

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

**OA 283 of 2024**

N. Malayalathan

....Applicant

Vs.

Puducherry Coastal Zone Management Authority and Ors.

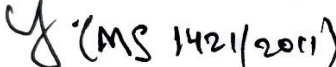
...Respondents

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Certified to be true copies of the respective originals.  
Dated on this the 26<sup>th</sup> day of November, 2024

Through

 (MS 1421/2024)

A Yogeshwaran  
Counsel for the Applicant  
Ph: 9566254546  
Email: [yogeshwaranadv@gmail.com](mailto:yogeshwaranadv@gmail.com)

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

(Under Sections 14 and 15 read with Section 18(1) of the NGT Act, 2010)

**OA 283 of 2024**

N. Malayalathan .....Applicant  
Vs.  
Puducherry Coastal Zone Management Authority and Ors. ...Respondents

**Preliminary rejoinder filed by the Applicant**

It is respectfully submitted as follows:

1. The Respondents had filed a document titled "status report as on 04.11.2024", when the subject application was taken up for admission on 05.11.2024.
2. No other Affidavit / report has been served on the Applicant by the Respondents till date.
3. The Respondents, in the status report dated 04.11.2024, had provided a table claiming compliance with the mandate of the CRZ Notification, 2019, and that the draft maps have been revised.
4. The draft maps continue to be inchoate. For example, even CRZ I-A areas have not been marked. The present application is not adversarial and is aimed only to ensure complete compliance with the law, and the preparation of accurate and robust CZMPs for the union territory of Puducherry.
5. A detailed report was submitted to the Respondents, mapping CRZ I-A areas that have not been reflected in the draft CZMPs. It is shocking that mangroves, sand dunes, turtle nesting grounds and even coral reefs have not been fully marked. In fact, coral reefs have not been marked at all. A translation of the report submitted to the Respondents is filed along with this affidavit as Annexure A4.
6. It is submitted that unless critical information like fisher settlements, fishing zones, land use planning for the area between the HTL and the hazard line, long term housing plan for fishers, accurate marking of ESAs etc. are ensured, the CZMP will fail to aid in the implementation of the law and the protection of the rights of fishers.
7. The Applicant reserves the right to file a detailed reply to any affidavit or report filed by the Respondent containing further particulars.

It is therefore prayed that this Hon'ble Tribunal may be pleased to allow the application as prayed for, and thus render justice.

*N. Malayalathan*  
APPLICANT

### VERIFICATION

I, N. Malayalathan, applicant herein, do hereby verify that the contents in the above paragraphs are true to the best of my knowledge and based on legal advice and that I have not suppressed any material fact.

Date : 26.11.2024

Place : Puducherry

*N. Malayalathan*  
X

**Signature of the Applicant**



**SIGNED BEFORE ME**

*William Jerome Vincent*

**WILLIAM JEROME VINCENT, B.A., LL.B.,**  
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Puducherry - 605 001  
Cell : 93631 27203  
MB. 1141/2000

**MISSING ECOLOGICALLY SENSITIVE AREAS  
IN THE DRAFT COASTAL ZONE MANAGEMENT  
PLAN MAPS OF PONDICHERRY AND  
KARAIKAL DISTRICTS**



# **Factual Report**

**Report prepared by:**

**Coastal Peoples' Right to Life Movement, Pondicherry**

August, 2024

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## MISSING ECOLOGICALLY SENSITIVE AREAS IN THE DRAFT COASTAL ZONE MANAGEMENT PLAN MAPS OF PONDICHERRY AND KARAIKAL DISTRICTS

### Factual Report

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## REPORT

### Background

Since April, 2023, the fisher panchayats of Karaikal and Pondicherry districts, Tamil Meenavar Viduthalai Vengaiikal, Coastal Peoples' Right to Life Movement (CPRM) and Karaikal District Fisherwomen's Federation have been jointly campaigning for proper implementation of the Coastal Regulation Zone (CRZ) notification, 2019.

The coastal States and Union Territories in India are in the process of preparing the Coastal Zone Management Plans (CZMP) as per the CRZ notification, 2019. The first set of draft CZMP maps for Pondicherry and Karaikal districts came out in March, 2023. The irony was that they did not show a single fishing village. We arranged a consultation meeting against these drafts by inviting progressive organisations, movements and political parties. Because of the protest of fishing communities and the pressure from political parties, the ruling NR-Congress and BJP government took back these drafts.

After making some changes, with solid inputs on fishing settlements and coastal commons from the activists and the fishing communities the Pondicherry Pollution Control Committee (PPCC) released the second set of draft CZMP maps in April 2024. These drafts also missed out many features and aspects. As a result, Malayalathan, a representative from Veerampattinam fishing village, filed a case in the National Green Tribunal – Southern Bench. An important demand was to include the actual extent of the Ecologically Sensitive Areas (ESA). The PPCC then gave a status report to this tribunal inadvertently claiming that all the ESA have been defined and properly marked in these drafts. In order to challenge this claim, the CPRM conducted a scientific study using survey tools and prepared this factual report.

### Methodology

The CRZ notification, 2019, has listed eleven ESA features under the zone of CRZ-1A. Mangrove forests, coral reefs, sand dunes, salt marsh, sea grass bed and turtle nesting site are some of these features. The aim of this factual report is to provide information on the missing areas on each of these features. With the help of fisher panchayats and domain experts, the CPRM conducted extensive field survey and prepared maps using location specific data. The team included ecologists, botanists, experienced field survey experts and a GIS expert. They covered the entire coast of Pondicherry and Karaikal identifying ESA features with species occurrence and measuring sand dunes with a laser device.

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## Sand dunes

Sand dunes act as natural barriers and protect people, land and properties during natural disasters like tsunami and storms. In Pondicherry district, the dunes are under severe stress because of the unregulated tourism development projects. Sand dunes take weeks to millennia to form through aeolian deposits. Without thinking about the ecological consequences, many were destroyed in this district in the last two to three decades.

The second set of draft CZMP maps released by the government did not show a single sand dune in Karaikal district. Though the government could deny the presence of sand dunes here, the names of fishing villages like Kilinjalmedu, Kasakudimedu and Karaikalmedu have historically come into existence because of their connection to sand dunes. In total, the government has missed out about 355.18 acres of sand dunes in Karaikal and Pondicherry districts. The plant species native to dunes such as *Spinifex littoreus*, *Ipomoea pes-caprae* and *Citrullus colocynthis* are documented visually during the field survey. Further, the information on height, extent and location are provided in this report. Kindly look at the Annexure-1 for these details.



## Mangrove forest

The coastal towns and cities have realized the importance of mangrove forest from their experience during the tsunami disaster in 2004. Many lives were saved because of this littoral forest. The government has marked only 82.6 acres of mangrove forest in these draft CZMP maps. As per our survey, an area of about 228.64 acres has been left out. For example, many forest areas in the Chunnambaru and Panithittu regions of Pondicherry and Arasalaru and fishing port regions of Karaikal have been left out. The details of these missing areas can be found in the annexure.





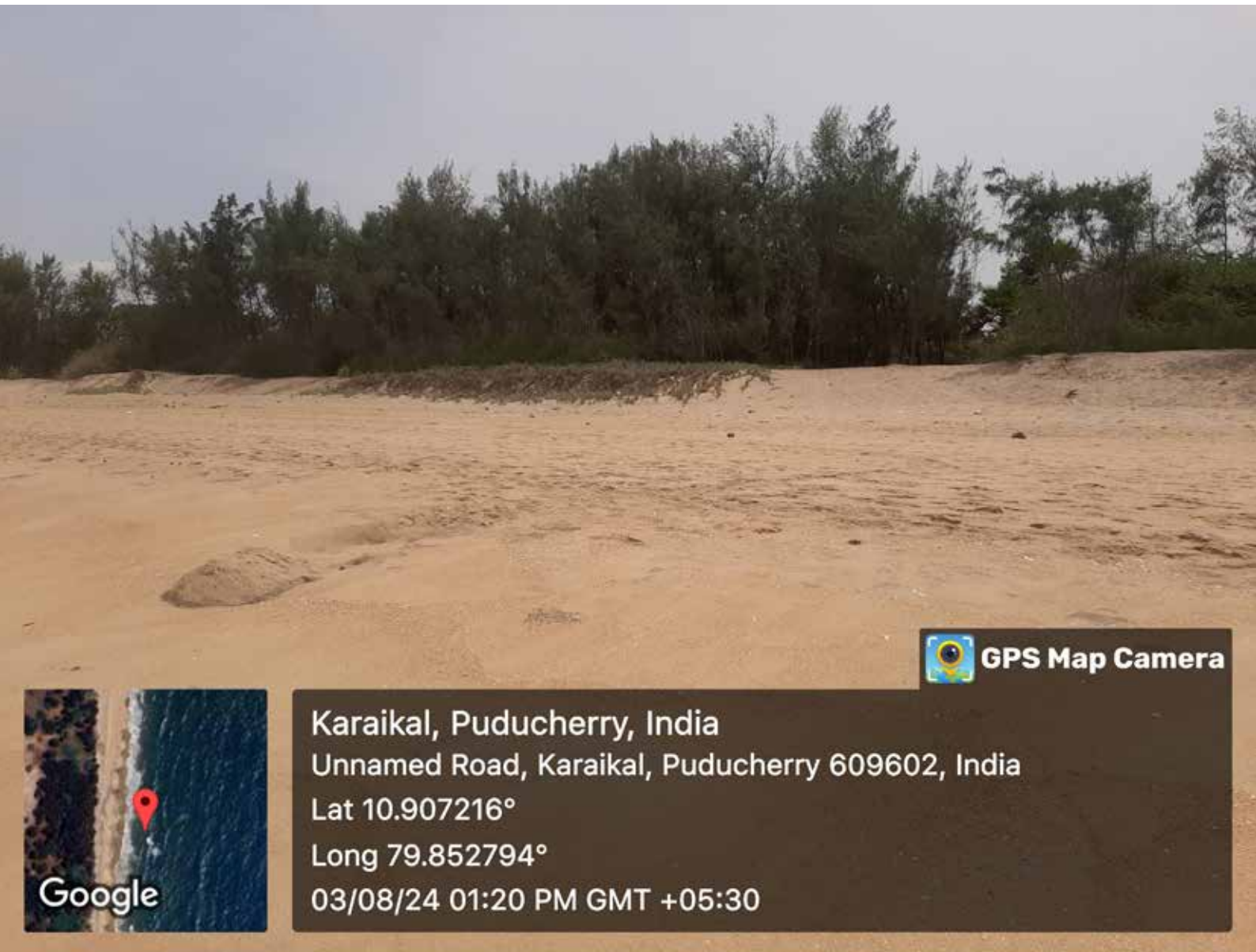
## Salt marsh

As far as salt marsh is concerned, except the Pooranankuppam area in Pondicherry and the Arasalaru area in Karaikal, all the other areas have been left out, mostly. For example, salt marsh in Nallavadu, Moorthykuppam and Pudhukuppam regions of Pondicherry are left out. Likewise, a majority of salt marsh region in Karaikal is missing in the drafts CZMP maps. The Nallavadu salt marsh had been acting as a habitat for the elusive and threatened smooth coated otter, an apex predator occupying the top of lagoon food chain. In addition, this marsh habitat act as habitat for thousands of migratory birds in Central Asian Flyway. As per our calculation, about 370.85 acres of salt marsh is left out in the drafts CZMP maps. For more details, kindly look at the annexure.



## Sea turtle nesting sites

With respect to turtle nesting sites in the draft CZMP maps, the villages in the north of Pondicherry are left untouched. There are studies and a peer reviewed publication on olive ridley sea turtle nesting sites in Pillaichavadi. The Forest Department regularly organises campaigns to collect turtle eggs and release them on hatching. In Karaikal, a large area is left out. Our conservative estimate shows that about 237.6 acres of sea turtle nesting sites are left out in these maps. The details about these omissions could be found in the annexure.



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## Mudflats

The mudflats in Ariyankuppam river of Pondicherry and Arasalaru and Thirumalairajan rivers of Karaikal are missing in the draft maps. Species such as mud creeper, fiddler crab, mudskipper and mangrove crab were widely observed in these places. A total of 20.17 acres of mudflats are left out in these maps. For more information, see the annexure.



## Sea grass beds

The Member Secretary of PPCC has informed in the status report to the National Green Tribunal that there are no sea grass beds in the Pondicherry region. On the contrary, researchers have confirmed their presence in the Chunnambar region in 1991. Further, during our survey, we noticed the sea grass (*Halophila ovalis*) in Chunnambar and documented its presence. Kindly look at the geo-referenced photograph of this report.



## Coral reefs

As far the coral reefs are concerned, we have included the geo-coordinates of a research paper in this report. The details of the publication: Laxmilatha, P., Jasmine, S., Sreeram, M. P., and Rengaiyan, P. (2019). Benthic communities of mesophotic coral ecosystem off Puducherry, east coast of India. *Current Science*, 166, 6, 982-987.

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### RESEARCH ARTICLES

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## Benthic communities of mesophotic coral ecosystem off Puducherry, east coast of India

**P. Laxmilatha<sup>1,\*</sup>, S. Jasmine<sup>2</sup>, Miriam Paul Sreeram<sup>3</sup> and Periasamy Rengaiyan<sup>1</sup>**

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<sup>2</sup>ICAR-Vizhinjam Research Centre of the Central Marine Fisheries Research Institute, Cochin 695 521, India

<sup>3</sup>ICAR-Central Marine Fisheries Research Institute, Cochin 682 018, India

**The shallow coral reef ecosystems along the Indian coast are being threatened by anthropogenic global ocean warming and increased frequency of coral bleaching in the recent past. Identification and conservation of deeper reef habitats are essential as they serve as a source of larvae and livestock to replenish the shallow reef habitats. Information on the location and spatial extent of the mesophotic coral ecosystems (MCEs) and their biodiversity is poorly known in the continental shelf of the east coast of India. In this study, we have documented the species diversity of MCEs at a depth of 30–40 m off Puducherry along the east coast of India. In total, 12 species of corals, including 5 black corals and 16 octocorals, 4 species of sponges and 31 species of coral-associated benthopelagic fish species were recorded. *Subergorgia* sp. was the most dominant species of octocorals and found extensively as gorgonian forests. The MCEs reported in this study raise important questions about the origin and connectivity of the coral populations in this region to the other major coral reef ecosystems along the east coast. Understanding the physical processes and hydrographic features around the MCEs, off Puducherry will reveal more information about the distribution and colonization of coral communities and their vulnerability to changes in future.**

to 150 m in clear waters of the tropics<sup>3</sup>. However, several species of corals interface between the shallow and deep sea environments around the world<sup>1,2,4,5</sup>. In general, MCEs occur at a depth of 30–150 m of the euphotic zone in tropical regions<sup>4,5</sup>. The MCEs, situated off Puducherry the east coast of India are considered to be unique, showing all the features mentioned above.

Biotic assemblages in MCEs are considered to be extensions of shallow-water coral ecosystem assemblages due to their unique depth range<sup>4</sup>. In addition, a number of unique or depth-restricted species occur in these habitats. These diverse groups of benthic assemblage in MCEs hold a rich biodiversity and chemical reservoirs<sup>2</sup> which are of high, ecological and economic value<sup>6</sup>. Knowledge on MCEs is scarce, while little is known about their functional aspects. Advanced technologies may enable us to connect and overcome the logistic challenges to bridge this knowledge gap and allow resource managers to make informed decisions on conserving MCEs<sup>2</sup>. The most important knowledge gap pertains to the species diversity and ecological role of organisms in MCEs. While intensive efforts were taken to study MCEs in different parts of the world, we do not have concerted efforts to study MCEs in India.

The potential importance of MCEs as refugia for shal-

**Table of the missing ESA**

|                      | Pondicherry        |                     | Karaikal           |                     | Total missing ESA (acres) |
|----------------------|--------------------|---------------------|--------------------|---------------------|---------------------------|
|                      | NCSCM data (acres) | Missing ESA (acres) | NCSCM data (acres) | Missing ESA (acres) |                           |
| Mangrove forest      | 52.43              | 149.96              | 30.21              | 78.68               | 228.64                    |
| Sand dunes           | 45.78              | 226.34              | -                  | 128.84              | 355.18                    |
| Mudflats             | -                  | 19.028              | 7.77               | 1.14                | 20.168                    |
| Salt marsh           | 25.21              | 89.05               | 12.87              | 281.80              | 370.85                    |
| Turtle nesting sites | 49.60              | 114.24              | -                  | 123.42              | 237.66                    |

### **Our demands**

- 1.** The missing ecologically sensitive areas should be included in the draft CZMP maps.
- 2.** In addition to protecting these areas, the rights of local communities over these resources should be ensured. Also, in order to protect the Union Territory of Pondicherry from natural disasters, it is essential to mark them in the maps.
- 3.** The Coastal Zone Management Authorities (CZMA) for Puducherry and Karaikal districts should prepare management plans to preserve these ecologically sensitive areas. Mere CZMP maps are not enough and constitute management plans. In the section 2.1.1. (b) of the CRZ notification, 2019, it clearly says, “A detailed environment management plan shall be formulated by the states and union territories for such ecologically sensitive areas in respective territories ...”
- 4.** Further, while preparing these plans, the participation of all stakeholders should be ensured.

## **Conclusion**

The National Centre for Sustainable Coastal Management (NCSCM), a public research institution, is the nodal agency for studying and marking the ecologically sensitive areas. Based on the experiences of civil societies in Tamil Nadu, without consistent efforts and pressure on the PPCC and the NCSCM, these missing areas may not be included in the maps.

On this subject, the CZMA should play a key role. For each district, there is a CZMA setup to look after the management of these areas. Each setup has about three fisher representatives. Sadly, the CZMA meetings do not happen regularly.

The missing ecologically sensitive areas should be included in the draft CZMP maps. Similarly, the environmental management plans should be prepared and followed in each district. All democratic and progressive forces should unite and demand the government for this. The union territory of Pondicherry has already lost significant portion of ecologically sensitive areas due to lack of management plans and poor governance. For example, untreated urban sewage is continuously being discharged into rivers, backwaters and sea affecting the fragile ecology of coastal ecosystems.

In 1990s, due to the collaborative efforts of Annamalai University, environmentalists, civil society and government department, the mangrove forest in the Thengaithittu harbour area was rejuvenated. The tourism activities around that forest became a reality because of these efforts. The policy makers should take this example as a lesson, which demonstrates that environmental conservation could benefit livelihoods, and prepare management plans with public participation and implement them for the well-being of all.

