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The research project is carried out by the Urban Design Research Institute (UDRI) along with various contributors through household surveys, observation surveys, photo documentation, community interviews and secondary research, spanning over an eighteen-month period from June 2018 to December 2019. It is an unbiased study which presents factual information at the time of the survey, and a technical assessment of the same. UDRI does not lay any claim to the substantiation and accuracy of the facts, the data or the content, relying rather on the information gathered through the surveys at that point in time. UDRI, therefore, cannot be held responsible for any data and representations.

Introduction

The Urban Design Research Institute (UDRI) has been working with the indigenous communities of the Mumbai Metropolitan Region (MMR) – the koliwadās, gaothans and adivasipadas – to understand and assist in determining, defining and addressing several of their urban issues through planning policy and governmental frameworks. The fundamental issue lies in the fact that these settlements have not been demarcated by the civic administration since the 1960s, leading to complex issues of place ownership, threatened livelihoods and poor or no essential infrastructure. As a result, these communities, albeit some of the oldest in the Region, are beginning to lose their identity. Their settlements, encumbered by extremely congested living conditions, are being incorrectly labelled as slums, and the community faces eviction notices on a regular basis.

Under the larger rubric of *Empowering indigenous communities and primary livelihoods of the Mumbai Metropolitan Region including facilitation of housing upgradation and sanitation infrastructure* and through continuous engagement with the communities since 2017, UDRI has been working towards achieving solutions for:

- i. Inclusion in the Coastal Zone Management Plan to protect koli settlements (fishing villages) and their primary livelihoods, which are entirely dependent on the sea;
- ii. Demarcation of core and extended koliwadās, gaothans and adivasipadas to regain their space and identity in the city, and inclusion in the Development Plan;
- iii. Formulation of Special Development Control Regulations (DCRs) for the demarcated settlements to facilitate upgradation of their housing and fishing allied activities;
- iv. Empowering primary livelihoods and empowering women through establishing their presence in market places, upgrading the market infrastructure and protecting the market places from being usurped for redevelopment;
- v. Settlement infrastructure upgradation to address micro-level issues of:
 - Water
 - Sanitation
 - Solid waste management
 - Social amenities and facilities

This handbook aims to serve as a guiding document for the various stakeholders involved in empowering indigenous communities i.e. community members of koliwadās and gaothans, bureaucrats, architects, planners, social workers, amongst others. A series of handbooks comprising technical information has been compiled to supplement planning for indigenous communities.

ENVIRONMENT RIGHTS

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Aim: Inclusion in the Coastal Zone Management Plan (CZMP) to protect koli/gaothan settlements and livelihoods, which are entirely dependent on the sea

Core Issues



Threatened by climate change, natural disasters & coastal pollution



Inconvenience for repairs & development

Why is settlement demarcation in the CZMP important?

1. Demarcation of the koliwadadas, gaothans and adivasipadas have not been indicated in the Coastal Zone Management Plans (CZMP) of Maharashtra
2. Due to this, inhabitants of these settlements face inconvenience for repairs, development & redevelopment
3. Inclusion in the CZMPs establishes the existence of the fishing communities and their common properties in the coastal districts; it also protects the land of native inhabitants

Who is responsible for indicating indigenous settlements in the CZMPs?

- Maharashtra Coastal Zone Management Authority (MCZMA)

Impact at the national and state level

National & State Level: Demarcated settlement boundaries should be indicated on the Coastal Zone Management Plans (CZMPs) of Maharashtra State to safeguard the native inhabitants and their livelihoods

The CRZ Notification 2019, Annexure IV states that:

"In the CRZ areas, the fishing villages, common properties of the 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, provisions of basic services including sanitation, safety, and disaster preparedness."

UDRI'S suggestions

- Inclusion of fishing & other primary occupations with their associated requirements in the list of permissible uses in (Coastal Regulation Zone) CRZ areas;
- Clear denotation of koliwadadas, gaothans and adivasipadas in CZMPs before making further modifications
- **UDRI's continuous efforts have led to a dialogue between the Koli and East Indian communities with the State Government**
- **UDRI sent a series of suggestions and objections to the MCZMA and Ministry of Environment, Forest and Climate Change (MoEFCC), and participated in public hearings for draft CZMPs of Greater Mumbai, Mumbai Suburbs and Thane districts**



Who is the concerned authority?

