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Term of Reference

**Project Title -Establishment of Demo plots in Cotton- India**

1. **Project Summary**

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| **Project Title**Establishment of Demo Plots -Recommended Package of Practices to reduce GHG emissions and increase Carbon sequestration |
| **Location:*** Gujarat and Madhya Pradesh States- 1 Acre area each
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| **Beneficiaries:*** 2 Producer Organisations- 1 each from Gujrat and Madhya Pradesh
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| **Project Duration:**7 months. From month June, 2022 to Jan 2023 | **Budget:**Euro:4000 |
| **Total Project Cost:** Euro 4000 |
| Main implementing organizationNAPP  |
| List of implementing partner organization (if any) (If any external consultant is required, mention the same)External consultant is required for the project implementation. The selection of the consultant organization will be done based on the budget. Preference will be given to the organizations that have done earlier phases of study. |
| **Project Background/ Rationale** Short description: Current situation and background, problem to be solved, project rationale.**Background** The environmental effects of climate change are broad and far-reaching, affecting oceans, ice, and weather. Changes may occur gradually or rapidly. Evidence for these effects comes from studying climate change in the past, from modelling, and from modern observations.Since the recent times,  [droughts](https://en.wikipedia.org/wiki/Drought) and [heat waves](https://en.wikipedia.org/wiki/Heat_wave) have appeared simultaneously with increasing frequency. Extremely wet or dry events within the [monsoon](https://en.wikipedia.org/wiki/Monsoon) period have increased in **India and East Asia**.  On the timescale of centuries to millennia, the magnitude of climate change will be determined primarily by anthropogenic CO2 emissions. This is due to CO2's long atmospheric lifetime.Given the challenges highlighted, we seek to take relevant measures to address the same. This is planned in 2 phases – 1st phase is focused on conducting study research (both desk and field included) to create a baseline and understand the current GHG emissions involved in the Fairtrade Cotton farming. This would help us to understand how current emissions are affecting the Cotton production system. Phase- 1 studyis completed in CottonThe 2nd Phase would primarily focus on the implementation of recommended package of practices developed by organisation partnered for the study based on their findings from the 1st phase study. This would be done in the form of demo plots to highlight the best practices, that can help reduce the emissions and also sequester more carbons**The project (Demo plots) in Cotton is planned in 2 Locations- Gujarat and Madhya Pradesh****Project Rationale:**Under Fairtrade NAPP strategy 2021 -25, one of the key thematic areas identified was on Sustainable Environment – to ensure developing the Climate Change strategy and implementation plan for our producer members. Factors which have affected the farming community in large w.r.t the Climate change are:* There are already high rates of land degradation (erosion and declining soil fertility, increasing water scarcity and loss of biodiversity) and sensitivity to climate variability.
* There are already low yields and high post-harvest losses due to poor land management practices.
* Occurrence of new pests and diseases reducing crop productivity.
* Natural resources and ecosystems including drylands, rainforests, are already fragile and there is a need to protect them.
* Some of the unsustainable farming practices like burning, lead to air pollution which has a direct impact on farmer’s heath and crop yield*.*
* High usage of pesticides in Cotton has led to increased carbon emissions in cotton.

*These factors have led us to deep dive into this subject and focus on adaptation and mitigations plans to support cotton farmers for their sustainability.***Aim and Objectives**1. **Phase-1**
* *To comprehend effect of the climate change in Cotton crop against parameters like yield, quality, cost of production etc. and to suggest crop-specific adaptive mechanisms*
* *To document the current agricultural operations and calculate GHG emissions contributed by it*
* *To recommend at the completion of the study a set of implementable practices that would reduce GHG emissions.*
1. ***Specific to the Demo Plot implementation phase –****2*
* *The launch of 2 demo plots in different geographies shall showcase how the recommended practices will support in reducing the GHG emissions.*
* *These recommendations or practices must stand scrutiny of a third-party audit in the event of possibility of carbon credit transactions. This aspect will be analyzed during the 6-month project cycle (from sowing till harvest cycle)*
* *The IOT based remote monitoring mechanism shall help enable quantifying the reduction levels of GHG emissions and amount of carbon sequestration.*
* *Ppossibility in selling carbon credits (monetization of Carbon credits) as an additional income opportunity.*

**Key Activities**

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| Activities |
| 1. Identify the organisation for the project implementation (Demo plots)
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| 1. Discuss the recommendedPackage of Practice – Region wise to adapt to the local conditions – In consultation with respective producer’s
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| 1. Preparation of key parameters relevant to support identifying the Demo Plot locations – 2 Regions
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| 1. Finalise detailed budget for establishing each Demo plots in consultation with the Producer groups
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| 1. Identification & Selection of Lead Farmers/ Producer Groups – where the demo plot has to be launched – 1 Acre plot each region
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| 1. Support Producers in providing key resources required for Cotton farming as per the practices recommended – Labour; Inputs & Services; Capital & Investments; Harvest and Post-Harvest
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| 1. Monitoring – through the partner organisation- to be continued during the 5-to-6-month cycle
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| 1. Consolidation of collected data (Towards the Harvest cycle Nov/Dec)
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| 1. Preparation of report and sharing the defined outcomes with all stakeholders – via Document Report or Physical meet
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| 1. Based on the Success rate – A package of Practice Document will be finalised – region wise and further Circulated to all producer organisations
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**Requirement for application:**

1. Interested organizations/ consultants can apply, as per the expertise in the field and geographical conveniences.

2. A complete proposal and a financial quote need to be submitted. – Proposal should outline the methodology, data collection plan, data analysis and report plan, time-line of study etc.

3. CV of the consultant/s or in Case of an agency (CVs of Team member) who are undertaking the project implementation along with the organizational background.

4. Any previous study reports on similar line will be an added advantage.

**Please apply by email only, in English, with a subject line:**

**“Application for Climate Change Demo plot in Cotton**” to research@fairtradenapp.org with a copy to manoj@fairtradenapp.org, amit.das@fairtradenapp.org

5. Deadline for submission of RFQ is on **or before 25th June, 2022.**

Technical Proposals (with credentials) and financial quote should be two different pdf files. Files to be named as Technical Proposal, Financial Quote, and Technical Proposal.