

Performa for Submission of Schemes/Proposals

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| Name of Scheme/ Project: | Mangrove Initiative for Salt Pans Habitats and Tangible Incomes- MISHTI under Directorate of Green India Mission |
| Program Division of the Ministry | Directorate of Green India Mission (GIM) |
| Nodal Officer of Programme Division (name and designation)and contact details- email id Mobile no | Dr. Sanjay Kumar Shukla, Inspector General of Forests, Green India Mission. Email: igf.naeb@gov.in ; gim-mef@nic.in Mobile No.: +918959996930 |
| Nodal Officer of Implementing Agency/Institute (nameand designation) and contact details-email id Mobile no | <p>The Principal Chief Conservator of Forests and HoFF, State Forest Department of Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha & West Bengal.</p> <p>The Chief Conservator of Forests, UT Administration of Daman & Diu, Puducherry, Andaman & Nicobar Is., Lakshadweep Is.</p> |
| Objectives | <p>The aim of the MISHTI is to “Restoration of mangrove forests” by undertaking mangrove reforestation/ afforestation measures along the coast of India by adopting existing best practices in India and globally.</p> <p>Among the diverse coastal habitats, mangroves are the most dominant ecosystem along the Indian coast. MISHTI Programme is focused on mangrove restoration with following features:</p> <ul style="list-style-type: none"> Identification of new, gap and degraded area with potential for development of mangroves and its services Afforestation of suitable mangroves species and healthy ecosystem in identified new area Increasing the density of existing mangroves by reforestation and developing requisite sustainable environment Restoration of mangroves at historical mangrove area by development of conducive landscape and ecosystem including area such as exposed mudflats, abandoned aqua-farms, salt pans, creek area, etc. Substitution of invasive or alien invasive species at infested locations with scientific data-based evidences. Development of mangroves coverage in challenging terrain of creek area in Bhuj District of Gujarat through a dedicated program namely “BHUMI” - BHUJ Mangrove Initiative. Convergence of resources from the ongoing or proposed National and State schemes, programs and projects such as Compensatory Afforestation Fund Management and Planning Authority (CAMPA) Fund, Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS), National Coastal Mission, other externally aided projects, State government schemes and other sources |

| | <p>Development of support system for promotion of Blue Economy activities and climate resilient services associated with Mangrove ecosystem</p> <p>Promote Public Private Partnership in development, conservation and management of blue carbon, blue economy and associated activities including active participation of coastal community</p> <p>The program will cover all 9 Coastal States and 4 Union Territories including the challenging creek terrain of Bhuj District in Gujarat.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|----------------------|--------------------|---------------|--------|---|---|---------------------|--------|---------------------|--------|---------------|--------------------|----------|--------|----------------------|--------|------|----------------------------|------------------------------|-------------------|--------------------------|-------------------------------|---------------------------|--|--|----------------------------------|
| Project Duration and Year wise activities | <p style="text-align: center;">2023-24 to 2027-28</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Year</th> <th>Type of Activities</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Core Activity</td> <td rowspan="3">Year-1</td> <td>Mapping and delineation of target intervention areas.</td> </tr> <tr> <td>Preparation of inventory based on scientific assessment of topography, hydrology etc.</td> </tr> <tr> <td>Nursery Development</td> </tr> <tr> <td>Year-2</td> <td>Mangrove Plantation</td> </tr> <tr> <td>Year-3</td> <td>Stabilization</td> </tr> <tr> <td rowspan="7">Support Activities</td> <td rowspan="7">Year 1-5</td> <td>Year-4</td> <td>Stabilization & Exit</td> </tr> <tr> <td>Year-5</td> <td>Exit</td> </tr> <tr> <td>Livelihood Diversification</td> </tr> <tr> <td>Organization and Contingency</td> </tr> <tr> <td>Capacity Building</td> </tr> <tr> <td>Research and Development</td> </tr> <tr> <td>Publicity, Media and Outreach</td> </tr> <tr> <td>Monitoring and Evaluation</td> </tr> <tr> <td></td> <td></td> <td>Ecotourism with the help of SHGs</td> </tr> </tbody> </table> | Category | Year | Type of Activities | Core Activity | Year-1 | Mapping and delineation of target intervention areas. | Preparation of inventory based on scientific assessment of topography, hydrology etc. | Nursery Development | Year-2 | Mangrove Plantation | Year-3 | Stabilization | Support Activities | Year 1-5 | Year-4 | Stabilization & Exit | Year-5 | Exit | Livelihood Diversification | Organization and Contingency | Capacity Building | Research and Development | Publicity, Media and Outreach | Monitoring and Evaluation | | | Ecotourism with the help of SHGs |
| Category | Year | Type of Activities | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Core Activity | Year-1 | Mapping and delineation of target intervention areas. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Preparation of inventory based on scientific assessment of topography, hydrology etc. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Nursery Development | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Year-2 | Mangrove Plantation | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Year-3 | Stabilization | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Support Activities | Year 1-5 | Year-4 | Stabilization & Exit | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Year-5 | Exit | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Livelihood Diversification | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Organization and Contingency | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Capacity Building | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Research and Development | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Publicity, Media and Outreach | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Monitoring and Evaluation | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Ecotourism with the help of SHGs | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Project Outlay | Rs 843 Cr. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Year wise estimated expenditure | (Tentative outlay is enclosed in Annexure-1) Subject to the actual Annual Plan of Operations submitted by the States | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| New or extension/ modification of existing scheme. | Nil | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Revised outlay in case of existing scheme/project | Nil | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| In case of modification of existing scheme: The details of expenditure incurred as on date along with copy of UC indicating unutilized fund. | Nil | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Brief note & Justification for seeking financial support from National Fund.

