



RIVER PARTNERS

**APPLYING ECOSYSTEM-BASED DISASTER RISK
REDUCTION (ECO-DRR) IN INTEGRATED WATER
RESOURCE MANAGEMENT (IWRM)**

**IN THE LUKAYA BASIN,
DEMOCRATIC REPUBLIC OF THE CONGO**



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EXECUTIVE SUMMARY

More than half of Africa's
freshwater resources lie
within the borders of the DRC

*Reference: UNEP (2011) Water Issues
in the Democratic Republic of the Congo
Challenges and Opportunities: A technical Report.
http://postconflict.unep.ch/publications/UNEP_DRC_water.pdf*



In 2013-2016, the United Nations Environment Programme (UNEP) and the European Commission (EC) supported a pilot demonstration project on Ecosystem-based Disaster Risk Reduction (Eco-DRR) in the Democratic Republic of the Congo (DRC). Implemented in partnership with the National Government, the Lukaya River Users Association (AUBR/L), and other local partners, the Eco-DRR project aimed to reduce flood and gully erosion risks and support community livelihoods through applying Integrated Water Resource Management (IWRM) in the Lukaya River basin, located in the outskirts of the capital Kinshasa.

The Eco-DRR project built-on and closely complemented an integrated catchment management demonstration project in the same basin, which was carried out by UNEP with support from the UN Development Account (2013-2016). Activities of both projects were implemented in a joint and integrated manner, although the stress on specific principles differed based on each project's respective aims and plans. It was DRC's first experience of applying IWRM, which was tailored to the local needs of the DRC. The project also served as a model for demonstrating how IWRM provides an effective framework for promoting Eco-DRR concepts and measures.

The project had four main components:

- (i)** Mainstream Eco-DRR in the development of an IWRM Action Plan for the Lukaya River basin;
- (ii)** Undertake field interventions, including reforestation, agroforestry and gully erosion control through bioengineering techniques;
- (iii)** Develop local and national capacities for implementing Eco-DRR through IWRM;
- (iv)** Support national advocacy on Eco-DRR through IWRM.

The project clearly demonstrated that Eco-DRR can be successfully applied through an IWRM framework

sustained and supported by national institutions. Enhanced national awareness of the importance of Eco-DRR and IWRM has resulted in a stronger national advocacy agenda on both water resource governance and disaster risk reduction, also giving greater visibility of DRC's new experience and capacities on implementing Eco-DRR through IWRM in various regional and global fora.

PROJECT HIGHLIGHTS

The project promoted ecosystem-based measures to mitigate hazards, namely gully erosion and floods and address ecosystem degradation, which is a driver of disaster risk in the Lukaya River Basin. The project also served to reduce local vulnerabilities by implementing measures that:

- **Diversified local livelihoods and augmented household incomes;**
- **Developed local and national capacities to undertake Eco-DRR through IWRM implementation, including establishing local risk monitoring systems;**
- **Informed development policies and planning processes at local and national levels;**
- **Strengthened partnerships and collaborative initiatives on Eco-DRR.**

By bringing different stakeholders together, the

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