**Terms of References of the Feasibility Study**  
**WWF-Pakistan- Marine Programme**

**Contract type:** Individual/Firm

‘Sustainable management of the mangroves ecosystem and enhanced resilience of communities in Keti Bunder, Shah Bunder and Kharo Chan, district Thatta and Sujawal in the Indus Delta’ phase II

This consultancy is part of the WWF Pakistan’s Marine Programme and aims to undertake a feasibility study of the project proposal titled ‘Sustainable management of the mangroves ecosystem and enhanced resilience of communities in Keti Bunder, Shah Bunder and Kharo Chan, district Thatta and Sujawal in the Indus Delta’ submitted to BMZ through WWF-Germany. The project will be implemented in 36 villages of the lower Indus delta.

This consultancy will cover several topics including list of documents reviewed including but not limited to the project annual reports, baseline socio-economic and ecological study reports as well other project related activities and consultancies reports; methodology and Structure of the Report; BMZ questions and project overview; DAC evaluation criteria; structure and guiding questions by BMZ on the implementation of a feasibility study; purpose, goals and use of a feasibility study; starting situation and problem analysis; project partner in the partner country (local project partner); analysis of target groups and involved actors; target group; involved actors; detailed analysis using DAC Criteria for outcomes; detailed analysis using DAC criteria for outputs; conclusion and bibliography.

**Background:**

Indus Delta spans over approximately 600,000 hectares of area where the mangroves are spread over 23% (139,000 ha). There are around 17 major creeks that host the 7th largest mangrove forest in Asia and 13th in the world.

The mangroves of Indus delta face a host of threats including higher dependency of communities for subsistence, fuelwood, fodder, timer, etc. It is estimated that around 1500 camels and 1200 buffalos are dependent on the mangrove resources, which are held by 35% of the project houses. Additionally, fuel-wood consumption from the mangrove area is another threat to mangroves. According to baseline study of 2019 (phase I) in 17 villages of Keti Bunder and Kharo Chan indicates that nearly 18% communities are completely and 20% are partially dependent on mangrove wood for their domestic energy need, with average about 10-15 kg fuel-wood is used by an individual household on daily basis. Over 90 percent of the communities of Keti Bunder, Kharo Chan and Shah Bunder rely on fisheries for livelihood and a very small percentage depends on livestock rearing and agriculture, etc. (WWF-Pakistan 2019). Furthermore, sea intrusion, reduction of freshwater flow from the Indus River are the prime threats to the mangroves and associated livelihood in the Indus delta. It was also revealed that the middle-men provide loan on exorbitant interest rates (164 percent) without a formal record keeping. During this period the fishing effort (fleet size, numbers of multi-gear boats) has increased significantly.

Local women carry expertise in making traditional embroidery, and sewing clothes, however there is potential for improving the skill level and with improved access to markets those can, which has been provided by the phase I of the BMZ project and enhance the skill of 250 semi-skilled women. To make this a sustainable source of alternate livelihood, enhancing accessibility to markets and enhanced capacities of women in managing small-scale businesses would carry a great value.
The Delta is also vulnerable to increased intensity of natural disasters. It is observed that there is a significant increase in the tropical cyclone during the last two decades. In the absence of well-structured disaster preparedness and response mechanisms, this contributes to further increase vulnerability of natural resource dependent marginalized communities of the Indus Delta.

The current project therefore, builds on the work and key learning initiated during Phase-I of the Project. This included increasing cover of the mangrove forest, which is a nature based solution for disaster risk reduction and restoring of mangrove ecosystem, provide alternative income generation and disaster preparedness to reduce climate change impacts and make the community more resilient to such changes.

The target villages from Keti Bunder, Shah Bunder and Kharo Chan have included in the project their vulnerability to climate change, high reliance on mangroves, livelihood support to small-scale fisheries, pressure from outside the villages on mangrove forests, user conflicts for the proposed project. The project managing around 30,000 ha of mangrove in which 14,000 ha are included from phase I to be continued for monitoring and sustainable management while 4,500 ha area are newly added among which 15,00 ha will be planted in the new project clusters at Shah Bunder and 3,000 ha of degraded and sparse mangroves areas will be rehabilitated. Additionally, around 12,000 intact mangroves will be regularly monitored and enhance capacity of the local communities to protect these forests. The project also focuses on enlacing resilience of communities to cyclones and other climate change linked natural disasters.

The Task:
The consultant(s) will assess the project proposal and expected outcome against each of the topics below:

The consultancy will focus on some of the proposed activities including but not limited to disaster risk preparedness and establishment of DRR facilities, elevated platform, the approach of women based saving groups, small businesses enterprises, bio-sand water filters, kitchen gardening, cultivation of multipurpose tree species, improve technology of cooking stoves and suggestions for improved version relating to the project areas.