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## Annexure – 1

### Information on latitude, longitude and other details of missing ESA

#### 1.1. Mangrove forest

| Pondicherry & Karaikal                               |                    |              |
|--|--------------------|--------------|
| Location   | Place              | Area (acres) |
| Point (79.79325335815504161<br>11.89909934599632635) | Ariyankuppam River | 0.42         |
| Point (79.7937433887408929<br>11.89900473226324706)  | Ariyankuppam River | 0.16         |
| Point (79.7938890398179268<br>11.89924504059205823)  | Ariyankuppam River | 0.03         |
| Point (79.7949395698452264<br>11.89938803944551537)  | Ariyankuppam River | 1.09         |
| Point (79.79496213703994556<br>11.89986595510999656) | Ariyankuppam River | 0.08         |
| Point (79.79512001216465933<br>11.89975211584605219) | Ariyankuppam River | 0.05         |
| Point (79.79556941228642586<br>11.89975614925967839) | Ariyankuppam River | 0.01         |
| Point (79.79639066641487943<br>11.89997753011595094) | Ariyankuppam River | 0.09         |
| Point (79.79688011404438441<br>11.90084173459342054) | Ariyankuppam River | 0.06         |
| Point (79.79479340245916319<br>11.89901978321342213) | Ariyankuppam River | 0.23         |
| Point (79.79499263745435655<br>11.8992504950682676)  | Ariyankuppam River | 0.04         |
| Point (79.79881306375219197<br>11.90243033710201104) | Ariyankuppam River | 1.32         |



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|  |                    |      |
|--|--------------------|------|
| Point (79.80519994875126599<br>11.90254286746786683) | Ariyankuppam River | 0.99 |
| Point (79.80679726759112214<br>11.90259786599635561) | Ariyankuppam River | 0.28 |
| Point (79.80909780583463942<br>11.90182934645002533) | Ariyankuppam River | 1.30 |
| Point (79.81310550961701722<br>11.90065398777077021) | Ariyankuppam River | 3.61 |
| Point (79.80802510742728373<br>11.90185574258975976) | Ariyankuppam River | 0.64 |
| Point (79.80859165265877664<br>11.90153082291030273) | Ariyankuppam River | 0.16 |
| Point (79.805075579668042<br>11.90166524067736376)   | Ariyankuppam River | 0.59 |
| Point (79.80193660412784595<br>11.90193628170369777) | Ariyankuppam River | 1.96 |
| Point (79.79893086471744823<br>11.90160952700201236) | Ariyankuppam River | 0.50 |
| Point (79.79762182344113342<br>11.9008590226304225)  | Ariyankuppam River | 0.48 |
| Point (79.80928996510293416<br>11.90119987985543304) | Ariyankuppam River | 0.25 |
| Point (79.80687498089456255<br>11.90118426087472159) | Ariyankuppam River | 0.59 |
| Point (79.8125202337194537<br>11.89957611415920802)  | Ashramthittu       | 0.16 |
| Point (79.81371682462830108<br>11.89688951654909665) | Ashramthittu       | 1.03 |
| Point (79.81358431538021136<br>11.89810477918219789) | Ashramthittu       | 0.99 |

|  |                                  |       |
|--|----------------------------------|-------|
| Point (79.81577210194075178<br>11.89841683798603533) | Ashramthittu                     | 6.16  |
| Point (79.81764154871882511<br>11.90290604065422819) | Arikamedu<br>Archaeological site | 7.92  |
| Point (79.81593452818570711<br>11.89726788033506288) | Ashramthittu                     | 1.78  |
| Point (79.81838949506789049<br>11.90077498100198206) | Arikamedu<br>Archaeological site | 2.15  |
| Point (79.82346721837623704<br>11.90488680708571678) | Harbor                           | 20.41 |
| Point (79.82598687877670329<br>11.90552926601640849) | Harbor                           | 0.16  |
| Point (79.82815254181208786<br>11.90752578135562878) | Harbor                           | 0.09  |
| Point (79.81827919358491386<br>11.90674817302117461) | Thengaithittu                    | 3.54  |
| Point (79.81883878635852625<br>11.90682345092466043) | Thengaithittu                    | 0.39  |
| Point (79.81863260447050834<br>11.9062310684263597)  | Thengaithittu                    | 0.12  |
| Point (79.81868710036543746<br>11.90649272119194357) | Thengaithittu                    | 0.02  |
| Point (79.82450271241241069<br>11.90514919966507179) | Harbor                           | 0.01  |
| Point (79.82482934790704121<br>11.90616395173614528) | Harbor                           | 0.01  |
| Point (79.81472613136092775<br>11.90954680753248063) | Thengaithittu                    | 30.81 |
| Point (79.81616540148995398<br>11.91574947401923623) | Thengaithittu                    | 3.17  |

|  |               |      |
|--|---------------|------|
| Point (79.81733489159584849<br>11.91760540568041904) | Thengaithittu | 0.88 |
| Point (79.81780390833262118<br>11.91779319142065496) | Thengaithittu | 0.14 |
| Point (79.81788925992489681<br>11.91837196096882678) | Thengaithittu | 1.65 |
| Point (79.81750776645584722<br>11.91879616690623855) | Thengaithittu | 0.14 |
| Point (79.81821662944351203<br>11.91904088391353156) | Thengaithittu | 0.54 |
| Point (79.81865298914837581<br>11.91911165125357286) | Thengaithittu | 0.05 |
| Point (79.82028233358786906<br>11.91831666606488405) | Thengaithittu | 5.01 |
| Point (79.82165605648705764<br>11.91791875890471353) | Thengaithittu | 0.03 |
| Point (79.8207751281136666<br>11.91892648485037398)  | Thengaithittu | 3.09 |
| Point (79.82037607403293578<br>11.91900560352752159) | Thengaithittu | 0.03 |
| Point (79.82054505127037203<br>11.91887670210505767) | Thengaithittu | 0.06 |
| Point (79.82058710125258472<br>11.91898757789738283) | Thengaithittu | 0.01 |
| Point (79.82229483236561407<br>11.91802086278070938) | Thengaithittu | 0.05 |
| Point (79.82254174357235854<br>11.91793101627641427) | Thengaithittu | 0.01 |
| Point (79.82434026226027868<br>11.91518322751984016) | Thengaithittu | 8.57 |

|  |                             |         |
|--|-----------------------------|---------|
| Point (79.82640587533890653<br>11.91370000615693847) | Thengaithittu               | 0.0033  |
| Point (79.82647866307287643<br>11.91391415229395001) | Thengaithittu               | 0.00497 |
| Point (79.82668515438075474<br>11.91372127982140583) | Thengaithittu               | 0.27    |
| Point (79.82567777565031975<br>11.91656142031967924) | Thengaithittu               | 0.97    |
| Point (79.82774723540403272<br>11.91235607511601557) | Boat house                  | 3.49    |
| Point (79.82644962384274834<br>11.91092738142685548) | Boat house                  | 0.81    |
| Point (79.82529882805626187<br>11.91335148454585635) | Achariya school<br>opposite | 2.43    |
| Point (79.82212806706336039<br>11.8814106798468675)  | Boat house                  | 0.02    |
| Point (79.82170795374130989<br>11.88115561185350977) | Boat house                  | 0.01    |
| Point (79.82217584215426598<br>11.88184071027723299) | Boat house                  | 0.01    |
| Point (79.82295996911922487<br>11.88118268774485031) | Boat house                  | 0.16    |
| Point (79.79031600996187024<br>11.78485942875143699) | Mullodai                    | 1.48    |
| Point (79.79074316173104364<br>11.78660188075812876) | Mullodai                    | 4.70    |
| Point (79.78592839491692246<br>11.78788555874239918) | Mullodai                    | 0.06    |
| Point (79.78663788734588991<br>11.78780238958965398) | Mullodai                    | 1.49    |

# 20

|  |            |       |
|--|------------|-------|
| Point (79.78924283681129737<br>11.78888810445794633) | Mullodai   | 0.02  |
| Point (79.80376548109356349<br>11.88043399398766908) | Chunnambar | 0.12  |
| Point (79.80657927593738066<br>11.88044251760020309) | Chunnambar | 0.03  |
| Point (79.80766126127609539<br>11.84609803422338103) | Nallavadu  | 0.17  |
| Point (79.78893904656601421<br>11.78747979546346691) | Mullodai   | 16.17 |
| Point (79.78747198986592082<br>11.78843284228593724) | Mullodai   | 0.02  |
| Point (79.78764290265640113<br>11.78854605060936933) | Mullodai   | 0.01  |
| Point (79.78807221381242698<br>11.78866092283568001) | Mullodai   | 0.01  |
| Point (79.78825808569661149<br>11.78866330527941031) | Mullodai   | 0.01  |
| Point (79.78862612277661981<br>11.78856751900929467) | Mullodai   | 0.04  |
| Point (79.78880955705591305<br>11.78851425840660205) | Mullodai   | 0.01  |
| Point (79.78929962156260558<br>11.7885925019381137)  | Mullodai   | 0.05  |
| Point (79.78980381521978416<br>11.78842936906727523) | Mullodai   | 0.17  |
| Point (79.7899377775328702<br>11.78845868043484124)  | Mullodai   | 0.01  |
| Point (79.79034182439711742<br>11.78826950480751634) | Mullodai   | 0.33  |

|  |                    |       |
|--|--------------------|-------|
| Point (79.8098336380038802<br>11.90020319822105677)  | Ariyankuppam River | 1.24  |
| Point (79.81264980085082072<br>11.89862690383171007) | Ariyankuppam River | 1.54  |
| Point (79.83891945220972275<br>10.91208732478382437) | Arasalar           | 0.02  |
| Point (79.83916770937780427<br>10.9121888169666299)  | Arasalar           | 0.03  |
| Point (79.8358893218204031<br>10.90866527808383779)  | Arasalar           | 0.07  |
| Point (79.83543334987767537<br>10.90847743191134533) | Arasalar           | 0.02  |
| Point (79.84083458991868554<br>10.90965682317707497) | Arasalar           | 0.06  |
| Point (79.84206943183328065<br>10.9085645222161336)  | Arasalar           | 0.05  |
| Point (79.84190845457162311<br>10.90877380607807723) | Arasalar           | 0.01  |
| Point (79.84048759344727841<br>10.9064871701419932)  | Arasalar           | 1.78  |
| Point (79.83968494648260616<br>10.90506501051170751) | Arasalar           | 5.72  |
| Point (79.84146040541202183<br>10.90616182219395469) | Arasalar           | 1.92  |
| Point (79.84190790181092723<br>10.90557587700216935) | Arasalar           | 0.03  |
| Point (79.84259197284744403<br>10.90556909560324605) | Arasalar           | 0.38  |
| Point (79.84131458722301034<br>10.90426883841462136) | Arasalar           | 0.002 |

|  |          |       |
|--|----------|-------|
| Point (79.84115412205801476<br>10.9051961050277253)  | Arasalar | 0.002 |
| Point (79.84368415025532784<br>10.9055157306265027)  | Arasalar | 1.04  |
| Point (79.84429766354924141<br>10.90528510636728932) | Arasalar | 0.02  |
| Point (79.84408446144738036<br>10.90524377784183052) | Arasalar | 0.01  |
| Point (79.8446316488951453<br>10.90528699800708523)  | Arasalar | 0.01  |
| Point (79.84221142547474415<br>10.90504356608173708) | Arasalar | 1.54  |
| Point (79.84439480544239132<br>10.90470886982601684) | Arasalar | 0.59  |
| Point (79.84372585095950114<br>10.90720677483544776) | Arasalar | 1.73  |
| Point (79.84453164628878596<br>10.90612019671554478) | Arasalar | 0.01  |
| Point (79.8448289616213458<br>10.90585794757026861)  | Arasalar | 0.04  |
| Point (79.8462747802337276<br>10.90661154139998423)  | Arasalar | 0.36  |
| Point (79.84551900329442731<br>10.90469159159013479) | Arasalar | 0.002 |
| Point (79.84562053661703374<br>10.90476710613061151) | Arasalar | 0.01  |
| Point (79.84576115539945818<br>10.90486033536182475) | Arasalar | 0.01  |
| Point (79.84587776626297284<br>10.90474412496732803) | Arasalar | 0.01  |

|  |                            |       |
|--|----------------------------|-------|
| Point (79.84583750024306426<br>10.90464987911875383) | Arasalar                   | 0.001 |
| Point (79.84786915593706169<br>10.916618007788637)   | Arasalar                   | 0.11  |
| Point (79.84817817795729411<br>10.91653370339269635) | Arasalar                   | 0.05  |
| Point (79.8483783814889847<br>10.91591227570970268)  | Arasalar                   | 0.07  |
| Point (79.84855506507842904<br>10.91592676869836254) | Arasalar                   | 0.02  |
| Point (79.84970484545647196<br>10.91420289237090735) | Arasalar                   | 0.02  |
| Point (79.84969276406640404<br>10.91376099735859384) | Arasalar                   | 0.01  |
| Point (79.84276209578165151<br>10.91550033697245325) | Karaikal court             | 0.14  |
| Point (79.84307289842207922<br>10.91454243120033851) | Karaikal court             | 1.79  |
| Point (79.84229209556613682<br>10.91590128952688943) | Karaikal court             | 0.01  |
| Point (79.84215296378076232<br>10.91409307755727909) | Karaikal court             | 0.04  |
| Point (79.84224593901782896<br>10.9143456007157269)  | Karaikal court             | 0.31  |
| Point (79.84192259179968687<br>10.91439766162388203) | Karaikal court             | 0.06  |
| Point (79.84209229561207621<br>10.91447086157091917) | Karaikal court             | 0.02  |
| Point (79.84978443234747658<br>10.91053439540435299) | Karaikal Fishing<br>Harbor | 1.05  |



|  |                           |       |
|--|---------------------------|-------|
| Point (79.84798898101729492<br>10.91572542881679375) | Mangrove Plantation       | 35.23 |
| Point (79.84518911490626181<br>10.91658420247373584) | RTO Office                | 6.39  |
| Point (79.83943549027078745<br>10.88359225990656221) | Thirumalarajanar<br>River | 0.31  |
| Point (79.84397547026077291<br>10.88329044008800928) | Thirumalarajanar<br>River | 0.08  |
| Point (79.8466296127651276<br>10.88353854022988898)  | Thirumalarajanar<br>River | 8.32  |
| Point (79.84815568842483913<br>10.88598024673226661) | Thirumalarajanar<br>River | 0.38  |
| Point (79.84894365913685021<br>10.8879764344115415)  | Thirumalarajanar<br>River | 3.92  |
| Point (79.84977703144608085<br>10.88683180155562624) | Thirumalarajanar<br>River | 0.30  |
| Point (79.84976664743457775<br>10.88713938208230836) | Thirumalarajanar<br>River | 0.004 |
| Point (79.84985457103790907<br>10.88746967253849718) | Thirumalarajanar<br>River | 0.28  |
| Point (79.85000444903948846<br>10.88789467918133624) | Thirumalarajanar<br>River | 0.13  |
| Point (79.85023321975836552<br>10.88869337403972715) | Thirumalarajanar<br>River | 2.32  |
| Point (79.8411797478960068<br>10.90398459384807417)  | Arasalar                  | 0.04  |
| Point (79.84110138960190284<br>10.90421192212438228) | Arasalar                  | 0.02  |
| Point (79.84147693589390826<br>10.90890101246522015) | Arasalar                  | 1.76  |

|  |              |               |
|--|--------------|---------------|
| Point (79.84127348557527171<br>10.90409021607992024) | Arasalar     | 0.01          |
|  | <b>Total</b> | <b>228.64</b> |

## 1.2. Sand dunes

### Pondicherry & Karaikal

| Location   | Location            | Height | Area (acres) |
|--|---------------------|--------|--------------|
| Point (79.82365348425092577<br>11.88023527612788577) | Eden beach          | 1.5    | 2.02         |
| Point (79.82472213661169747<br>11.88571761507847135) | Eden beach          | 3.6    | 16.17        |
| Point (79.82739831701836408<br>11.916239563863531)   | Harbor              | 12.8   | 5.24         |
| Point (79.82564165210048657<br>11.90883381891758219) | Harbor              | 1.6    | 0.66         |
| Point (79.82598553116933715<br>11.90955732771713294) | Harbor              | 8.1    | 1.29         |
| Point (79.82636210326734272<br>11.91662403804088655) | Harbor              | 10     | 0.42         |
| Point (79.87182790867798587<br>12.03747250456351381) | Kanagachettikulam   | 0.7    | 3.56         |
| Point (79.79324691763279986<br>11.79370130968374752) | Moorthykuppam       | 3.4    | 1.80         |
| Point (79.79313305519083599<br>11.79454086080552244) | Moorthykuppam       | 6.45   | 0.37         |
| Point (79.79712972860997411<br>11.7938571921199653)  | Moorthykuppam beach | 2.5    | 3.87         |
| Point (79.79638158965491357<br>11.79504497005489227) | Moorthykuppam beach | 6.5    | 6.72         |

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|  |  |      |        |
|--|--|------|--------|
| Point (79.79795465015730827<br>11.79868958368026455) | Moorthykuppam beach                    | 2.5  | 5.00   |
| Point (79.80899291684282559<br>11.84352859103120537) | Nallavadu                              | 4.6  | 100.82 |
| Point (79.81084636403454624<br>11.85298406821272543) | Nallavadu                              | 1.6  | 5.31   |
| Point (79.80203371366367548<br>11.81955149486545231) | Narambai                               | 5    | 0.57   |
| Point (79.80275021369671151<br>11.81931510914477101) | Narambai to Panithittu                 | 5.8  | 23.32  |
| Point (79.86473840053913875<br>12.02567808292816309) | Periya Kalapet                         | 6    | 4.53   |
| Point (79.82829010468553577<br>11.91079988214432994) | Pondy marina                           | 12.8 | 5.20   |
| Point (79.82835652983001751<br>11.90829324952700929) | Pondy marina                           | 10.3 | 9.96   |
| Point (79.81722961468095434<br>11.86384703257248852) | Poorna Kuppam                          | 1    | 6.44   |
| Point (79.82694169262667572<br>11.90422730468761259) | Veerampattinam River<br>Mouth (Harbor) | 12.7 | 18.87  |
| Point (79.82892895368546249<br>11.90384479599691581) | Veerampattinam River<br>Mouth (Harbor) | 8.6  | 3.12   |
| Point (79.82698156187063887<br>11.89800111547754469) | Veerampattinam sand<br>dunes           | 2.8  | 1.09   |
| Point (79.85281293855359763<br>10.85075292033035232) | Vanjur Harbor                          | 2.5  | 0.34   |
| Point (79.85189107360127991<br>10.85516961034982408) | Vanjur Harbor                          | 1.8  | 21.69  |
| Point (79.85160542529239081<br>10.86211669029020932) | Vanjur Harbor                          | 3.57 | 7.76   |

|  |                               |       |       |
|--|-------------------------------|-------|-------|
| Point (79.85186373815730576<br>10.86575183640692721) | Pattinam                      | 6.23  | 4.08  |
| Point (79.85181077023042917<br>10.87075019527707909) | Pattinam                      | 3.377 | 11.03 |
| Point (79.85173715888893753<br>10.87803019469474997) | Pattinacherry Boat<br>Parking | 3.56  | 6.16  |
| Point (79.85159491685217859<br>10.88353428164087333) | Pattinacherry                 | 3.925 | 1.34  |
| Point (79.85201680554503412<br>10.89381621438050374) | Pattinacherry                 | 3     | 15.98 |
| Point (79.85231049442690221<br>10.90656846904805732) | Karukalcherry                 | 4.028 | 11.52 |
| Point (79.8529311825966488<br>10.91630400595274786)  | Karaikalmedu                  | 2.7   | 0.23  |
| Point (79.85265670024979556<br>10.92462638822329701) | Karaikal beach                | 6.94  | 29.05 |
| Point (79.85269983401653349<br>10.93815767285177998) | Karaikalmedu                  | 3     | 1.21  |
| Point (79.85278791750732807<br>10.94562251298104982) | Kilinjalmadu                  | 11.04 | 0.64  |
| Point (79.85287727626275966<br>10.94678828968294049) | Kilinjalmadu                  | 3     | 0.10  |
| Point (79.85252637717199775<br>10.94778053382565552) | Kilinjalmadu                  | 1.975 | 1.87  |
| Point (79.85283382994961698<br>10.94737781829581458) | Kilinjalmadu                  | 2.4   | 0.10  |
| Point (79.85280816232800305<br>10.94915123076601837) | Kinjalmadu                    | 1.5   | 0.17  |
| Point (79.85291184202495174<br>10.94966105877717055) | Kilinjalmadu                  | 1.5   | 0.26  |

|  |               |              |               |
|--|---------------|--------------|---------------|
| Point (79.85307314314599125<br>10.95637670075484316) | Kasakudimedu  | 1.7          | 4.41          |
| Point (79.85339651920453719<br>10.96557471735839151) | Kasakudimedu  | 2.8          | 4.49          |
| Point (79.85356251006234629<br>10.97143334716766105) | Akaampettai   | 11.65        | 0.82          |
| Point (79.85363831836659188<br>10.97381029100448124) | Akkampettai   | 3.8          | 2.87          |
| Point (79.8539160089443385<br>10.97950579865923793)  | Kalikuppam    | 2.3          | 0.15          |
| Point (79.85393433659413631<br>10.98323614411881266) | Mandaputhur   | 3.1          | 2.28          |
| Point (79.85240521611407871<br>10.85008520253711062) | Vanjur Harbor | 4.6          | 0.28          |
|  |               | <b>Total</b> | <b>355.19</b> |

