IWRM Action Hub

CASE STUDY

Volta River Basin: Building Climate Resilience of People and Ecosystems

Summary

With an estimated population of 24 million and a surface area of 400,000 km², the Volta Basin is confronted, according to the Transboundary Diagnostic Analysis (TDA), with climatic risks including recurrent floods and pockets of drought. It is important to ensure sustainable development in this West African basin by taking into account these extreme climatic phenomena which are becoming more severe over the years. Against this background, GWP-WA has been supporting the Volta Basin Authority (VBA) and its partners since 2010 in strengthening the resilience of the basin's populations and ecosystems to climate risks through multiple actions designed for the long term.

Background

The Volta Basin is located in West Africa, between latitudes 9°N to 15°N and longitudes 6°W to 3°E. It is the 9th largest river basin in sub-Saharan Africa. The six riparian countries (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo) share the resources of the basin, which is home to a set of ecosystems, several of which are of global importance due to their high biological diversity. These countries are confronted with the effects of climate change: for example, in September 2020, the 13 regions of Burkina Faso were affected by floods and violent winds, causing numerous deaths and significant material damage in communities that were already very vulnerable. These extreme climatic phenomena are now recurrent, affecting the resilience and adaptation capacity of the population and ecosystems. The population of the basin, which is expected to increase to 34 million in 2025, remains highly dependent on its natural resources. In order to ensure better management and harmonious development of the basin, the Volta Basin Authority (VBA) was created by the six countries in 2007 and was endowed in 2014 with a Strategic Action Program (SAP). One of its specific objectives is to identify and plan projects and investments that should be jointly implemented to

maximize results, particularly for better adaptation and increased resilience to the current impacts of climate change and variability. The TDA, conducted under the VBA in 2012 to produce the SAP, identified five key challenges: variations in water quantity and seasonal flows, ecosystem degradation, water quality impairments, water resources governance, and climate change. The TDA has clearly identified the latter challenge as one of the root causes of the region's environmental problems. Given its relative youth and limited staff, the VBA Executive Directorate was soon faced with a need to strengthen its technical, institutional, financial and human resource capacities. There was a need to establish strategic partnerships to achieve the mandate of the institution and provide riparian countries with appropriate legal and institutional arrangements for the sustainable management of the basin's natural resources.

Actions taken

The Volta Basin has been identified as a priority action area for the Water, Climate and Development

in Africa Program (WACDEP), an initiative of the African Ministers' Council on Water (AMCOW) developed and implemented by GWP-WA with other partners from 2011 to 2019 and continuing with the WACDEP - Gender Equality.

The GWP-WA is one of the first organizations to have signed, as early as 2010, a memorandum of understanding with the Executive Management of the VBA. The aim was to promote coordination and harmonization of their respective actions, to achieve common goals and to contribute to the implementation of IWRM at the transboundary scale. As a result of this agreement, many initiatives, some of which are described below, have been developed and implemented jointly, contributing to the development of the adaptation and resilience capacities of communities and ecosystems to the impacts of climate change in the basin. In particular, GWP-WA has contributed to the process of elaboration and validation of the Basin Water Charter, at regional and country levels.

Within the framework of the Associated Programme on Flood Management (APFM), the World Meteorological Organization (WMO) and GWP-WA have committed to building the capacity of riparian countries to ensure integrated flood management in the basin. This action has supported the VBA in the development of the project «Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin» (VFDM), funded by the Adaptation Fund.

GWP-WA has contributed to the development of the VFDM project and the mobilization of funding for its implementation. It facilitated the preparation and stakeholder consultation and capacity building workshops, including hydrological and meteorological services involved in flood and drought management at regional and country levels. The process was carried out in close collaboration with the VBA and WMO. It includes an analysis of capacity building needs in integrated flood and drought management in the six countries and the basin in 2015 and 2016, a regional training workshop in 2017 on integrated flood and drought management (IFM), the preparation and funding of projects on IFM in the six countries and the basin and finally the preparation and submission of the concept note and the detailed document of the VFDM project for funding to the Adaptation Fund in 2017 and 2018 respectively. Project funding for nearly $8 million was approved in 2018. The project, implemented through 2023 by WMO, is executed by VBA, GWP-WA, and WMO.

Similarly, the support of IUCN, UNEP and GWP-WA, on the basis of the TDA and SAP report, has made it possible to support the efforts of VBA to elaborate and submit for funding to GEF the project Identification Form on «Reversing the Ecosystem and Water Degradation trends in the Volta Basin» (REWarD). The detailed project document was submitted in December 2019 and is, as of June 2021, in the official GEF approval loop.

