

## FORM - 'A'

Form for seeking prior approval under section 2 of the proposals by the State Governments and other authorities

### PART-I

(To be filled up by user agency)

#### 1. Project details:

Diversion of 0.2260 Ha forest Land for the Development of Mangrove Conservation Center and Mangrove Park at Gorai by Mumbai Mangrove Conservation Unit (MMCU).

- (I) Short narrative of the proposal and project /scheme for which the forest land is required.

Mumbai, with a population of over 12.4 million inhabitants, is the capital of the state of Maharashtra and is considered as the financial capital of the country. Owing to historical reasons, over the years, economic activities developed and concentrated in the Mumbai Island. This island is narrow and long on a north south axis and has an area of only 68.71 sq. km compared to 437.71 sq. km for Greater Mumbai and 4135 sq. km for the MMR. Mumbai is located between 18°53'N – 19°16'N latitude and 72° E – 72° 59'E longitude The Mumbai Metropolitan Region is also one of the fastest growing regions in India and is expected to be the largest metropolitan region of the world by the year 2031. Greater Mumbai is, in effect, the mother city and acts as a significant engine of growth for the whole region. Four-fold growth of population since 1951 has been largely accommodated in the suburbs while the highest concentration of jobs has remained in the Island City. The trend is expected to continue in the future. The job opportunities it offers have served as a major attraction for immigration from hinterland of Maharashtra as well as from all parts of the Country. The physical characteristics of the City are such that the suburbs have been constrained to spread northwards only, and all transport facilities are concentrated within three narrow corridors.

Mumbai Mangrove conservation Unit is a specific body of forest department which look after towards conservation and protection of mangroves

in Mumbai region of Maharashtra. Mangroves are present in all the coastal districts of Maharashtra viz. Mumbai city, Mumbai suburbs, Thane, Palghar, Raigad, Ratnagiri and Sindhudurg. Mangrove cell in Mumbai has successfully managed to increase the density of mangroves cover in state although there are many constructions and infrastructural work is increasing in state.

Globally as well as nationally, Forest Conservation is increasingly being viewed as a powerful instrument in sequestering carbon and thereby offset adverse climate change. Maharashtra Forest Department, being custodian of the State's rich and diverse bio-diversity, is committed to a conservation-centric management and protection strategy. Wild-life focused eco-tourism management hinges on sustainability. Production-be it timber or non-timber forest produce is managed with sustainability at its core. Joint Forestry Management to secure natural resources as well as livelihood security remains the major people-centric activity. Attempts are on to hone local artisans' skill in making value-added articles out of non-timber forest produce like bamboo and cane. Augmenting green cover on non-forest areas to achieve national targets of 33% of land area under green cover remains a forefront agenda. Intensive use of Information and Communication Technology supplemented by e-governance is under effective use to monitor on-going forestry activities. Extensive use of digital platform to project a true picture of forest conservation forms the central theme.

There are about 80 different species of mangrove trees. All of these trees grow in areas with low-oxygen soil, where slow-moving waters allow fine sediments to accumulate. Mangrove forests only grow at tropical and subtropical latitudes near the equator because they cannot withstand freezing temperatures.

Many mangrove forests can be recognized by their dense tangle of prop roots that make the trees appear to be standing on stilts above the water. This tangle of roots allows the trees to handle the daily rise and fall of tides, which means that most mangroves get flooded at least twice per day. The roots also slow the movement of tidal waters, causing sediments to settle out of the water and build up the muddy bottom.

Mangrove forests stabilize the coastline, reducing erosion from storm surges, currents, waves, and tides. The intricate root system of mangroves also makes these forests attractive to fish and other organisms seeking food and shelter from predators.

Mumbai Mangrove Conservation Unit is planning to develop Mangrove Conservation and Development Park at Gorai. The objective of this project is to educate the citizens of Mumbai about the value of the mangrove ecosystem to their well-being, and in turn running a drive for environmental awareness in the citizen and visitors.

Setting mangrove conservation and a mangrove interpretation center right next to three of the most well-known tourist attractions in Mumbai: Essel World, Water Kingdom and Global Vipassana Pagoda. This will bring in the population. Taking advantage of this pull of crowd MMCU wants to set up a centre which will emphasize on environmental importance of mangroves and bio-diversity of the coastal areas.