### 1.3. Salt marsh

| Pondicherry & Karaikal                               |           |              |
|--|-----------|--------------|
| Location   | Place     | Area (acres) |
| Point (79.81266677459045411<br>11.86253156577559409) | Nallavadu | 3.09         |
| Point (79.81008693564302803<br>11.85876114485444788) | Nallavadu | 0.87         |
| Point (79.80913298040552206<br>11.85910927684500749) | Nallavadu | 0.37         |
| Point (79.80934077395954773<br>11.8596685016472545)  | Nallavadu | 0.48         |
| Point (79.81125336566113049<br>11.8604183725251211)  | Nallavadu | 2.30         |
| Point (79.81053070367825342<br>11.85722486460154634) | Nallavadu | 3.36         |

|  |           |       |
|--|-----------|-------|
| Point (79.80891150878655083<br>11.8574651543327132)  | Nallavadu | 0.27  |
| Point (79.80844306990601922<br>11.85824198719931744) | Nallavadu | 5.59  |
| Point (79.80754682569282465<br>11.85587410511496387) | Nallavadu | 0.19  |
| Point (79.80798491067544376<br>11.85638070329934557) | Nallavadu | 2.91  |
| Point (79.80851335582029549<br>11.85501651934025169) | Nallavadu | 0.05  |
| Point (79.80892550512916728<br>11.85452512751060716) | Nallavadu | 0.97  |
| Point (79.80954130766100718<br>11.85552744270118097) | Nallavadu | 2.97  |
| Point (79.80766377741089457<br>11.8533642719164618)  | Nallavadu | 11.26 |
| Point (79.8069309658986441<br>11.84946820805662959)  | Nallavadu | 0.18  |
| Point (79.80697377157117955<br>11.84925760884942214) | Nallavadu | 0.15  |
| Point (79.80736931750641361<br>11.85057315361954444) | Nallavadu | 14.20 |
| Point (79.80980746034322237<br>11.85193380437432964) | Nallavadu | 0.52  |
| Point (79.80857887668375383<br>11.84830989346679964) | Nallavadu | 2.92  |
| Point (79.8072571075191064<br>11.84666846195778689)  | Nallavadu | 1.13  |
| Point (79.80755647532708963<br>11.84551144314278304) | Nallavadu | 0.30  |
| Point (79.80559262831897627<br>11.85892868061500138) | Nallavadu | 1.07  |

|  |                |       |
|--|----------------|-------|
| Point (79.79534833403197069<br>11.79429296382313375) | Moorthykuppam  | 12.71 |
| Point (79.79832543958693236<br>11.83658074118937797) | Panithittu     | 3.80  |
| Point (79.78514701531857156<br>11.78803215998160248) | Mullodai       | 6.74  |
| Point (79.78657804876159787<br>11.78864101056358571) | Mullodai       | 0.13  |
| Point (79.78905783377697958<br>11.78887487241728849) | Mullodai       | 0.17  |
| Point (79.78466810746530768<br>11.78822999172237651) | Mullodai       | 0.14  |
| Point (79.78477424832267673<br>11.78852041180564392) | Mullodai       | 0.63  |
| Point (79.79434855236415558<br>11.79108073617915231) | Moorthykuppam  | 9.57  |
| Point (79.85071283219522797<br>10.98796518212446749) | Mandaputhur    | 19.32 |
| Point (79.85250784250065692<br>10.97457918254655418) | Kalikuppam     | 16.36 |
| Point (79.8503694501348491<br>10.97213296355816858)  | Akkampettai    | 32.83 |
| Point (79.85291053278182005<br>10.96844411373169947) | Akkampettai    | 3.66  |
| Point (79.85167318952896665<br>10.96729599700808855) | Akkampettai    | 8.79  |
| Point (79.85155887916423012<br>10.96305906947671893) | Kottucherryedu | 4.76  |
| Point (79.85118050307418969<br>10.96203803494623408) | Kottucherryedu | 1.38  |

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|  |                            |               |
|--|----------------------------|---------------|
| Point (79.85062746407392353<br>10.95062594773335896) | Keezhakasakudimedu         | 2.65          |
| Point (79.85204184620286583<br>10.96207908390113239) | Kottucherrymedu            | 0.31          |
| Point (79.85021357012028886<br>10.95259515856968413) | Kasakudimedu               | 3.28          |
| Point (79.84949477487673164<br>10.95016532086873795) | Kilinjalmedu               | 2.63          |
| Point (79.8516686725929361<br>10.95056297277452195)  | Kilinjalmedu               | 1.30          |
| Point (79.8510155398071646<br>10.92958900141805678)  | Karaikal beach             | 71.89         |
| Point (79.8495140037962301<br>10.90928108765340987)  | Karaikal Fishing<br>Harbor | 26.34         |
| Point (79.85103043607008999<br>10.89833555657349962) | Neravy                     | 32.62         |
| Point (79.85093152855340293<br>10.87121530990967067) | Keezhaiyur                 | 13.82         |
| Point (79.85056481835437125<br>10.87860191928841047) | Pattinacherry              | 18.78         |
| Point (79.85189849739668944<br>10.94860258857691981) | Kilinjalmedu               | 6.23          |
| Point (79.84926921083439311<br>10.85030558033978387) | Vanjur                     | 5.18          |
| Point (79.85012449512601052<br>10.86239005330579133) | Vanjur                     | 9.67          |
|  | <b>Total</b>               | <b>370.85</b> |



## 1.4. Turtle nesting sites

## Pondicherry &amp; Karaikal

| Location   | Village                              | Area (acres) |
|--|--------------------------------------|--------------|
| Point (79.87117967566859988<br>12.03555561907086258) | Kanagachettikulam                    | 6.61         |
| Point (79.86526610626467004<br>12.02294444948702434) | Periyakalpet                         | 2.67         |
| Point (79.82897810658906224<br>11.8993839471220415)  | Veerampattinam                       | 18.53        |
| Point (79.81730651165189272<br>11.86303290381708919) | Nallavadu                            | 3.61         |
| Point (79.81001798588879126<br>11.84375846236621221) | Nallavadu                            | 62.20        |
| Point (79.80637935205830047<br>11.83059549944209898) | Panithittu                           | 0.93         |
| Point (79.80312659085572591<br>11.81938057700224576) | Narambai                             | 15.28        |
| Point (79.82563941914061445<br>11.88580380713302453) | Chinnaveeramattinam                  | 4.36         |
| Point (79.8522473649662885<br>10.8586907385096616)   | Vanjur Harbor                        | 47.33        |
| Point (79.85194041358766981<br>10.8775292346233563)  | Pattinacherry                        | 2.60         |
| Point (79.85188015722332011<br>10.88381297304784923) | Pattinacherry<br>Rivermouth          | 2.30         |
| Point (79.85233201488094323<br>10.89849919945362089) | Pattinacherry to<br>Karaikal horbour | 18.57        |
| Point (79.8528743881688996<br>10.92421033291379828)  | Karaikal beach                       | 23.82        |
| Point (79.85272578290887679<br>10.9476607713584233)  | Kilinjalmedu                         | 5.01         |
| Point (79.85285902871797248<br>10.94954768228868325) | Kilinjalmedu                         | 2.12         |
| Point (79.85312244996096354)                         | Keezhakasakudi                       | 6.53         |

|  |                              |               |
|--|------------------------------|---------------|
| 10.95641459463648815)                                |                              |               |
| Point (79.85319825616369371<br>10.96238836129400518) | Keezhakasakudi<br>Rivermouth | 2.46          |
| Point (79.85350844423619776<br>10.96605177993783187) | Kottucherry                  | 5.05          |
| Point (79.85387734755248346<br>10.97376965630357937) | Akkampettai                  | 5.34          |
| Point (79.85417125689366458<br>10.98318021528677946) | Mandaputhur                  | 2.29          |
|  | <b>Total</b>                 | <b>237.65</b> |

### 1.5. Mudflats

#### Pondicherry & Karaikal

| Location   | Place                   | Area (acres) |
|--|-------------------------|--------------|
| Point (79.80819116440746086<br>11.90151904910096192) | Thengathittu            | 10.47        |
| Point (79.8247572435468129<br>11.90538096491430053)  | Murugampakkam<br>Bridge | 8.55         |
| Point (79.8456829914807571<br>10.9052125581221695)   | Arasalar                | 1.14         |
|  | <b>Total</b>            | <b>20.17</b> |

### 1.6. Sea grass beds

#### Pondicherry

| Location | Long    | Lat     | Place      |
|----------|---------|---------|------------|
| 1        | 79.8147 | 11.8718 | Pudukuppam |

### 1.7. Coral reefs

#### Pondicherry

| Location | Long    | Lat     | Place                     |
|----------|---------|---------|---------------------------|
| 1        | 80.0286 | 11.8331 | East of Pondicherry coast |
| 2        | 80.0264 | 11.8561 |                           |
| 3        | 80.0247 | 11.8797 |                           |
| 4        | 80.0331 | 11.9006 |                           |
| 5        | 80.035  | 11.92   |                           |
| 6        | 80.0358 | 11.9306 |                           |

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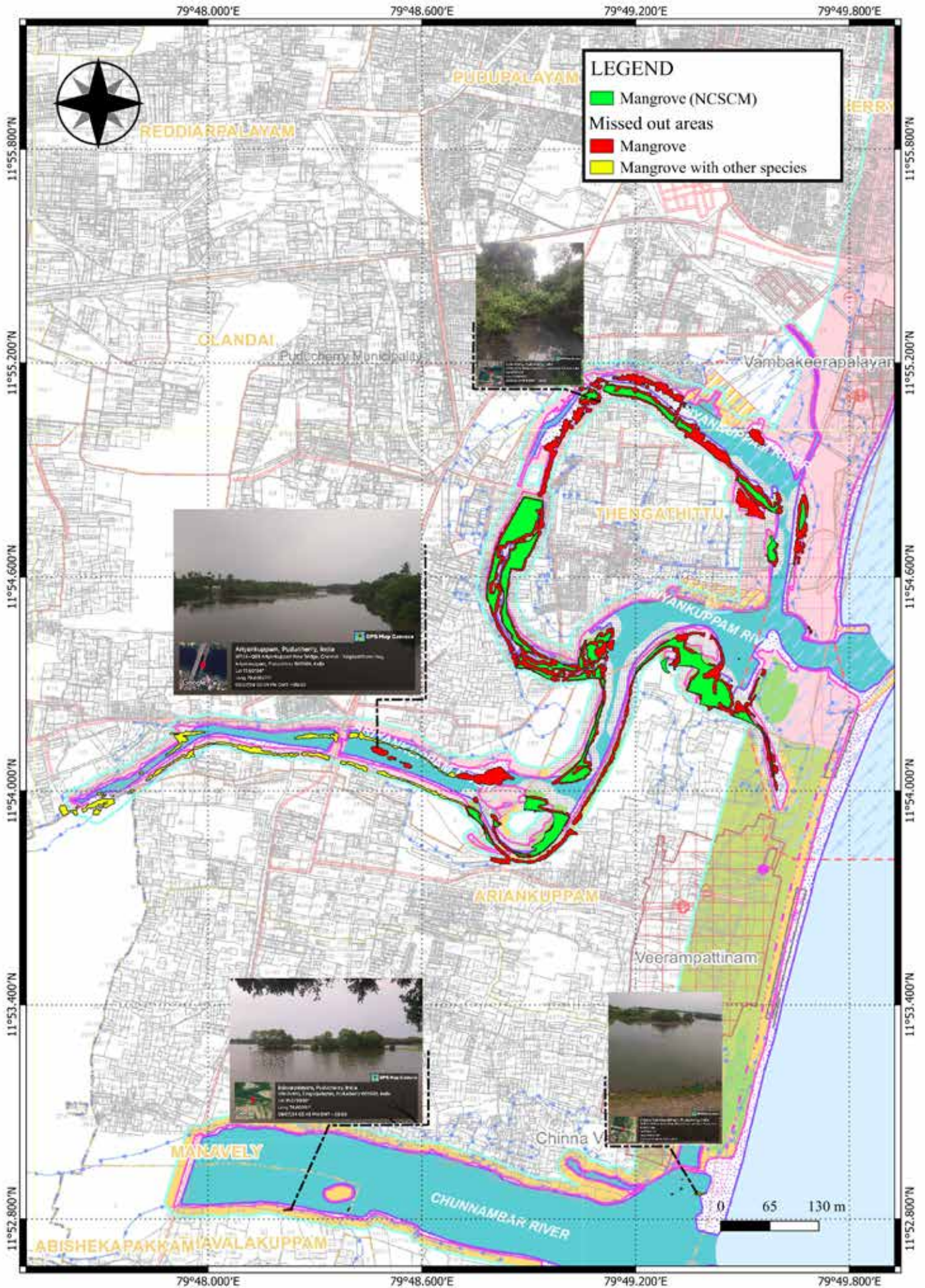
|    |         |         |  |
|----|---------|---------|--|
| 7  | 80.0356 | 11.9772 |  |
| 8  | 80.0425 | 12.0686 |  |
| 9  | 80.0364 | 11.8408 |  |
| 10 | 80.0311 | 11.9289 |  |

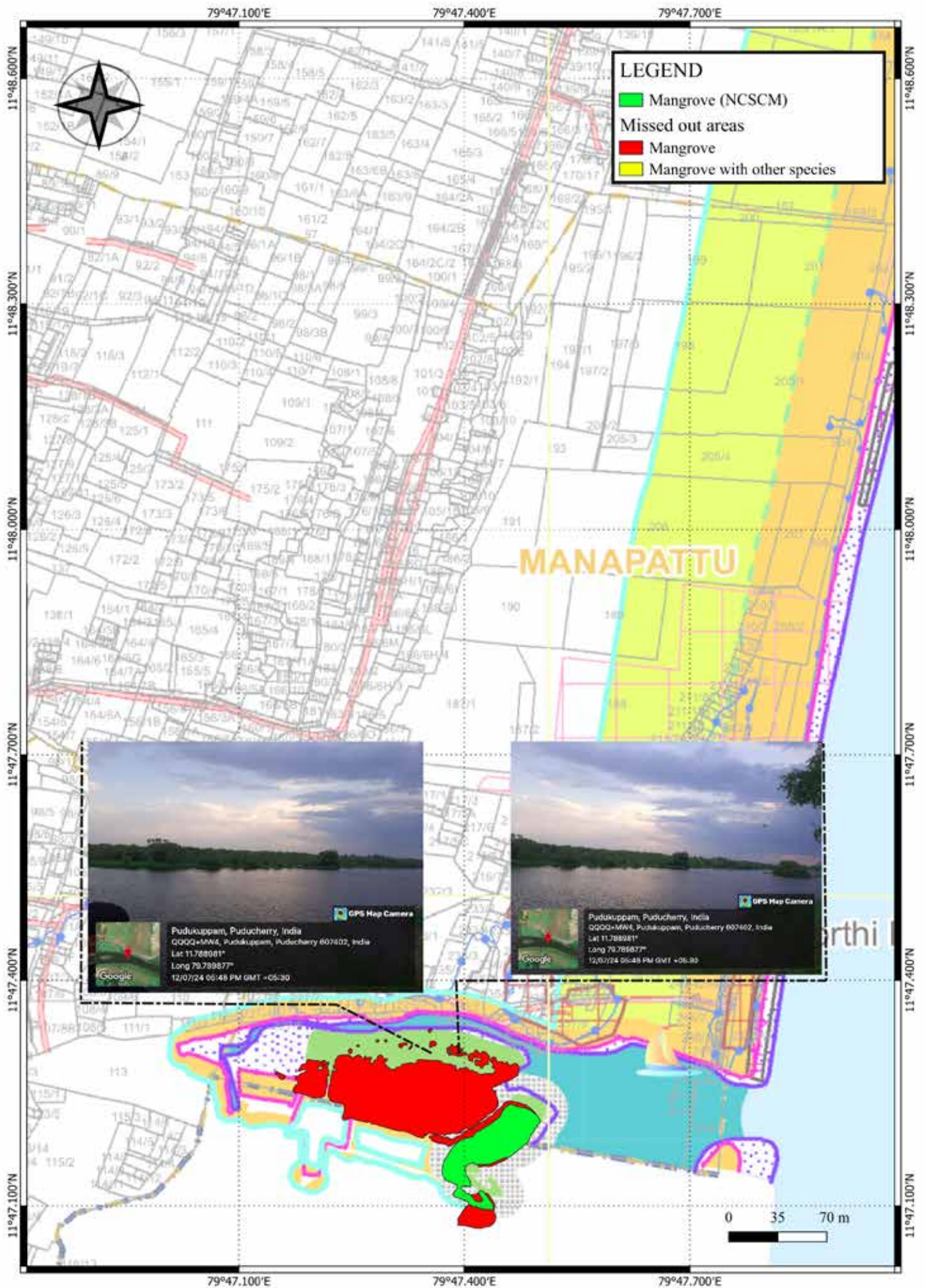
This information is taken from the secondary data: Laxmilatha, P., Jasmine, S., Sreeram, M. P., and Rengaiyan, P. (2019). Benthic communities of mesophotic coral ecosystem off Puducherry, east coast of India. *Current Science*, 166, 6, 982-987.

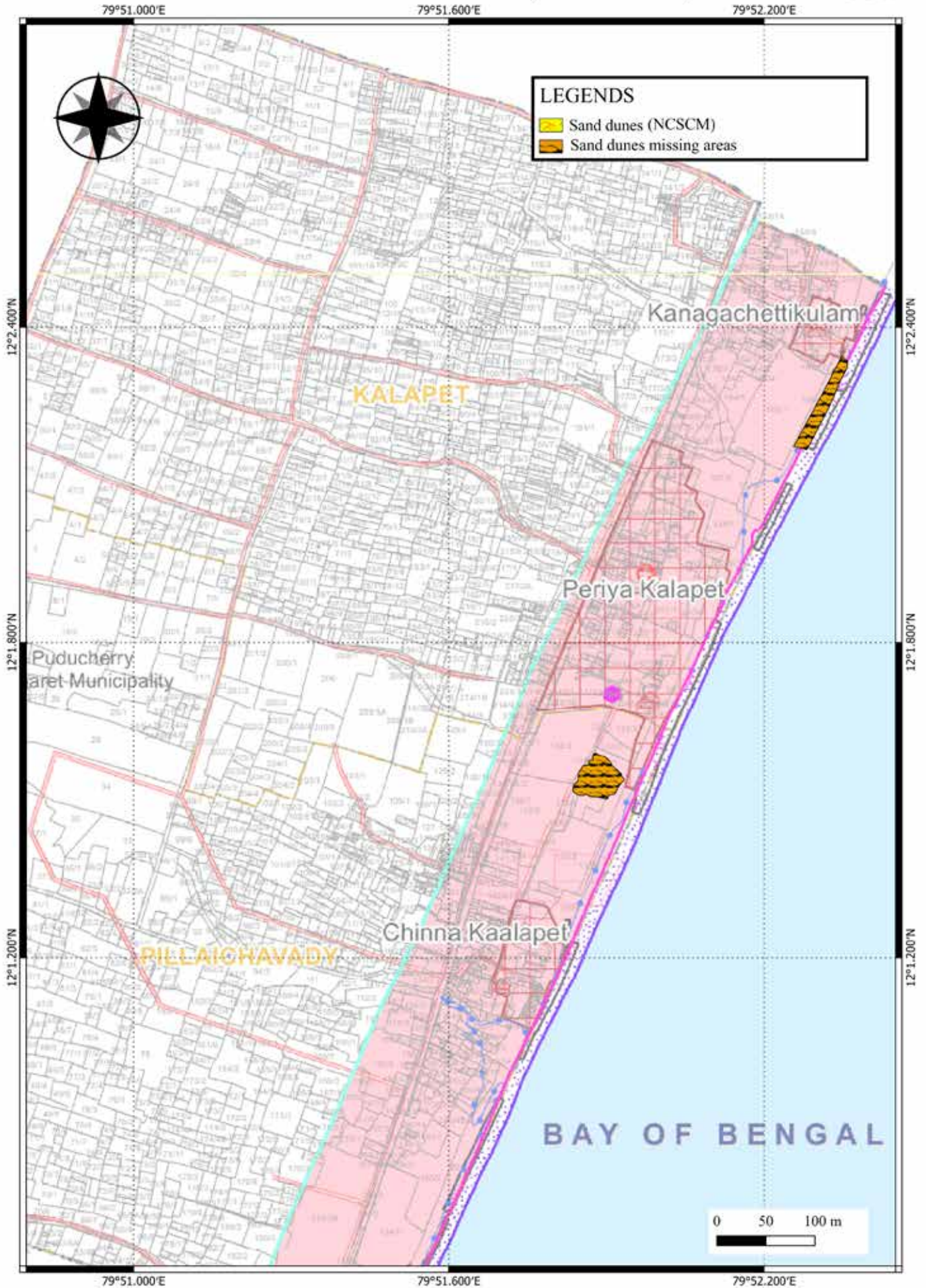
## Annexure – 2

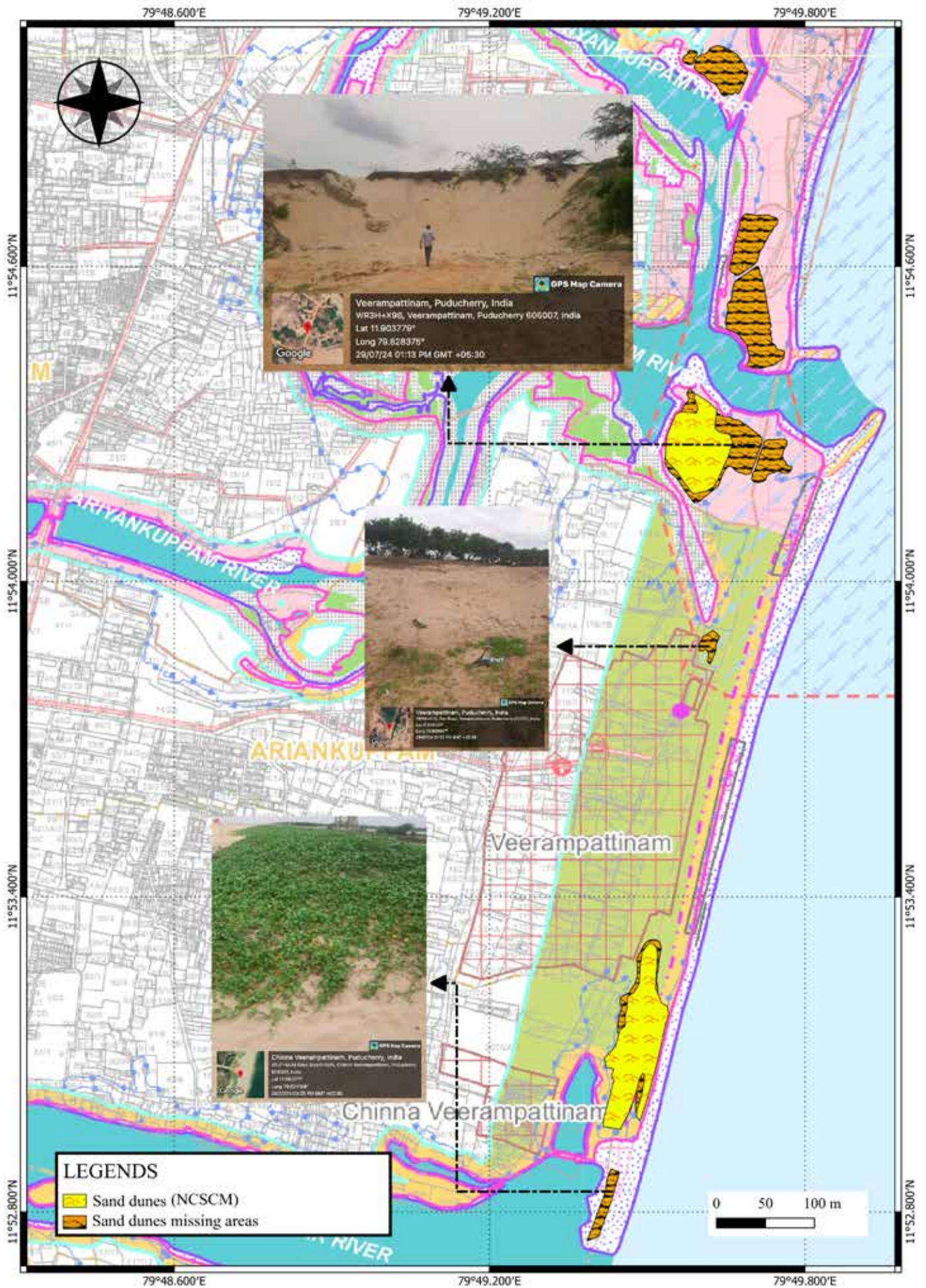
## Maps of missing ESA features in Pondicherry district