- Ministry of Environment, Forest and Climate Change (MoEFCC), at the national level
- Maharashtra Coastal Zone Management Authority (MCZMA), at the state level



Website Links

- <https://moef.gov.in/en/>
- <https://www.mczma.gov.in/>



Legal Provisions & Regulations

CRZ Notification 2019

<https://www.mczma.gov.in/content/crz-notification-2019>

CZMPs of Maharashtra 2019

<https://www.mczma.gov.in/czmp>



Who are the stakeholders involved?

- Members of the koli and gaothan communities
- Members of Legislative Assembly (MLAs)
- Members of Parliament (MPs)
- State & Central Government

Fishing allied activities along the sea coast



Way Forward

The indigenous communities must continue engagement with the State Government and get their settlements demarcated on the CZMPs

What is the CRZ?

The **Central Government** has declared the **coastal stretches** of the country and the water area up to its **territorial limit**, excluding the islands of Andaman & Nicobar and Lakshadweep and the marine areas surrounding these islands, as **Coastal Regulation Zone**. This includes:

- (i) The land area from High Tide Line (HTL) to 500 meters on the landward side along the sea front;
- (ii) The land area between HTL to 50 meters or width of the creek, whichever is less on the landward side along the tidal influenced water bodies that are connected to the sea *

The **CRZ Notification** is the official document published by the MoEFCC and has a series of regulations related to environment and development which must be followed and adhered to, by the coastal states, while preparing the CZMP

Classification

For the purpose of conserving and protecting the coastal areas and marine waters, the CRZ area is classified as follows:

CRZ-I areas are environmentally most critical and are further classified as under **CRZ-IA & IB**

CRZ-II constitutes the developed land areas up to or close to the shoreline, within the existing municipal limits or in other existing legally designated urban areas, which are substantially built-up

CRZ III constitutes land areas that are relatively undisturbed (viz. rural areas, etc.) and those which do not fall under CRZ-II. It is further classified into **CRZ-III A & IIIB**

The **CRZ-IV** constitutes the water area and is further classified as under **CRZ-IVA & IVB**



Snipping of the legend

Snipping of an approved CZMP of Mumbai City, 2019 showing CRZ lines

* Refer to the CRZ Notification 2019, page 30 for the complete definition and detailed explanation

Significance of the CRZ

The CRZ is formulated for the following reasons:

1. To conserve and protect the unique environment of coastal stretches and marine areas
2. Livelihood security to the fisher communities and other local communities
3. To promote sustainable development based on scientific principles
4. To take into account the dangers of natural hazards and sea-level rise

The CRZ especially impacts coastal communities like the kolis because:

- They live along the coast line;
- Their lives and livelihoods depend upon the sea and the coast

CRZ regulations concern the development of the following:

- Housing
- Fishing and allied activities
- Jetties
- Common infrastructure and amenities such as schools, hospitals and parks

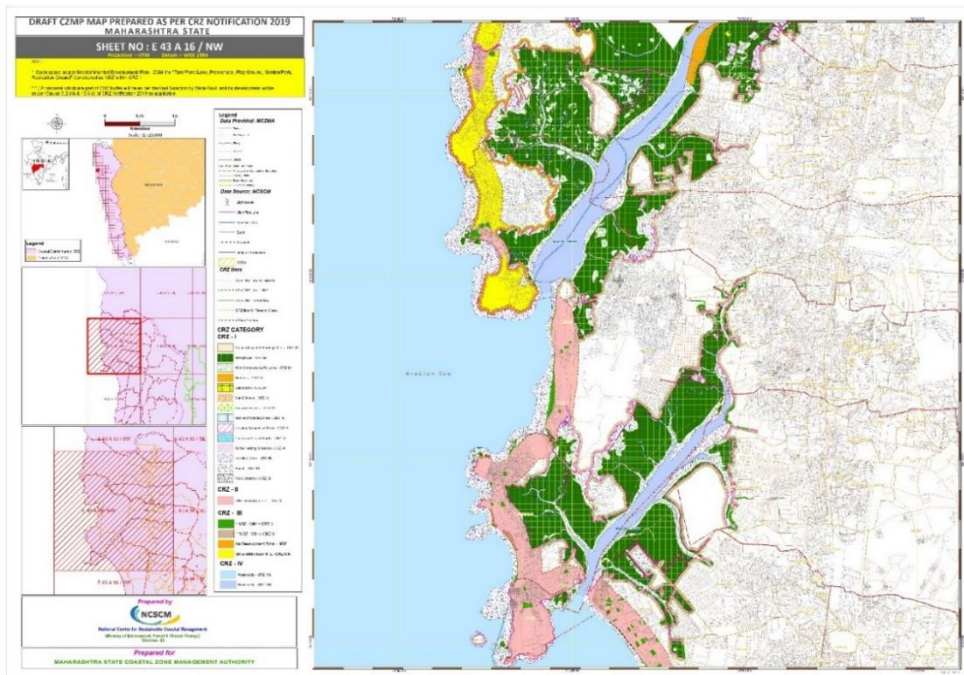
For further details refer to CRZ
Notification 2019

