



Inclusive Water Resilience Accelerator Fund

Lagos, Nigeria

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The Inclusive Water Resilience Accelerator Fund (IWRAF) supports the creation of a community based early warning system (CBEWS) to predict, monitor, and respond to flood events through automatic weather observation systems across strategic locations.

The initiative aligns with broader local and national climate resilience strategies, emphasising community-based approaches and integrating data-driven insights into policy frameworks.

What challenge did the project address?

Lagos is working to address city-wide flood risks that pose severe challenges, particularly due to the city's inadequate drainage infrastructure. The current system is unable to handle heavy rainfall efficiently and

is regularly clogged with waste and debris, resulting in frequent flooding. Additionally, Lagos currently has limited data or forecasting capacity, making it challenging to implement proactive measures or increase public awareness around flooding events – particularly in informal settlements and frontline communities. Challenges related to flood and drainage issues are expected to be exacerbated even further with the increasing impacts of the climate crisis.

What did the city achieve?

Lagos has strengthened its capacity for flood risk management by implementing a community-based early warning system (CBEWS) in four selected communities: Ajeromi/Ifelodun, Ojo, Kosofe, and Lagos Island. The new system is designed to integrate seamlessly with existing infrastructure,

A community-based early flood warning system



significantly enhancing the city's ability to predict and monitor flooding events.

Weather monitoring equipment – placed in strategic locations identified through risk assessments and community feedback – provides real-time data to support effective flood management and early warning efforts. This enables the timely dissemination of alerts to at-risk communities, allowing residents to take proactive measures such as evacuation and safeguarding their assets. The system focuses on densely populated areas and locations with vulnerable infrastructure, and prioritises stakeholder accessibility to maximise impact.

Crucially, the monitoring system works hand-in-hand with enhanced capacity at the community level due to improved knowledge and awareness. This includes residents from some of the city's most vulnerable communities, who are now better informed and prepared thanks to capacity-building training and an awareness campaign.

Local flood monitoring and response teams have been established, composed of community members trained in CBEWS operations and emergency protocols. These teams will play a crucial role in ensuring that frontline communities are informed and supported during flood events, thereby reducing displacement and loss of livelihoods due to flooding.

How did the Fund advance equitable water resilience?

- This project has created an early warning system that prioritises the needs and response capacities of vulnerable frontline communities.
- Improved prediction accuracy and the active engagement of community members in monitoring the system ensure alerts reach those who need them most.
- The project supports Lagos' wider work in reducing the socioeconomic and environmental impacts of flooding; safeguarding public health; and promoting sustainable, longer-term resilience. It is also compatible with further strategies (e.g. evacuation protocols) to strengthen critical infrastructure and ensure the safety of people during emergencies.
- The project is closely aligned with the existing [Lagos Resilience Strategy](#), which charts a pathway for building resilience by focusing on economic, social, environmental, and physical aspects, and with the National Disaster Management Framework, which provides the overarching regulatory guidelines for effective disaster management across the country.