| S. No. | Annexure Sub. Cat. | Title  | Draft CZMP Map No. |
|--------|--------------------|--|--------------------|
| 1      | 2.1.1.             | Missed out ESA in Draft CZMP 2019 (Mangroves - 1 of 2)             | PY-06              |
| 2      | 2.1.2.             | Missed out ESA in Draft CZMP 2019 (Mangroves - 2 of 2)             | PY-05              |
| 3      | 2.2.1.             | Missed out ESA in Draft CZMP 2019 (Sand dunes - 1 of 4)            | PY-07              |
| 4      | 2.2.2.             | Missed out ESA in Draft CZMP 2019 (Sand dunes - 2 of 4)            | PY-06              |
| 5      | 2.2.3.             | Missed out ESA in Draft CZMP 2019 (Sand dunes - 3 of 4)            | PY-05              |
| 6      | 2.2.4.             | Missed out ESA in Draft CZMP 2019 (Sand dunes - 4 of 4)            | PY-05              |
| 7      | 2.3.               | Missed out ESA in Draft CZMP 2019 (Mudflats)                       | PY-06              |
| 8      | 2.4.1.             | Missed out ESA in Draft CZMP 2019 (Salt marshes - 1 of 2)          | PY-05              |
| 9      | 2.4.2.             | Missed out ESA in Draft CZMP 2019 (Salt marshes - 2 of 2)          | PY-05              |
| 10     | 2.5.1.             | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 1 of 4) | PY-07              |
| 11     | 2.5.2.             | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 2 of 4) | PY-06              |
| 12     | 2.5.3.             | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 3 of 4) | PY-05              |
| 13     | 2.5.4.             | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 4 of 4) | PY-05              |
| 14     | 2.6.               | Missed out ESA in Draft CZMP 2019 (Coral and Coral reefs)          | PY-05 & PY-06      |
| 15     | 2.7.               | Missed out ESA in Draft CZMP 2019 (Sea grass beds)                 | PY-05              |

