

Government of Tamil Nadu
Department of Environment and Climate Change
Panagal Maaligai, Saidapet, Chennai – 600015,
Phone No: 044-24336421

Notification No.02/TNCCM/2023

Dated: 06.02.2023

Tamil Nadu Climate Change Mission, Department of Environment and Climate Change invites Expression of Interest (detailed proposal along with technical and financial) for conducting the baseline study for “**Rehabilitation of coastal habitats for climate change adaptation through eco-friendly solutions** by formation of Bio-shields with Casuarina, Palmirah, Cashew, Mangroves and other specialized species, propagating Mangroves, Seagrass beds and Coral reefs” to this office on or before 20.02.2023 within sealed cover addressed to Mission Director, Tamil Nadu Climate Change Mission, Office of Director, Department of Environment and Climate Change, Saidapet, Chennai – 600 015.

The Terms of Reference (ToR) is attached for conducting the baseline study for **Rehabilitation of coastal habitats for climate change adaptation through eco-friendly solutions.**

Address for sending application

The Mission Director
Tamil Nadu Climate Change Mission
Department of Environment and Climate Change
Panagal Maaligai, Saidapet, Chennai – 600015

Sd./- Deepak S. Bilgi
Mission Director
Tamil Nadu Climate Change Mission
Director, Dept of Environment & Climate Change

ToR for conducting Baseline Study on Rehabilitation of Coastal Habitats for Climate Change Adaptation through Eco-Friendly Solutions in Tamil Nadu

Introduction

The 1076 kms long coastline of Tamil Nadu constitutes nearly 15% of the total coastal length of India. It is endowed with a rich biodiversity reserve now under great peril due to the exposure to human activities and settlements. Coastal vegetation has a significant potential to mitigate damage and save human lives by acting as buffer zones during extreme natural events. Coastal ecology is under great threat from the visible effects of climate change. The impact and intensity of hydro-meteorological disasters too are increasing. The adverse impact of these on coastal communities is leading to an increase in losses of lives and livelihood.

Bio-shields constitute one such mechanism for safeguarding the ecology of coastal areas and the livelihood of the fishing and farming communities. Bioshields can be created by strip planting of sand dune with vegetation. Such buffer zones serve several purposes:

- Shrubs control erosion and stabilize the shore;
- Green belts significantly alleviate wind energy thus protecting the hinterland from oceanic forces;
- Green belt of trees effectively reduced the force of devastating storm surges and waves;
- Trees are beneficial for biodiversity and can induce habitats for wildlife;
- People inhabiting hazard-prone coasts would benefit from green belts in terms of security, access to food, fodder, raw materials for industries, shelter and income;
- Strips behind the green belts served as areas of peace and tranquility.

It is proposed to conduct a Baseline study of coastal habitats in Tamil Nadu to assess the current status and to recommend appropriate climate change adaptation through eco-friendly solutions such as formation of Bio-shields with Casuarina, Palmirah, Cashew, mangroves, and other specialized species and also Propagating Mangroves, Seagrass beds and Coral reefs.

I. Objectives and Study area:

- i) To assess the current status and Climate vulnerability of coastal districts of Tamil Nadu
- ii) To recommend nature based solutions to minimise the Climate induced Risks in Coastal districts of Tamil Nadu

Study area:

The coast of Tamil Nadu is located on the southeast coast of Indian Peninsula, and forms a part of Coromandel Coast of Bay of Bengal and Indian Ocean. It is 1076km long and is the second longest coastline in the country. The coastal corridor consists of 14 districts. The coast is also endowed with varied coastal habitats like mangroves, corals, seaweeds, sea grass beds, salt marshes, mudflats, sand dunes etc. The State also has a number of rivers, estuaries and lagoons.

The coastal ecosystems are now highly disturbed and very much threatened, encountering problems like pollution, siltation and erosion, flooding, saltwater intrusion, storm surges and other activities due to ever expanding human settlements.

II. Methodology and Outcome

The Climate change induced events (Cyclones, Sea level rise, Sea water intrusion etc.) and associated social, economic and environmental impacts to be documented based on secondary sources and interactions with relevant stakeholders. Appropriate nature based solutions to minimise the Climate induced Risks in Coastal districts of Tamil Nadu to be suggested based on expert consultation. This will include

1. Identification of suitable locality
2. Choice of tree species
3. Methodology of Seedling preparation
4. Planting technique
5. Planting time/ seasons
6. Nature based solutions

Outcome: The successful outcomes of the establishment of bioshield in the coastal regions will deliver

- i) Sand dune fixation,
- ii) Sand dune stabilization, and
- iii) Sand dune Afforestation.