Introduction

Blue economy is 6th dimension of India's vision for New India by 2030, and has an indispensable role to play in the promotion of ecological and socio-economic resilience of the country's coastal ecosystems. In other words, persevering and enhancing the sustainability of the coastal habitats like mangroves, seagrasses, coral reefs, salt marshes and mudflats is imperative.

To address this, MISHTI: "Mangrove Initiative for Salt Pans Habitats and Tangible Incomes" has been announced in para 85 of the Union Budget FY 2023-24 to promote and conserve mangroves as unique, natural eco-system having very high biological productivity and carbon sequestration potential, besides working as a bio-shield.

Considering the above, the Mission MISHTI (**Mangrove Initiative for Shoreline Habitats & Tangible Incomes**) is taken up by India in response to climate change in terms of green energy transition and green economy. "MISHTI" comes after India joined the 'Mangrove Alliance for Climate' launched during the 27th Conference of Parties (COP27) to the United Nations Framework Convention on Climate Change held in Egypt in November 2022.

Vision

To enhance resilience of Indian coast and ensure the protection of coastal life, livelihood and infrastructure against the climate change consequences such as sea-level rise through conservation and management of coastal habitats.

Programme will cover approximately 540 sq km area across nine (9) coastal States and four (4) Union Territories in five years (2023-2028). It will create around 22.8 million man-days with estimated carbon sink of 4.5 million tons of Carbon. It will also create potential areas for nature tourism and livelihood potential for local communities.

Implementation Process

For implementation of the proposal, funding will be done from State CAMPA = National CAMPA & MGNREGA and also from other sources. This dovetailing of funds will be well formulated at village, panchayat, district and State level.

Activities

The Core activities undertaken by State CAMPA will include Restoration through Gap Plantation; afforestation; and enrichment plantation. The funding for activities other than core activities will be done through National CAMPA, MNREGA and other sources. Any gap in financing through State CAMPA will be considered by National CAMPA.

The core activities include-

Mapping and delineation of target intervention areas

Preparation of inventory based on scientific assessment of topography, hydrology etc.

Nursery Development

| | |
|---|---|
| | <p>Mangrove Restoration/Plantation</p> <p>In addition, the support activities, funded by the National CAMPA and other sources will supplement the implementation on the MISHTI Programme and in achieving its mandate and include-</p> <ul style="list-style-type: none"> Livelihood Diversification activities Awareness and Capacity Building Research and Development Publicity, Media and Outreach Monitoring and Evaluation Ecotourism with the help of SHGs Development of Interpretation Centres |
| Outcomes | <p>Restoration on Mangrove Ecosystem</p> <p>Capacity building and livelihood enhancement of coastal communities</p> <p>Creating Carbon sink and contributing towards achieving NDC commitments and other national and international commitments.</p> |
| Deliverables (including year wise) | <p>Year wise tentative area taken up for restoration of mangroves is given in Annexure-2.</p> |
| Recommendation of the Program Division | <p>The Directorate of Green India Mission of the MoEFCC has prepared the Project/Programme titled "Mangrove Initiative for Salt Pans Habitats and Tangible Incomes- MISHTI" for seeking financial support from National fund as per the section 5(b)(iii) of the CAF Act 2016. The Directorate of Green India Mission will function as Program Division for the Scheme/Pilot Project which will be implemented through State Forest Departments as Implementing Agency and monitor the physical and financial progress of the Scheme/Pilot Project as required under CAF Act 2016 and CAF Rules 2018 and submit the quarterly progress report and annual progress report to National CAMPA. The Program Division will ensure forwarding of Utilization Certificate as and when required.</p> |



Signature of Nodal Officer of the Program Division

Cost Norms under MISHTI

Annexure-1

| Particulars | Degraded & | Aquaculture & | Mudflat | Replacement | Total |
|-----------------------------------|---------------|---------------|---------------|--------------|---------------|
| Total Area in Ha | 39613 | 1502 | 10021 | 2880 | 54016 |
| Tentative cost of Core activities | 4753560000.00 | 180240000.00 | 1202520000.00 | 345600000.00 | 6481920000.00 |
| Per Ha cost | 120000.00 | 120000.00 | 120000.00 | 120000.00 | 480000.00 |
| Nursery Development | | | | | 30000.00 |
| Creation | | | | | 54000.00 |
| Maintenance 1 | | | | | 12000.00 |
| Maintenance 2 | | | | | 12000.00 |
| Maintenance 3 | | | | | 12000.00 |

Note: Cost is indicative and calculated @ Rs 120000 per ha for Core Activities (Cycle of 05 years). However, state cost norms as per the provisions of CAMPA/State Schemes will be applicable.