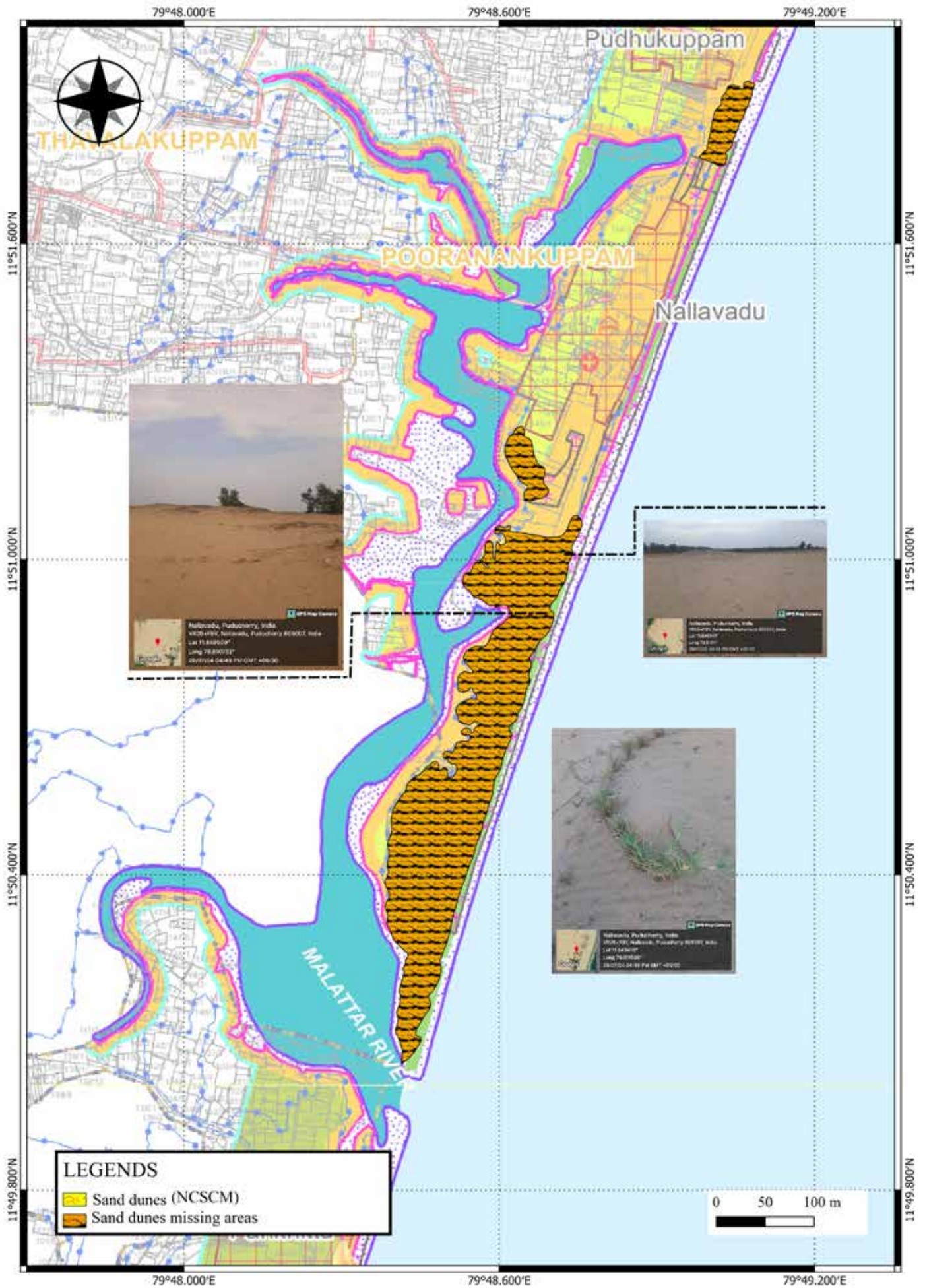




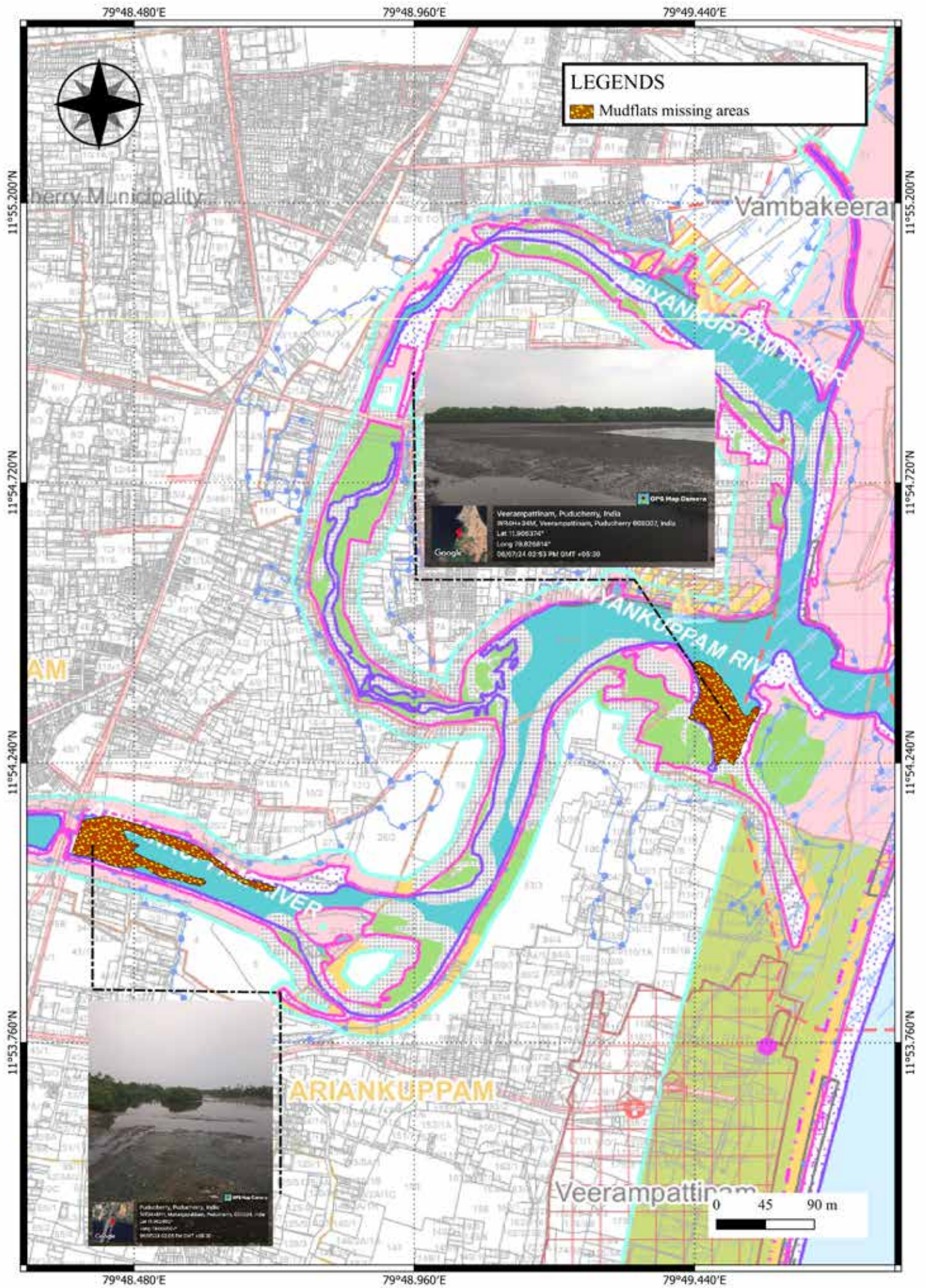


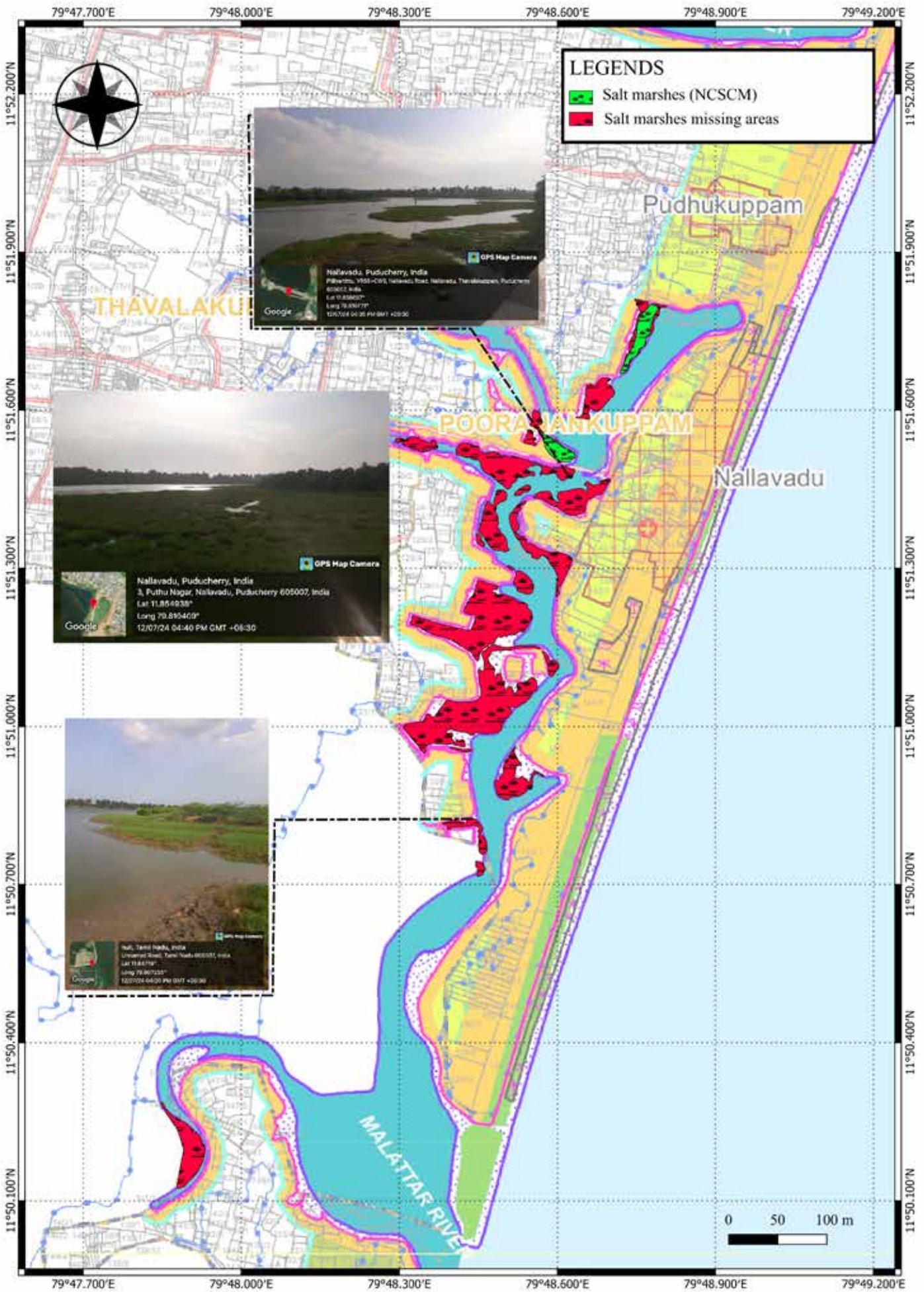




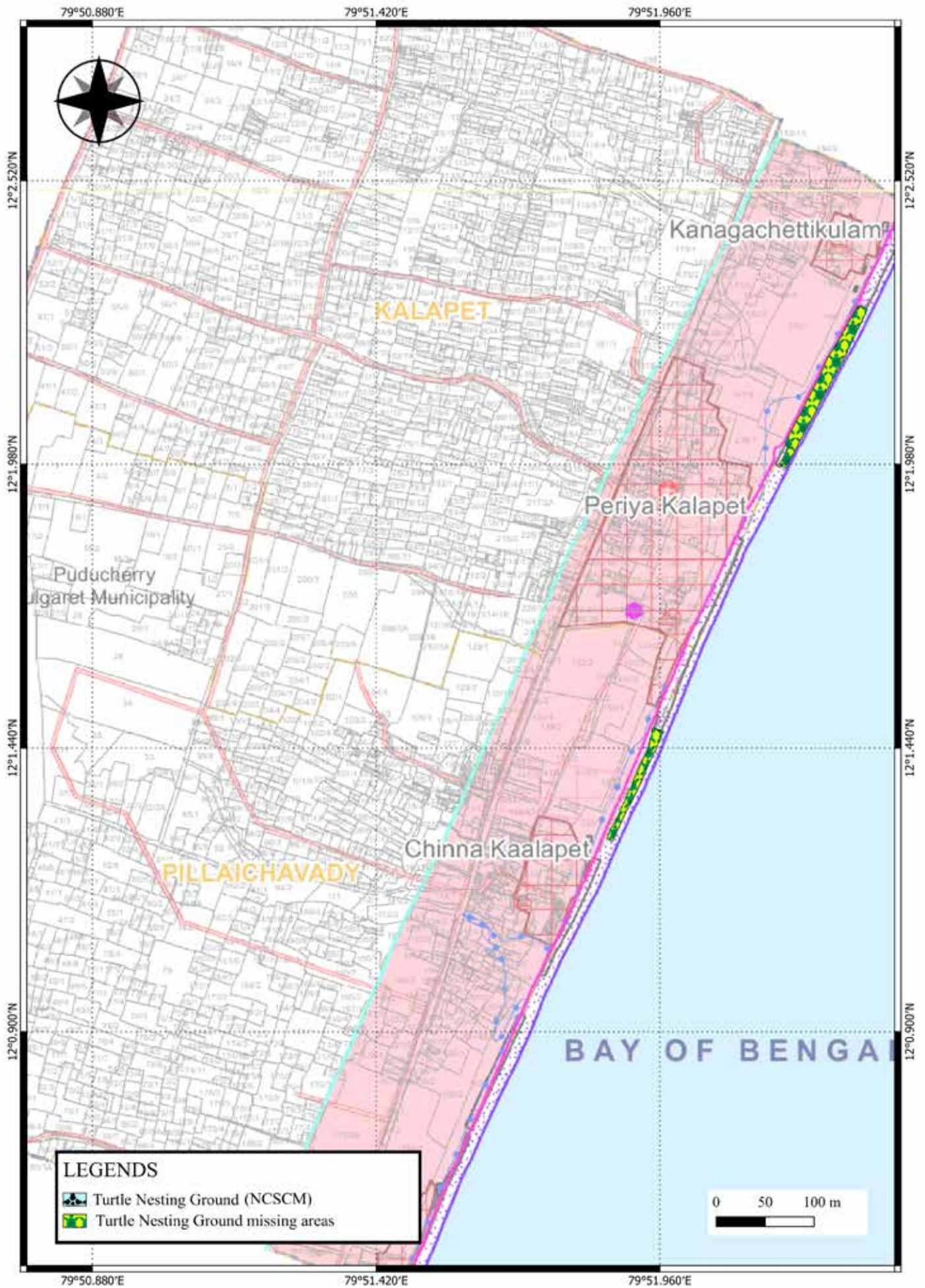


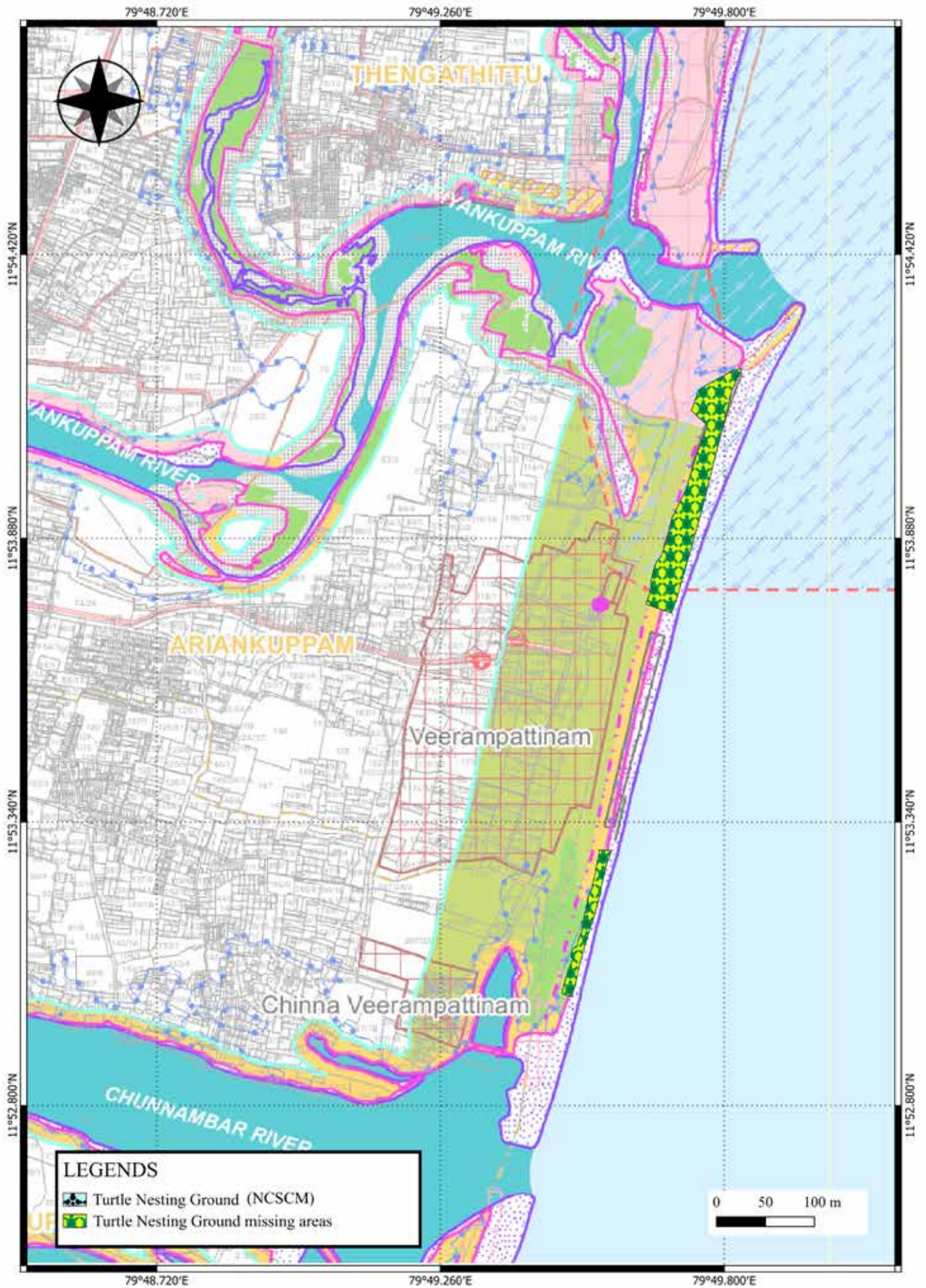


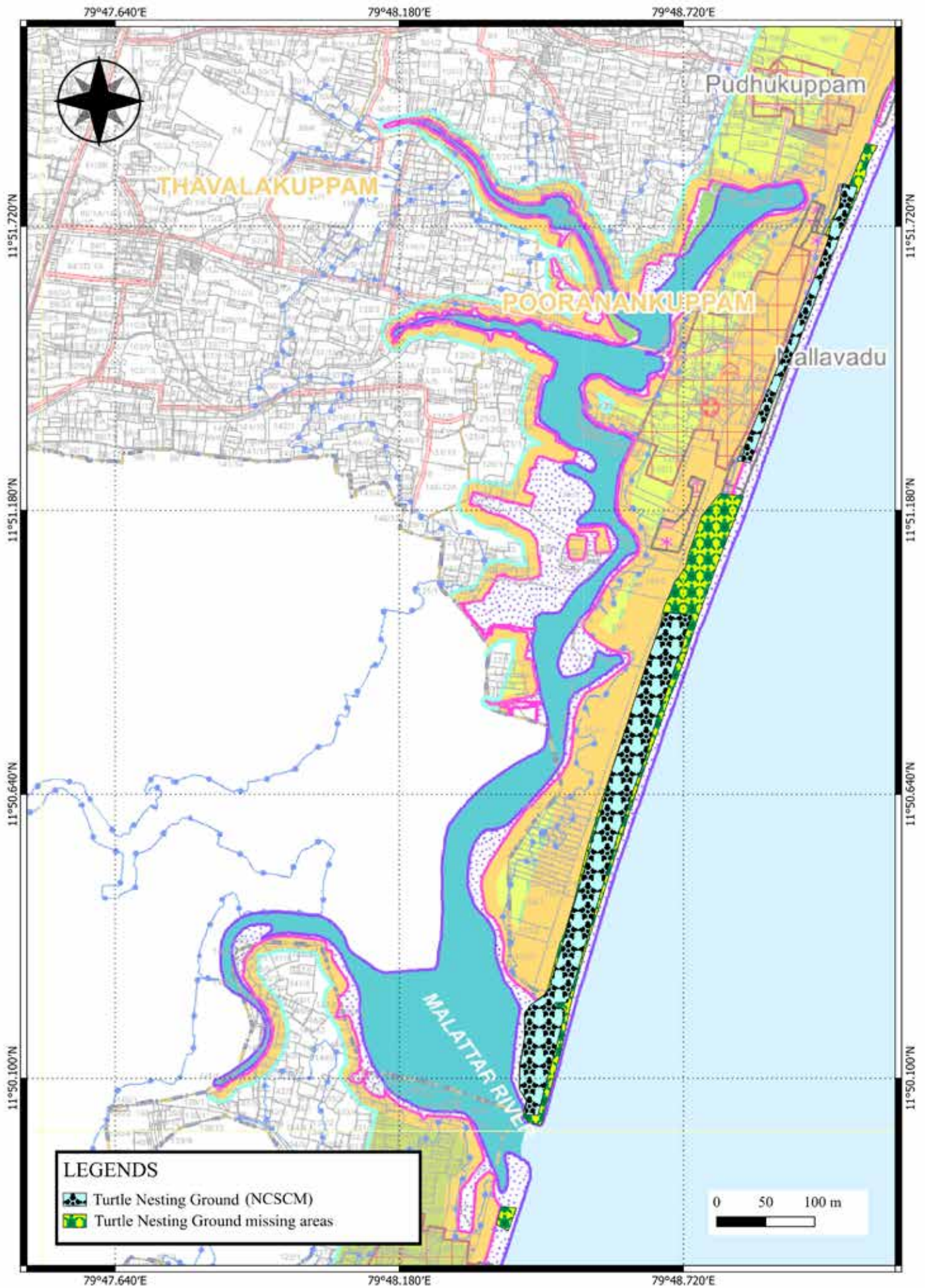




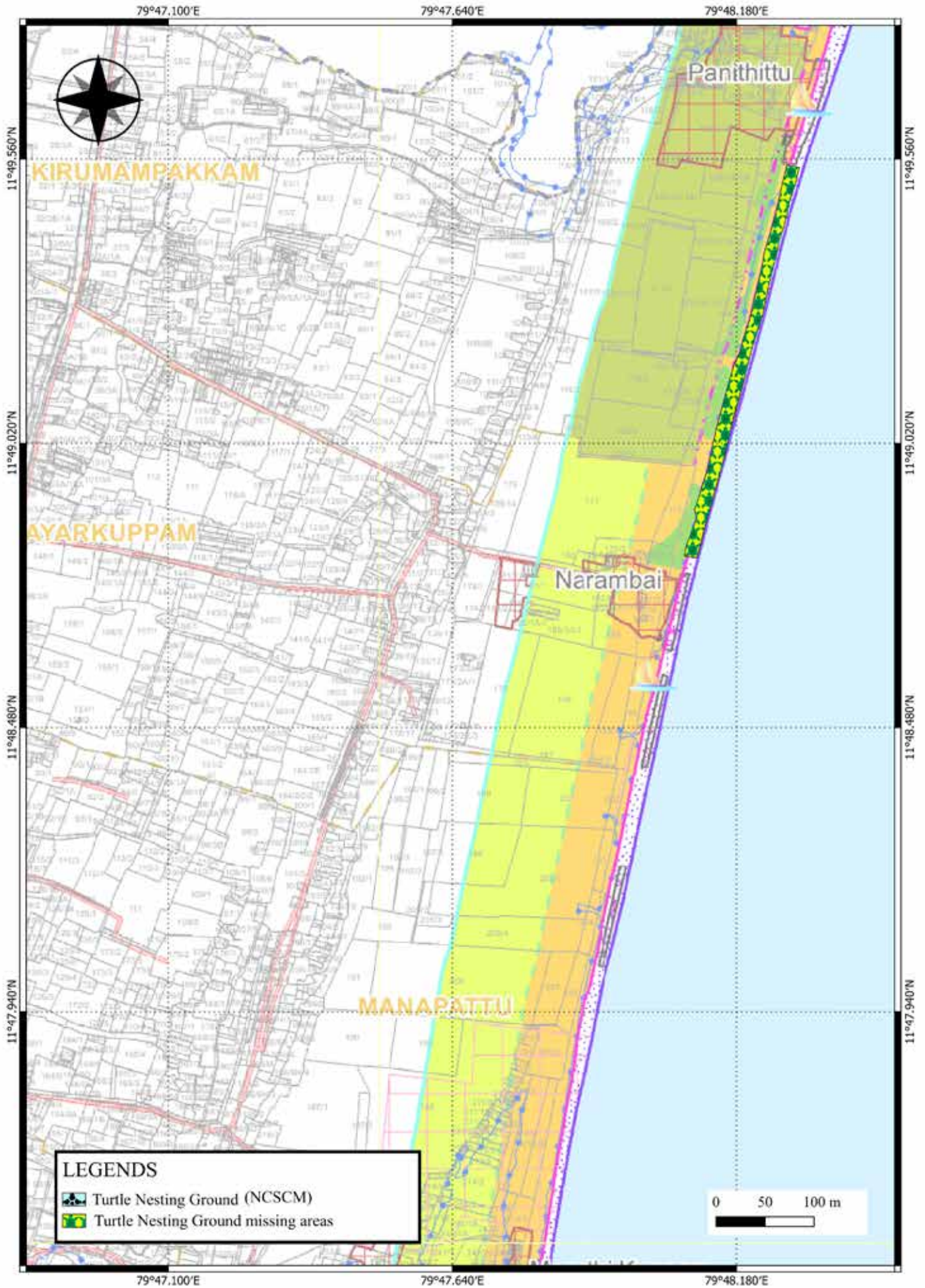


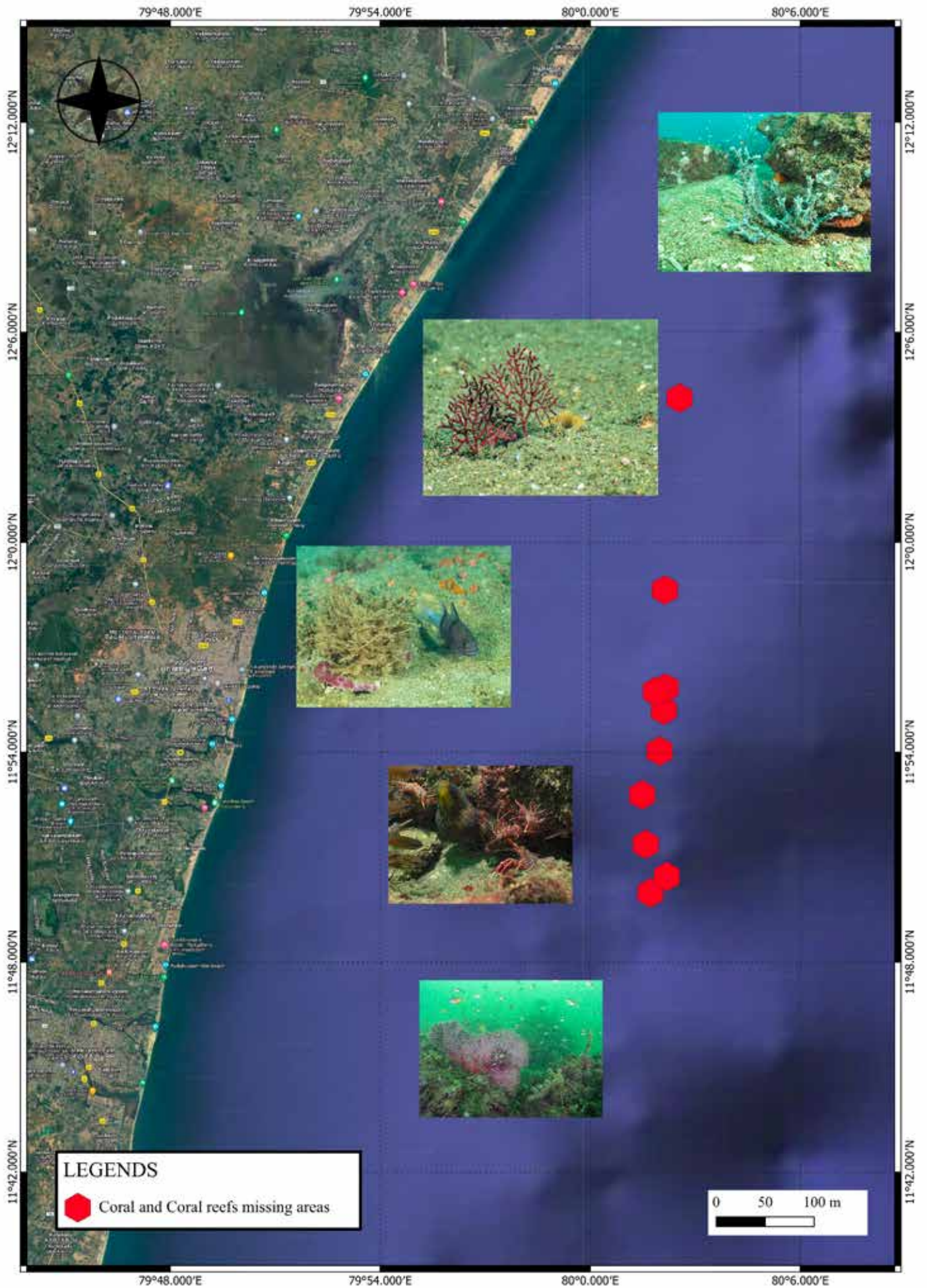


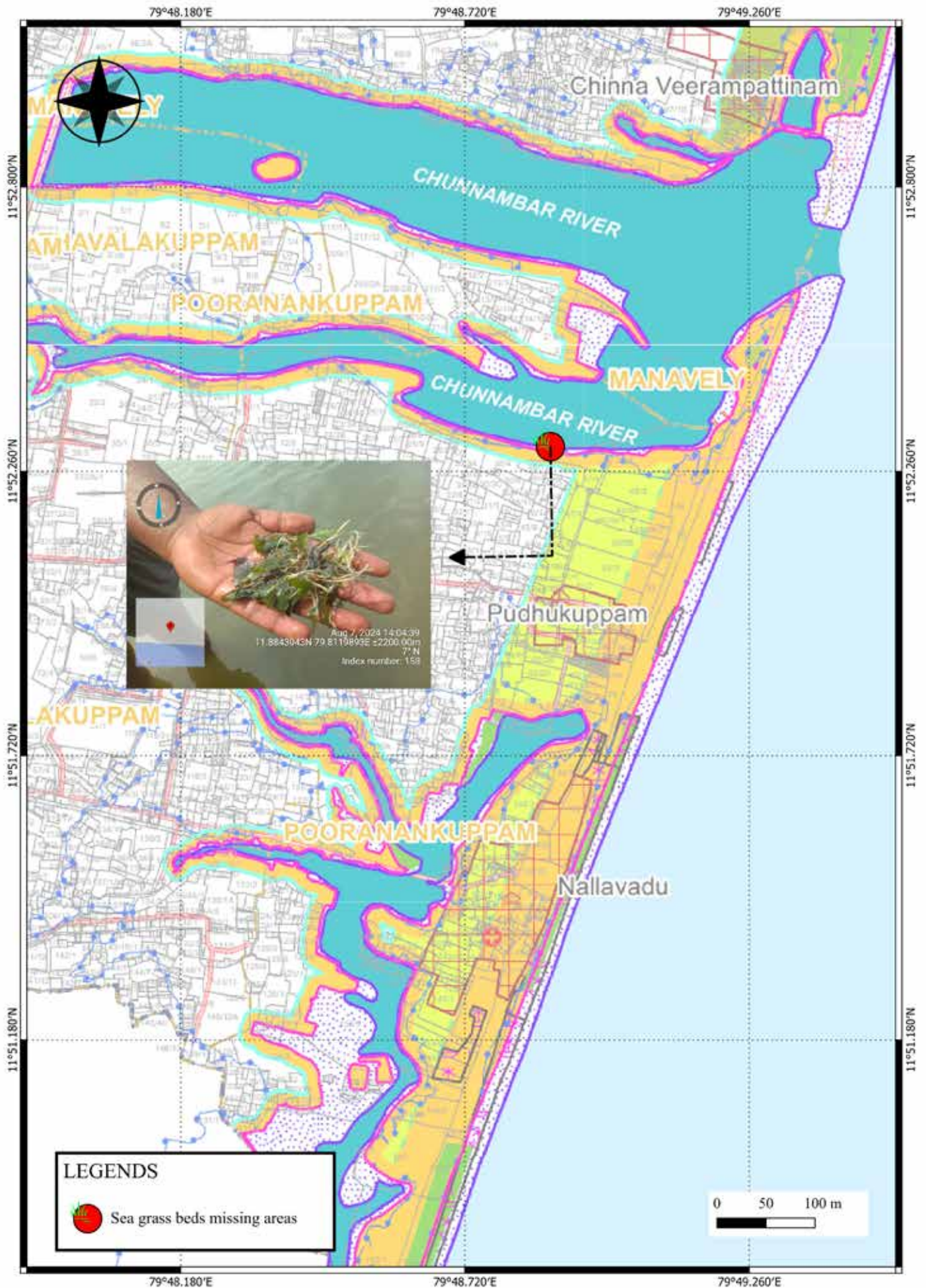










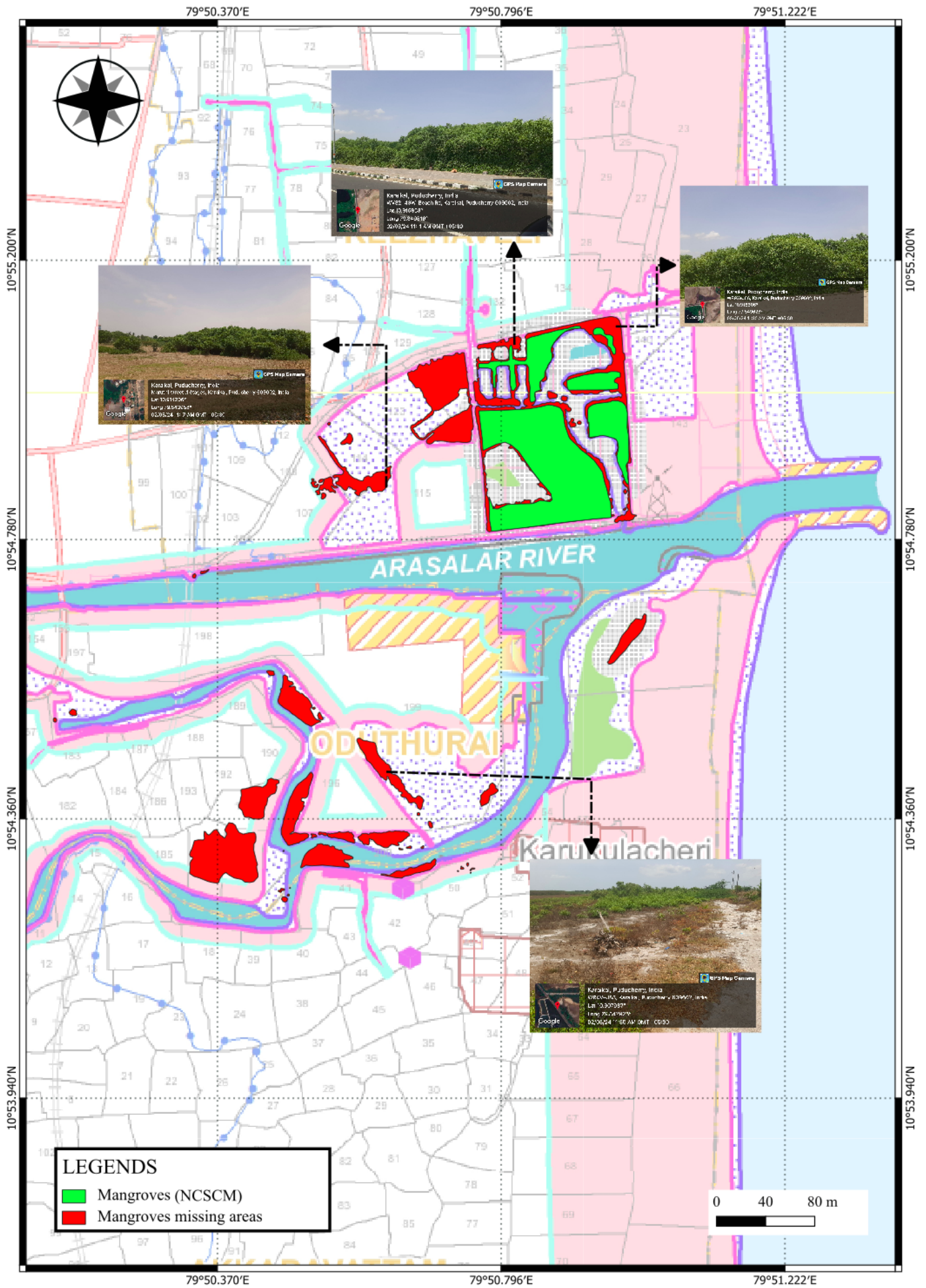


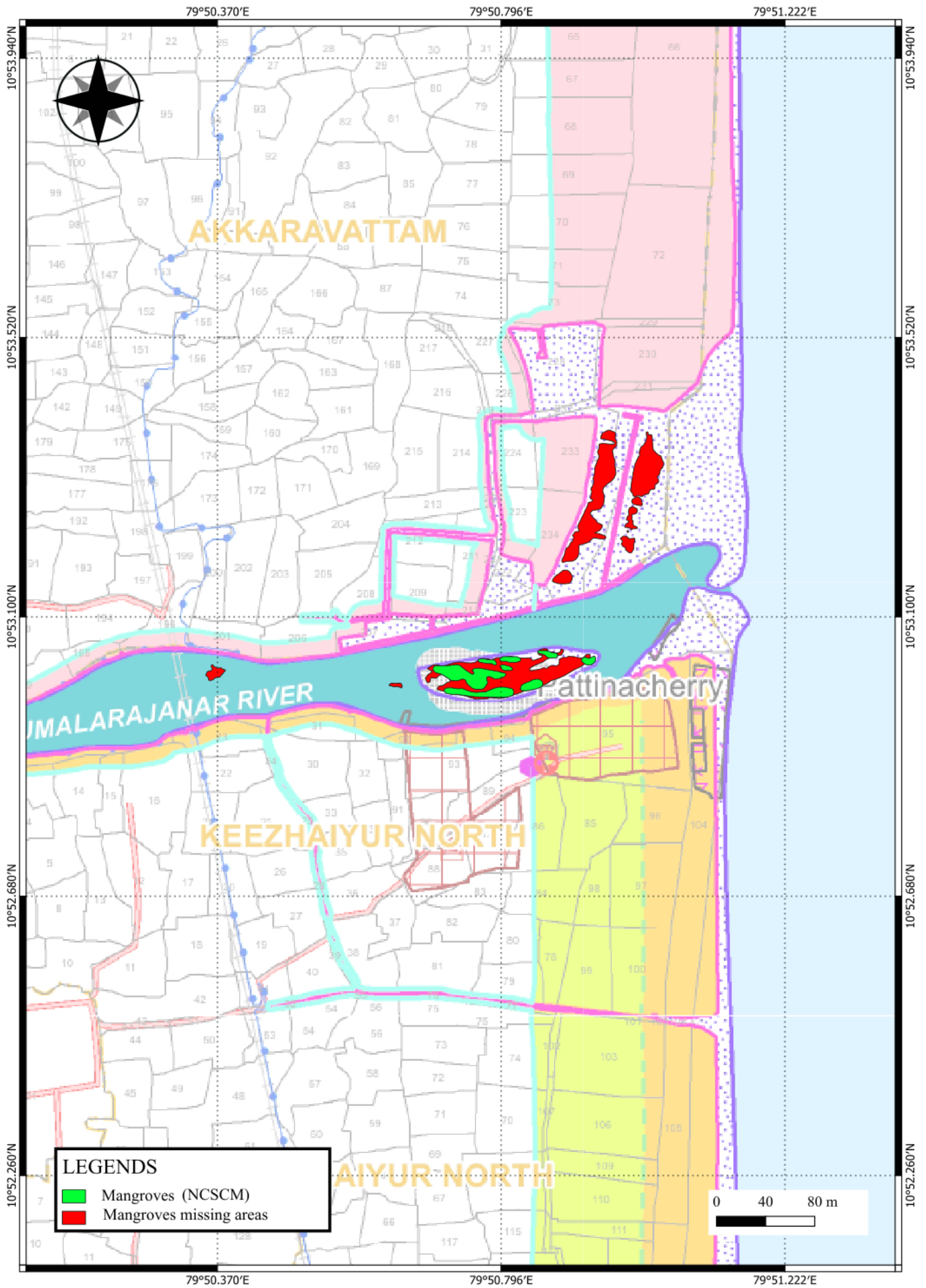
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## Annexure – 3

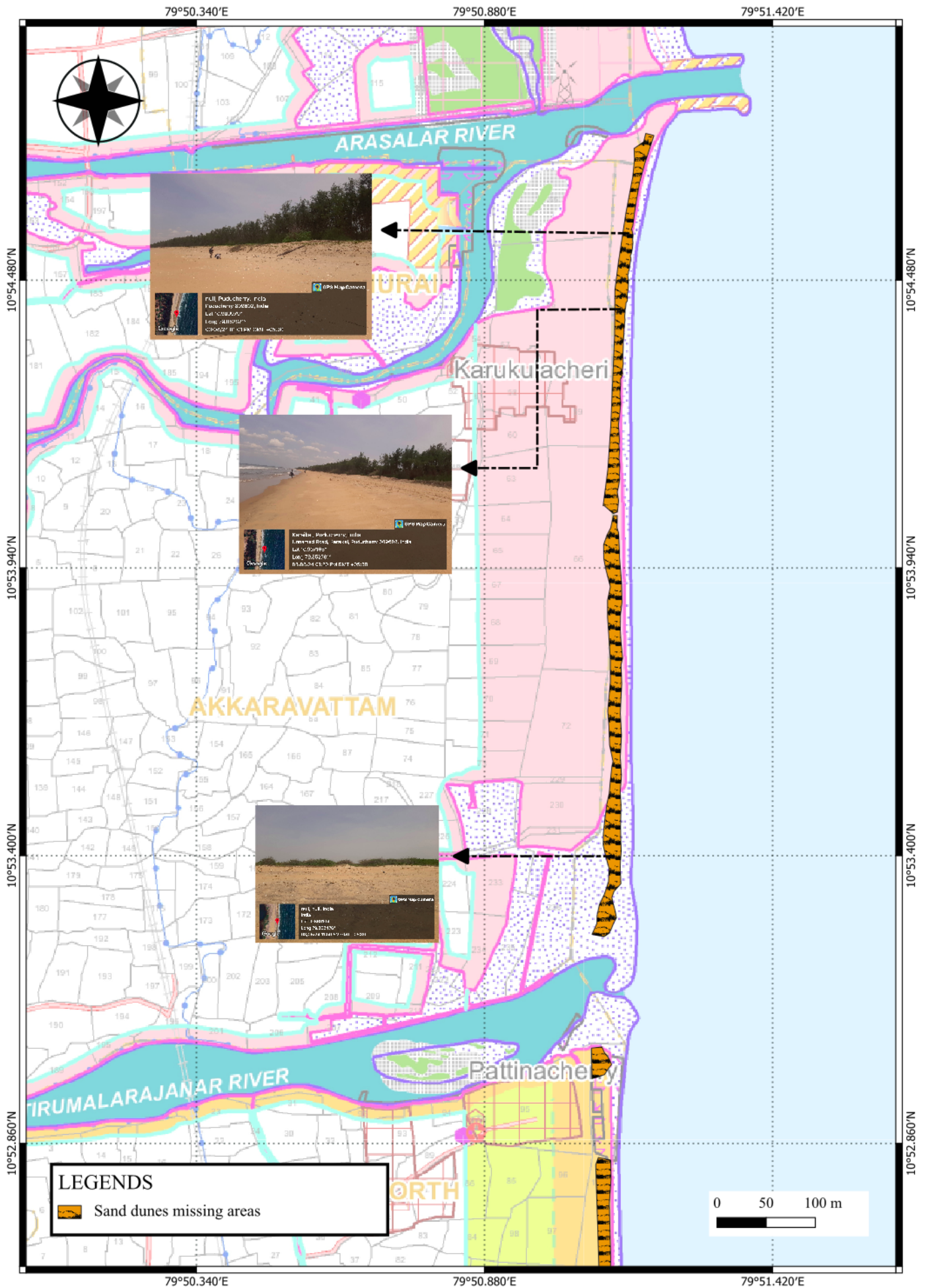
### Maps of missing ESA features in Karaikal district

| S. No. | Annexure Subcategories | Title  | Draft CZMP Map No. |
|--------|------------------------|--|--------------------|
| 1      | 3.1.1.                 | Missed out ESA in Draft CZMP 2019 (Mangroves - 1 of 2)             | PY-02              |
| 2      | 3.1.2.                 | Missed out ESA in Draft CZMP 2019 (Mangroves - 2 of 2)             | PY-02              |
| 3      | 3.2.1                  | Missed out ESA in Draft CZMP 2019 (Sand dunes - 1 of 4)            | PY-01 & PY-02      |
| 4      | 3.2.2.                 | Missed out ESA in Draft CZMP 2019 (Sand dunes - 2 of 4)            | PY-02              |