<https://www.mczma.gov.in/content/crz-notification-2019>



What is the CZMP?

The CZMPs of Maharashtra are detailed base maps at a scale of 1:25,000 that are prepared to depict the high tide lines, areas falling within the Coastal Regulation Zone (CRZ) and natural coastal environs such as mangroves, salt marshes, rock beds etc.



Sample of draft CZMP for Greater Mumbai, 2019
Source: <https://mczma.gov.in/czmp>

Agencies overlooking the preparation of CZMPs:

- Ministry of Environment, Forests and Climate Change (MoEF);
- Maharashtra Coastal Zone Management Authority (MCZMA)

What should you look out for:

- ✓ Hazard Line
- ✓ High Tide Line
- ✓ Low Tide Line
- ✓ CRZ Classification
- ✓ Settlement boundaries of koliwadass and gothans
- ✓ Common properties of fishing communities, fishing jetties, ice plants, fish drying platforms etc.

Hazard line – A 'Hazard line' has been demarcated by the Survey of India (SOI) taking into account the extent of the flooding on the land area due to water level fluctuations, sea level rise and shoreline changes (erosion or accretion) occurring over a period of time.

High Tide Line – HTL means the line on the land up to which the highest water line reaches during the spring tide.

Low Tide Line – LTL means the line on the land up to which the lowest water line reaches during the spring tide.

Process followed while formulating the CZMPs of Maharashtra

Demarcation of the High Tide Line and Low Tide Line (by **National Centre for Sustainable Coastal Management**)

Demarcation of the Hazard Line (by Survey of India)

Preparation of draft CZM Maps at the specified scale (by agencies identified by the MoEFCC)

Preparation of local level CZM Maps

Public consultations on the CZMP

The draft CZMP prepared is to be given wide publicity, and Suggestions & Objections (SO) are to be received in accordance with the Environment (Protection) Act, 1986. A public hearing on the draft CZMP is to be held at the district level by the concerned CZMA.

Based on the SOs received the CZMPs are revised and approval from the Ministry of Environment, Forest and Climate Change is obtained

