UNIVERSITY OF SINDH CAMPUS THATTA
Centre for Coastal and Deltaic Studies

Terms of Reference (ToR) for "Consultant Expert" (GIS, Oceanographer/ Geologist)

Marine Research Project of PMDC Thatta

ESTABLISHMENT OF OCEANOGRAPHIC SURVEY UNIT: CLIMATE CHANGE, FRESHWATER SCARCITY AND POLLUTION IMPACT ASSESSMENT ON GEO-MORPHOLOGY, MANGROVE, FISHERIES AND WILDLIFE OCCURRING IN COASTAL AND MARINE WATERS OF DISTRICT THATTA

Introduction

University of Sindh Campus Thatta was established in 2012, since then, each year more than 100 trained students are getting higher degrees in MBA, Computer Science, English and Coastal Zone Management. Presently more than 500 students are enrolled in the University of Sindh Campus Thatta. Very recently the Centre for Coastal and Deltaic Studies has started the MS/ M.Phil degree Program in Coastal and Marine Science. In addition large number of academic and social activities such as Seminars International reputed workshops and trainings in collaboration with the different I/NGOs and Government departments have been organized.

Centre for Coastal and Deltaic Studies (CCDS) established on 8th December 2015, at University of Sindh Campus Thatta. The aim of the Centre is to promote scientific education and research studies related to marine, coastal and deltaic regions with specific focus on natural disasters, climate change effects, sea level rise, seawater intrusions and their impact on natural ecosystems, marine ecology and biodiversity, infrastructure and threats to vulnerable coastal communities. The CCDS successfully completed following research studies.

Petroleum Marine Research Development Committee (PMDC) Thatta is a government constitutional committee headed by Regional Member of National Assembly (MNA) as a Chairman along with regional MPAs as members while Deputy Commissioner of the district is the Secretary of the Committee. The different federal and provincial ministries and department who are working in the district are the members. The overall objective of the committee is to confirm the development in the region through the submitted amount by the different Oil and Gas companies who are working and exploring the oil and gas from the vicinity of the district. The PMDC Thatta awarded above titled Marine Research Project to the Centre for Coastal and Deltaic Studies (CCDS). The main goal of the PMDC Thatta is protection, conservation and development of marine fauna and flora existing in coastal creeks of Thatta & Sujawal districts.

The Indus eco-region covers approximately 65% of the province of Sindh, while a small north-western part of the eco-region extends slightly into Balochistan. Located in a semi-arid

environment, the eco-region harbors riverine forests along the Indus River, wetlands, mangrove forests in the coastal areas, and desert ecosystems occupy the periphery of the eco-region.
Centre for Coastal and Deltaic Studies (CCDS), University of Sindh has been working in the Indus Delta Eco-region for almost 6 years and has undertaken a number of studies including socioeconomic and ecological baselines under various projects.

Centre for coastal and Deltaic Studies, University of Sindh Campus Thatta requires a short term consultancy initially for the period of 6 months (renewable subject to the requirement of work and satisfactory performance) to conduct studies on coastal and marine tidal current, sea level rise, sea intrusion, bathymetry, petroleum exploration, and deltaic degradation impacts on biodiversity in deltaic region of Thatta and Sujawal.

Objectives and responsibilities
The consultant will work on the following proposed interventions in coordination with the project experts and related organizations.

i. Desk review of previous studies on eco-geological conditions of coastal zone of Sindh.
ii. To conduct studies on coastal weather condition, marine tidal current, sea level rise, sea intrusion, bathymetry, petroleum exploration, deltaic degradation impacts assessments on biodiversity in deltaic region of Thatta.
iii. To suggest and help in the installation of weather and atmospheric instruments at coastal zone.
iv. To write/ develop a complete structural guidance manual in English and Sindhi language.

Project Outcomes

i. Empowering vulnerable coastal communities through livelihood models and technology transfer.
ii. Increasing the white protein through fish culture development.
iii. Improve the economy of the country.
iv. Improving the conservation and protection mechanism of marine and coastal biodiversity.
v. Combating challenges of climate change, disasters of cyclones, rains, floods and droughts.

Specific Task of Consultant Expert

- ✓ To complete the task with due diligence, efficiently and in accordance with ToRs.
- ✓ Provide all a administrative support needed in order to ensure the timely and satisfactory performance of the agreed service.
- ✓ All reports shall be written in the English language, however the training manual shall be in local language and describe in detail the services rendered under the agreement during the period of time covered in such report. All reports shall be delivered by the consultant in the form of both hard and soft copies.

Finance, price and payment
In full consideration for the complete and satisfactory performance of the services under the ToRs, the project shall pay amount in the following installments to the consultant. The tax will be deducted at source as per rules. The above price includes all the expenses related to the task, and no additional travel, boarding and lodging expenses will be paid to consultant expert. The amount will be paid from PMDC funds of the project. The consultant is bound to submit original

vouchers and non consumable materials if purchased from the project funds to the University of Sindh.
The total consultancy cost Rs. 500,000/- (Rupees five lac only including all taxes with time limit of 5 months after awarding and acceptance of contract.

- 50 % payment will be made at the start of assignment after signing of contract.
- 50% will be paid after completion of the task.
- The payment will be made through cross Cheque.

Warranties
Consultant expert hereby warrants its power to enter into an agreement and have obtained all necessary approvals to do so. The consultant expert hereby warrants and conveyed that task titles to the project and that any services provided will be free from encumbrance. The consultant must present accurate and genius data. Any misleading information in this regard will entail consequences.

Confidentiality
Both the parties agree to maintain confidence and do not disclose, reproduce, and/or copy any materials, documentation or specification which is provided to the other hereunder. Both the parties shall take all reasonable steps to ensure that its employees, agents, sub-consultant are bound by the same obligation.

Copy Rights
The study's data, methodology, content and report etc, shall be the property of the project.

The interested candidates or firm if agree with the above terms and conditions may submit a concept proposal including summary of work, background of study, methodology, activity chart and details of budget expenditure within 7 days after receiving the ToRs. The proposal should reach the Office of Project Director Marine Research Laboratory and Oceanographic Survey Unit, at Office of Registrar, University of Sindh Jamshoro. The soft copy can be send via email mukhtiar.mahar@usindh.edu.pk to the Project Director.