
Burkina Faso


Benin


Niger

The Mékrou River: *a resource to be shared*

To contribute to sustainable development and security through improved data management for integrated water resources management

Photo: Marco Schmidt/Wikimedia

The socio-economic development of the Mékrou River basin depends on the commitment of local stakeholders, transboundary cooperation, and reliable water data.

The inhabitants of the Mékrou River basin face major challenges every day: satisfying basic needs of people in one of the world's poorest regions; securing economic activity which is heavily affected by fluctuating rainfall; and preserving ecosystems which are fragile yet essential for humans and the environment.

Transboundary cooperation for development

Africa faces particularly complex water management challenges such as extreme intra-annual and inter-annual hydroclimatic variability, and the fact that most river basins are transboundary. From source to mouth, the basin of the Mékrou River, a tributary of the Niger River, covers parts of Benin, Burkina Faso, and Niger. The resources currently in place to manage the basin's water, infrastructure, and, in particular, its governance, are inadequate given the dependence of this territory on the sustainable development of water resources.

Managing a transboundary basin such as that of the Mékrou presents challenges which can only be overcome through the introduction of (i) coordinated policies, (ii) investment planning, and (iii) training for stakeholders. This pilot project, which has been approved by the three countries concerned, aims to enable these three pillars of sustainable management to be implemented for the water resources throughout the basin.

Financed by the European Commission, the Mékrou River basin project is jointly led by GWP West Africa and the JRC. It is a collaborative effort between Benin, Burkina Faso, and Niger.

European Commission

Global Water Partnership

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A complex challenge requiring innovative solutions

The low resilience of water users to the basin's hydrological variability poses serious risks for sustainable development in the region. Water is increasingly scarce due to demand from a growing population, climatic events, and the improving economy. It is therefore the responsibility of local stakeholders and resource managers to work together with all parties to establish a balance between the availability of the resource and the demand for it.

Analysis of past experience shows that solutions tend to be context-specific, as each basin presents a unique combination of natural, social, and economic characteristics. In-depth knowledge of the local conditions is therefore vital to develop the best options.

Training, governance, and investment planning are crucial in integrating water into public policy. The countries and stakeholders must take into account the varying hydroclimatic factors and the effects of climate change on the basin, the impact of non-collaborative water management on other sectoral policies, and strengthening the role of water as a catalyst for sustainable development in the area.

Cooperation throughout the transboundary basin

The key stakeholders in the project are the three countries within whose borders the basin lies – Benin, Burkina Faso, and Niger – as well as the common transboundary institution, the Niger Basin Authority (NBA). However, this ambitious project for joint, integrated water resources management (IWRM) requires the voluntary involvement of not only these key stakeholders, but also of local stakeholders representing various interests. The governance to be put in place through this project will take a variety of forms to ensure that all stakeholders are represented, in particular those using water for various purposes, and the scientific community for its technical knowledge of the basin. Collaboration and cooperation at an international level will guide the implementation of this governance.

A reliable information system – the basis for collaboration

The information system used to support integrated water resources management in the basin must be reliable, shared, and scalable. To this end, all of the studies needed to identify the water requirements for agriculture, energy, water quality and quantity, climate change scenarios, and biodiversity will be gathered and supplemented. In particular, a geographical information system using satellite data acquisition technology will be put in place, with a field validation component fed by data to be gathered by equipment installed at observation sites under the responsibility of local stakeholders. The aim will be to provide stakeholders and decision-makers with a reliable and appropriate system that can assist with long-term decision-making once the project has ended.

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Aims and objectives

1. To establish a long-term framework for cooperation for integrated water resources management for the purposes of development in the Mékrou River basin
2. To develop a strategy for integrated water resources management for sustainable development (food security and rural economies, the well-being of urban and rural populations), while preventing the impact of climate change and encouraging relevant investment

Benefiting from other programmes to develop synergies

The project will be undertaken alongside other programmes and projects already under way in the Mékrou basin region, in particular drawing on the experience and development of local capabilities gained from the following projects and programmes:

- Niger Basin Authority programmes (shared vision, sustainable development action plan, investment programme, Niger basin water charter)
- The strategy of the African Network of Basin Organisations (ANBO)
- Scientific and technical partners (Niger basin observatory, African Monitoring of the Environment for Sustainable Development [AMESD] hydrometeorological database, Niger-HYCOS, HYDROMET, AGRHYMET)
- The PAGEV programme developed for the Volta basin by the Volta Basin Authority (VBA) and the International Union for Conservation of Nature (IUCN)
- The alternative energy policy developed in Benin with support from the European Union (EU)
- The Rural Water Supply and Sanitation Initiative (RWSSI) of the African Development Bank
- The New Partnership for Africa's Development (NEPAD) Water Centres of Excellence network with support from the EU
- The development project of the Liptako–Gourma Authority
- The 'Great Green Wall of the Sahara and the Sahel Initiative' project.