**II. Map showing the required forest land, boundary of adjoining forest on a 1:50,000 scale map.:** The required forest land, boundary of adjoining forest on a 1:50,000 scale Map is attached here with

**III. Cost of the Project: The Total Cost of the Project is Rs. 17 Cr**

**IV. Justification for locating the project in forest area:**

Mumbai Mangrove Conservation Unit is planning to develop Mangrove Conservation and Development Park at Gorai. The objective of this project is to educate the citizens of Mumbai about the value of the mangrove ecosystem to their well-being, and in turn running a drive for environmental awareness in the citizen and visitors.

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The project is an Eco-Tourism project which will create awareness amongst the people for protection and conservation of mangroves, the site is specifically selected considering eco-tourism potential hence there is no alternative as such.

## V Cost-benefit analysis:

The project will be a part of an Ecotourism. Generally, ecotourism deals with interaction with biotic components of the natural environments. Ecotourism focuses on socially responsible travel, personal growth, and environmental sustainability. Ecotourism typically involves travel to destinations where flora, fauna, and cultural heritage are the primary attractions. Ecotourism is intended to offer tourists an insight into the impact of human beings on the environment and to foster a greater appreciation of our natural habitats.

While protecting the environment there will be the generation of employment from the project. Employment including engagement of local fishermen for activity likes Kayak Trail in mangroves. During the construction period the manpower / labor will be needed to work as mason, beldar, bhisti, carpenter, coolie, fitter, crane operator etc.

Eco Friendly: Mangrove Park causes no air pollution as there will not be any emissions in the air.

It will not generate any noise as such, hence no noise pollution as well.

Less Land Requirement: Occupies less space as it's mostly uplifted from the land and hence no effect to the mangroves growth.

Following are another cost beneficiary measures.

- Renewal Energy sources with solar shade panels.
- Using recycled materials like Shipping Containers.
- Minimal ground coverage of the design.
- Selection of materials in turn to reduce on maintenance cost.
- Maximum use of natural light and ventilation.
- Constructing 75% boardwalk on the outer edge of the current mangrove density to avoid harm to existing mangroves. And replanting new mangroves to increase the mangrove coverage.
- Selection of materials in turn to reduce on maintenance cost
- Renewal Energy sources with turbines.

**Employment Generation:**

The construction phase of the project is spread over a period of 23 months. During this period the manpower / labor will be needed to work as mason, beldar, bhisti, carpenter, coolie, fitter, crane operator etc. Due to this project, the local population will get the employment based on the skills they have. About 300 persons per day are likely to work during the peak periods.

In the post construction phase the project will provide social benefits in terms of direct employment by generating number of jobs in various position both in supervisory and non-supervisory positions.

The Construction of the project would employ about 10 Skilled like engineers, planners and various domain experts for the projects and around 70 unskilled persons would be direct employed and about 300 persons will find indirect employment in the proposed project.

2. Purpose-wise break-up of the total land required:

Sr. No	Components	Area Required (Sq. m.)	Survey No	Village	Taluka	District	Forest Status	
1	Nature Interpretation Centre (NIC)	160	CTS 883	Gorai	Borivali	Mumbai Suburban	Reserved Forest	
2	Mangrove Trail	2000	CTS 883	Gorai	Borivali	Mumbai Suburban		
3	Bird watching Tower	100	CTS 883	Gorai	Borivali	Mumbai Suburban		
Total in Sq. M							2260	
Total in Hectare Ha (Round Off)							0.2260	



(V.R. Jagtap)

Divisional Forest Officer

Mumbai Mangrove Conservation Unit



Mumbai Mangrove Conservation Unit

3. Details of displacement of people due to the project, if any: NIL  
(i) Number of families.: NA  
(ii) Number of Scheduled Castes/Scheduled Tribe families: NIL  
(iii) Rehabilitation plan. (to be enclosed): NIL
4. Whether clearance under Environment (Protection) Act, 1986 required?  
(Yes/No): NO
5. Undertaking to bear the cost of raising and maintenance of compensatory afforestation and/or penal compensatory afforestation as well as cost for protection and regeneration of Safety Zone, etc. as per the scheme prepared by the State Government (undertaking to be enclosed). : Enclosed
6. Details of Certificates/documents enclosed as required under the instructions: Enclosed



(V.R. Jagtap)  
Divisional Forest Officer  
Mumbai Mangrove Conservation Unit  
(V.R. JAGTAP)  
Divisional Forest Officer  
Mumbai Mangrove Conservation Unit

Date:-\_\_\_\_\_

Place:-\_\_\_\_\_

State serial No. of proposal\_\_\_\_\_

(To be filled up by the Nodal Officer with date of receipt)