The development of the REWarD project is led, under the guidance of the VBA, by UNEP and IUCN with the participation of GWP-WA. A regional workshop held in 2016 produced the concept note of a regional program taking into account actions focused on the conservation and restoration of a functional ecosystem of the Volta Basin. This workshop has largely contributed to the development of the Project Identification Form (PIF). As the VBA chose GEF funding from the outset, UNEP and IUCN took the lead as implementing agencies to accompany the development and submission of the PIF and the detailed project document. Bringing its expertise, GWP-WA participated in the development of the technical content of the project based, among others, on the results of the studies previously carried out within the framework of the WACDEP and the Integrated Drought Management Project in West Africa (IDMP-WA) as well as in the mobilization of the basin stakeholders and counterpart funds for the project.

Outcomes

The actions undertaken by the GWP-WA have enabled the VBA Executive Directorate to develop and strengthen strong partnerships with various institutions to carry out numerous actions aimed at achieving its mandate, to mobilize significant resources and to develop its technical and institutional capacities for the benefit of the populations and ecosystems of the Volta Basin.

The VFDM project, which started in June 2019, contributes in particular to providing the basin with an early warning system for floods and drought. A capacity building needs assessment of national and regional institutions in flood and drought management was conducted in 2019. Its results were validated by stakeholders during national workshops in 2020 and 2021. The development of a flood and drought risk maps and early warning system was underway in June 2021.

WACDEP outputs in relation to the Volta Basin include the completion of the inventory of water management and climate change in the context of the development of the observatory of water resources and related ecosystems, the development of an outline of principles and guidelines for the sustainable development of the basin, and the drafting of a concept note for the establishment of an

early warning system for drought, floods, and pollution-related risks.

In addition, within the framework of the elaboration and validation of the Basin Water Charter, GWP-WA has contributed at the regional and country levels at each step, mobilizing media actors in the six riparians and at the regional level. The charter was approved on May 10, 2019, by the VBA Council of Ministers. In June 2021, its ratification process was underway at the country level under the guidance of the VBA Executive Directorate.

Through six national stakeholder training workshops on ecosystem management for climate change adaptation in the Volta Basin under the Volta Basin Strategic Action Program Implementation Project (VSIP), supported by the World Bank and the GEF, GWP-WA contributed in 2019 to:

- the development of a training manual on ecosystem management for adaptation to climate change in the basin, accessible to stakeholders;
- a better knowledge of the VBA, in particular its mission, mandates, achievements and prospects for the sustainable management and development of natural resources by 200 stakeholders, 26% of whom are women representing youth organizations, CSOs, local authorities, decentralized State structures and donors;
- capacity building of target actors on topics such as restoration and protection of ecosystems for climate change adaptation, maintenance and protection of riverbanks, protection of wetlands and IWRM processes;
- the awareness of the target stakeholders of the very rapid degradation of natural resources in the basin as well as the responses implemented to reverse this trend;
- the development of action plans for the management of specific ecosystems in the basin. On the basis of the actions proposed by the workshop participants, five transboundary intervention axes were proposed in synergy with the VSIP component 3 restoration of the banks of the Black Volta rivers (Burkina, Ivory Coast and Ghana), restoration of those of the Oti (Benin and Togo), development and restoration of the ecosystems of the headwaters of the Oti (Benin, Burkina Faso and Togo) integrated water resource management of water bodies and dams to fight against pollution in the basin and support for sustainable management of water resources in protected ecosystems and preservation of biodiversity (Benin, Burkina Faso, Ivory Coast, Ghana and Togo).

These different actions have targeted the stakeholders of the basin, the sectoral ministries at the central level, the executives and managers at the level of the municipalities, the NGOs and associations of women and youth within the communities as well as at the regional level with the executives of the Executive Directorate of the VBA.

Lessons Learned

Collaboration between institutions should be based on predefined common objectives, taking into account their respective mandates and attributions and their comparative advantages, resources that can be pooled and actions that can be carried out in synergy. It was made possible by the memorandum of understanding between the VBA and GWP-WA, a relevant general framework for joint actions.

It was important for the VBA to have its own human and financial resources to assume leadership over the TDA/SAP process and respond to stakeholder concerns. Complementary contributions from mobilized stakeholders and coherence of their objectives was key for successful implementation.

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Partnership action for water security and climate resilience of populations and ecosystems in West Africa

Related IWRM Tools
Integrated Drought Management Plans, Integrated Flood Management Plans, Training Water Professionals , Transboundary Diagnostic Analysis

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