State wise potential area to be taken under MISHTI under different models

| S. No. | State | Area in Ha | | | | Total Plantation Potential |
|--------|-----------------------|----------------|-------------------------|--------------|-------------|----------------------------|
| | | Degraded & Gap | Aquaculture & Salt Pans | Mudflat | Replacement | |
| 1 | Gujarat | 20502 | 339 | 4000 | 1000 | 25841 |
| 2 | Daman & Diu | 0 | 0 | 5 | 0 | 5 |
| 3 | Maharashtra | 4316 | 32 | 800 | 10 | 5158 |
| 4 | Goa | 565 | 0 | 5 | 0 | 570 |
| 5 | Karnataka | 168 | 0 | 5 | 5 | 178 |
| 6 | Kerala | 122 | 0 | 1 | 10 | 133 |
| 7 | Tamil Nadu | 3906 | 165 | 200 | 500 | 4771 |
| 8 | Puducherry | 64 | 0 | 5 | 5 | 74 |
| 9 | Andhra Pradesh | 4197 | 780 | 200 | 750 | 5927 |
| 10 | Odisha | 2242 | 120 | 1600 | 500 | 4462 |
| 11 | West Bengal | 3531 | 66 | 1500 | 100 | 5197 |
| 12 | Andaman & Nicobar Is. | 0 | 0 | 1700 | 0 | 1700 |
| 13 | Lakshadweep Is. | 0 | 0 | 0 | 0 | 0 |
| | Total | 39613 | 1502 | 10021 | 2880 | 54016 |

State wise tentative cost under MISHTI under different models (Rs. in Actuals)

| S. No. | State | Degraded & Aquaculture & Salt Pans | Mudhat | Replacement | Total Plantation Potential |
|--------------------|---|------------------------------------|-----------|-------------|----------------------------|
| 1 | Gujarat | 246024000 | 4068000 | 48000000 | 310092000 |
| 2 | Daman & Diu | 0 | 0 | 12000000 | 60000 |
| 3 | Maharashtra | 51792000 | 60000 | 0 | 6840000 |
| 4 | Goa | 384000 | 9600000 | 120000 | 61896000 |
| 5 | Karnataka | 6780000 | 60000 | 0 | 6840000 |
| 6 | Kerala | 2016000 | 60000 | 60000 | 2136000 |
| 7 | Tamil Nadu | 1464000 | 0 | 12000 | 1596000 |
| 8 | Puducherry | 46872000 | 1980000 | 2400000 | 57252000 |
| 9 | Andhra Pradesh | 768000 | 0 | 60000 | 888000 |
| 10 | Odisha | 50364000 | 9360000 | 2400000 | 71124000 |
| 11 | West Bengal | 26904000 | 1440000 | 19200000 | 53544000 |
| 12 | Andaman & Nicobar Is. | 42372000 | 792000 | 18000000 | 62364000 |
| 13 | Lakshadweep Is. | 0 | 0 | 20400000 | 20400000 |
| Support activities | | 475356000 | 18024000 | 120252000 | 648192000 |
| 1 | Research (5%) | 23767800 | 9012000 | 6012600 | 324096000 |
| 2 | Publicity/Media/outreach activities (5%) | 23767800 | 9012000 | 6012600 | 324096000 |
| 3 | Monitoring and Evaluation (5%) | 23767800 | 9012000 | 6012600 | 324096000 |
| 4 | Livelihood improvement activities, (10%) | 475356000 | 18024000 | 120252000 | 324096000 |
| 5 | Strengthening FDS & Organisation, operation and maintenance, contingencies and overheads (4%) | 190142400 | 7209600 | 48100800 | 648192000 |
| 6 | PMU at MoEF&CC (1%) | 47535600 | 1802400 | 12025200 | 259276800 |
| Total (B) | | 1426068000 | 54072000 | 360756000 | 1944576000 |
| Total (A+B) | | 6179628000 | 234312000 | 1563276000 | 8426496000 |

Table-4 Year wise Allocation of Overall physical targets-tentative area to be taken

Annexure-2

| Category | Year | Year | Year | Year | Year | Year | Year | Year | Area in Ha |
|--|------|-------|-------|-------|-------|-------|-------|-------|------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Year |
| Nursery Development and other preparatory works | 8000 | 11000 | 13000 | 11000 | 11000 | | | | 9 |
| Creation | | 8000 | 11000 | 13000 | 11000 | 11000 | | | |
| Maintenance-I | | | 8000 | 11000 | 13000 | 11000 | 11000 | | |
| Maintenance-II | | | | 8000 | 11000 | 13000 | 11000 | 11000 | |
| Maintenance-III | | | | | 8000 | 11000 | 13000 | 11000 | 11000 |
| | | | | | 8000 | 11000 | 13000 | 11000 | 11000 |