.
5.	Dr.R.Vidhya	Professor, Institute of Remote Sensing, Anna University, Chennai.

The Joint committee held discussions with Department of Fisheries, Government of Tamil Nadu and during inspection, the extension of breakwater structures was found to be in progress.

4.0 Assessment of Status Report by IRS, Anna University

Accordingly, the Institute of Remote Sensing(IRS), Anna University, Chennai has prepared the report for the period between July 2019 and September 2020 using Time series satellite Data and furnished the report under title “Assessment of status in the vicinity of Tuna Fish Landing site at Ernavur, Thiruvottriyur kuppam Village, Ennore Taluk, Thiruvallur District, Tamilnadu”.

In the report, it was concluded that

- A silo and one temporal structure has been erected around June 2019.
- Activities such as strengthening of groynes and other permanent structures are not seen till June 2019.
- The groynes A and C, supposedly the part of proposed Tuna Fish landing harbour are strengthened after June 2019, whose lengths had been increased by 235m and 153m by Feb 2020.
- Production of tetra pods using the silo must have been started around June 2019.

- The seaward distance of the coastline from the HTL varies between 5.40m to 67.2m at different points as depicted in the Map 2 of the IRS, Anna University.
- No evidence of other construction activity found during the field visit.

The copy of the report is enclosed as **Annexure-II**.

5.0 Assessment of Environmental Compensation

The Executive Engineer, Fishing Harbour Project Division, Department of Fisheries, Government of Tamil Nadu vide his letter dated 10/09/2020 (Copy enclosed as **Annexure-III**) has reported that the Fisheries Department has stopped all the activities of Tuna Fishing Harbour on 07/02/2020.

As directed by the Hon'ble National Green Tribunal, the Joint Committee opined that the Environmental Compensation (EC) has to be calculated from the date of commencement of construction activity to the date of stoppage of construction activity by the Fisheries Department.

The Hon'ble National Green Tribunal (NGT), Principal Bench in the matter of OA No.593/2017 (WP (CIVIL) No.375/2012, Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors. has directed the Central Pollution Control Board (CPCB) to arrive methodology for assessing Environmental Compensation(EC) and action plan to utilize the fund. Accordingly the CPCB has formulated the methodology for assessing Environmental Compensation (EC) to be levied on industrial units in Chapter –I in which it is reported that the following cases can be considered for levying Environmental Compensation(EC).

- a) Discharges in violation of consent conditions, mainly prescribed standards / consent limits.
- b) Not complying with the directions issued, such as direction for closure due to non-installation of OCEMS, non-adherence to the action plans submitted etc.
- c) Intentional avoidance of data submission or data manipulation by tampering the Online Continuous Emission / Effluent Monitoring systems.
- d) Accidental discharges lasting for short durations resulting into damage to the environment.
- e) Intentional discharges to the environment – land, water and air resulting into acute injury or damage to the environment.
- f) Injection of treated/partially treated/untreated effluents to ground water.

In this case, the 6th respondent Department of Fisheries, Government of Tamil Nadu has extended the break water structures in the southern & northern direction of the project site from

the existing groins and formation of roads by violating the condition no “p) Clearance under the EIA Notification 2006 should be obtained from the SEIAA” of CRZ clearance obtained from the Tamil Nadu State Coastal Zone Management Authority vide Proceeding No.PI/2204/2016 Dated 10/03/2017. Hence the committee decided to assess the Environmental Compensation (EC) as per the following CPCB methodology as directed by the Hon’ble Nation Green Tribunal(SZ).

Environmental Compensation Formula

$$EC= PI \times N \times R \times S \times LF$$

where

EC-Environmental compensation

PI-Pollution index of industry sector

N-Number days of violation took place

R-A factor in Rs for EC

S-Factor for scale of operation

LF- Location Factor

Note:

- i) The industrial sectors have been categorized into Red, Orange and Green based on their pollution index in the range of 60-100, 41-59 and 21-40 respectively. It was suggested that the average pollution index of 80, 50 and 30 may be taken for calculating the Environmental compensation for Red, Orange and Green Categories of industries respectively.
- ii) N, number of days for which violation took is the period between the day of violation observed/ due date of directions compliance and the day of compliance verified by PCB/SPCB/PCC.
- iii) R, is a factor in rupees, which may be a minimum of 100 and maximum of 500. It is suggested to consider R as 250, as the Environmental Compensation in cases of Violation.
- iv) S could be based on small/medium/large industries categorization which may be 0.5 for micro or small, 1 for medium and 1.5 for large units.
- v) LF, could be based on the population of the city/town and location of the industrial unit. For the industrial unit located within municipal boundary or up to 10 Km distance from the municipal boundary of the city/town, following factors (LF) may be used.

Sr.No	Population (Million)	Location Factor(LF)
1	Less than 1	1.0
2	1 to <5	1.25
3	5 to <10	1.5
4	10 and above	2.0

Calculation of Environmental Compensation to the 6th respondent as per the CPCB Guidelines

The day of violations commenced (Date of break water structures installation noticed as reported in the report of Remote sensing Department, Anna University).	-	01.07.2019
The day of violations stopped (Date of construction activities stopped by the Fisheries Department and reported).	-	07.02.2020
The number of days of violations took place (From 01.07.2019 to 07.02.2020)	N	222
Pollution Index for Red category industries as per CPCB Guidelines (Ports and harbour, jetties and dredging operations comes under the red category (1046) as per CPCB letter dated.07.03.2016).	PI	80
Factor in Rs for EC as per CPCB Guidelines	R	250
Factor for scale of operation as per CPCB Guidelines	S	1.5
LF as per CPCB Guidelines (Population of Greater Chennai Corporation is 7.1 Million – Source Greater Chennai Corporation Website).	LF	1.5
Environmental Compensation(EC)	$PI \times N \times R \times S \times LF = 80 \times 222 \times 250 \times 1.5 \times 1.5$ $= 99,90,000/-$	

5.0 Recommendation:

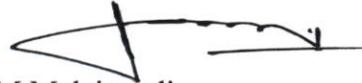
The 6th respondent, Department of Fisheries, Government of Tamil Nadu had obtained CRZ clearance from the Tamil Nadu State Coastal Zone Management authority vide Proceeding Dated.10.03.2017 under the Coastal Regulation Zone Notification, 2011 and subsequently obtained Environmental Clearance from the Tamil Nadu State Environmental Impact Assessment Authority (SEIAA) vide Proceeding Dated.05/08/2020 under the EIA Notification, 2006.

Nevertheless, the Fisheries Department has extended the existing groins and formed the temporary roads without obtaining the Environmental Clearance under the EIA Notification, 2006 as the establishment of Tuna Fishing Harbour is a public welfare scheme and delay in execution will affect the general public in getting their basic rights in time and also escalation in project cost.

By considering the above facts, the Hon'ble Tribunal may pass appropriate order(s)/directions(s) as deemed fit.



Dr.R. Sivacoumar
Member, State Expert
Appraisal Committee (SEAC),
Tamil Nadu.



M.Malaiyandi,
Joint Chief Environmental
Engineer(M), Tamil Nadu
pollution Control Board,
Chennai Zone .



D.Eswaran, Assistant
Conservator of Forests,
Department of Environment,
Chennai.



V.Ravi,
Revenue Divisional
Officer, Chennai North,
Chennai District.



Tmt.R.Vidhya,
Professor, IRS,
Anna University,
Chennai.

Item No. 01:

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

Original Application No. 28 of 2020 (SZ)

IN THE MATTER OF:

Meenava Thanthai

...Applicant(s)

WITH

The State of Tamil Nadu and others.

...Respondent(s)

Date of hearing: 14.09.2020.

CORAM:

**HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER**

For Applicant(s):

Sri. Ritwick Dutta along with Sri. Stanley
Hebzon Singh

For Respondent(s):

Sri. S.R. Rajagopl, Additional Advocate
General along with Sri. M. Mani Gopi for
R1, R6 and R7

Sri. M.R. Gokul Krishnan for R2 & R3.

Sri. Kasirajan through M/s. Meena for R4

Sri. Kamalesh kannan for R5

ORDER

1. As per order dated 07.02.2020, this Tribunal had constituted a committee to go into the allegations in the application and submit a factual and action taken report and posted the case to

26.03.2020. On 26.03.2020, the matter was adjourned to 15.07.2020 by notification. On 15.07.2020, at the request of the committee members, the matter has been adjourned to 21.07.2020 for getting the report. On 21.07.2020, this Tribunal had considered the Joint Committee report and also the counter statement filed by the 6th respondent and also directed the committee to assess the Environmental Compensation for the violation if any, committed by the concerned departments in carrying out the work.

2. Further, this Tribunal has also directed State Environment Impact Assessment Authority (SEIAA) to consider and pass appropriate orders, if any application for environmental clearance is pending with them in accordance with law making it clear that the pendency of this application is not a bar for them to exercise their statutory powers and posted the case to today for consideration of further report and also for objection if any, to be filed by the applicant for the same.
3. We have received an additional reply affidavit though it was mentioned as the interim application by the 6th respondent wherein they have stated that they have obtained all necessary clearances including the Environment Clearance as per proceedings No. *SEIAA-TN/F.No.6440/EC/(e)/75/2020* dated *05.08.2020*.

4. We have also received a counter affidavit filed by the 5th respondent almost re-iterating the same contentions raised by the 6th respondent and also stating that have already granted the Coastal Regulation Zone Clearance and Environment Clearance will have to be obtained.
5. The applicant has filed rejoinder to the counter filed by the 6th respondent and also the response to the report of the joint committee.
6. When the matter came up for hearing today through Video Conference, Sri. Ritwick Dutta along with Sri. Stanley Hebzon Singh represented the applicant. Sri. S.R. Rajagopl, Additional Advocate General along with Sri. M. Mani Gopi represented respondents 1, 6 and 7, Sri. Kasirajan through M/s. Meena represented 4th respondent, Sri. Kamalesh kannan represented 5th represented and Sri. M.R. Gokul Krishnan represented respondents 2 and 3.
7. We have received the report of the Joint Committee which reads as follows:

The Petitioner Meenava Thanthai K.R. Selvaraj Kumar, Meenavar Nala Sangam prayed to the Hon'ble National Green Tribunal that to initiate appropriate action against the 6th respondent Department of Fisheries, Government of Tamil Nadu for their illegal unauthorized constructions, reclamation and dredging activities of Tuna Fishing Harbour in CRZ Zone at S.F.No.7/4,39,40,41,42 & 49,Thiruvottriyur Kuppam Village, Ennore Taluk, Thiruvallur District, Tamil Nadu without obtaining the prior Environmental clearance as laid

down under the Category "B" of Item.7(e) "Port, Harbour, Fishing Harbour" of the Schedule to the EIA Notification, 2006 and CRZ Clearance under CRZ Notification 2011."