Preparation of the final and approved CZM Maps

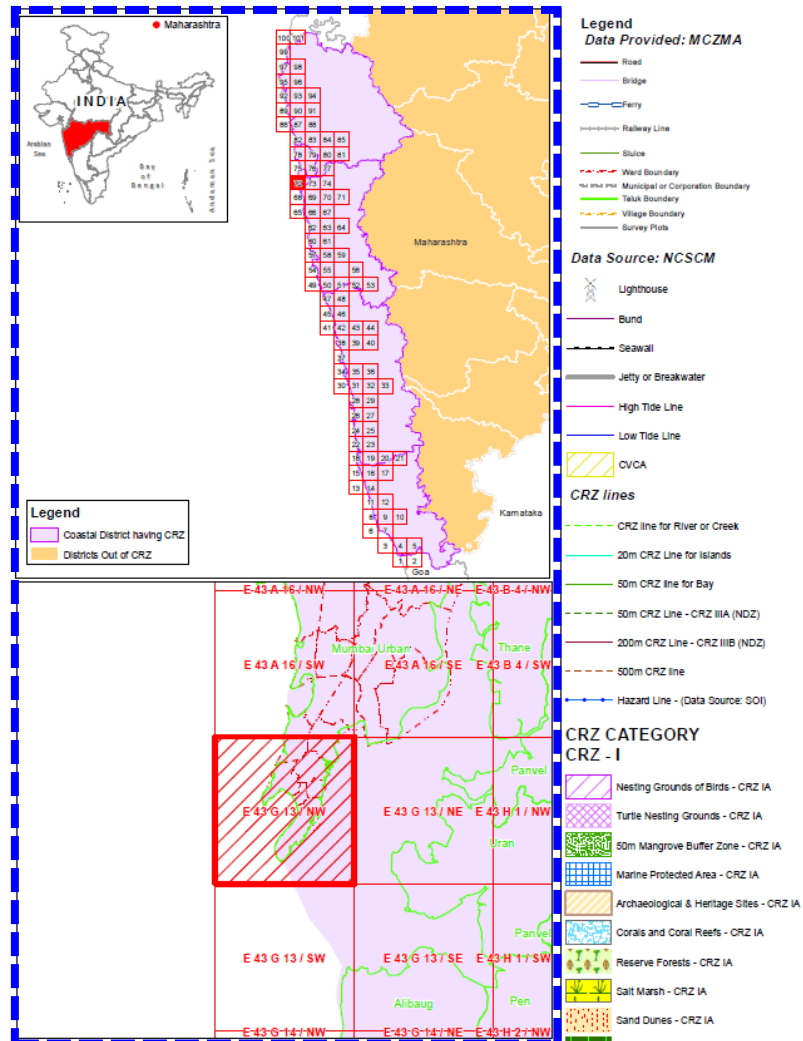
The approved CZMP should be put up on the website of MoEFCC and concerned website of the State or Union Territory Coastal Zone; Management Authority and hard copy should be made available in the Panchayat Office and District Collector's Office.

Revision of Coastal Zone Management Plans

How to read a CZMP?

Step 1

Open any one of the CZMPs of Greater Mumbai & its suburbs, and look at the key map comprising different sheet numbers - <https://mczma.gov.in/czmp>

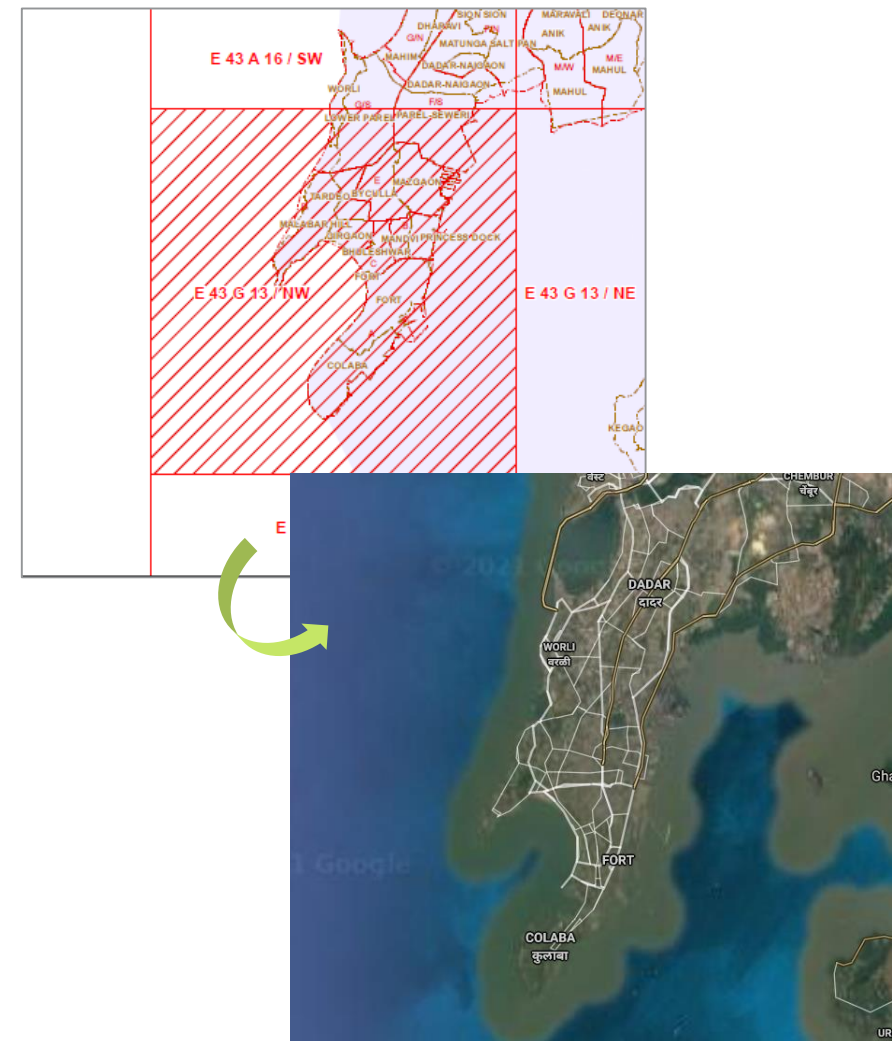


Note: Map clippings have been extracted from the draft CZMP of Greater Mumbai, released in 2020

How to read a CZMP?

