Terms of Reference

for

Spatial mapping of ICS, FFS and major interventions in selected districts of Balochistan, Organic Cotton Project (OCP)

**Project Name:** Spatial mapping of ICS, FFS and major interventions in selected districts of Balochistan, Organic Cotton Project (OCP)

**Project Background:**
WWF-Pakistan’s Sustainable Agriculture & Food Programme (SAFP) endeavors to empower and build capacity of the marginalized resource, poor farmers’ communities. This is done through innovation and dissemination of economically efficient ecological farming solutions and technologies, linkage development for agricultural commodities’ supply chain improvement, ensuring food security and promotion of Decent Work.

Balochistan is considered highly vulnerable to climate-related challenges, with high reliance on rain-fed agriculture for agriculture production. Large segments of poor rural populations are engaged in subsistence farming with limited profitability. Relatively undiversified agriculture production systems and poorly developed infrastructure contributes to the overall vulnerability of small-scale agriculture.

With the financial support of Laudes Foundation, WWF-Pakistan and the Department of Agriculture Extension, Government of Balochistan have partnered to implement Organic Cotton production in Barkhan, and Lasbela districts of the Balochistan province. Additionally, to support poor farmers in other areas of the province in promoting organic cotton production, similar projects have been initiated in District Kohlu and Khuzdar. These projects aim at to build up the capacities of farming community of the selected areas and the Department of Agriculture Extension on standard practices of organic cotton cultivation and its certification. The project also focuses to develop a viable supply chain of organic cotton in Pakistan and engage relevant stakeholders to create a conducive environment of organic agriculture in Balochistan. Similarly, the project offers linkage development among the farming community and bio-input sources like Non-GMO seed producing companies, government research institutes, sources of bio-fertilizers and bio-pesticides.

WWF-Pakistan is looking for GIS mapping to meet one of the requirements of audits and inspections regarding Organic Certification/in-conversion certification of cotton crop being produced by the project farmers of all sites. It will include maps of FFSs, ICSs, farms’ boundaries, buffer area, vegetation, water source and points of other interventions carried out under the project. The activity demands a detailed survey of the project sites and farms to record aforementioned all necessary and required details carefully and develop maps accordingly.

**Objective of the Task:**
The major objectives of the consultancy are as under:
1. Conduct extensive field survey for Internal Control System (ICS), Farmer Field School (FFS) boundary delineation and spatial interventions data collection (Demo plots, Seed Multiplication and fruit plantations)
2. ICS, FFS and farmer land holdings Boundaries Delineation
3. Geotagging of 2,022 farmer codes to associated farmer land holdings
4. Development of GIS based maps of ICS, FFS and Interventions

**Study areas:**

Study area of this project comprises four selected districts of the Balochistan including Barkhan, Lasbela, Kohlu and Khuzdar.

**Specific Tasks:**

- Conduct field surveys for data collection (ICS & FFS boundaries, spatial interventions and geographic locations) as and when required
- Delineation of Internal Control Systems (ICS) & Farmer Field Schools (FFS) boundaries
- Spatial data development of houses, barren lands, buffer zones and tubewells
- Conduct consultancy meeting with project stakeholders
- Conduct capacity building of field staff in the use of mobile GPS and Google maps
- ICS & FFS wise mapping of spatial interventions (demo plots, seed multiplication and fruit plantations)
- Integration and geo-tagging of 2,022 farmer codes with associated farmer land holdings
- Develop and update of farmers land holdings inventory
- Provide support in GIS mapping and data collection activities to OCP field staff

**Deliverables:**

Main deliverables of the project consultancy will be
- ICS boundaries and project interventions in selected areas of Balochistan
- ICS boundaries with associated FFS
- FFS wise mapping of 7 selected ICS with associated farmer codes

**Required Qualifications/Skills of consultants/consultancy firm:**

The consultants/consultancy firm is expected to demonstrate possession of following:

- Technical/professional expertise in geographical data management and utilization.
- Proficiency with advanced GIS software’s.
- Knowledge about data processing, evaluation and organizing the collection, storage, usage of geographic data and visualization.
- Ability to solve GIS-specific problems and convey GIS information to non-GIS people.
- Ability to create high-quality narration, interpretation of analyzed data/results, written documents (report, policy brief, research paper etc.)

**Timeline:**

The consultants/consultancy firm will complete consultancy till 31st December 2021.