III. Agency Qualifications:

A research agency/individual with strong understanding about the methodological approach, competent team with experts, Previous experience of high quality Baseline Study of similar projects and Ability to conduct .

IV. In the contract/MoU between DOE&CC and the Agency,

The following terms shall be interpreted as indicated

1. The “Contract/MoU” means agreement entered between the DOE&CC in the State Government and the agency selected.
2. **Time Schedule:** The work is to be completed within six months from the signing of contract between DoE&CC and the Agency.
3. **Payment:** The payment for the aforesaid project shall be as decided based on bid documents. It should clearly indicate statutory taxes, service tax and any similar taxes, as applicable. The bid will be evaluated on the basis of the total cost of the project.

4. Terms of payment: Payment will be made as follows;-

- a. 60% payment will be made after sanction of the project against contract signed between DOE &CC and Agency.
- b. 40% payment on submission of draft baseline study Report
- c. Submission of final report along with Utilization Certificate and Expenditure Statement.

5. Project Time / Termination / penalty/ Liability Clause

- a. The duration of the assignment is scheduled to be Three months from date of signing of contract between the DOE&CC and the Agency to which the job is assigned. In case, the delay is solely on the account of any fault on the part of agency, the project shall be completed by the agency without any extra cost or fee.
- b. In case of non-adherence of the terms & conditions of the contract for reasons other than beyond the institution/agency's control the DOE&CC shall be entitled to recover the liquidated damages by way of imposing penalty upto the amount equivalent to 10% of the contract value and the decision of the DoE&CC shall be final and binding on the bidder.
- c. The DoE&CC shall be at the liberty to terminate the agreement, cancel the purchase order and may also forfeit the Performance Security in case the supplier fails to deliver the items within the stipulated delivery period.
- d. DOE&CC may at any time terminate the contract by giving written notice to the Agency without any compensation to the agency if the agency becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued.

6. Progress of the Project

Progress of the project may be intimated in writing by the agency to the DOE&CC on monthly basis.

7. Confidentiality

- a. Neither party will disclose to any third party without the prior written consent of the other party any confidential information which is received from the other party for the purposes of providing or receiving services.
- b. The Agency shall not, without DOE&CC's prior written consent, disclose the commercial terms of this work order to any other organization.

8. To ensure that the agency should be :

- ✓ Minimum of 5 years of experience of publishing reports of similar nature.
- ✓ Should have team of at least 5 persons of high academic background and reports in the fields of Projects
- ✓ Must have conducted studies on national / international environment situation and have contributed to national/international reputed journals on the subject.
- ✓ Should have sound financial background.

9. Miscellaneous Terms & Conditions

- a. The end product of the work assignment carried out by the Agency, in any form, will be the sole property of the Government concerned.
- b. The Agency shall not outsource the work to any other associate/franchisee/third party under any circumstances except with the prior approval of the government.
- c. The Agency shall perform the services and carry out its obligations under the contract with due diligence and efficiency. .
- d. The Agency automatically agrees with Government for honouring all aspects of fair trade practices in executing the work orders placed by the government in this regard.

e. Force Majeure

Force majeure clause shall mean and be limited to the following in the execution of the contract placed by the Government;-

- Riot or civil commotion;
- Earth quake, flood, tempest, lightning or other natural physical disaster;
- Restrictions imposed by the Government or other statutory bodies, which is beyond the control of the agency, which prevent or delay the execution of the order by Agency.
- Global factors (like pandemic, financial crisis etc) impacting, India

f. The Agency shall advise the DOE&CC in writing, duly certified by the local Chamber of Commerce, the beginning and the end of the above causes of delay, within seven days of the occurrence and cessation of the force majeure conditions, In the event of a delay lasting for more than one month, if arising out of clauses of force majeure, the DOE&CC reserves the right to cancel the contract without any obligation to compensate the Agency in any manner for what so ever reason, subject to the provision of clauses mentioned.

10. Applicable Law

The contract shall be governed by the laws and procedures, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing. In particular, the law relating to Bid Security and Performance Security be assured as per the applicable legislation.

1. Give details about the approach proposed to be adopted for the job within the frame work outlined in the “Technical paper for Bidding”. The details should be given in bullet form and should not exceed 300 words.
2. Details of data Collection and Analysis proposed.
3. Time schedule with milestones for completion of the job within the prescribed time frame.