Step 2

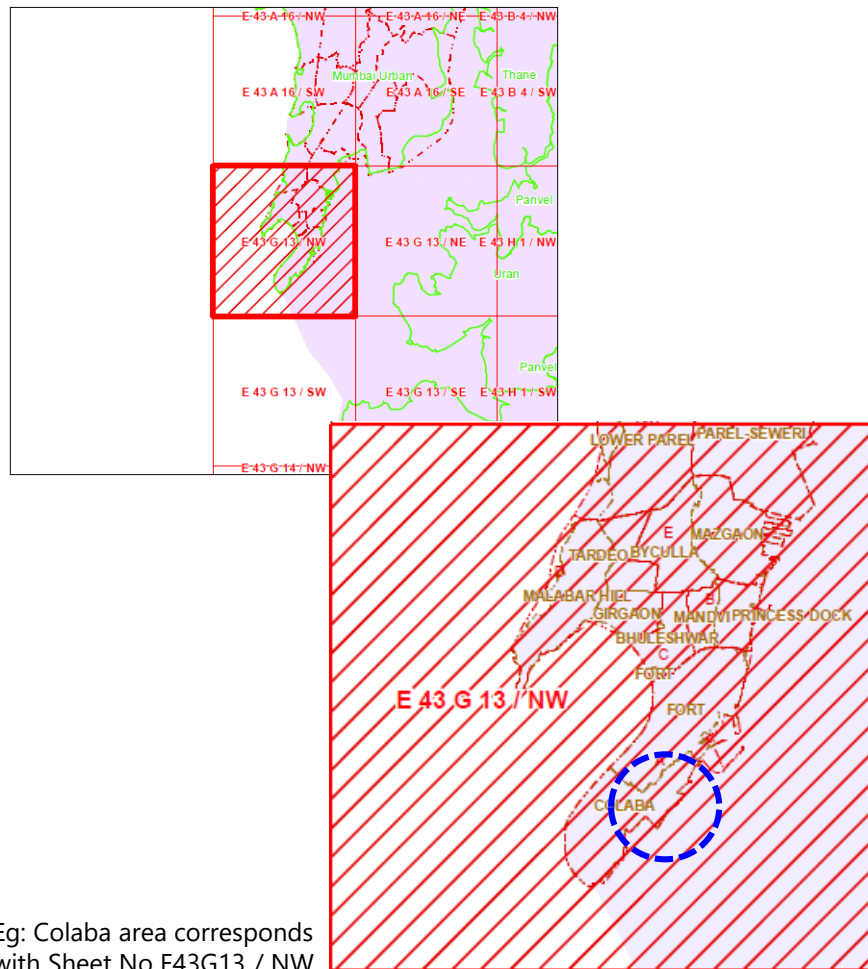
Compare the profile of the key map with the satellite imagery of the city for reference.



How to read a CZMP?

Step 3

Identify which sheet number of the key plan corresponds to the area of your concern