It is alleged in the petition that Department of Fisheries, Government of Tamil Nadu is establishing a Tuna Fishing Harbour in CRZ Zone at S.F.No.7/4,39,40,41,42 &49, Thiruvottriyur Kuppam Village, Ennore Taluk, Thiruvallur District without obtaining necessary clearances and also Coastal Regulation Zone Clearances as required under EIA Notification 2006 and CRZ Notification 2011.

According to the petitioner, it is under CRZ I under the CRZ Notification, 2011 and without getting prior permission any activity in that area is illegal. The petitioner also produced the minutes of the meeting of the State Appraisal Committee dated 16/12/2019 which dealt with that project for appraisal and observed that the presentation and EIA report submitted by the project proponent is not proper and they will have to submit a fresh EIA report on the basis of the directions given by them and necessary presentation will have to be made by consultant to satisfy the appraisal committee to consider the project.

The Petitioner also submitted substantial evidence in the form of photographs taken at the site showing the nature of activities going on in that area.

In order to ascertain the present status of the project, Hon'ble National Green Tribunal, Southern Zone, Chennai in its order dated 07.02.2020 vide para-9 constituted a Joint Committee comprising of District Collector, Thiruvallur, the Tamil Nadu State Pollution Control Board, State Environment Impact Assessment Authority and Senior Officer from the Tamil Nadu State Coastal Zone Management Authority to inspect the area in question and submit the factual and action taken report including any violations found before the Tribunal within a period of one month.

The Hon'ble National Green Tribunal, Southern Zone, Chennai also directed State Environment Impact Assessment Authority (SEIAA) to act as the nodal agency for co-ordination and also for providing necessary logistics for this purpose.

As per the above said directions of the Hon'ble NGT (SZ), the joint committee filed its first inspection report during March, 2020.

2.0 Orders of the Hon'ble Tribunal

The Hon'ble National Green Tribunal order dated 21/07/2020 has directed that

11. "On going through the report, we find that no environment compensation has been assessed, and whether any damage has been caused to the environment / coastal area has not been mentioned. So, we feel it appropriate to direct the committee to

assess the environment compensation as well and the question as to whether it has to be awarded or not can be considered by this Tribunal after hearing both sides on that aspect later.

13. The committee is directed to submit further report as directed within a period of one month from today to this Tribunal i.e, on or before 14.09.2020 through email or by e-filing at ngtszfilling@gmail.com. "

The copy of the order is enclosed as **Annexure I**.

3.0 Joint Inspection of the Committee

The Joint Committee comprising of the following members have again inspected the project site of TUNA Fishing harbour by the Department of Fisheries, Government of Tamil Nadu located at Thiruvottriyur Kuppam Village, Ennore Taluk, Thiruvallur District in the presence of Thiru Murugesan, Executive Engineer, Department of Fisheries on September 09, 2020.

1.	<i>Dr. R.Sivacoumar</i>	<i>Member, State Expert Appraisal Committee (SEAC), Tamil Nadu.</i>
2.	<i>M.Malaiyandi</i>	<i>Joint Chief Environmental Engineer (Monitoring), Tamil Nadu Pollution Control Board, Chennai Zone.</i>
3.	<i>D.Eswaran</i>	<i>Assistant Conservator of Forests, Department of Environment, Chennai.</i>
4.	<i>V Ravi</i>	<i>Revenue Divisional Officer, Chennai North, Chennai District.</i>

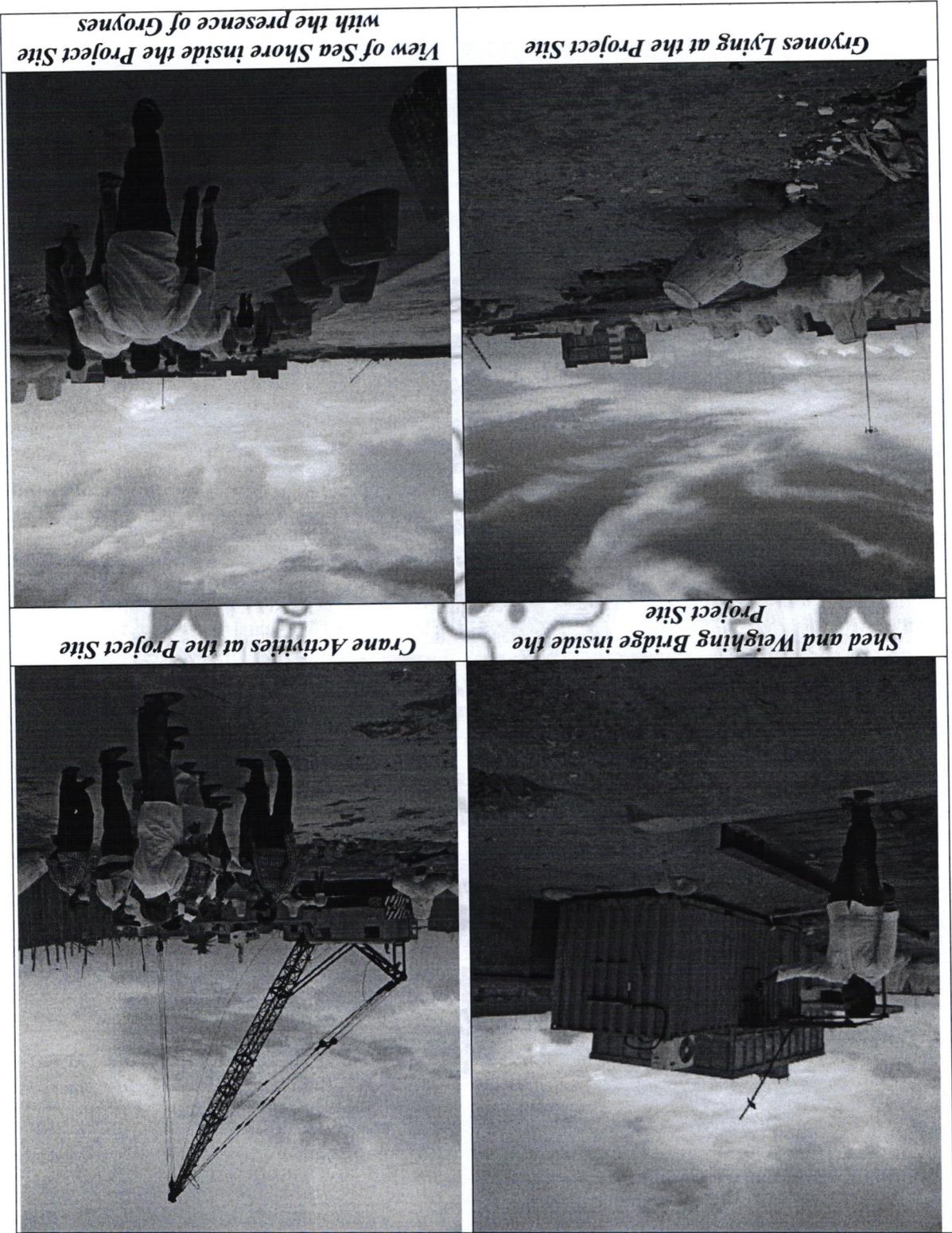
The joint committee held discussions with Department of Fisheries, Government of Tamil Nadu and inspected the project site to verify if any further constructions has been carried out after the previous inspection of the committee and took photographs.

4.0 Assessment of the Joint Committee

During the time of inspection, the committee observed the following in addition to the observations submitted by the committee in the earlier report to the Hon'ble National Green Tribunal, Southern Zone, Chennai.

1. Two more temporary sheds were found at the project site as shown in the Photographs.
2. Two gigantic grins were seen at the site one near the northern approach road and the other one at the southern break water facility.

- 3. Many Solid gryones weighing 4 MT were seen inside the project area as well all along the shore line in the southern direction.
- 4. No construction/dredging/reclamation activities related to fishing harbour were carried out within the project site.



5.0 Conclusion and Recommendation of the Joint committee

In order to assess the damage caused by the Department of Fisheries, Government of Tamil Nadu to the environment / coastal area before obtaining Environmental Clearance (EC) from the SEIAA of Tamil Nadu and its consequent compensation resulting from the damages caused, the Joint committee is of the opinion that, it needs to be carried out by reputed institute/organizations working in these field.

*Dr.R. Sivacoumar
Member, State Expert Appraisal
Committee (SEAC), SEIAA,
Tamil Nadu.*

*M. Malaiyandi,
Joint Chief Environmental Engineer (M),
Tamil Nadu pollution Control Board,
Chennai Zone .*

*D.Eswaran, Assistant Conservator of
Forests, Department of Environment,
Chennai.*

*V. Ravi,
Revenue Divisional Officer,
Chennai North.*

8. It is mentioned in the report that in order to assess the damage caused to the environment on account of the work done by the Department of Fisheries of Government of Tamil Nadu to the Environment/Coastal area without obtaining environmental clearance from State Environment Impact Assessment Authority (SEIAA) of Tamil Nadu and its assessment of consequent compensation resulting from the damage caused, the Joint Committee opined that it needs to be carried out by a reputed institute/organisation working in these fields.
9. The learned counsel appearing for the applicant submitted that, in view of the objections filed by the applicant, if the department

is permitted to carry out their work, it will not be possible for the committee to assess the compensation for the purpose of enabling this Tribunal to decide the matter in accordance with law.

10. The learned Advocate General appearing for the State Department submitted, since the monsoon is fast approaching and the project will have to be proceeded with as necessary clearances have already been obtained from the concerned authorities, they may be permitted to proceed with the work subject to this Tribunal enquiring in to the question of damage, if any, caused to the environment and imposition environmental compensation if any, required after getting the further report of the committee and they have no objection even deputing any other expert agency along with the committee to assist them and get the necessary data for this Tribunal to decide the matter in accordance with law.
11. It is an admitted fact that there were some activities done by the Fisheries Department namely, 6th respondent for the purpose of proceeding with the proposed project without getting the necessary Environmental Clearance under EIA Notification 2006.
12. The learned Additional Advocate General submitted that as per the counter statement of 5th respondent, it is clearly

mentioned that on 06.10.2016, an environmental clearance was issued to Public Works Department (PWD) to construct series of 19 Groynes from Ennore to Ernavoorkuppam by the 2nd respondent and only they are carrying out that work alone.

