UNEP and the European Commission are promoting improved ecosystems management for disaster risk reduction (Eco-DRR) to achieve sustainable and disaster-resilient development. From 2012-2015, field-based demonstration projects are being implemented in four countries: Sudan, Afghanistan, Haiti and the Democratic Republic of the Congo.

ECO-DRR PROJECT FACT SHEET
DEMOCRATIC REPUBLIC OF THE CONGO

RIVER PARTNERS:
MANAGING WATERSHEDS FOR FLOOD RISK REDUCTION AND WATER QUALITY

Rich with natural resources, the Democratic Republic of the Congo holds half of Africa’s freshwater sources. However, severe erosion and flooding are creating water-related hazards that impact Kinshasa and surrounding areas. These hazards are exacerbated by heavy rainfall and human activities, such as slash and burn agriculture, deforestation, charcoal making, uncontrolled housing construction near the Lukaya River, one of the main sources of drinking water for Kinshasa.

Soil erosion increases sedimentation and reduces water quality, impacting local fisheries, aggravating flooding, and increasing the cost of water purification.

Our Eco-DRR strategy applies Integrated Water Resource Management (IWRM) to harness benefits for disaster risk reduction and improved water quality in the Lukaya River basin. It connects upstream and downstream communities and facilitates dialogue amongst water users of the Lukaya River.

WORKING THROUGH PARTNERSHIPS

UNEP works through its local and national partners to implement the Eco-DRR Project in the DR Congo.

Key partners include:

National Government of the Democratic Republic of the Congo:
- Water Resources Directorate of the Ministry of Environment, Nature Conservation and Tourism
- Ministry of Social and Humanitarian Affairs
- Ministry of Interior
- Public water utility under the Ministry of Energy (REGIDESO)

Mbankana Centre for Integrated Development (CADIM)
Lukaya River Basin Users Association
Local and traditional authorities
Agence Nationale de Météorologie et Télédétection par Satellite
University of Kinshasa
University of Liège
International Commission for the Congo-Oubangui-Sangha Basin
United Nations Development Programme (UNDP)
PLANNED INTERVENTIONS

Develop an integrated peri-urban river basin management plan for the Lukaya River Basin that integrates an Eco-DRR approach, including river water quality monitoring, rainfall and flood monitoring, and baseline mapping.

Strengthen local capacities for river basin management planning that integrates Eco-DRR, through the Ministry of Environment and the Lukaya River Users Association.

Conduct ecosystem rehabilitation activities, including reforestation, agro-forestry, slope and river bank stabilization through vetiver grass planting.

National Training on Eco-DRR to raise national and public awareness of the potential role of river basin management for disaster risk reduction in the DR Congo.

Support recognition of river basin management as part of national disaster risk reduction strategies as well as National Government’s engagement in the post-2015 global framework on DRR.

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OUR TARGETS

IWRM and river basin management recognized as an approach for reducing disaster risk in national government policies and engagements in the post-2015 global framework on DRR.

3D map of the Lukaya River Basin created through a participatory mapping exercise identifying key environmental issues.

Tree nurseries including 3,800 seedlings established and maintained by local communities.

10 hectares of land under reforestation and tree planting carried out to support home consumption and river bank stabilization, and to reduce sedimentation.

Community agroforestry system established over 10 hectares to improve local livelihoods.

River gauging and meteorological stations installed to inform land use and flood management.

Four agro-forestry and bee-keeping workshops delivered to support the 20 families involved in managing agro-forestry activities and to optimize income opportunities.

700 fruit trees planted as windbreakers around homes, providing extra sources of income.

Trainings on bush fire risk management conducted.

Early warning system established through the Lukaya River Users Association to reduce vulnerabilities to water-related hazards.

Green buffer zone totalling 42,000 vetiver grasses planted on river banks around REGIDESO water treatment plant and in residential areas to prevent gully erosion.

ECOSYSTEMS IN FOCUS

River basin
High rainfall savanna with gallery forests

MAIN HAZARDS TARGETED

Floods
Soil / gully erosion
Poor water quality (associated with sedimentation)
Strong winds

LOCATION

Lukaya River Basin outside of Kinshasa, Bas Congo Province
Target: 1,400 inhabitants in 10 villages (Ntampa, Kasangulu, Kimwenza and Mafumba zones of the Lukaya watershed)