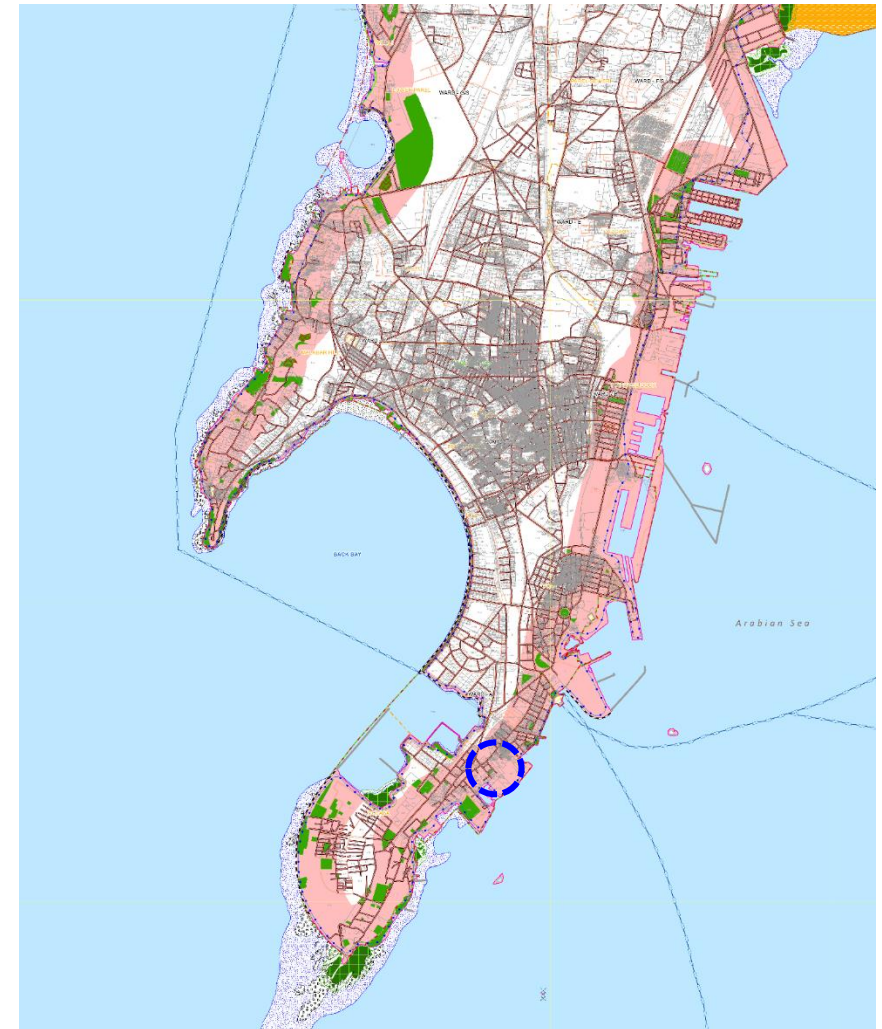
Eg: Colaba area corresponds with Sheet No E43G13 / NW

Note: Map clippings have been extracted from the draft CZMP of Greater Mumbai, released in 2020

How to read a CZMP?

Step 4

Identify the ward and survey plot number which needs to be checked on the specific sheet number