| 5      | 3.2.3.                 | Missed out ESA in Draft CZMP 2019 (Sand dunes - 3 of 4)            | PY-02              |
| 6      | 3.2.4.                 | Missed out ESA in Draft CZMP 2019 (Sand dunes - 4 of 4)            | PY-02              |
| 7      | 3.3.                   | Missed out ESA in Draft CZMP 2019 (Mudflats)                       | PY-02              |
| 8      | 3.4.1.                 | Missed out ESA in Draft CZMP 2019 (Salt marshes - 1 of 4)          | PY-01 & PY-02      |
| 9      | 3.4.2.                 | Missed out ESA in Draft CZMP 2019 (Salt marshes - 2 of 4)          | PY-02              |
| 10     | 3.4.3.                 | Missed out ESA in Draft CZMP 2019 (Salt marshes - 3 of 4)          | PY-02              |
| 11     | 3.4.4.                 | Missed out ESA in Draft CZMP 2019 (Salt marshes - 4 of 4)          | PY-02              |
| 12     | 3.5.1.                 | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 1 of 4) | PY-01 & PY-02      |
| 13     | 3.5.2.                 | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 2 of 4) | PY-02              |
| 14     | 3.5.3.                 | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 3 of 4) | PY-02              |
| 15     | 3.5.4.                 | Missed out ESA in Draft CZMP 2019 (Turtle Nesting Ground - 4 of 4) | PY-02              |

