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FOR
CONSULTANCY SERVICE TO DEVELOP A CLIMATE CONFLICT EARLY WARNING TOOL

Introduction

The Conflict Early Warning and Response Mechanism of IGAD is in the process of developing a climate – conflict early warning and predictive tool in selected IGAD climate conflict vulnerable clusters. To this end, CEWARN has received a grant from the Government of Ireland through its Embassy in Addis Ababa towards part of this initiative. CEWARN is therefore desirous to recruit a consultant expert or consultancy firm specialized in developing early warning systems towards this initiative.

The consultant shall build a climate-conflict predictive tool that leverages findings from CEWARN's climate-conflict research studies, conflict behavioural indicators, and other related assessments. The tool will predict conflict risks based on climatic trends, allowing stakeholders to visualize, track, and act on these forecasts in near real-time and determine levels of anticipated humanitarian interventions.

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The specific objectives of the consultancy shall include;

- Develop a predictive model and tool to assess conflict risks tied to adverse climate conditions in key cross-border clusters.
- Enable geospatial visualization of conflict probabilities through a mobile-compatible application with desktop interoperability.
- Ensure data-driven decision-making by embedding both conflict and environmental data into the model to generate cluster-based forecasts.
- Support scalability so the tool can accommodate additional regions over time.
- Should be based on mobile platform application with web/desktop interoperability capabilities.

Scope of work

The consultant will develop the climate-conflict probability calculator with coverage of four pilot regions, representing high-risk sub-ecosystems with cross-border dynamics:

- Aweil (Sudan-South Sudan).
- Karamoja South (Uganda-Kenya).
- Assosa (Sudan-Ethiopia).
- Mandera (Kenya-Somalia).

The geospatial visualization of conflict probability forecasts will be limited to each respective sub-ecosystem, eliminating the need for full regional maps. The consultant must ensure that the system supports intuitive interaction and location-based visualization. The platform may utilize tools such as Google Earth or other GIS systems that support embedded shapefiles.

1 **Deliverables**

The consultant will be responsible for delivering the following;

1. **An interactive, user-friendly Climate -Conflict Predictive Tool based on mobile platform, with geospatial visualization and desktop interoperability capabilities.**

To achieve this, the consultant shall undertake the following;

1. Data Acquisition and Curation

Conflict (behaviour) Data:

- Aggregate conflict data from multiple sources, including field reports, media data, or other datasets compatible with CEWARN's framework.
- Ensure data consistency and quality through cleaning, augmentation, and transformation.
- Prepare data to support micro-analysis models that reflect real-time conflict dynamics in cross-border clusters.

Climate Data:

- Collect and curate vegetation, rainfall, and temperature data for the target regions.
- Integrate satellite data, historical climate records into the conflict forecasting system.

2. Building the Conflict-Climate Forecasting Model

- Assess existing CEWARN climate-conflict models and identify gaps or areas for refinement.
- Develop a causality-based forecasting model that links climate variability to conflict probability.
- Include parameters that reflect human security vulnerabilities caused by droughts, floods, or other climate events.
- Ensure the model supports scenario-based forecasting for future events, empowering decision-makers to respond proactively to potential crises.
- Ensure the model's predictions align with CEWARN's cross-border conflict clusters, offering real-time early warnings.

3. Developing a Mobile-Based Tool

An interactive, user-friendly mobile tool that allows users to;

- Select specific regions and timeframes to generate conflict probability forecasts.
- View geospatial outputs through visualization layers integrated into maps
- Supports a desktop interface to complement the mobile tool for user administration, in-depth analysis and broader data management. The system should be compatible with the existing CEWARN system.

Finally, but not least, ensure the tool can:

- Generate dynamic visual outputs based on weather changes and conflict risks.

- Provide user management and data export functionality for further analysis or reporting.

2 Qualifications and experience

The selected consultant or firm should demonstrate the following:

- Proven experience in developing early warning systems, with a focus on conflict or climate risks.
- Technical expertise in data modelling, GIS tools, and mobile app development.
- Familiarity with the CEWARN framework and the climate-conflict nexus in the IGAD region.
- Strong capabilities in data acquisition, curation, and analysis using climate and conflict datasets.
- Experience working with multi-stakeholder projects involving government, international organizations, and civil society.

3 Timeline and Reporting

The consultant will be expected to complete the project within one month of signing the contract. Regular progress updates will be required at key milestones, including;

- Inception report detailing the work plan and methodology-two weeks upon signing of the contract.
- Interim reports summarizing data acquisition, model development, and tool prototype.
- Final report and handover of the tool, including user manuals and documentation by April 15th 2025.

4 EOl Submission Requirements

Interested consultants or firms are requested to submit the following for evaluation:

- **Technical Approach and Methodology:** A detailed plan explaining the methodology, tools, and technologies to be used in developing the climate-conflict probability calculator.
- **Clear Understanding of the Terms of Reference**.
- **Work Plan and Timeline:** A schedule showing how the project will be implemented within the proposed timeframe.
- **Relevant Experience:** Portfolio of previous work on early warning systems, conflict analysis, or climate-based forecasting.
- **List of experts:** A list and profile/experience of experts at the projects disposal to execute the tasks.
- The consultant will be expected to provide three experts for an in-person presentation and final workshop in Uganda, for three days.

Time Frame:

- The consultancy is expected to be completed within one month from the date of signing the contract.
- Project commencement: 1st March – 15th April 2025.
- Presentation of findings and demonstration of the tool will take place in April on a date and location to be determined.

5 Conclusion

This project presents a unique opportunity to enhance early warning capabilities within the IGAD region by building a climate-conflict probability calculator. By integrating environmental data and conflict indicators, the tool will provide actionable insights that can mitigate risks and improve human security outcomes. We look forward to receiving proposals from qualified experts ready to contribute to this vital initiative.

6 Attachments:

Regional Map of Target CEWARN Sub-Ecosystems