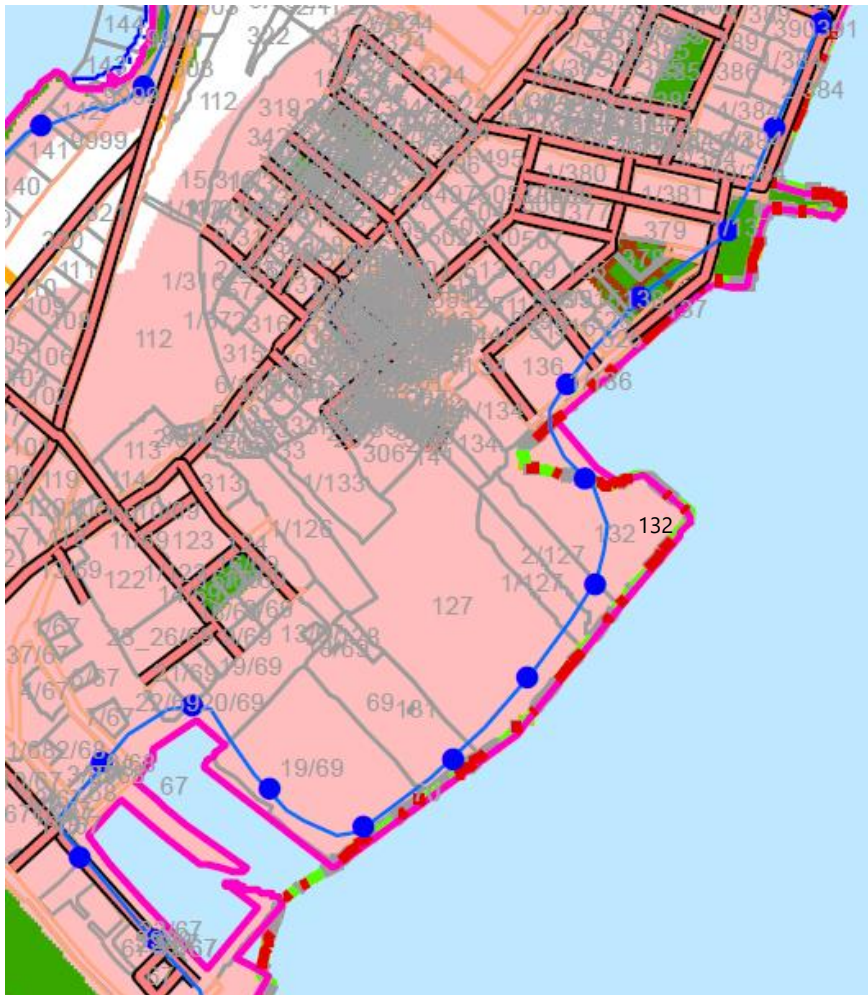


Example: Colaba Koliwada is located in the 'A' Ward, Sheet No E43G13 / NW, and corresponds to plot number 224.

How to read a CZMP?

Step 5

Zoom in to the identified area to explore the desired information.

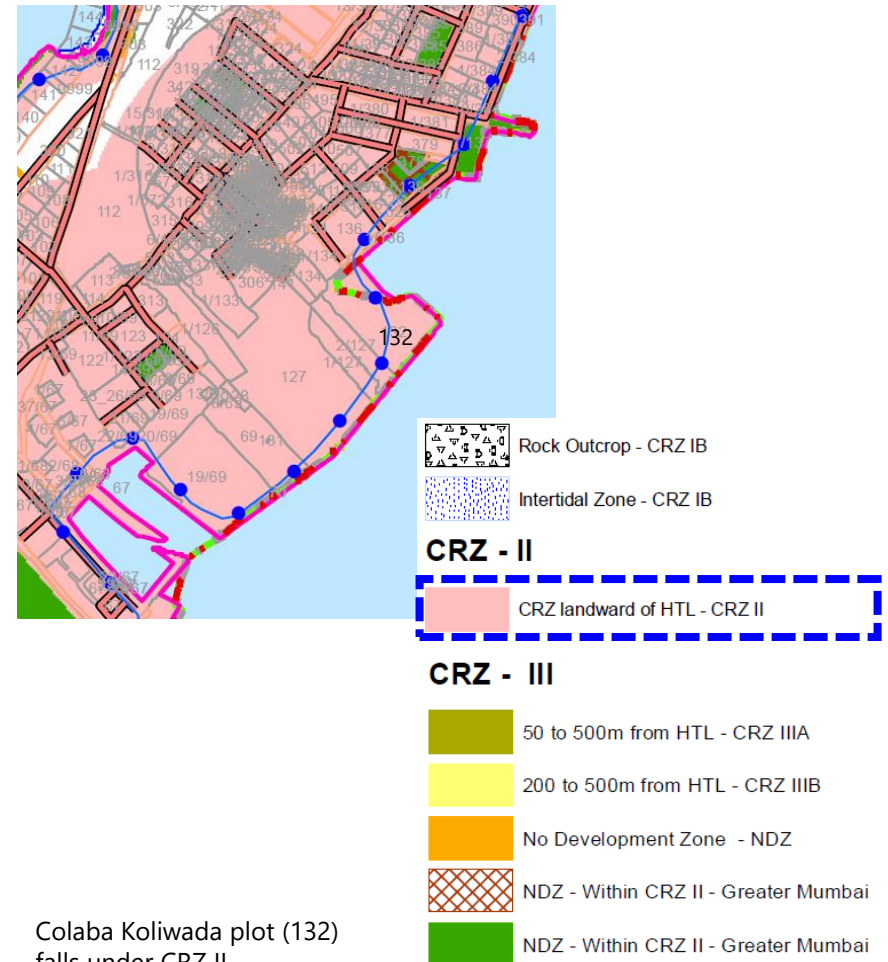


Note: Map clippings have been extracted from the draft CZMP of Greater Mumbai, released in 2020

How to read a CZMP?

Step 6

Check in which CRZ zone the specific plot falls, with the help of the legend.



How to read a CZMP?

Step 7

Read the CRZ 2019 Notification for details regarding the CRZ zone which the plot falls in.