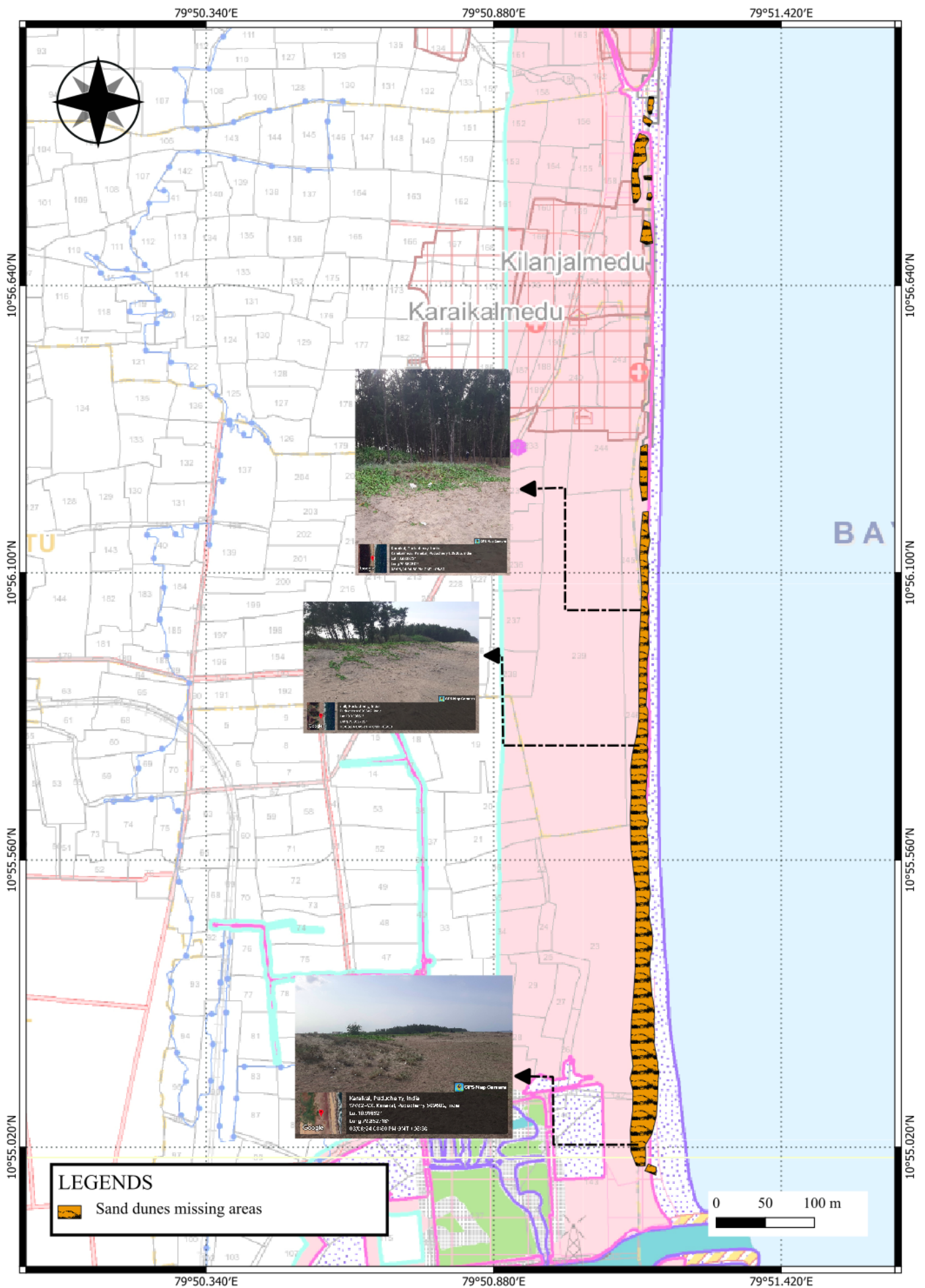


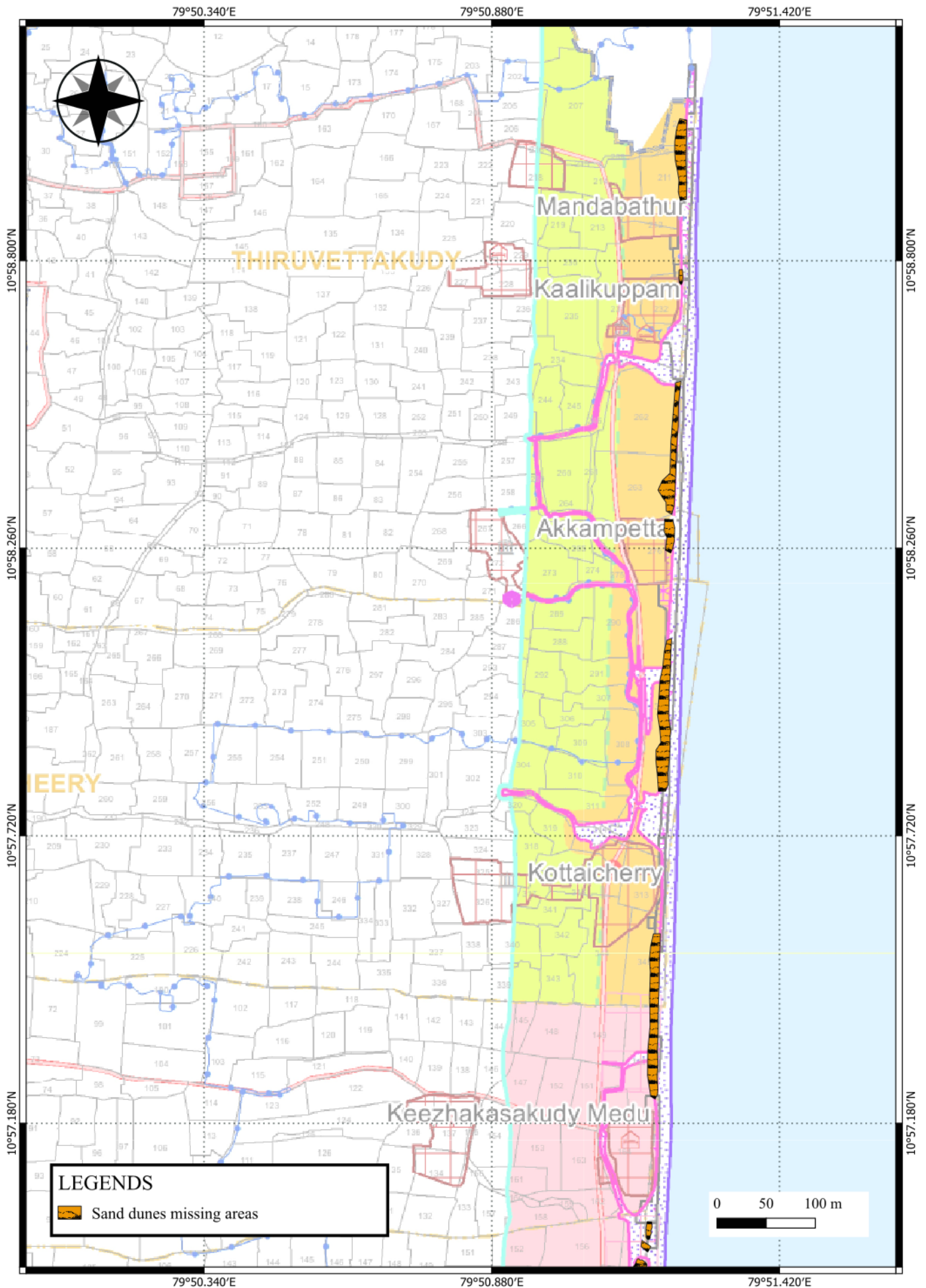


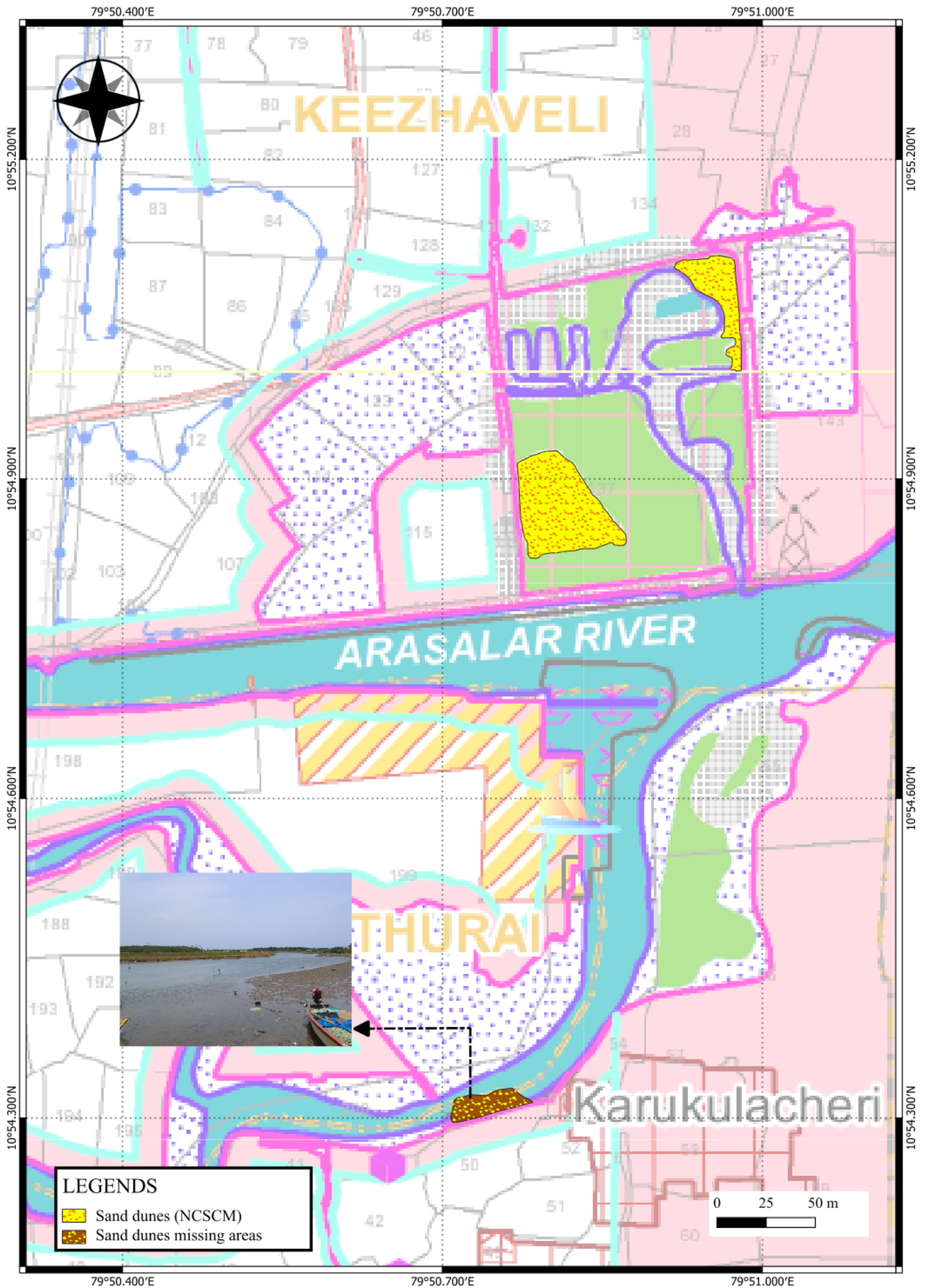


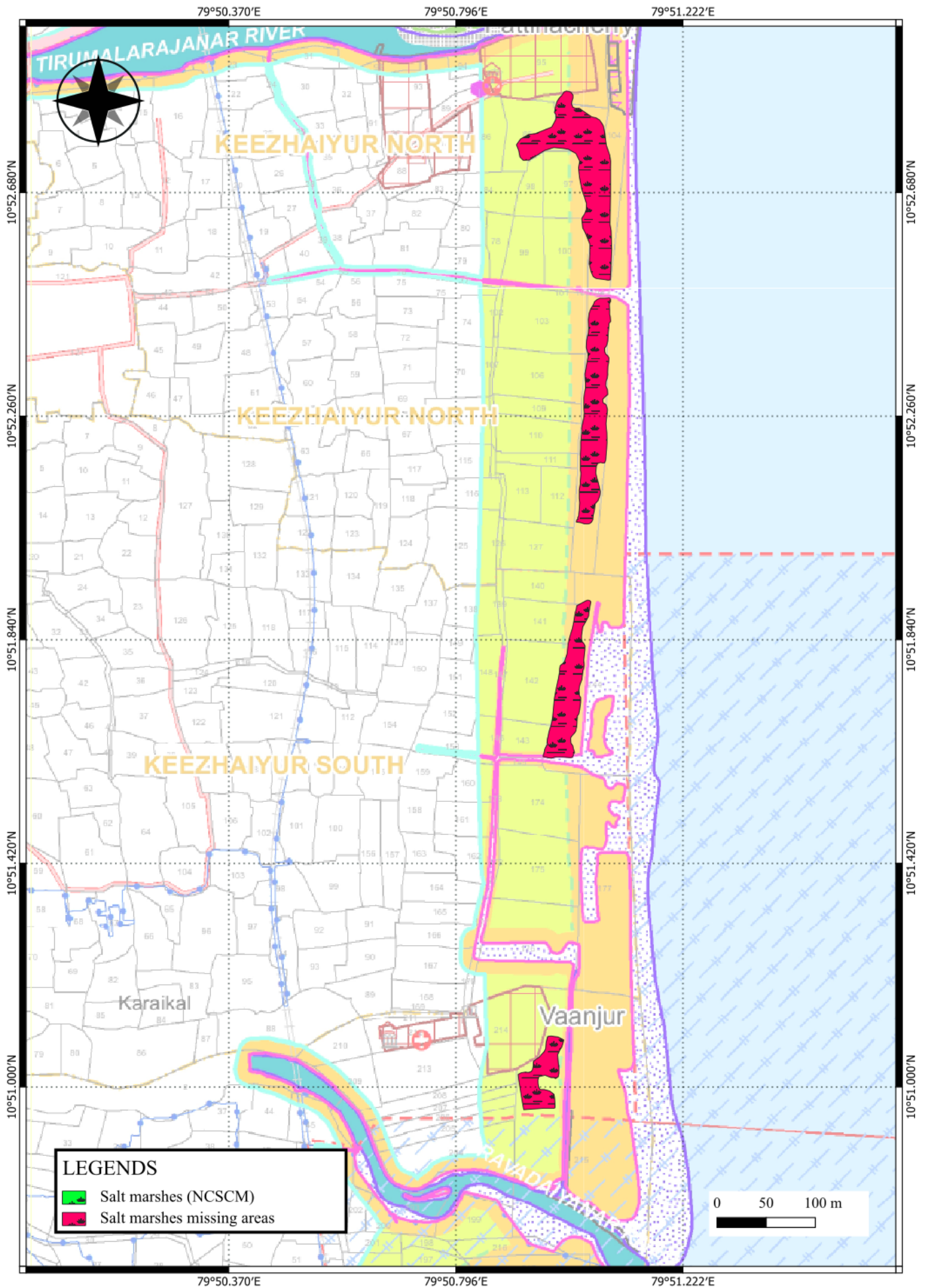


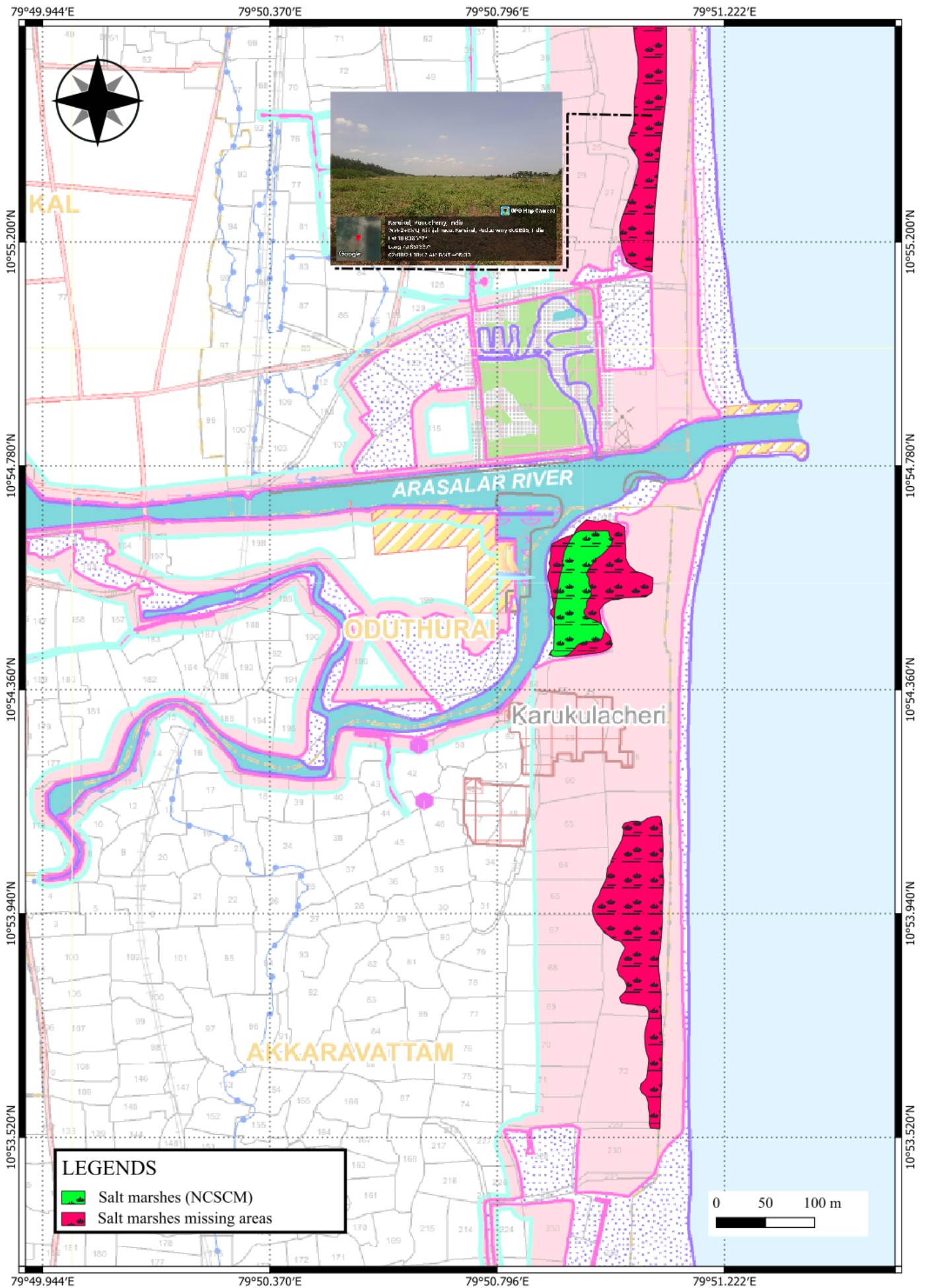


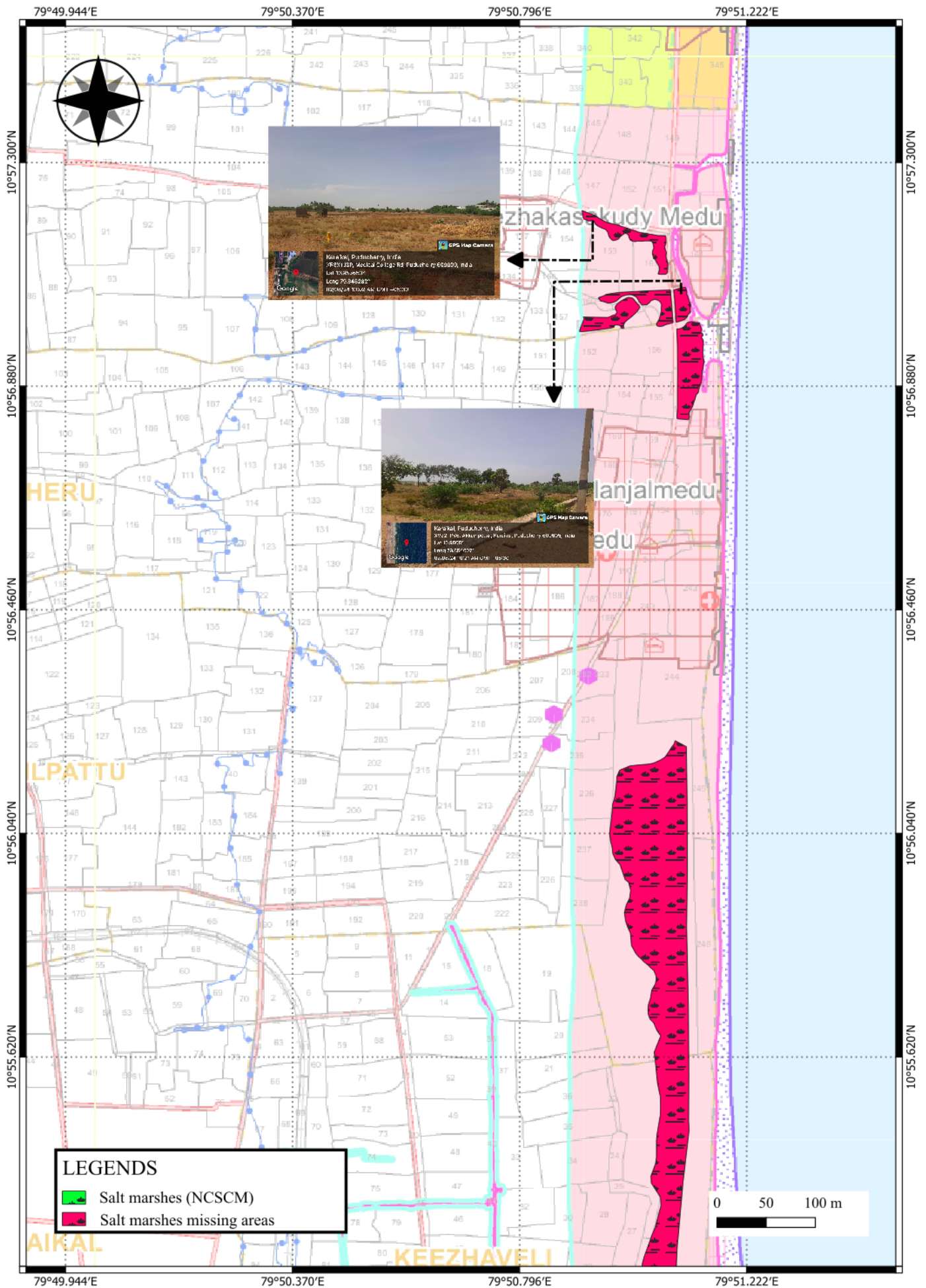


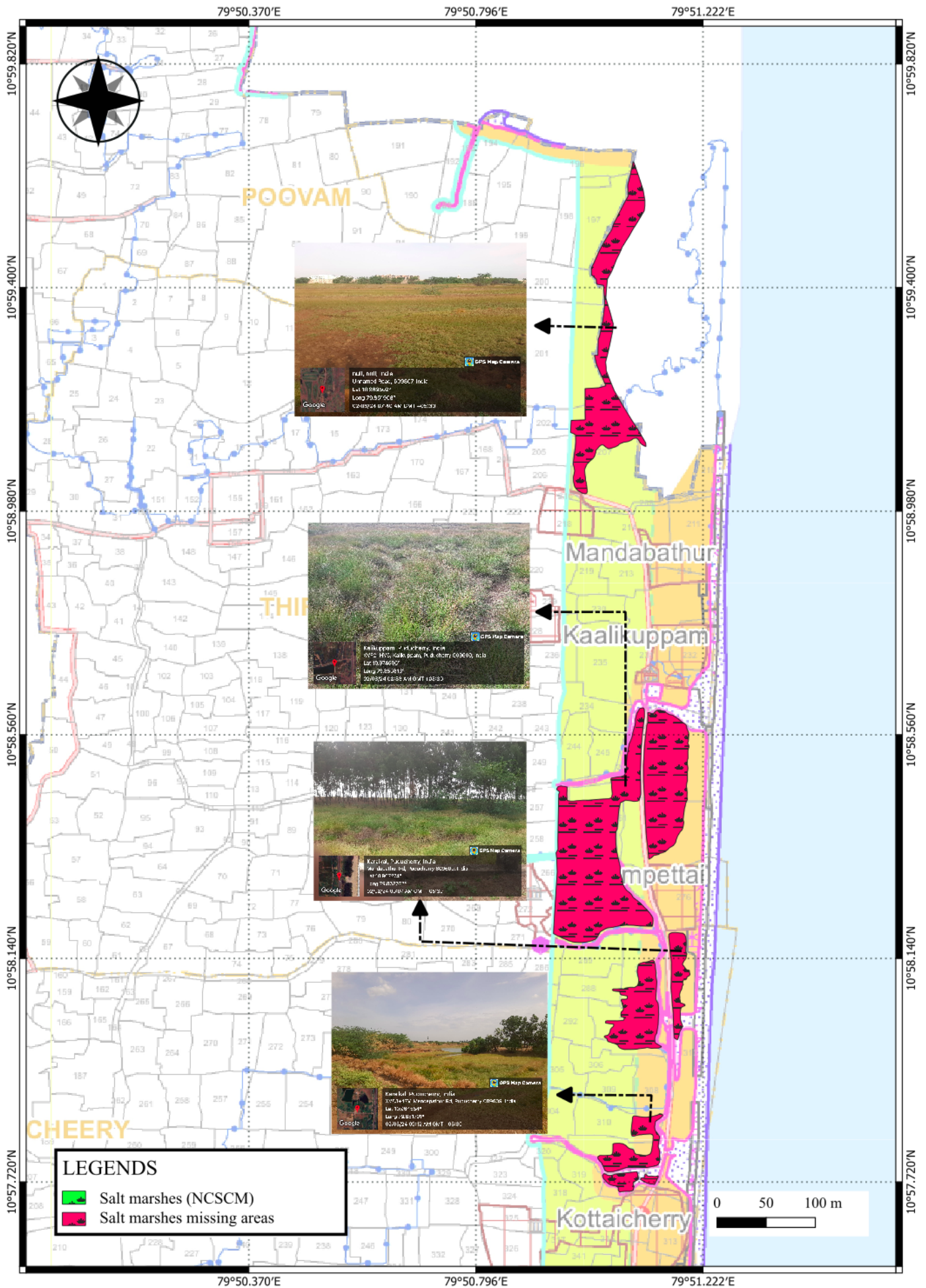


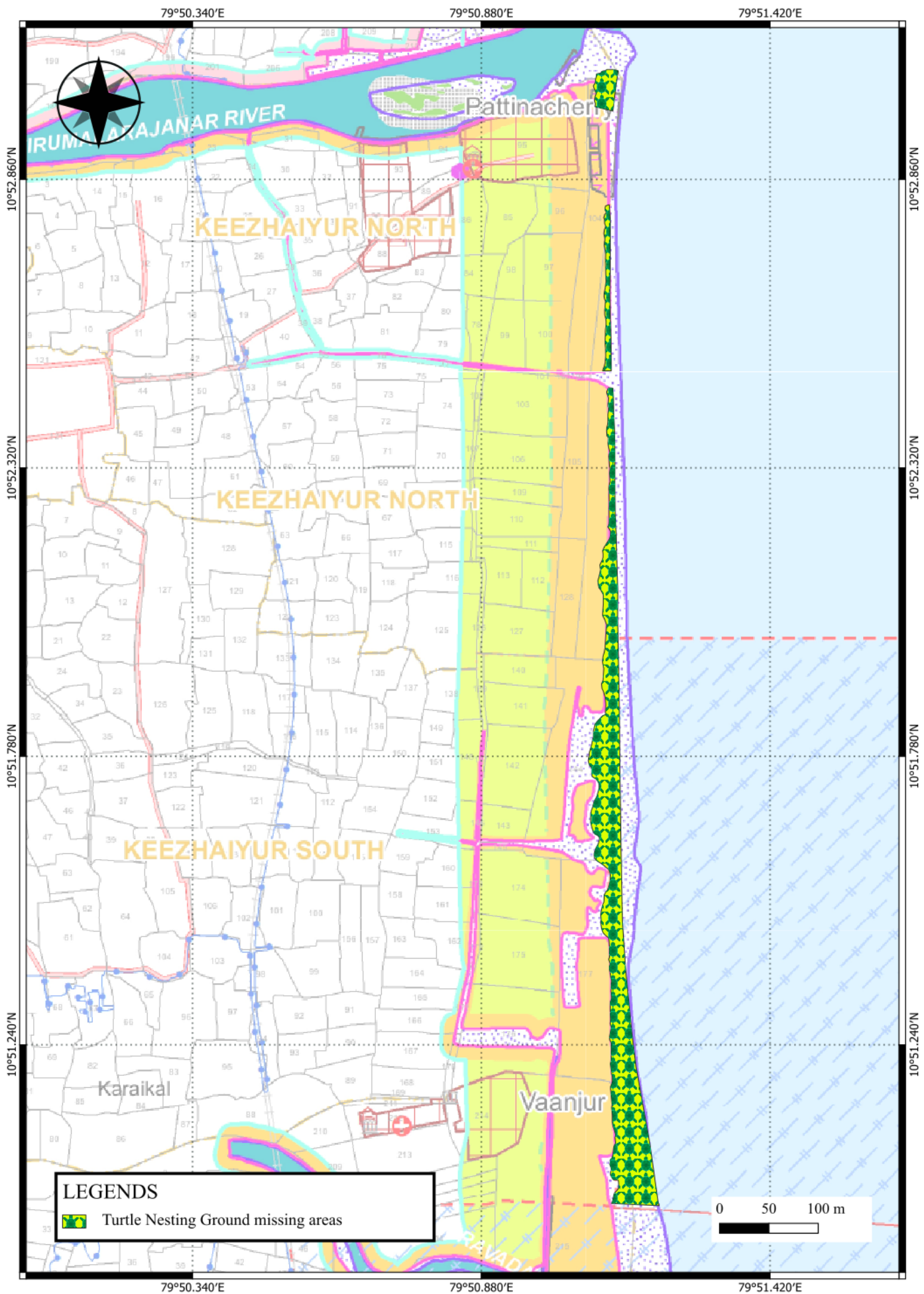




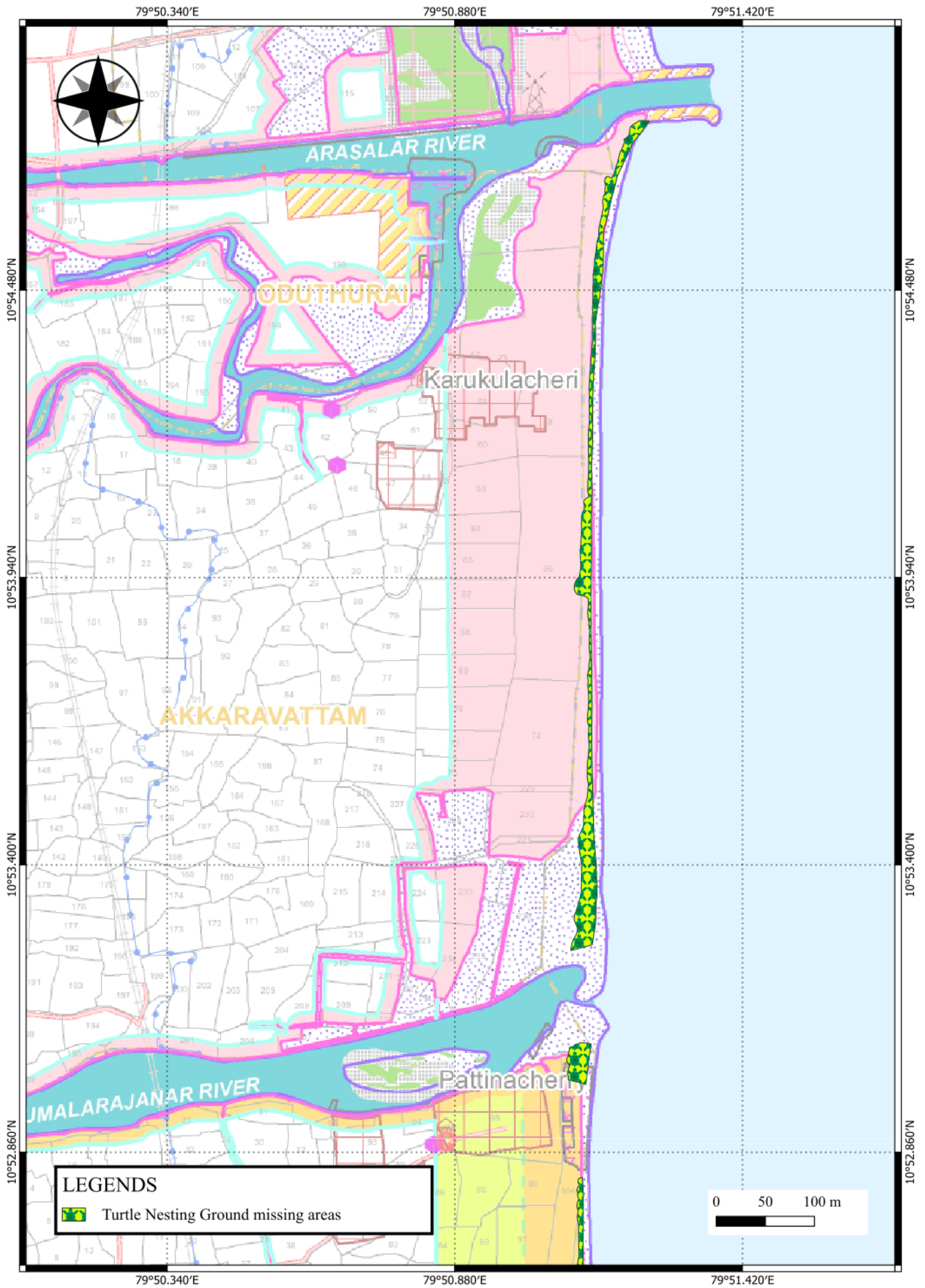


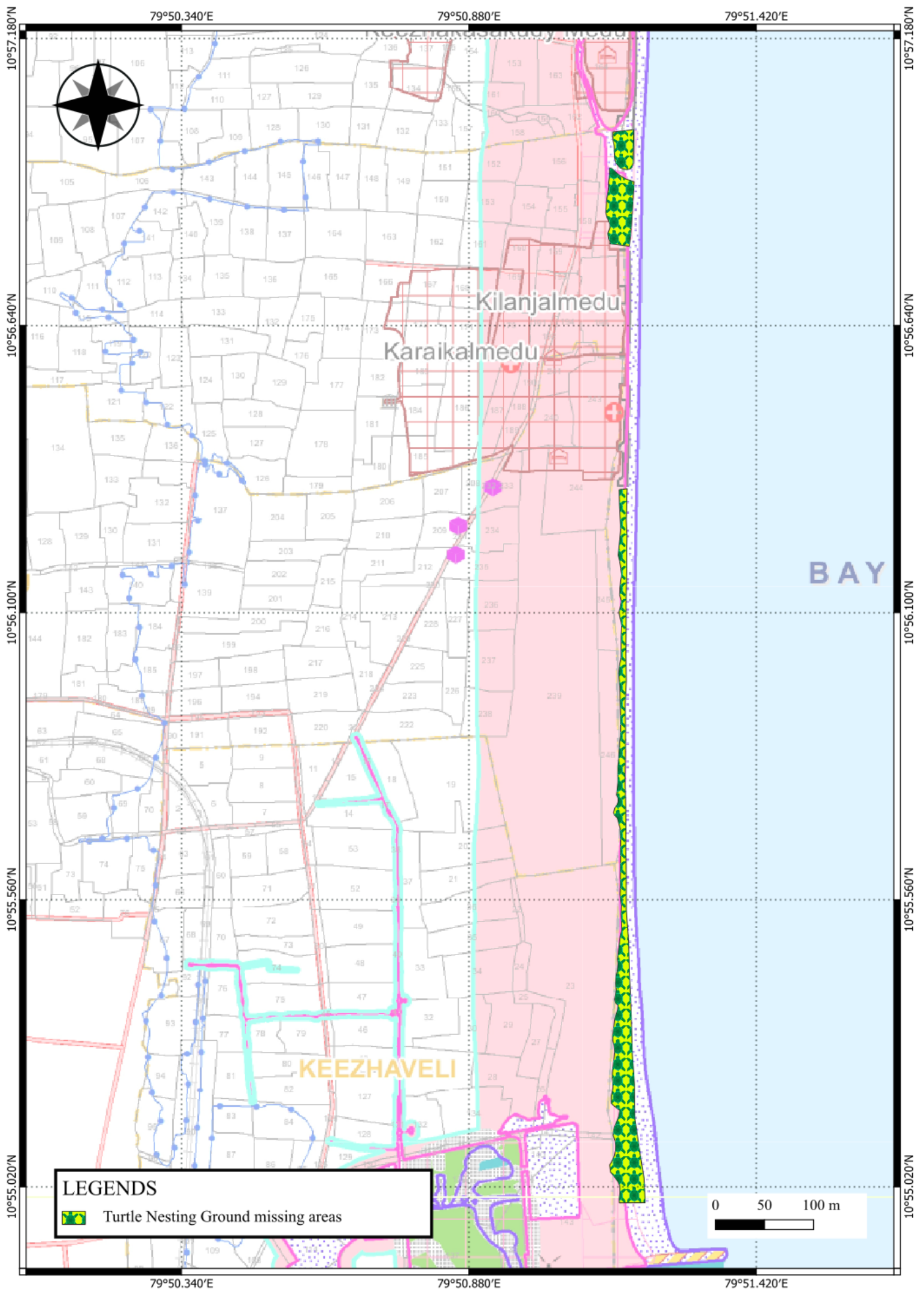


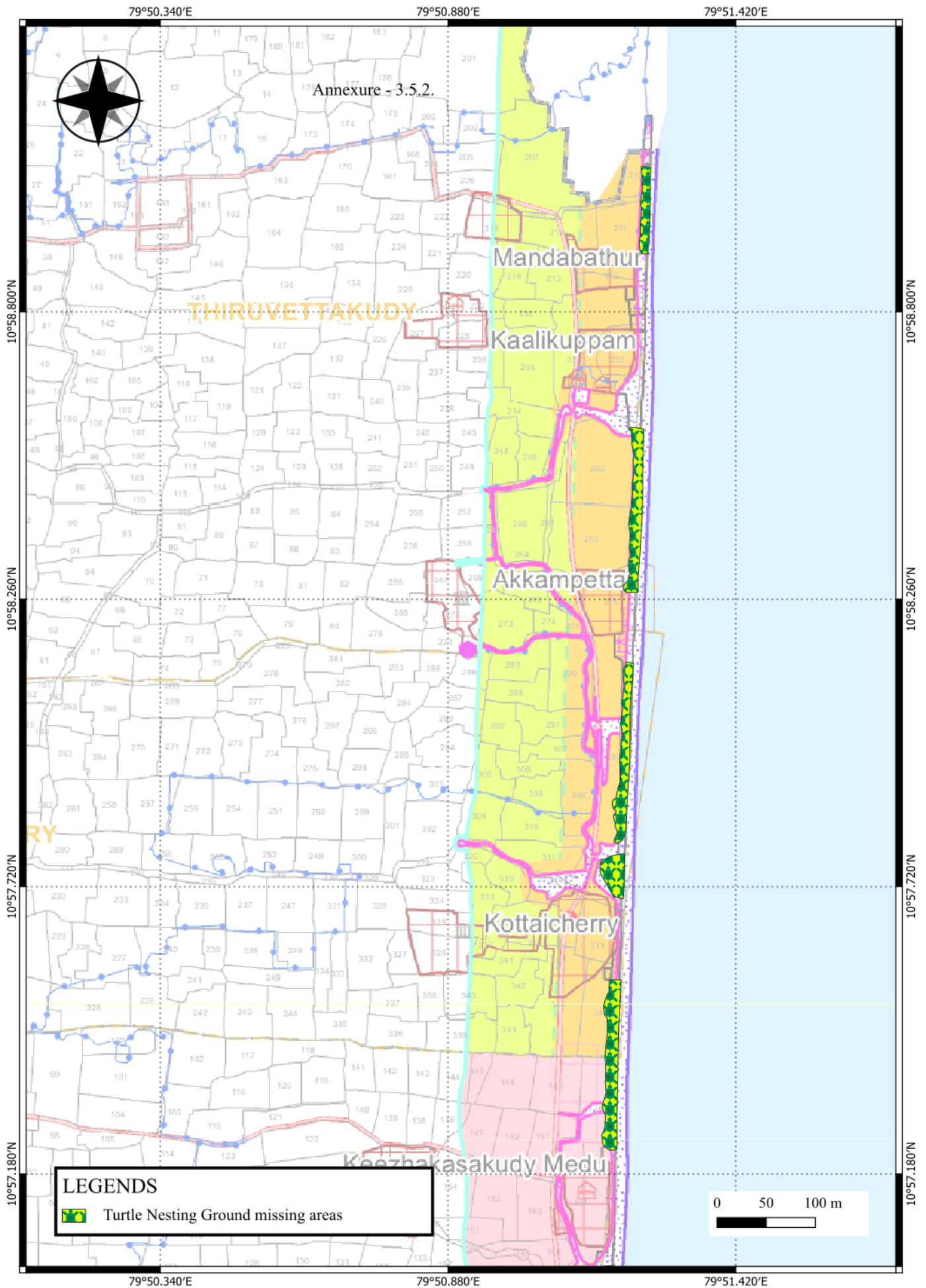












**A brief introduction to Coastal Regulation Zone notification**

The Coastal Regulation Zone (CRZ) notification, 2019, was brought by the Department of Environment, Forest and Climate Change of the Union government. In order to give life to this notification, all the coastal States and coastal Union Territories are asked by the union to prepare the Coastal Zone Management Plans (CZMP). The Pondicherry Pollution Control Committee (PPCC) is coordinating this effort with the guidance from the Coastal Zone Management Authority (CZMA) – there are three fisher representative in this authority. There are other departments such as the department of fisheries, the department of town and country planning and the department of tourism involved in this process. The National Centre for Sustainable Coastal Management (NCSCM) is helping in the visual representation of data given by these departments.

So far, three CRZ notifications have come, 1991, 2011 and 2019. The aims of this notification are preserving Ecologically Sensitive Areas (ESA) on the coast and the nearshore waters, protecting the livelihood rights of fishers and regularize the developmental activities. An allegation is that the rigour of the first two aims has been diluted in the successive notifications.

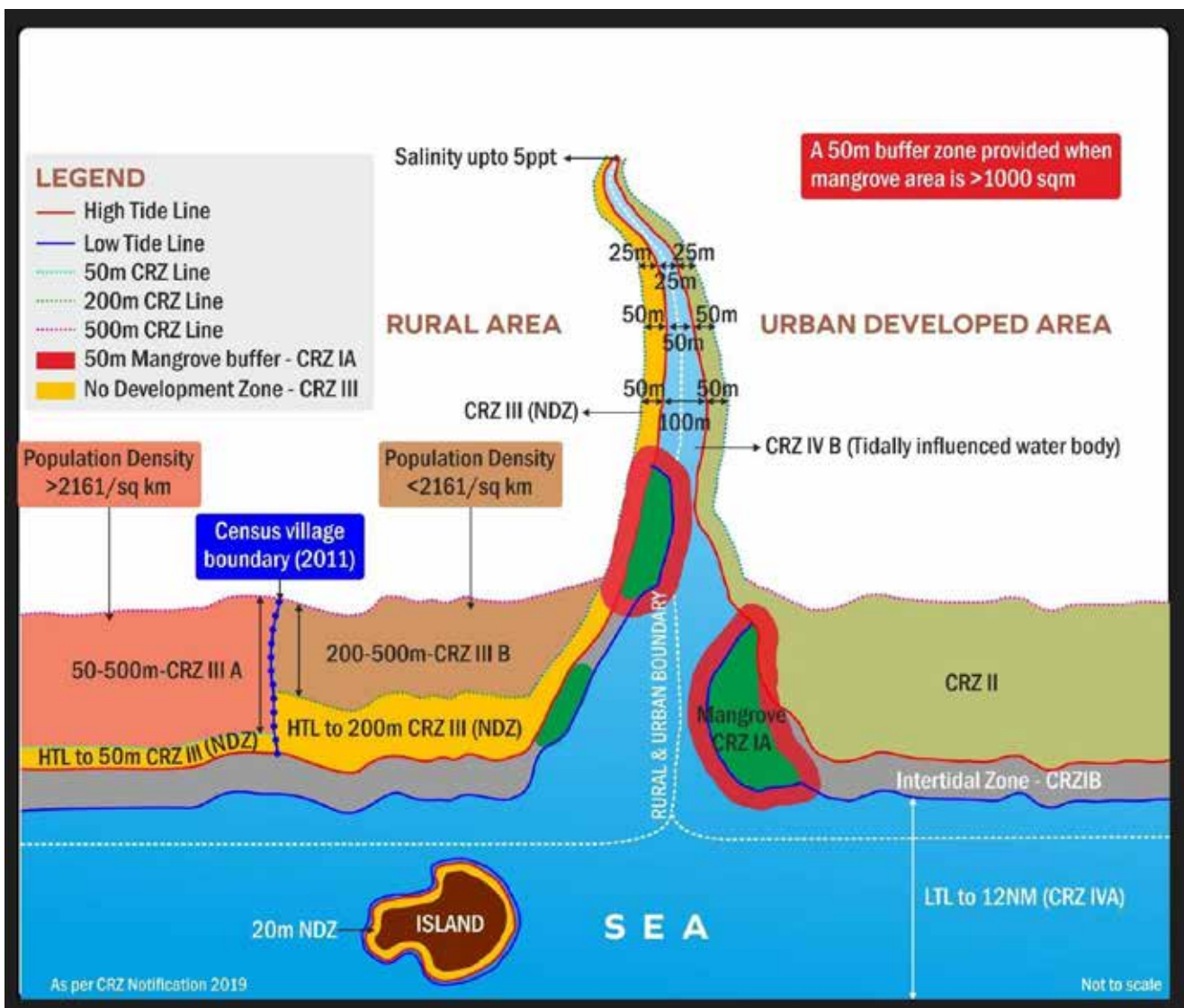
Initially, the plans will be prepared in the scale of 1:25,000. The jurisdiction of this notification is 500 m on the landward side (coast) from the High Tide Line and 12 nautical miles in the sea. There are four zones within this jurisdiction like CRZ-1 talks about the ESA, CRZ-2 deals with the developed/urban regions, CRZ-3 speaks about the rural regions and CRZ-4 deals with the water front (both sea and water ways that are connected to sea).