13. They also mentioned in the counter statement that the Coastal Zone Management Authority also granted necessary clearance under CRZ Notification 2011, for this purpose. But the allegation in the application was that they are proceeding with the construction work of the project without getting necessary environment clearance especially when the application filed by them for that purpose was pending with the authority and this Tribunal has only taken cognizance of the application in respect of the work being carried out without obtaining necessary clearance which is required for that project.

14. Even for the construction of the road etc., or making preparations for the project as per EIA Notification, 2006, prior environment clearance is required. If any work has been done in violation of the EIA Notification, 2006 then, this Tribunal is entitled to go into the question regarding the nature of damage caused to the environment, on account of this violation and also fixing the liability of the payment of environmental compensation if any, caused on the person/department responsible for the same.

15. Since, the committee members have mentioned that they don't have the expertise to assess the environmental damage and they wanted assistance of an expert agency, we feel that it is necessary to include an expert in remote sensing for the purpose of identifying the area prior to the activities and what is the nature and extent of the damage caused and also what is the amount required for restoring the same to its original position as these details will have to be taken into account by this Tribunal for proper disposal of this case.
16. So, for that purpose we include an expert from the Institute of Remote Sensing, Anna University, Chennai as additional Member in the committee so that, the committee can with the help of the expert collect data regarding the prior position of the area. Time series satellite data from July, 19 till date can be procured for appearing the appropriate period of commencement of construction and to what extent this has been done and the committee is directed to assess the environmental compensation based on the available data and submit the further report to this Tribunal.
17. We have not issued any interim order of injunction restraining them from doing proceeding with the work.

18. We have only recorded the undertaken given by the learned Additional Advocate General that they will not precede with the work of the project without getting the necessary environment clearance from the authorities.
19. So under such circumstances, we don't think that there is any necessity for us to pass any interim order regarding the proceeding with the project as such. However, the right of the applicant to challenge the environmental clearance in accordance with law is left open.
20. The Registry is directed to communicate this order to Anna University, to depute an expert from Institute of Remote Sensing under their University to assist the committee appointed by this Tribunal for the things mentioned above and also the committee members, so as to enable them to comply with the direction of assessing environmental compensation and submit a further report in this regard.
21. The committee is granted one month time for this purpose.
22. The committee is directed to submit the report to this Tribunal on or before 28.10.2020 by e-filing along with necessary hard copies as per rules.

23. For consideration of further report, post on 28.10.2020.

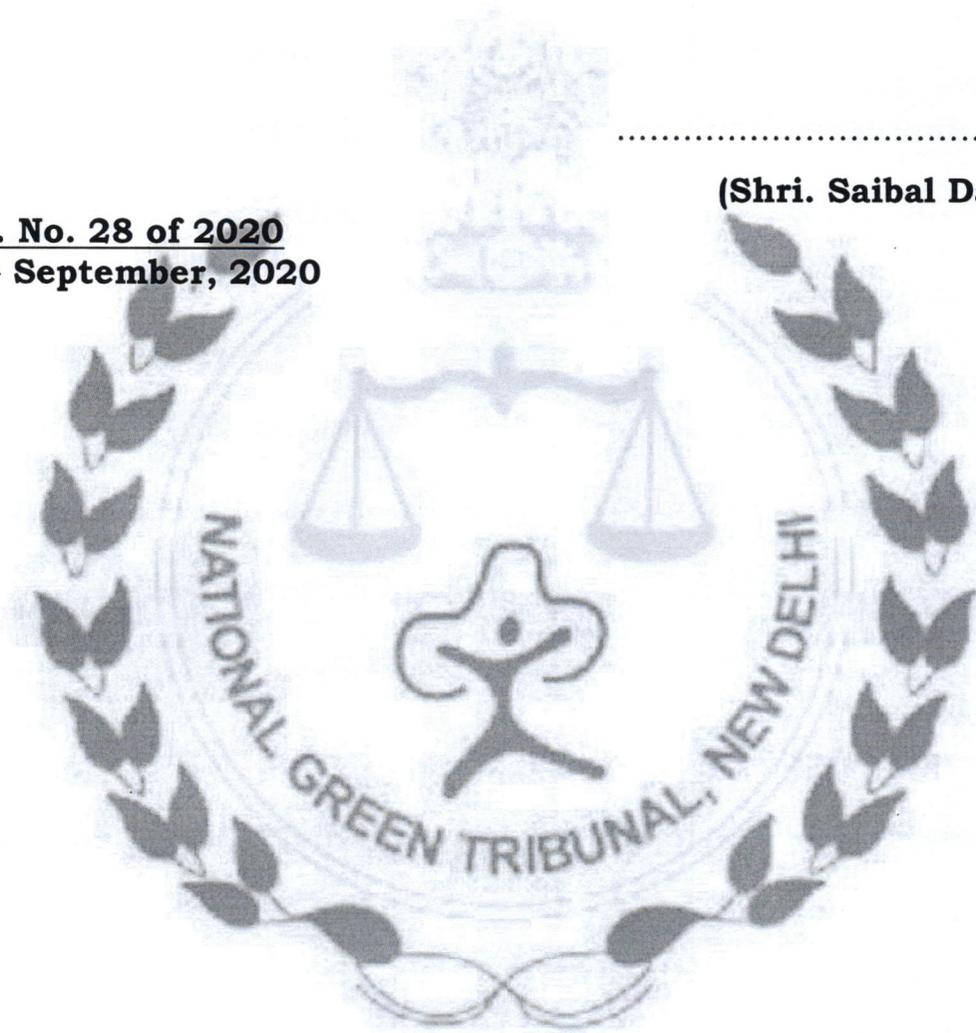
.....J.M.

(Justice K. Ramakrishnan)

.....E.M.

(Shri. Saibal Dasgupta)

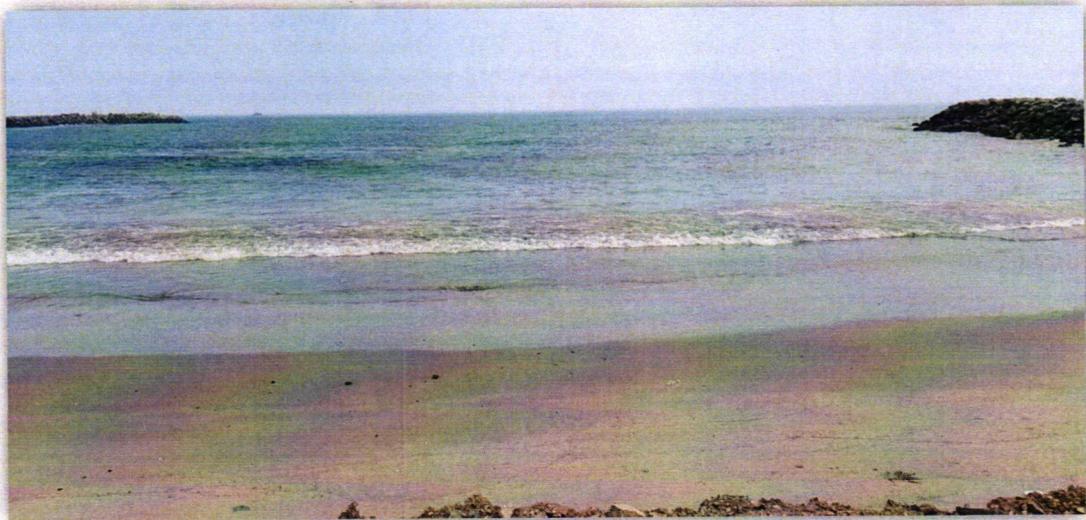
O.A. No. 28 of 2020
14th September, 2020
Sr.



**Assessment of status in the vicinity of Tuna Fish landing
site at Ernavur, Thiruvottriyur kuppam Village, Ennore
Taluk, Thiruvallur District, Tamil Nadu
Between July 2019 – September 2020 using
Time series Satellite Data**

Report Prepared for

**State Level Environment Impact
Assessment Authority – Tamil Nadu
3rd Floor, Panagal Maaligai
No.1, Jeenis Road, Saidapet
Chennai – 600 015**



Prepared By



**Institute of Remote Sensing
Anna University, Chennai - 600 025**

October, 2020

EXECUTIVE SUMMARY

State Level Environment Impact Assessment Authority, Tamil Nadu has requested Anna University to nominate an Expert Member from Institute of Remote Sensing (IRS), Anna University to be an Additional Member in the expert committee as per the order of Honorable National Green Tribunal. This study was undertaken to assess the status in the vicinity of the Tuna Fish Landing site, Ernavur using time series satellite data between July 2019 to June 2020 downloaded from the Google earth open source service. Current condition was assessed during the field visit on 16.10.2020. The project includes survey No. 7/4, 39, 40, 41, 42 & 49 of Thiruvottriyur kuppam village of Ernavur Taluk. The interpretation of the time series satellite data and the field verification revealed that the ground base activities like erection of temporary shed and silo have happened around June 2019. The extension and strengthening of the groynes, a part of proposed Tuna Fish landing harbour was done after June 2019 only. The production of tetrapods for strengthening the groynes was undertaken after June 2019.

1. Back Ground

The Honourable National Green Tribunal (NGT) has passed an order to involve Institute of Remote Sensing by way of nominating an expert member to assist the committee appointed for assessing the status caused in the vicinity of the Tuna Fish landing site at Ernavur, Thiruvottriyur kuppam village, Ennore Taluk to the community with time series satellite data. State Level Environment Impact Assessment Authority, Tamil Nadu has requested Anna University to nominate an Expert Member from Institute of Remote Sensing (IRS), Anna University to be an Additional Member in the expert committee. It is stated in the order that “the expert collect data regarding the prior position of the area. Time series satellite data from July 19 till date can be procured for appearing the appropriate period of commencement of construction and to what extent at the project site has been done and the committee is directed to assess the environmental compensation based on the available data and submit the further report to this Tribunal”.

