

CLIMAFRI – Implementing climate-sensitive adaptation strategies to reduce flood risks

Client II – International partnerships for sustainable innovations

Floods pose a great risk to local populations. This is certainly the case in the Lower Mono River Basin, which straddles the border between Benin and Togo. In order to develop and implement adaptation strategies for existing and future flood risk, information is required on possible flood scenarios, aspects, vulnerabilities and the coping capacities of humans and the environment. The German-African consortium “CLIMAFRI” is therefore working to develop a river basin flood information system and associated adaptation strategies for the region.

Flood risk management

Heavy rains and the resulting flood events are natural hazards that have devastating consequences on human life and livelihoods. This is certainly the case in the Mono River Basin in Benin and Togo. Overuse of natural resources, insufficient knowledge of the complex relationships between flood effects and a lack of resource management mean that intervention is needed in this area.

The “CLIMAFRI” project aims to collaborate with local stakeholders in order to develop and implement adaptation strategies for long-term flood risk and environmental resource management in the cross-border catchment area of the Lower Mono River. The primary challenges are the low level of development of the trans-national territory and a lack of data resources.



Use of the Mono River.

The project consortium is working on developing a river basin flood information system that is based both on scientific data and the knowledge of the local population and other relevant stakeholders. In order to ensure sustainable implementation of the information system, another of the project’s aims is to train workers and give them the

scientific and technical skills needed to use and maintain the information system and to connect the system with the responsible agencies.

Multi-sectoral cooperation

The composition of the consortium – which comprises German and African researchers, a water management company (BCE), a think tank on insurance in the context of climate risks (MCII), a regional education centre in Africa (WASCAL) and the national ministries as responsible political authorities – forms the basis for multi-sectoral collaboration.

Together, the consortium strives to capture data and carry out scenario modelling in order to create and implement an open source modelling environment for long-term use. In addition, they will also develop specific adaptation measures that are sensitive to climate change.

Improved water management

The main objective of “CLIMAFRI” is to implement a functional and usable river basin information system for use by the relevant local authorities. This will be accompanied by a catalogue of possible customization options and insurance recommendations as an option for risk transfer. This should lead to improved water management and therefore a reduced risk to the population. The results should help enable the region to reduce the predicted negative consequences of climate change and to promote sustainable development through the sustainable use of local natural resources.

The project results will be published in scientific publications that focus on the topics of climate change, adaptation, risk reduction and cross-border water management. The results will also be turned into materials for teaching and capacity building in the target countries.

Furthermore, the project also intends to provide proof of applicability for the software Kalypso, which is required for the information system, and to develop a software extension by incorporating additional methods in the field of flood and risk management. This will improve its chances in the African market and promote new business relations between Germany and Africa.



Measuring station at the Lower Mono River.

Funding initiative

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Project title

CLIMAFRI – Implementing climate-sensitive adaptation strategies to reduce flood risks in the catchment area of the cross-border lower Mono river

Duration

01.04.2019–31.03.2022

Funding code

01LZ1710A-E

Funding volume

1,554,871 Euro

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Internet

bmbf-client.de

Published by

Bundesministerium für Bildung und Forschung/
Federal Ministry of Education and Research (BMBF)
Division Global Change; Climate Research
53170 Bonn, Germany

July 2019

Editing and layout

Project Management Jülich (PtJ), Forschungszentrum Jülich GmbH; adelphi research gGmbH

Photo credits

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