Structure and key questions on the implementation of a feasibility study:
If possible, the following structure should apply to every feasibility study. The additional key questions, however, only serve as orientation. Depending on the focus of the study, only the relevant questions should be answered.

Purpose, goals and use of a feasibility study:
- What is the particular reason for conducting a feasibility study and what is the aim?
- Who will use the results, how and for what – in particular with regard to the proposal, concept and implementation of the project?
- What is the scope of the feasibility study (in time and geographical)? What (sub-) regions or sectors does the study focus on?
- What is the methodology of the feasibility study?
- Which prior experience (from similar programmes/ projects, other studies and analyses) could serve as a basis for drawing up this feasibility study?
- What specific recommendations can the study make to project partners with regard to project conceptualization and implementation?

Starting situation and problem analysis:
• What does the (starting) situation in the sector, region, and country look like? Please describe the socio-economic, political and cultural context.
• Which problems can be identified? What are the underlying causes and how do they affect the livelihoods of the target groups?
• What kinds of need have been deduced from the problem analysis? How did you find out about the needs?
• On what basis and history have the project and its logical framework been developed (old projects, previous work, also of other organizations)? Who came up with the project idea?
• Are there alternatives to the suggested plan and the project components?

Project partner in the partner country (local project partner):
• Which local organisations are potential project partners and why? What professional capacities do they have (institutional, technical, staff-wise, financial)?
• What kinds of measures are necessary to strengthen the organisation and capacities of the local project partners?
• What kind of self-interest/ ownership do local project partners have in the success of the project?
• What is the relationship between local project partners, target groups and other actors involved (legitimacy)? Are there any conflicts of interest or diverging interests? How could their interaction be improved?

Analysis of target groups and involved actors:
Target group
• Which is the target group and how was it chosen (selection criteria)? Are several target groups concerned by the project or just one?
• How homogeneous or heterogeneous is the target group with regard to the following factors: sex, ethnical affiliation, age, sexual orientation, language, capacities etc.? In what way does the project need to take those factors into consideration?
• What kinds of need does the target group have and how can they be addressed?
• What position and role do the target groups have in society? What conflicts of interest with other parts of the population could arise by supporting the target groups?
• What potential could the target groups provide with regard to initiative of their own, self-help efforts, local problem-solving capacities? How can this potential be strengthened?

Involved actors:
• Who are the most relevant state and non-state actors in the sector – at the project site, region, and country level?
• Does the planned project relate with the development strategy of the government?
• What interests do involved actors have? Are conflicts of interest perceptible? Which interactions exist with other projects of involved actors? Have those interactions been taken into consideration for conceptualizing the project?
• Do all involved actors have a common understanding of the problems and resulting project goals?
• How strongly do different actors support the project? How strong is their potential influence on the project (if it exists at all)? Have agreements already been concluded between different actors?

Evaluation of the project according to OECD DAC criteria (cf. http://www.oecd.org/dac/evaluation/49756382.pdf)
Relevance:
• Does the planned project address the adequate issues?
• Does the project approach tackle an important development problem/ insufficiency of the partner country or region?
• Are the activities and outputs of the project consistent with the target group needs?
• What are the intended impacts and effects of the project at the end of the project?

Effectiveness:
• What project approach allows best to attain the objectives?
• Are the chosen activities and the methodological approach suitable to achieve the project goal?
• Should activities at the meso and macro level be also included in order to increase the sustainability of the project (multi-level approach)?
• Are synergies with and activities of other donors or programmes been used?
• What particular activities does the feasibility study suggest in order to achieve the objectives?
• What impact logic/ impact hypothesis should the project be based on? What could the impact matrix look like, including suitable, significant indicators? Present a first draft of indicators and baseline data.
• Who monitors the results, when and how often (result monitoring)?

Efficiency:
• Can the project objectives be achieved cost-efficiently?
• What financial, structural and staff resources are needed?
• Is it possible to implement all activities and to achieve the objectives in an economic and economical way (with the envisaged resources) and on time? (cost-benefit ratio)

Impact/ Significance:
• Does the project contribute to achieving overall development goals?
• What objectives and impacts that were deduced from the problem and needs analysis are relevant for which target group?
• In what way does the envisaged project have a structure-building, broad effect and serve as a role model? Does a multi-level approach (micro, meso, macro) represent a good tool to increase the impact of the project?
• Do project goals take into account gender-sensitive, inclusive, cultural, conflict-sensitive and human rights-based approaches?