This study was done to assess the status of the site by using time series satellite data downloaded from the Google earth open source service as the procurement of satellite data product with comparable spatial resolution will

take time owing to the procedural formalities including MoD, GoI clearance. To meet the stipulated time frame for submission of the report, i.e 30.10.2020 given by Hon'ble NGT, the satellite data in Google earth service with ≤ 1 meter resolution which is by far the best available resolution from open source were used.

2. Study area and data

The study area includes survey numbers 7/4, 39, 40, 41, 42 & 49 in the vicinity of Ernavur fish landing site in Thiruvottriyur kuppam village, Ennore Taluk, Thiruvallur District in Tamil Nadu. Area encompassed by longitude from 80°18'49.833" E to 80°18'38.827" E and by latitude from 13°10' 38.547" N to 13°9'34.089" N was studied using multi temporal satellite data.

3. Procurement of Satellite Data

The procurement of the Satellite data from the "Google Earth Pro - open source server" was downloaded. The study to assess the status in the vicinity of Tuna Fish landing site by using time series satellite data was done from January 2019 to latest available image in June 2020 in Google earth open source server . The present condition was assessed during the field visit on 16.10.2020. The time series satellite data used for this study is listed as follows:

Table.1 Dates of the satellite data used

1. 5 th January 2019	5. 31 st March 2020
2. 14 th April 2019	6.7 th May 2020
3. 8 th June 2019	7.14 th June 2020
4. 14 th February 2020	

Source: Google Earth Pro open source platform (The dates are as given in the open source server)

It may be noted that the displayed date stamp of the downloaded images may not be the same as the date of acquisition of the satellite. Hence, the acquisition date was verified with “Digital Globe” website, who are the distributors of the high resolution foreign satellite data especially IKONOS, Geo Eye, World View etc., (<https://discover.digitalglobe.com/>)

4. Field Visit

The aforesaid study area at Eranavur was visited by Institute of Remote Sensing (IRS), Anna University on 16.10.2020 along with other Committee Members and Officials. It has been clarified that the survey numbers mentioned in the order that is 7/4 is actually the plot having survey number 4 in the old revenue records and the 7 in the Town resurveyed record, whereas the other survey numbers namely 39, 40, 41, 42 and 49 are as per the old record. The new town map which was resurveyed by the revenue department for the study area is attached in *Annexure – I*.

During the field visit, it was observed that two temporary structure/shed along with one Silo were seen. The Silo is being used for producing the Tetrapods to be used for strengthening the groynes. The extension and strengthening of groynes A and C were observed. The photographs taken during the field visit is presented in *Annexure – II*.

5. Observation from the Time series Satellite data

The findings from the time series satellite data are discussed below.

- There are 5 no. of Groynes in the area in which the study was done. For convenience sake, the groynes were named as A, B, C, D & E from south to north is shown and the length of each groynes were measured to be 152m, 144m, 164m, 200m and 250m respectively are presented *Map no.1*.
- No activities like construction, reclamation and dredging along the coast at the vicinity were noticed in data pertaining to January 2019 in the survey numbers 7/4, 39, 40, 41, 42 & 49 that is in *Figure.1*.
- A track/pathway is seen in satellite data pertaining to 14th April 2019 and drawn by the line symbol which is shown in *Figure.2*. The lengths of five groynes were unchanged.

- On 8th June 2019, a Silo and a temporary structure/shed were seen. Also, a crane is noticed in the site. The details are presented in *Figure.3*.
- Heaps of tetrapods are observed along the coastline of the above mentioned study area from the Satellite data dated 14th February 2020, indicating the production of tetrapods for strengthening of groynes A and C as a part of the proposed project. The lengths of groynes A and C towards sea is increased from 2019 to 2020 as tabulated in *Table.2*.

Table. 2 Comparison the length of the Groynes

Description	*Length in (m)		*Change of Length (m)
	Year - 2019	Year - 2020	
Groynes - A	152	387	235
Groynes - B	144	144	-
Groynes - C	164	317	153
Groynes - D	200	200	-
Groynes - E	250	250	-

*Length is measured from satellite data

- The second temporary shed was observed in the data of 14 February, 2020 (*Figure.4*).
- An increase in the heaps of tetrapods is seen from images of 31st March, 7th May, 14th June of 2020, as shown in *Figure .5, 6 and 7* respectively.

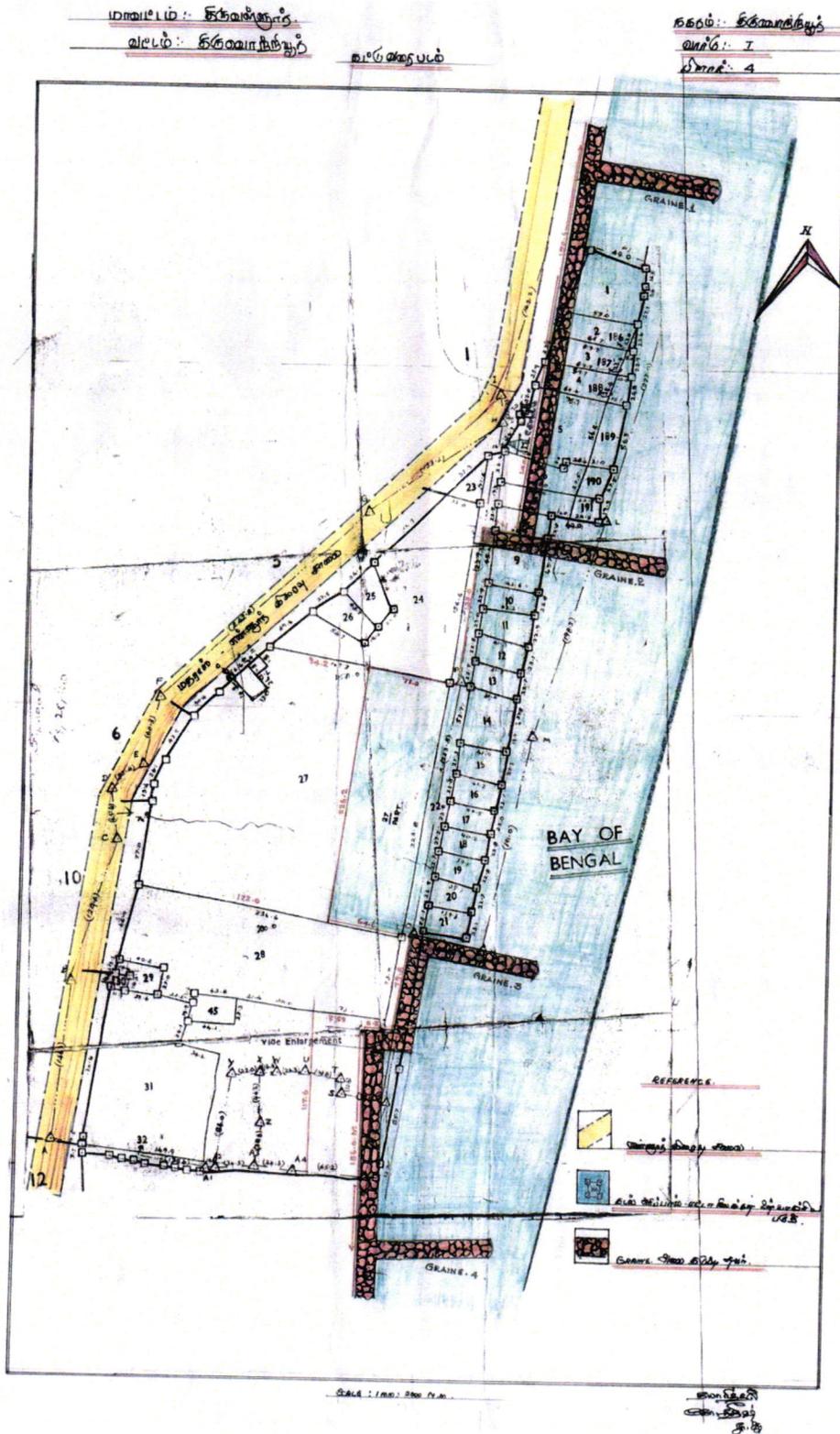
- The change in coastline with respect to the HTL of approved CZMP (Map no. TN 110) as per CRZ 2011 notification due to wave action for the study period is presented in *Figure.8*. The seaward distance of the coastline from the HTL varies between 3.03m to 57.7m at different points as depicted in *Map No. 2*.

6. Conclusion from the Study

The conclusions of the study are presented as below:

- A silo and one temporal structure has been erected around June 2019, No activities such as strengthening of groynes and other permanent structures are seen till June 2019.
- The groynes A and C, supposedly the part of proposed Tuna Fish landing harbour are strengthened after June 2019, whose lengths had been increased by 235m and 153m by Feb 2020.
- Production of tetrapods using the silo must have been started around June 2019 (*Plate. 4*).
- The seaward distance of the coastline from the HTL varies between 3.03 m to 57.7m at different points as depicted in the map.
- No evidence of other construction activity found during the field visit.