The actions aim to

- Establish the governance framework
- Establish diagnostics and the initial assessment of the basin
- Identify strategic priorities
- Develop the information system for the basin
- Develop a system for assessing the annual variability of water resources
- Study the balance between needs and water availability
- Establish a framework for the strategy to secure water resources throughout the basin
- Develop an action and investment plan.

Expected results

- Dialogue between the stakeholders to deal with adaptation to climate change and the need/availability balance
- Strategic partnerships between key stakeholders and a shared strategy for sustainable development in the basin
- Shared tools to assist with decision-making
- Strategic framework approved for the transboundary information system
- Transboundary information system put in place
- System for assessing annual variability of water resources put in place
- Strategy for securing water resources approved by the main stakeholders.

At the same time, the essential and indispensable cross-cutting issues of the environment, health, gender equality, transparency of information, human rights, and conflict prevention will be constantly monitored. Through the proposed actions, the project will help to directly improve the situation with regard to the above issues.

Funding and project management

The Mékrou River basin project is funded by the European Commission. The project will include an initial one-year environmental set-up phase, followed by a three-year implementation phase. The governance and institutional aspects of the project will be implemented through Global Water Partnership (GWP), with the Joint Research Centre (JRC) handling the technical side.

A unit comprising one project manager and an administrative and financial assistant will be deployed, under the responsibility of the Executive Secretary of GWP West Africa. This team will work closely with the Niger Basin Authority, and in particular will be responsible for communication between all stakeholders. To this end, it will receive support from Country Water Partnerships in Benin, Burkina Faso, and Niger, which will appoint their own contacts.

The estimated overall budget is EUR 5 million, fully funded by the EU.

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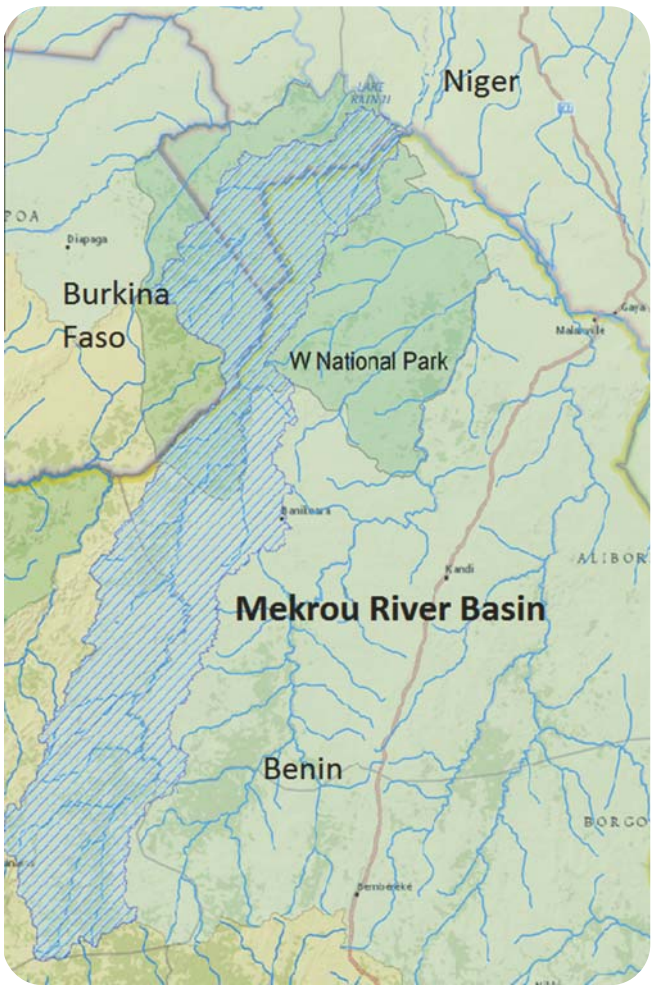
Programme summary

Region
The drainage basin of the Mékrou River: a tributary of the Niger River, covering parts of Benin, Burkina Faso, and Niger.

Aim
To promote integrated water resources management for the purposes of sustainable development in the region.

Duration
4 years, January 2014–December 2017.

Project implementation
The project will be a collaborative effort between the three countries and the Niger Basin Authority, and will be jointly led by GWP West Africa and the JRC.



The ANBO and African Ministers' Council on Water (AMCOW) will provide assistance and share their experience to aid discussion.

Estimated cost
EUR 5 million

Impact
The living conditions of the basin populations will be improved in both social and economic terms, and their living environment preserved thanks to the coordinated management and deployment of water resources.

Surface area
The basin covers an area of 10,500 km^2, of which the headwaters cover 5,034 km^2.

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GWP (Global Water Partnership) is a global network comprising 13 Regional Water Partnerships, 84 Country Water Partnerships, and more than 3,000 Partners located in 172 countries. GWP's vision is for a water secure world.

The Joint Research Centre (JRC) of the European Commission (EC) provides independent, technical, and scientific support for the formulation of European policy. As part of this, the JRC works closely with other directorates and departments of the EC to tackle societal challenges and stimulate innovation and the development of new methods, tools, and standards. The main areas of intervention are: agriculture, environment, climate change, and food security through a multidisciplinary approach.