Sustainability:
• Do project benefits outlast the end of the project (without further external funding)?
• How can the sustainability of results and impacts be guaranteed and strengthened (structural, economic, social, and ecological)?
• What role do state and civil society structures play and what responsibility do they have?
• To what degree do local potential, structures and procedures exist and can be built upon?
• What are the most suitable measures and instruments to use and foster local initiative, participation and capacities?
• What kind of socio-cultural obstacles exist and how can they be cleared away?
• What kind of negative impact could project activities or sub-targets result in? How could this be taken into account in project conceptualization (e.g. “do no harm” approach, conflict sensitive result monitoring)?
• Which risks exist during project implementation (staff-related, institutional/organisational, reputational, and context-related risks) and how can they be mitigated?
Relevance:
This is will assess the extent to which the planned activities are suited to the priorities and policies of the target group, recipient and donor. In evaluating the relevance of a programme or a project, it is useful to consider the following questions:

- To what extent are the planned objectives of the programme valid?
- Are the planned activities and outputs of the programme consistent with the overall goal and the attainment of its objectives?
- Are the planned activities and outputs of the programme consistent with the intended impacts and effects?
- Are the planned activities technically and socially sound?

Effectiveness:
This will measure the extent to which an activity attains its planned objectives. In evaluating the effectiveness of a programme or a project, it is useful to consider the following questions:

- To what extent will the objectives be likely to be achieved?
- What will be the major factors influencing the achievement or non-achievement of the objectives, and how can they be addressed?

Efficiency:
Efficiency measures the outputs both qualitative and quantitative and in relation to the inputs. It is an economic term, which signifies that the aid uses the least costly resources possible in order to achieve the desired results. This generally requires comparing alternative approaches to achieving the same outputs, to see whether the most efficient process has been suggested. To achieve this it is useful to consider the following questions:

- Are the activities cost-efficient?
- Can the objectives be achieved on time?
- Is the programme or project implemented in the most efficient way compared to alternatives?

Impact:
The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. The feasibility assessment should be concerned with both expected intended and unintended results and must also include the expected positive and negative impact of external factors, such as changes in terms of trade and financial conditions. When evaluating the impact of a programme or a project, it is useful to consider the following questions:

- What will happen as a result of the programme or project?
- What real difference will the activity make to the beneficiaries?
- How many people will be affected?

Sustainability:
Sustainability is concerned with measuring whether the benefits of an activity are likely to continue after donor funding has been withdrawn. Projects need to be environmentally as well as financially sustainable. When evaluating the sustainability of a programme or a project, it is useful to consider the following questions

- What planned new activities could be high impact and up-scalable and can be replicated post-project?
- What planned activities could be high-impact but not replicable OR low-impact but highly
• replicable and should therefore be reassessed
• What planned activities could low impact and poorly replicable and therefore maybe replaced?

Activities:
• Review the project proposal and have a briefing session with relevant WWF staff,
• Conduct desk review, undertake consultations and discussions with relevant stakeholders,
• Prepare feasibility draft report and share with WWF staff
• Incorporate feedback and submit final feasibility to donor

Qualification:
• Education: At least master degree in marine biology, natural resource management, ecology, rural development or any other related disciplines

Requirements for experience:
• At least 5-7 year experience of working and sound knowledge of working in the Indus delta, fisheries sector / mangrove ecosystems, participatory management of natural resources, community based natural resource management
• Good understanding of issues related to mangroves, coastal and marine, climate change, etc.
• Excellent communication skills both verbal and writing in English (and German)

Competencies:
• Demonstrates openness to change and ability to manage complexities
• Demonstrate abilities of analytical work, data presentation and excellent report writing skills
• Proactive and able to work independently and high degree of initiative, reliability, flexibility, motivation and resourcefulness
• Professionalism, flexibility to make ad-hoc changes as and when require, ability to perform under stress, willingness to keep flexible working hours

Documents to be included when submitting the proposal
Interested individual consultants must submit the following documents/information to demonstrate their qualifications:
• A proposal (i) explaining why they are the most suitable for the work, (ii) provide brief methodology on how they will approach and conduct the work
• Financial proposal (including fee, travel cost, (if any) and other relevant expenses)
• Curriculum vitae
• References

Deliverable:
Develop feasibility report of the project proposal titled ‘Sustainable management of the mangroves ecosystem and enhanced resilience of communities in Keti Bunder, Kharo Chan and Shah Bunder in districts of Thatta and Sujawal in Indus Delta’

Timeline:
The overall time period for this consultancy is 31 days from 1 July – 31 July. Timeline to deliver this assignment are very specific and the selected consultant will be required to submit the report within the agreed time-frame of this assignment.