Annexure - I
Resurveyed Town Map of the project site



Annexure – II
Field Photographs



Plate. 1 Site Visit with Committee Members

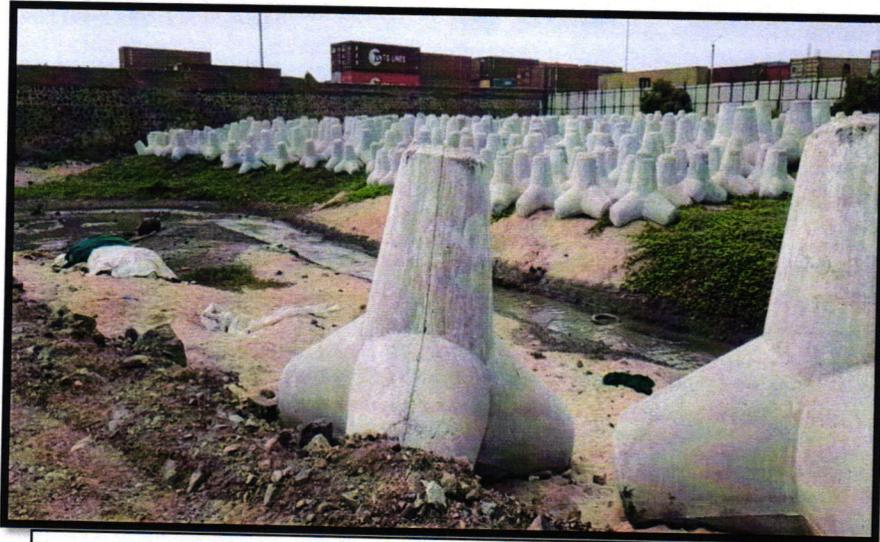


Plate. 2 Heaps of Tetrapods near to the site



Plate. 3 Tetrapods installation by Crane along the Groyne A

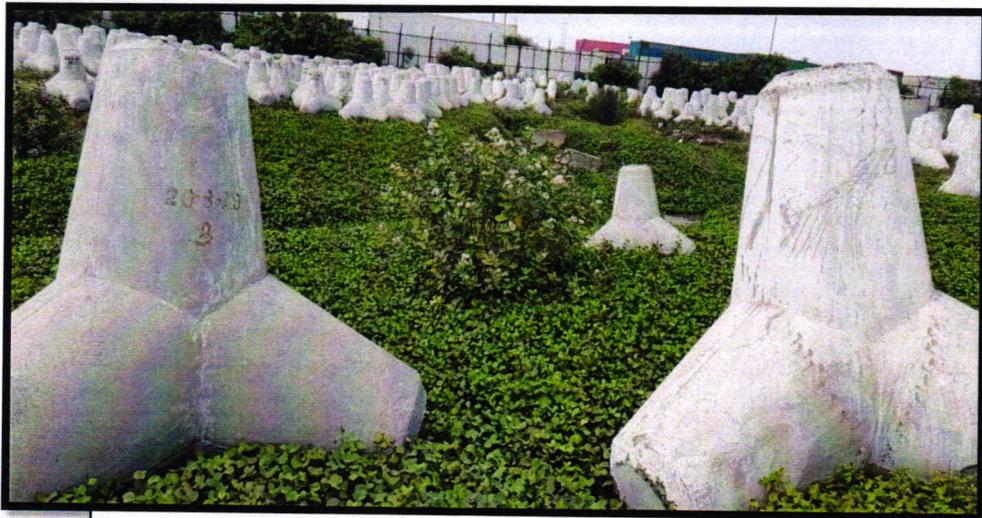


Plate. 4 Date displayed in Tetrapod indicating the production of Tetrapods

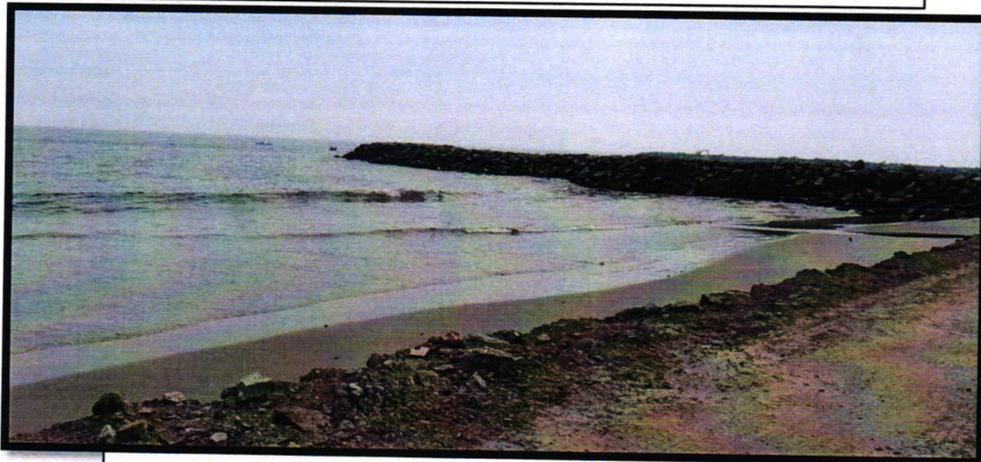


Plate. 5 Groyne B at the site

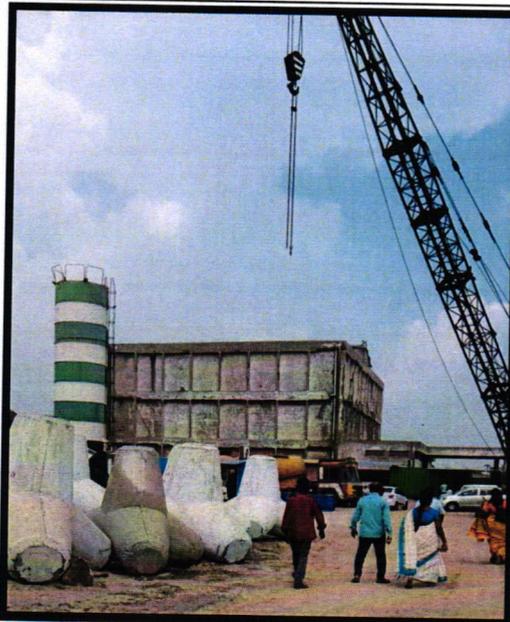


Plate. 6 Silo and Crane on the site indicating production of Tetrapods



Figure. 1 Satellite data pertaining to 5th January 2019

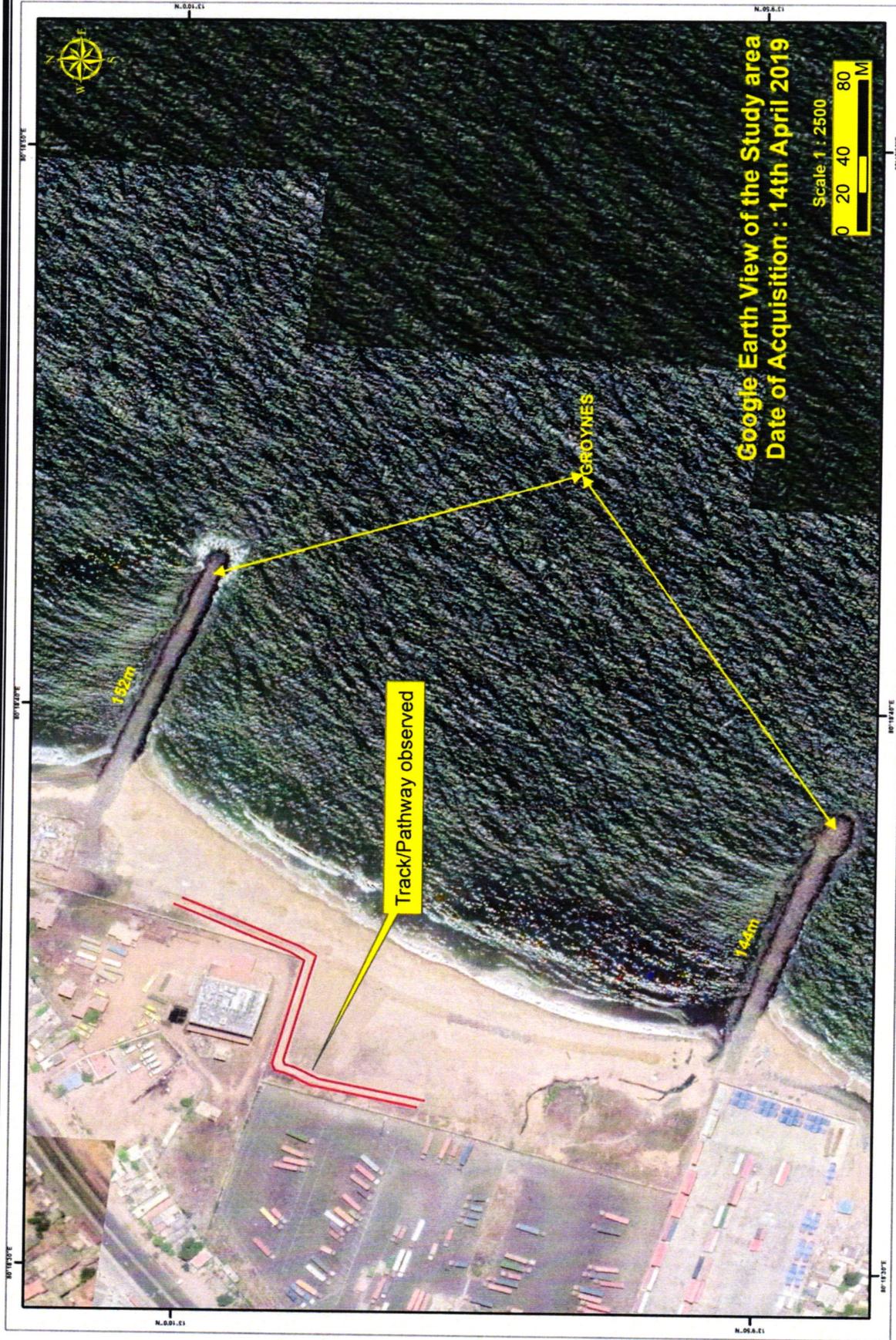


Figure. 2 Satellite data pertaining to 14th April 2019

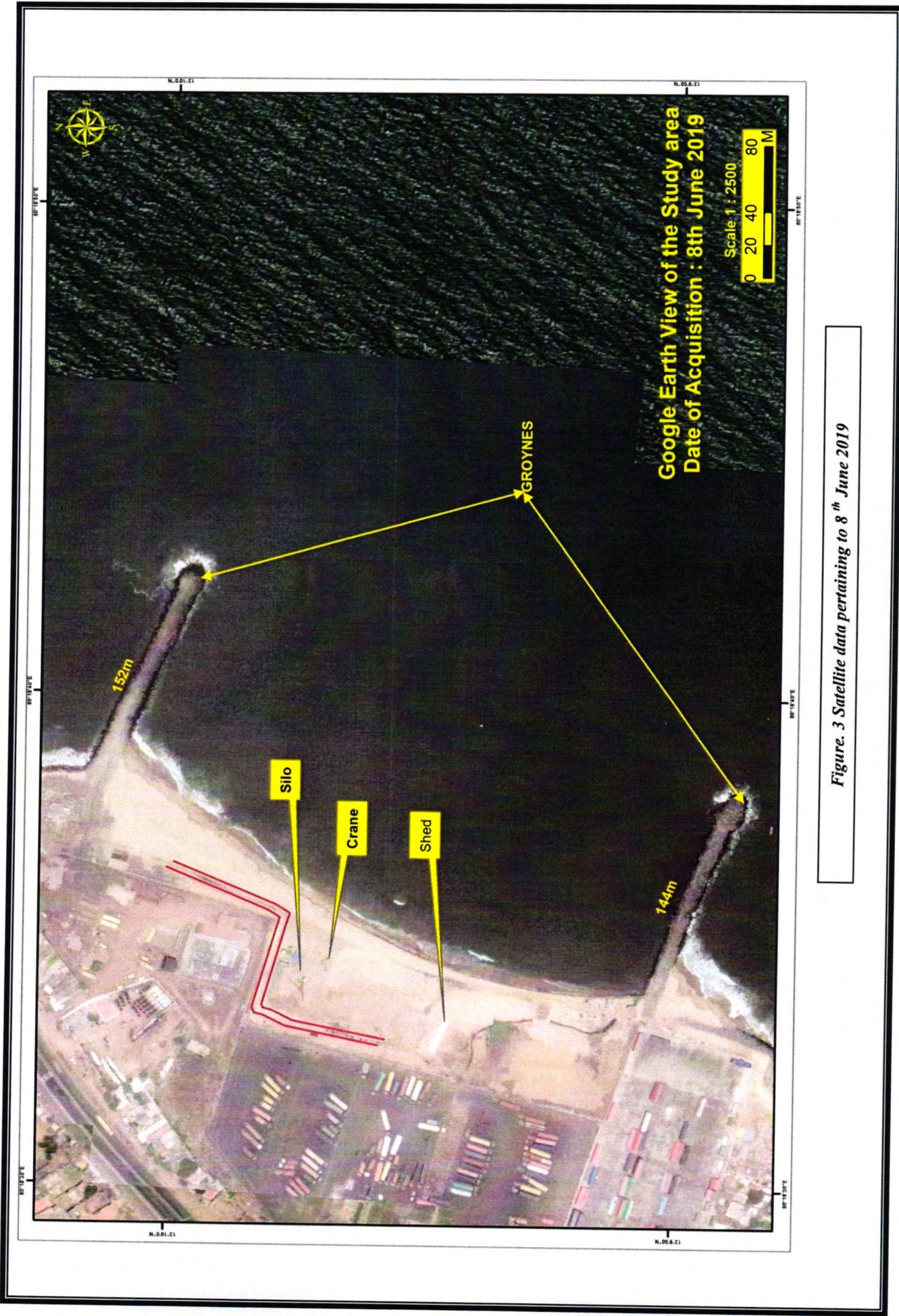


Figure 3 Satellite data pertaining to 8th June 2019

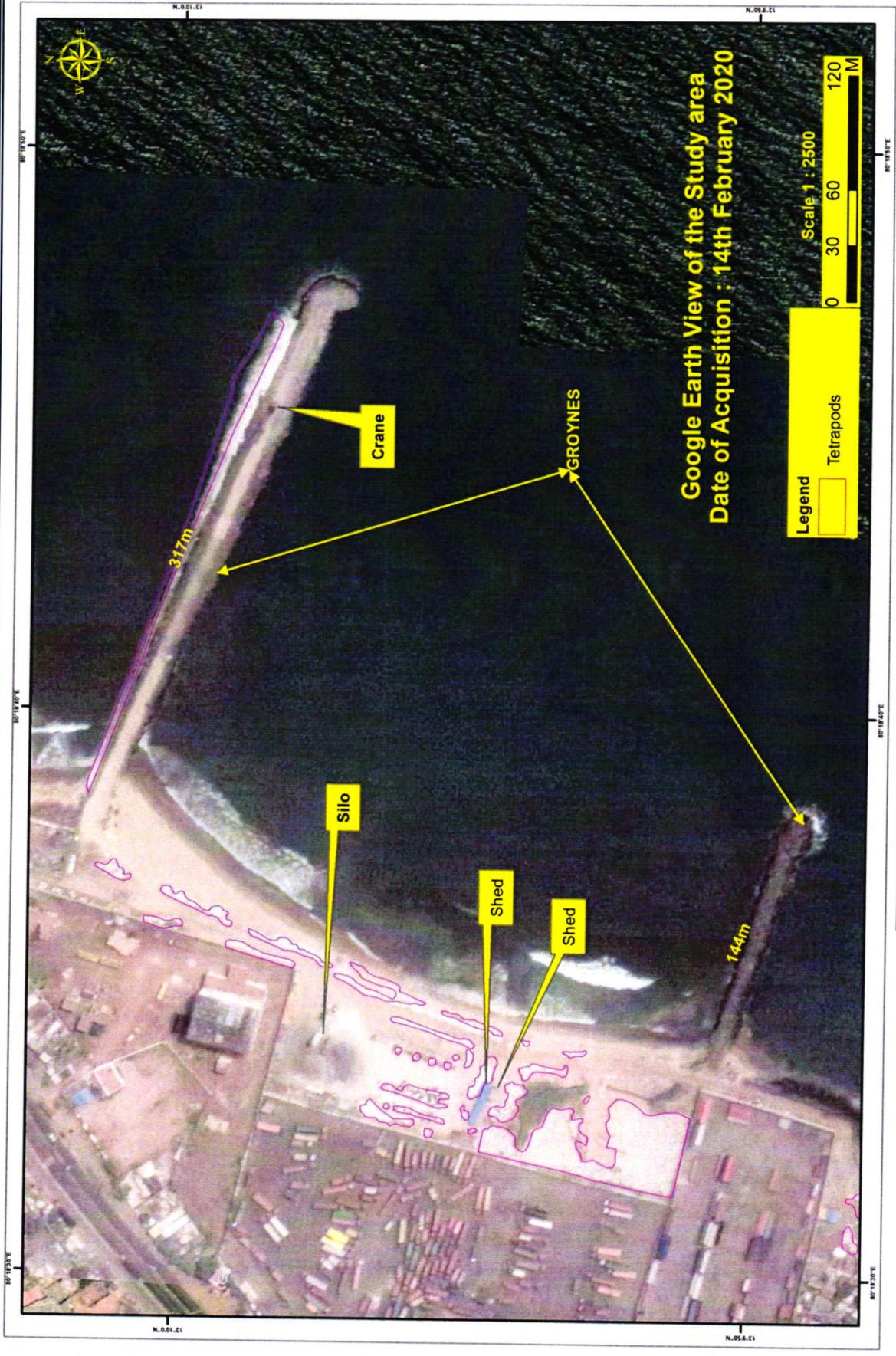


Figure. 4 Satellite data pertaining to 14th February 2019

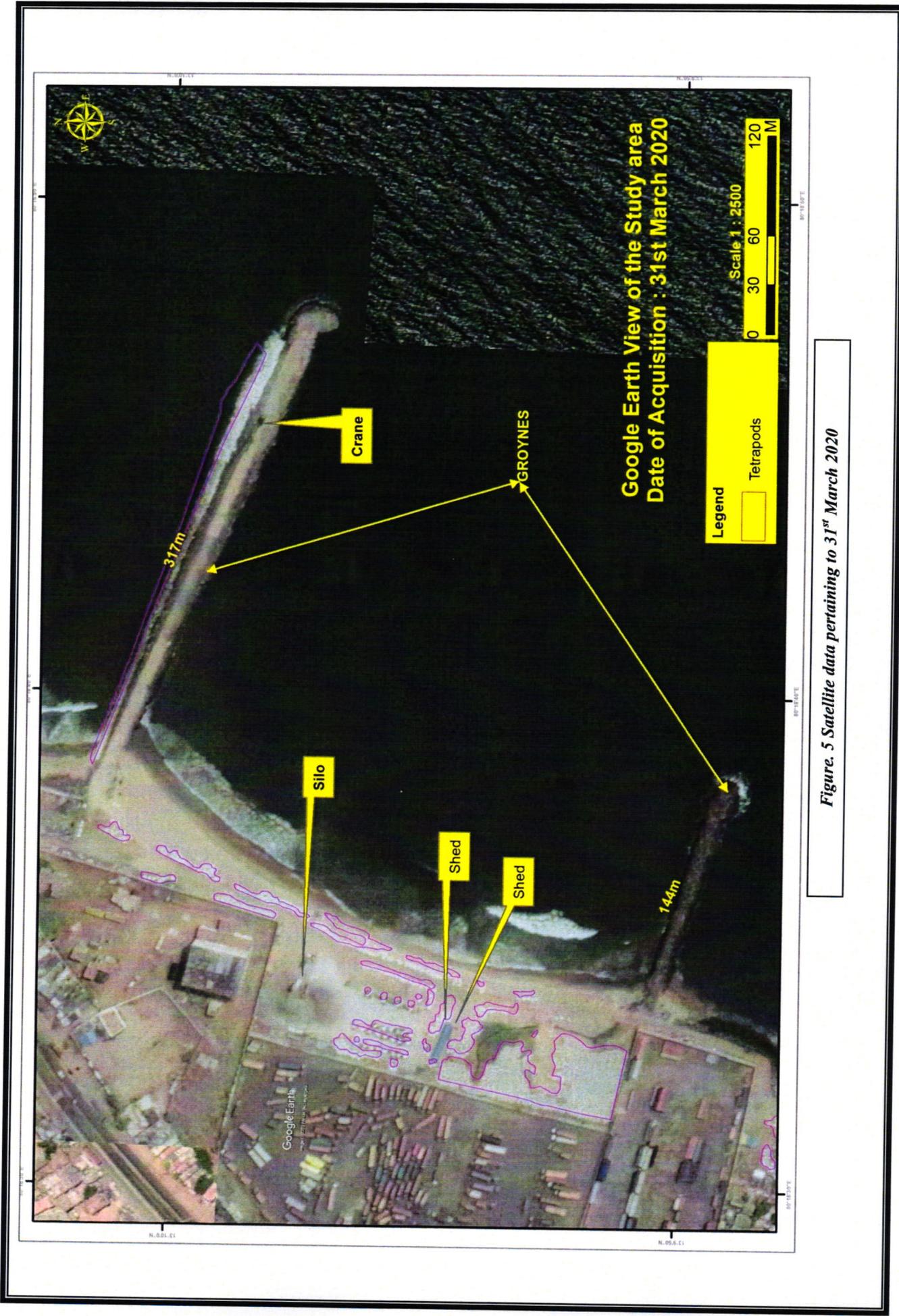


Figure 5 Satellite data pertaining to 31st March 2020

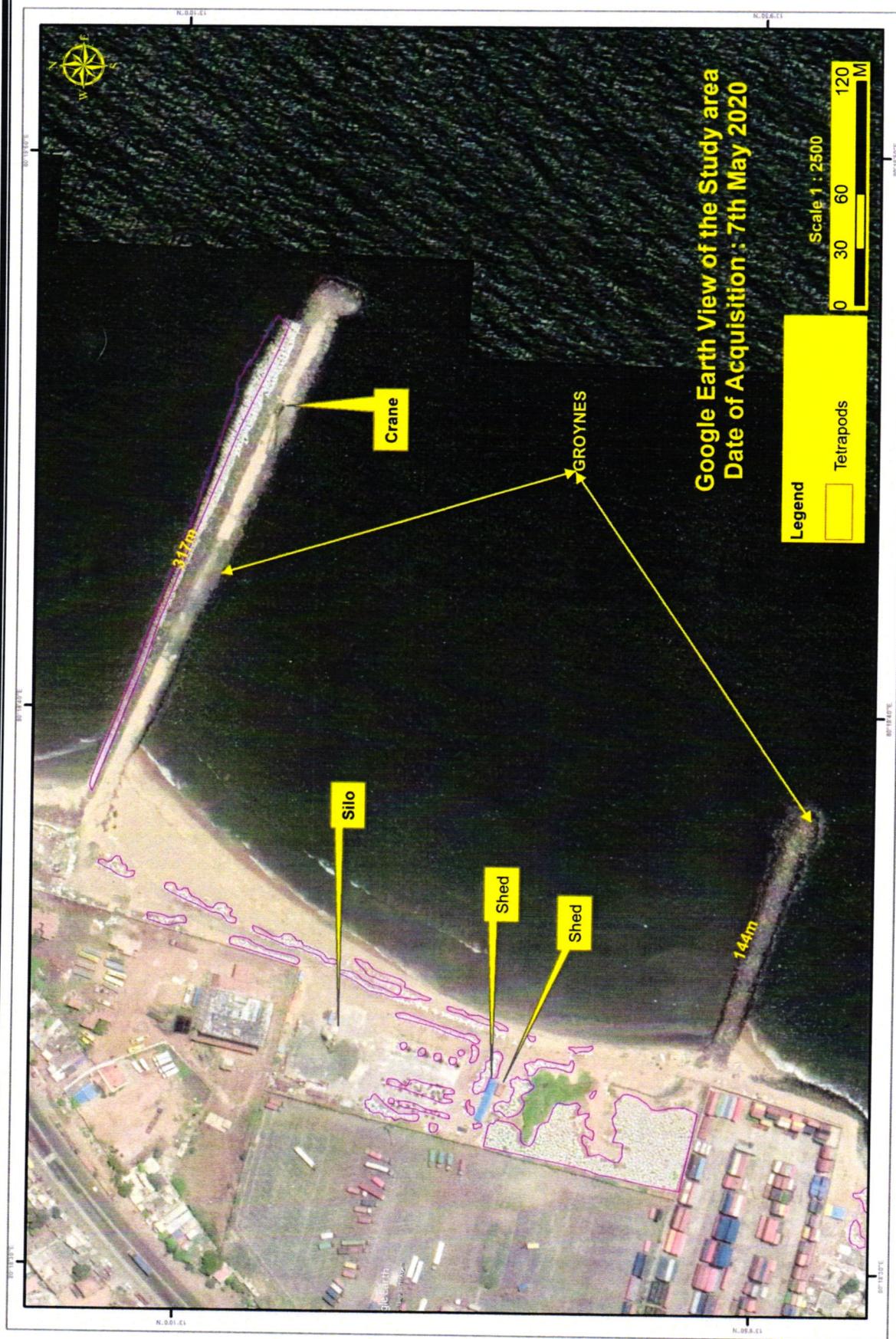


Figure. 6 Satellite data pertaining to 7th May 2020

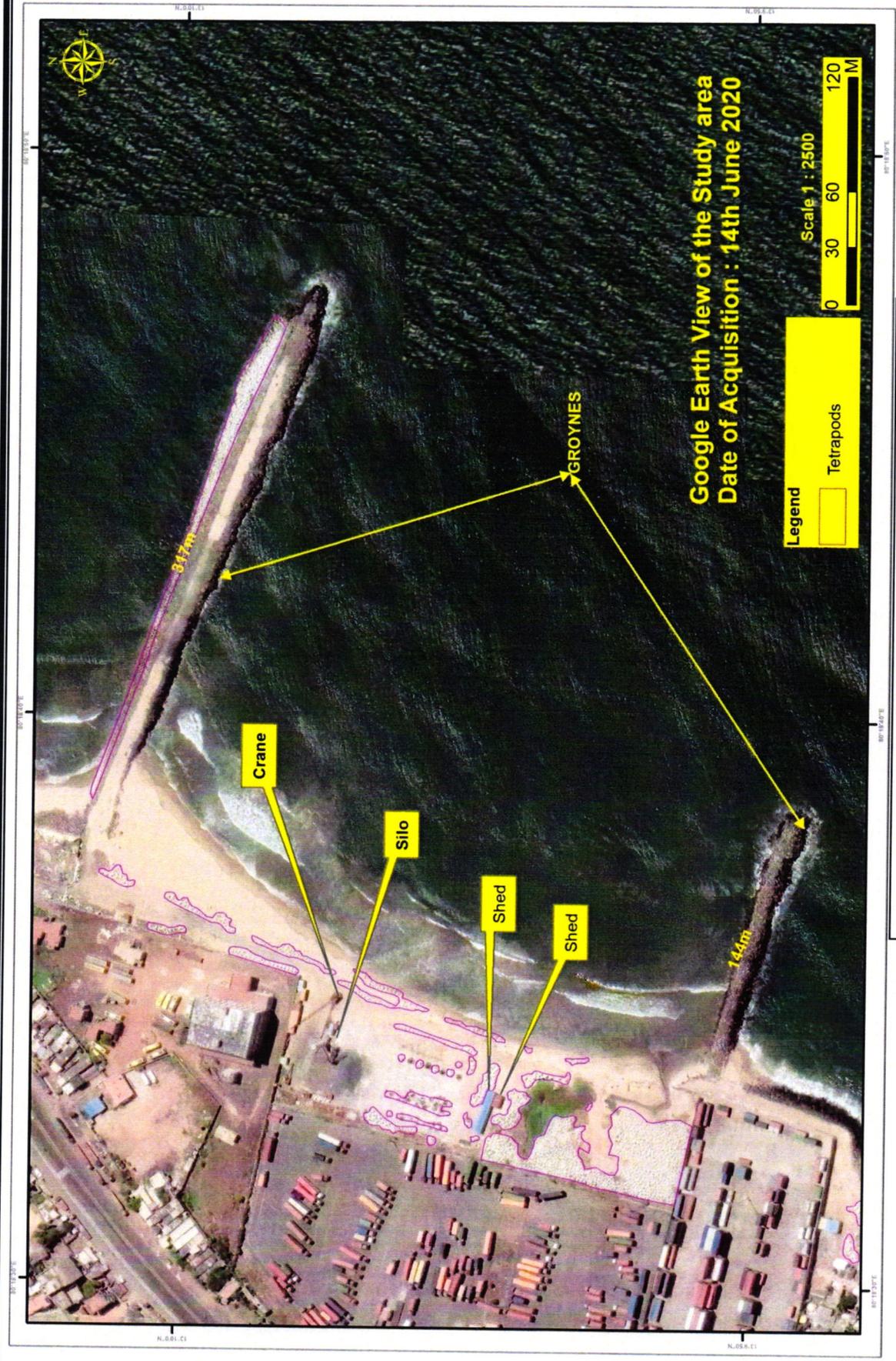


Figure. 7 Satellite data pertaining to 14th June 2020

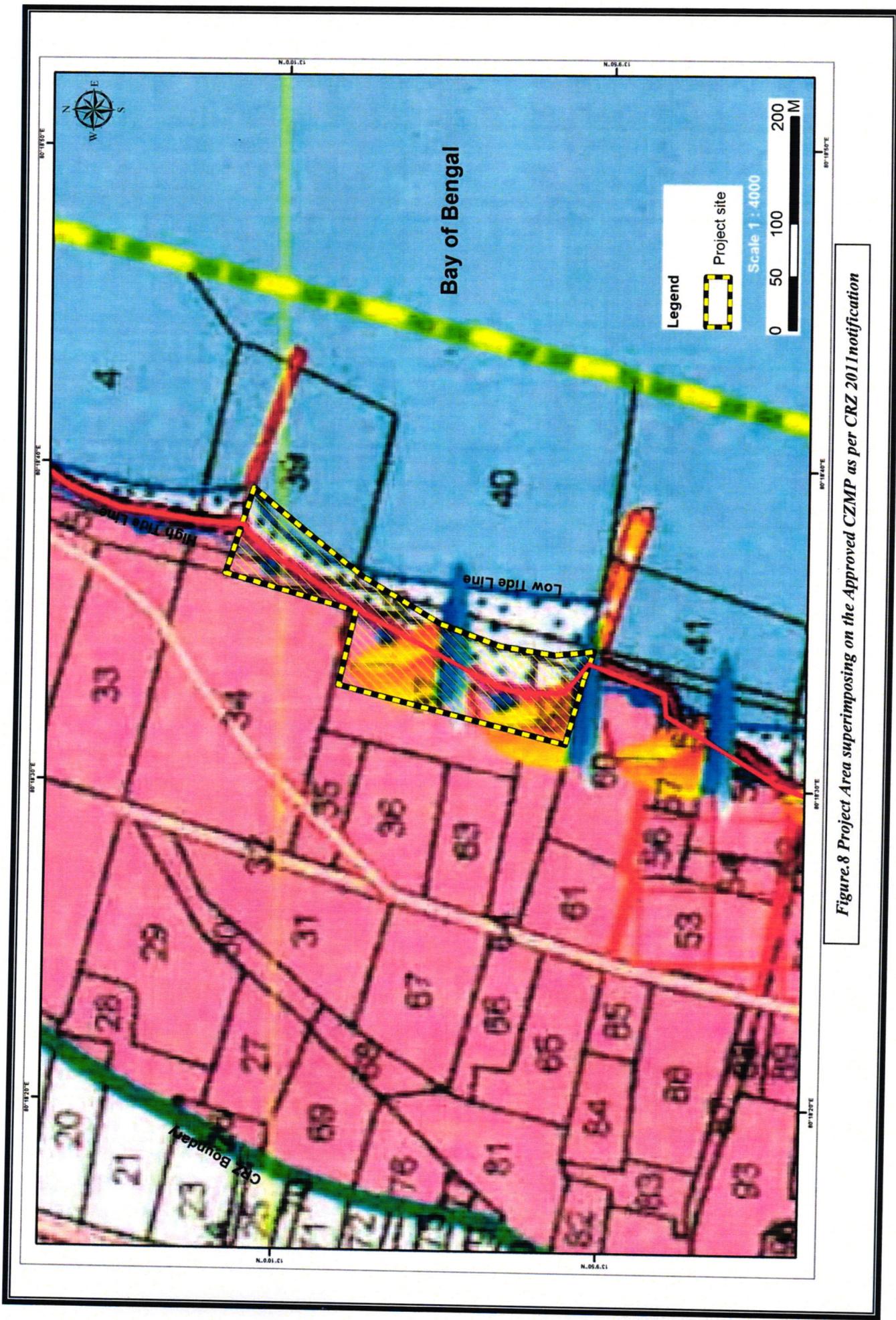
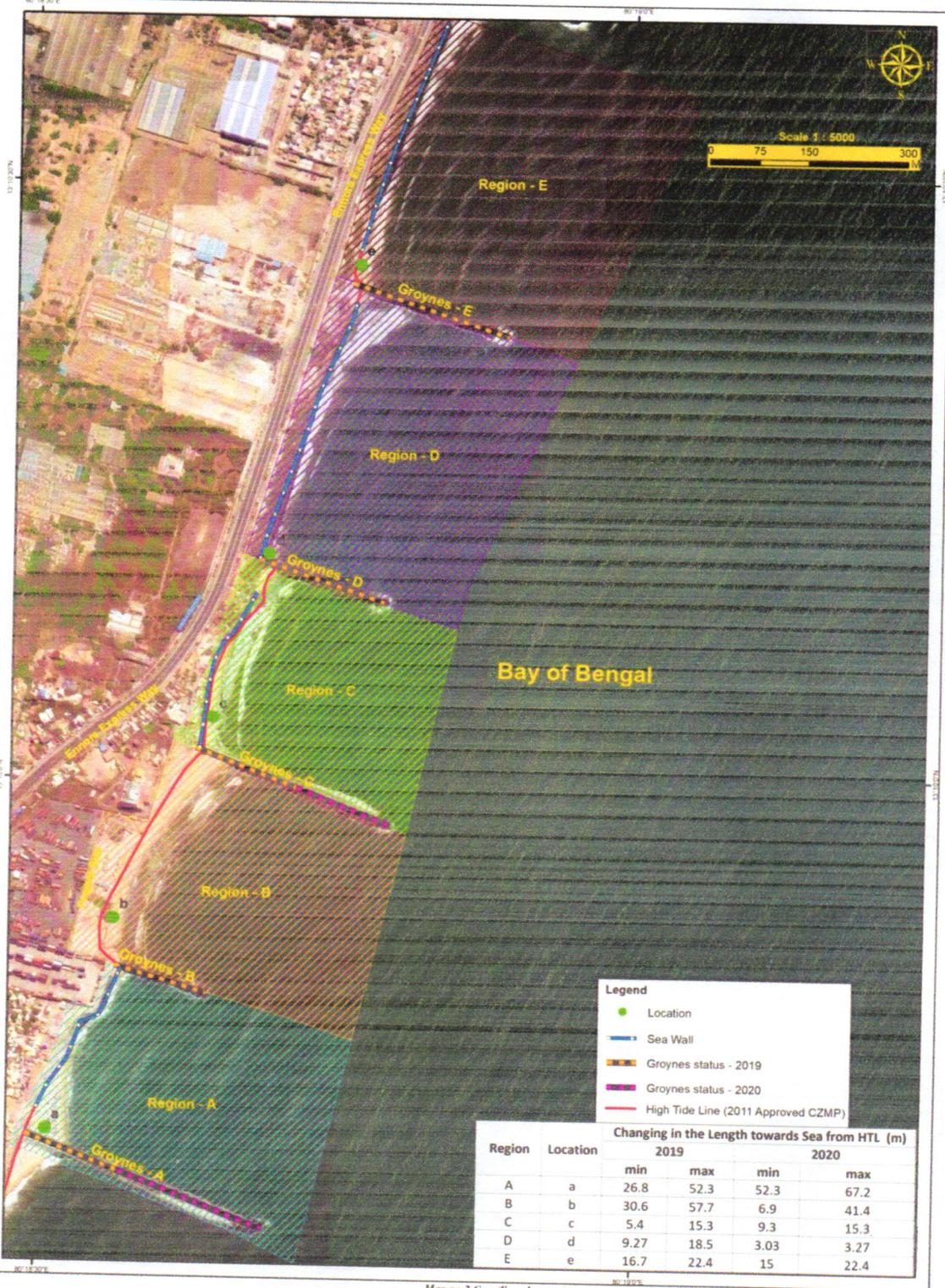


Figure.8 Project Area superimposing on the Approved CZMP as per CRZ 201 Notification



Map no.1 Study area on Satellite imagery



Map no.2 Coastline change Assessment

FISHERIES DEPARTMENT

From
Er.M:Murugesan, M.Tech., MBA.,
Executive Engineer,
Fishing Harbour Project Division,
Chennai – 600 035.

To
The Joint Committee Members,
Constituted by the Hon'ble NGT
(South Zone), Chennai,
for the Application No 28 of 2020.

Letter No. DB/D1/C-25 /2017 Date: 10.09.2020

