

**Scope of Work**  
**PROVISION OF EARLY WARNINGS AND CLIMATE DISSEMINATION SERVICES TO AGRO-PASTORALISTS IN NORTH KORDOFAN STATE, SUDAN (RAPID PROGRAM)**

**Targeted localities in North Kordofan State:** Sheikan, Ar Rahad and Um Rawaba.

| <b>Locality</b> | <b>Total By Locality</b> | <b>Women Target</b> | <b>Men Target</b> |
|-----------------|--------------------------|---------------------|-------------------|
| Sheikan         | 1260                     | 680                 | 580               |
| Ar Rahad        | 1260                     | 680                 | 580               |
| Um Rawaba       | 1680                     | 907                 | 773               |
| <b>Totals</b>   | <b>4200</b>              | <b>2267</b>         | <b>1933</b>       |

**SOW Objective:** To provide and implement a climate information service or product solution that will equip agro-pastoralists in the targeted localities with location specific and timely advice to improve productivity and climate resilience. Thus, enabling them to better prepare, protect and manage their farms and livestock. The solution should incorporate early warnings related to flood, drought, disease, pests like locusts, worms etc., and other potentially harmful climate events that can negatively affect livestock and crops.

**Key Activities:** Enter into agreements with partnering organizations providing the source weather data and the distribution platform to disseminate the information. Implement the service providing climate information in the Arabic language to agro-pastoralists in the targeted localities of North Kordofan. It is envisioned this would be made available to them via an application on mobile phones.

1. Integrate the weather data source into the delivery mechanism.
2. Beta test the solution with a subset of agro-pastoralists from the targeted areas.
3. Address and resolve any issues identified.
4. Educate agro-pastoralists on access to and use of the information.
5. Promote widespread adoption and use in the targeted areas.

Mercy Corps is seeking to contract one provider with experience providing and implementing early warning and climate/weather dissemination services to the agricultural sector, expressly agro-pastoralists in remote rural areas. While the aim of this partnership is to provide access to climate services to agro-pastoralists, it is acknowledged that this service to our knowledge does not exist in a full production mode in Sudan. Therefore, the successful tender respondent must, through an agreement reached directly by them with a data source provider and a distribution network, bring about the creation and implementation of the needed service or the expansion of an existing service already in development.

Mercy Corps is aware that service providers have differing business models and thus, this SOW serves as a guide of services required for this call for proposal. Mercy Corps will assess the appropriateness of the customized activities to achieving the program targeted goal against proposals that will apply for this purpose.

**1) Background:**

Mercy Corps' RAPID (Resilience building for Agro-Pastoralist in North Kordofan) Program, funded by USAID/Bureau for Humanitarian Assistance, aims to improve the wellbeing, resilience, and livelihoods of conflict and crisis affected agro-pastoralist households in North Kordofan with the collaboration of likeminded private sector partners.

Mercy Corps [Homepage | Mercy Corps](#) is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.

USAID's [Bureau for Humanitarian Assistance](#) (BHA) provides life-saving humanitarian assistance—including food, water, shelter, emergency healthcare, sanitation and hygiene, and critical nutrition services—to the world's most vulnerable and hardest-to-reach people.

## 2) Purpose / Project Description:

The RAPID program is designed to enhance the resilience capacities of poor and vulnerable agro-pastoralist households affected by resource-based conflict and crisis, exacerbated by the effects of climate change and poor natural resource management in North Kordofan State. The Program aims to achieve the following objectives:

1. **WASH (Water sanitation and hygiene).** Improved access to safe potable water for agro-pastoral HHs in the target areas, thereby reducing water-borne diseases and other public health risks as well as improving food utilization.
2. **Agriculture and food security.** Increased food production, food diversity, capacity building, and incomes. RAPID will prioritize women's participation (at least 60%), recognizing that women play a leading role in many on and off farm activities.
3. **Economic recovery and market systems.** Improved livelihoods by increasing financial services and market engagement in relation to agricultural products and livestock.
4. **Disaster risk reduction policy and practice.** Engage in capacity-building and training activities to bolster communities' knowledge around the implementation of local Disaster Risk Reduction (DRR) and climate change adaptation approaches.

This program is being implemented through an approach which will support agro-pastoralists (and particularly, women agro-pastoralists) to improve productivity and climate resilience by providing them with crucial real time information on pests, climate, and weather. The information will help them to adapt their practices more easily to variable and extreme weather conditions while increasing their awareness of modern technologies so they can adopt and perform better under the changing climatic conditions. Providing climate services to agro-pastoralists has proven success in other African countries by improving resilience to shocks, removing access barriers, expanding digital literacy, cultivating gender and social inclusion, and increasing income and food security.

Climate weather services once established can scale both in terms of geographic reach and complimentary bundled services. For example, pest and disease information and market prices and linkages are often offered together with weather information. Scaling such services directly supports and facilitates the long-term development of the agricultural market systems which will bring more benefit to all parties involved in the system.

**Objective 1:** Identify providers of source climate, weather, and other agriculture early warning data and distribution platforms or networks that can offer and supply North Kordofan specific weather information. (Weather information that is not specific to the targeted areas is not of value to the agro-pastoralists located there.)

**Objective 2:** Implement the weather/climate and other agriculture early warning services information application, making it available on mobile devices.

**Objective 3:** Identify and work with selected project champions in the four (4) localities named in North Kordofan to promote widespread adoption of the use of the climate, weather, and other agriculture early warning information service.