30 THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—SEC. 3(i)]

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION

New Delhi, the 18th January, 2019

5.2 CRZ-II:

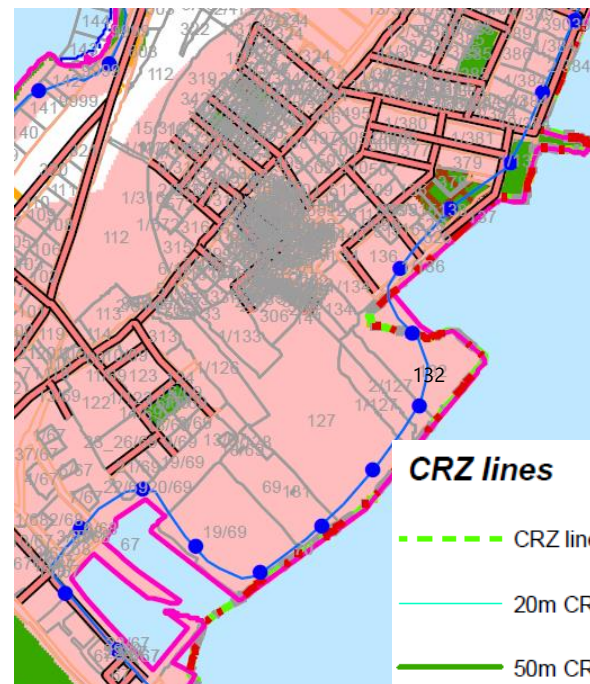
- (i) Activities as permitted in CRZ-I B, shall also be permissible in CRZ-II, in so far as applicable.
- (ii) Construction of buildings for residential purposes, schools, hospitals, institutions, offices, public places, etc. shall be permitted only on the landward side of the existing road, or on the landward side of existing authorised fixed structures:
Provided that no permission for construction of buildings shall be given on landward side of any new roads which are constructed on the seaward side of an existing road.
- (iii) Buildings permitted as in (ii) above, shall be subject to the local town and country planning regulations as applicable from time to time, and the norms for the Floor Space Index (FSI) or Floor Area Ratio (FAR) prevailing as on the date of this Notification, and in the event that there is a need for amendment of the FSI after the date of publication of this notification in the official Gazette, the Urban Local Body or State Government or Union territory Administration shall approach the Ministry of Environment, Forest and Climate Change through the concerned State Coastal Zone Management Authority (SCZMA) or Union Territory Coastal Zone Management Authority, as the case may be and the SCZMA shall forward the proposal to the National Coastal Zone Management Authority (NCZMA) with its views in the matter, and the NCZMA shall thereafter examine various aspects like availability of public amenities, environmental protection measures, etc., and take a suitable decision on the proposal and it shall be the responsibility of the concerned Town Planning Authority to ensure that the Solid Wastes are handled as per respective Solid Waste Management Rules and no untreated sewage is discharged on to the coast or coastal waters.
- (iv) Reconstruction of authorised buildings shall be permitted, without change in present land use, subject to the local town and country planning regulations as applicable from time to time, and the norms for the Floor Space Index or Floor Area Ratio, prevailing as on the date of publication of this notification in the official Gazette and in the event that there is a need for amendment of the FSI after the said date of this notification, the Urban Local Body or State Government or Union territory Administration shall approach the Ministry of Environment, Forest and Climate Change through the concerned State Coastal Zone Management Authority (SCZMA) or Union Territory Coastal Zone Management Authority, as the case may be and the CZMA shall forward the proposal to the National Coastal Zone Management Authority (NCZMA) with its views in the matter, and the NCZMA shall thereafter examine various aspects like availability of public amenities, environmental protection measures etc., and take a suitable decision on the proposal and it shall be the responsibility of the concerned Town Planning Authority to ensure that the Solid Wastes are

Note: Map clippings have been extracted from the draft CZMP of Greater Mumbai, released in 2020

How to read a CZMP?

Step 8

Check other parameters such as the High Tide Line, Hazard Line etc.



CRZ lines

- CRZ line for River or Creek
- 20m CRZ Line for Islands
- 50m CRZ line for Bay
- 50m CRZ Line - CRZ IIIA (NDZ)
- 200m CRZ Line - CRZ IIIB (NDZ)
- 500m CRZ line

--- Hazard Line - (Data Source: SOI)