For the CRZ notification, 2011, the PPCC prepared the draft CZMP maps and conducted the public hearing in 2018. Many fisher representatives and leaders of movements participated in that public hearing and registered their rejection of the draft maps. Though the officials recorded the minutes of meeting, they did not make any changes based on these opinions. These maps are currently used for making decisions on this jurisdiction.

Based on the CRZ notification, 2019, so far in Pondicherry and Karaikal districts, the PPCC has released the draft CZMP maps twice (one in March, 2023 and another in April, 2024) and called for public hearings. The protests from fishing community and movements, the pressure from political parties and the intervention of National Green Tribunal – Southern Bench forced the government to take back these drafts. In the draft CZMP maps of 2023, the domination of tourism department was very visible. The PPCC did not mention the existence of even a single fishing village. It was the activists and the fisher youth who mapped the fishing settlements which were then included in the draft CZMPs by the authorities. Similarly, in the draft CZMP maps of 2024, the traditional fishing zones, the fish breeding regions and the ESA are not marked properly.

Annexure – 4 of the CRZ notification, 2019, clearly provides the guidelines for preparation of CZMP. The section – 5 of this annexure talks about the classification of CRZ areas. The Section – 5.3. informs that the fishing villages, common properties of fishermen communities, fishing jetties, ice plants, fish drying platforms or areas infrastructure facilities of fishing and local communities such as dispensaries, roads, schools, and the like, shall be indicated on the cadastral scale maps. States and Union territories shall prepare detailed plans for long term housing needs of coastal fisher communities in view of expansion and other needs.

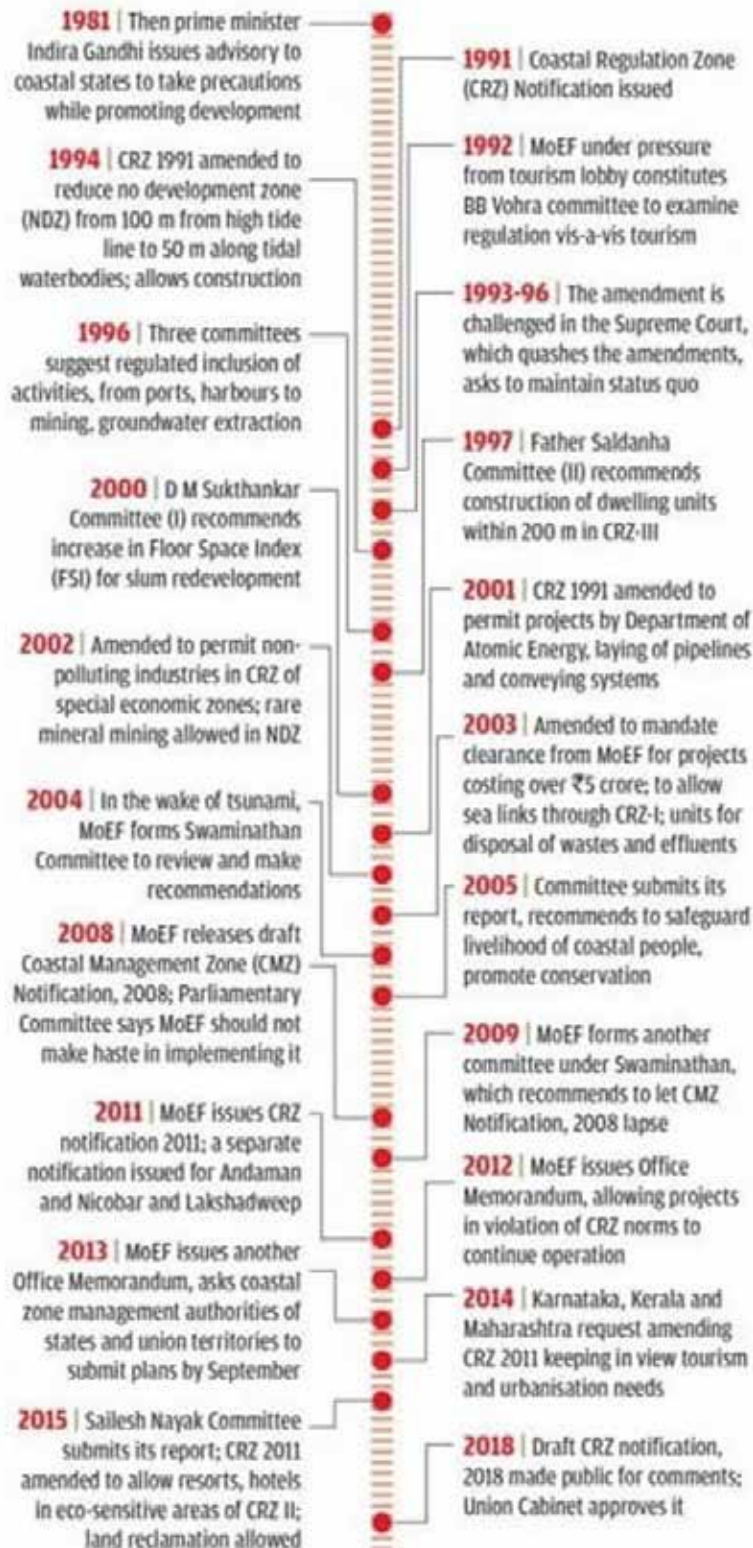
The PPCC should properly prepare the CZMP maps based on the guidelines given in this annexure, before calling for a public hearing meeting.



Credit: National Centre for Sustainable Coastal Management (NCSCM)

# Systematic violations

Coastal regulation zone notification has been amended 34 times in 27 years, not to protect the coast but to open it up for development



Published by:  
**Tamil Meenavar Viduthalai Vengaikal and  
Coastal Peoples' Right to Life Movement**