**Objective 4:** Run village awareness campaigns in North Kordofan State

**Objective 5:** 4200 Number of Male and female agro-pastoralists using the application in North Kordofan State

### **3) Project Awareness Items**

Most agro-pastoralists in North Kordofan State have mobile phones, at least one per household. However, many of these devices are basic and older technology. The climate dissemination services application must be compatible and functional on older devices, as smartphones due to their cost are not widely possessed by the target group.

- Unstructured supplementary service data (USSD), a communications service controlled by mobile network operators, is a critical piece of infrastructure used to provide mobile digital services (financial, weather) on most phones, at low cost, and without requiring access to the user's SIM card.
- There should be no or limited cost to the agro-pastoralists using the application.

The literacy level (ability to read and write) and digital literacy (use of technology applications) varies between agro-pastoralists, and within this group, between men and women. It is important that weather information services provided do not exclude individuals based on their literacy levels. Success is dependent on wide adoption and understanding of the information's value.

### **4) Proposed activities to be taken into consideration by the climate, weather, and other agriculture early warning information dissemination services applicants during its performance**

#### **1. Educate agribusiness agricultural extension workers, field agents, community leaders, government officials, and agro-pastoralists in the targeted areas.**

- 1.1. Hold focus group discussion with agro-pastoralists and key informant interviews with livestock extension workers in the targeted areas to learn what type of weather related and agriculture early warning information currently exists, how they access it and how they use it. (Are formal/informal local social networks the source of weather information or is any form of communications technology being utilized?)
  - 1.1.1. What weather information and early warning systems are useful to agro-pastoralists to make production decisions?
  - 1.1.2. How can they use this information to improve performance?
- 1.2. Document findings from the focus group discussions to determine requirements for proposed solutions. For example, how many agro-pastoralists have a phone or is a smartphone or tablet required at the village level, where is the nearest weather station data being collected, etc. Do female agro-pastoralists have access?

- 1.3. Identify the most receptive and eager villages to pilot proposed solutions and act as champions for promoting wider adoption.
- 1.4. Educate stakeholders (incorporating learnings from focus groups) on benefits of using climate related and early warning systems information. There can be no real benefit to agro-pastoralists if they cannot link the weather and early warning information provided to opportunities or threats and act.
- 1.5. Train agro-pastoralists in livestock cooperatives, livestock and agricultural extension workers and other stakeholders on understanding the weather and early warning information provided and using the solution.
- 1.6. Promote the system through radio talk shows and adverts; monitor and report on adoption.

## **2. Establish a USSD system or platform to deliver climate, weather, and other agriculture early warning system to agro-pastoralists**

- 2.1. Establish an information delivery service embedded in existing local telecom networks
- 2.2. Obtain approval from national weather services and Ministry of agriculture and natural resources for the information delivery service
- 2.3. Pilot and modify the information delivery system in North Kordofan, targeted localities to ensure appropriate user experience with special consideration to female users
- 2.4. Develop business partnerships for sustainability of the information service

## **3. Enroll 4200 subscribers (agro-pastoralists) to the service.**

- 3.1. Deliver location-specific and reliable weekly weather information to 4200 agro-pastoralists in North Kordofan between April 2023 and October 2023.
- 3.2. Deliver early warning agriculture information such as large-scale crop/livestock pest and disease outbreaks, floods, dry spells, among others to 4200 agro-pastoralists in North Kordofan state as these events occur.

## **5) Expected Outputs from the proposal**

- 1) 8 focus group discussion with agro-pastoralists and 10 key informant interviews with agricultural extension workers in the targeted areas
- 2) 1 report documenting the findings from the Focus Group discussions and Key Informant Interviews
- 3) Digital weather/climate and early warning information services established and implemented/operational
- 4) 60 agro-pastoralists in cooperatives and 20 agricultural extension workers/other relevant stakeholders trained on (1) the importance of using and (2) understanding the weather and early warning information related information provided and using the solution. Attendance to be segregated by gender
- 5) 2 radio talk shows held, 120 radio adverts and 60 village sensitization sessions held to promote on climate information services
- 6) 4200 agro-pastoralists the targeted localities of North Kordofan State receive climate and weather information weekly for 5 months between mid-May and end of October 2023. The company should endeavor as much as possible to serve a similar number in each locality.
- 7) 4200 agro-pastoralists in targeted localities of North Kordofan State receive early warning information between mid-May and end of October on extreme climate, weather, crop, or livestock occurrences **if they occur**. This will be billed as per actual.

- 8) Report and graphics detailing progress over project period. How many agro-pastoralists subscribed over a given period and how many are using the service. Need a baseline to show impact.

**This belongs in the TIR and Tender Package. Not in the SOW**

#### **6) Eligibility of Climate Services Provider**

Only businesses which meet the criteria below qualify to be considered.

- a. Must be a legally registered company
- b. Must have been operating in Africa for at least 2 years.
- c. Must have been engaged in providing climate services and agriculture early warning services to agro-pastoralists for a minimum of 2 years
- d. Proven ability to implement climate and other agriculture early warning services for agro-pastoralists
- e. Evidence of existing relationships with source data and networks would be an added advantage.
- f. Willing to contribute to the cost of establishing the climate services to areas targeted by the SAFE program.
- g. Having proven ability to deploy climate services in remote rural areas.
- h. Must show willingness to employ additional strategies to promote women's access to the service
- i. Will pass all Mercy Corps due diligence efforts and have a good reputation in the region

Other: Mercy Corps will also consider other factors such as:

- j. Institutions with demonstrated specific efforts, tools, and capacity to serve women clients.
- k. Demonstration of creativity and technology in improving access and reducing operational costs in rural areas (digital training, produce aggregation and mobile payment platforms).