Sir,

Sub: Fisheries - Construction of Tuna Fishing Harbour at Thiruvottriyur kuppam in Thiruvallur District – Hon'ble NGT(SZ), Chennai-Application 28 of 2020-Joint Committee Inspection on 17-03-2020 and 04-09-2020 - Status Report submitted – Regarding.

Ref: Original Application No.28 of 2020 (SZ) in the Hon'ble National Green Tribunal(Southern Zone), Chennai.

As informed, the status report on the Tuna Fishing Harbour at Thiruvottriyur kuppam in Thiruvallur District is submitted, as follows, to the Joint Committee.

The Hon'ble Minister for Fisheries has made announcement in the Floor of Assembly in 2014 that Detailed Techno Economic Feasibility Studies would be conducted for Construction of Tuna Fishing Harbour at Thiruvottriyur kuppam in Thiruvallur District to reduce the congestion in Chennai Fishing Harbour and to promote deep sea fishing. The Government of Tamilnadu has accorded the Administrative Sanction, vide G.O.(D) No 373, Animal Husbandry, Dairying and Fisheries (FS-1) Department dated 22-12-2014, for the same.

Accordingly, the Detailed Project Report has been prepared and District level CRZ and State Level CRZ Clearance were obtained vide their letter No. CRZ-29/DEE/TNPCB/ CHN/DCZMA/2016 dated 27-10-2016 and proceedings No P1/2204/2016 dated 10-03-2017, respectively. The SEIAA has issued the Terms of Reference (ToR) to carryout Environmental Impact Assessment (EIA) and public

hearing meeting, vide their Lr. No. SEIAA-TN/F.No6440/SEAC-C/7(e) ToR-301/2017 dated:22-01-2018. The detailed EIA report was prepared by the Annamalai University, Chidambaram and Public hearing meeting was conducted on 25-07-2019.

The Government of Tamilnadu has accorded Administrative Sanction, vide GO. (Ms.) No.14/ Animal Husbandry, Dairying and Fisheries (FS-1) Department dt: 01.02.2019 for Construction of Tuna Fishing Harbour at Thiruvottriyurkuppam in Thiruvallur District. **Considering the long pending request and welfare scheme of fishermen, congestion and frequent boat accidents in Chennai Fishing Harbour, promoting deep sea fishing and project cost escalations, the fisheries department has started extending on 06-08-2019 the existing 150m groins to 320m in North and 400m in South.**

Mr. Thiyagarajan, on behalf of Meenava Thanthai K.R. Selvarajkumar Meenavar Nala Sangam, Royapuram, filed Application 28 of 2020 in the Hon'ble NGT and prayed that the Fisheries Department is executing the Construction of Tuna Fishing Harbour at Thiruvottriyurkuppam without obtaining CRZ and Environmental Clearances from the competent authorities, and doing building construction, dredging, reclamation, construction of roads, illegal structures, dumping of heavy materials and construction debris, which affects the ecosystem and clear violation of the EIA and CRZ Notifications, hence, requested the Hon'ble Court to issue directions to take action against the Fisheries Department as well as restrain from further construction and other related activities.

The Hon'ble National Green Tribunal, Southern Zone, Chennai has passed an order on 07.02.2020, that the Fisheries Department should maintain the Status Quo at Project Site and formed a Joint Committee to ascertain the present status at site. Accordingly, the Joint Committee has inspected the project site on 17.03.2020 and submitted the report to the Hon'ble NGT and stated in its **para-2 that the Fisheries Department has obtained CRZ clearance from the Tamilnadu State Coastal Zone Management Authority vide Proceedings No P1/2204/2016 dated:10-03-2017 for the Construction of Tuna Fishing Harbour at**

Thiruvottriyurkuppam under CRZ Notifications-2011 and in para-11 that, at the time of inspection, no Construction/Dredging/Reclamation activities related to Fishing Harbour were carried out within the project site; also the fisheries department has not constructed any permanent structures pertaining to Fishing Harbour except the extension of breakwaters from the existing groins of 150m to 400m in South and 150m to 320m in north.

On hearing from the learned Additional Advocate General, the Hon'ble Court, in its order dated 21-07-2020, has directed the SEIAA to consider and pass appropriate orders in the pending application for Environmental Clearance for the Tuna Fishing Harbour Project in accordance with law and also directed the Joint Committee to assess the environment compensation and submit the report on or before 14-09-2020. As per the direction of the Hon'ble NGT, the SEIAA has issued the Environmental Clearance vide their Lr.No.SEIAA-TN/F.No 6440/EC/7(e)/75/2020 dated 05-08-2020 and the Joint Committee has inspected the site again on 04-09-2020.

As directed by the Hon'ble NGT, the Fisheries Department has stopped all its activities on 07-02-2020 and maintaining the "Status Quo" till date.

Being the public welfare scheme and Government project, delay in execution, affects the general public in getting their basic rights in time and also escalation in project cost, which is again the public money will be spent for creating this infrastructures, therefore, the fisheries department has extended the existing groins and have not done any other activities, causing no damage to the prevailing environment of the project site.


Executive Engineer
Fishing Harbour Project Division,
Chennai – 600 035