

Technical Workshop on Project Preparation Transformational Climate Resilience Water Project Concepts in Africa for the Green Climate Fund

Date: 19 – 21 September 2018

Case Study : Volta Project

Submitted to



WMO OMM

World Meteorological Organization
Organisation météorologique mondiale



More information on APFM:

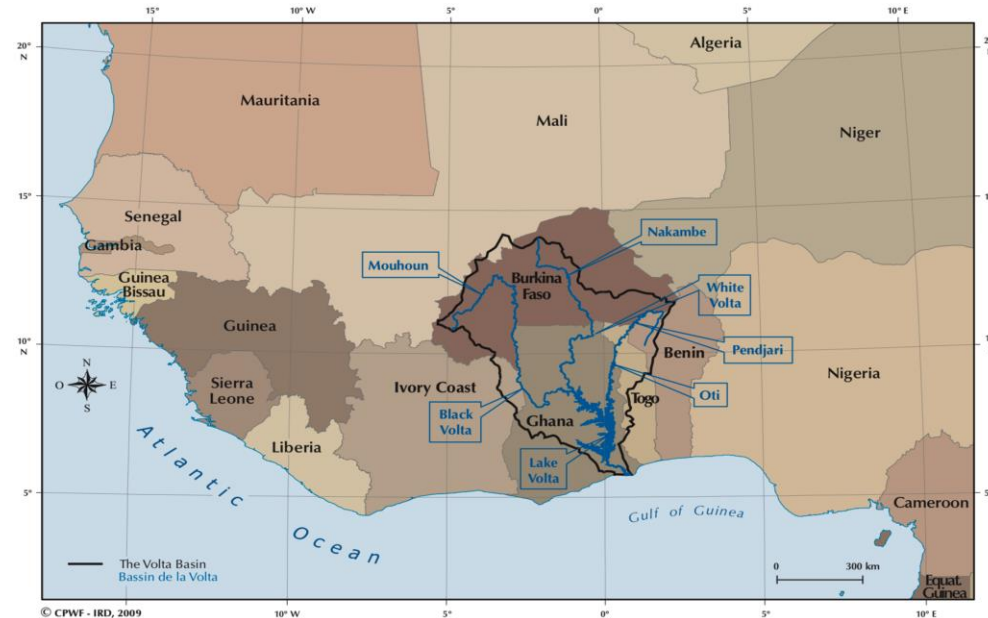
<http://www.floodmanagement.info/>



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GWP-WA Executive Secretary

Project Title: Integrating Flood and Drought Management and Early Warning for Climate Change Adaptation in the Volta Basin

- **Regional project:** Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali and Togo
- **Focal Area:** Disaster risk reduction and early warning systems
- **Implementing Entity:** WMO
- **Executing Entities:**
 - World Meteorological Organization
 - Global Water Partnership West Africa (GWP-WAF)
 - Volta Basin Authority (VBA)
- **Developed under guidance of joint WMO-GWP Associated Programme on Flood Management (APFM) with inputs from Integrated Drought Management Programme (IDMP)**
- **Amount of Financing Requested:**
7 920 000 USD



- 24 millions people
- 400 000 km²
- Semi-arid to sub-humid areas
- 2 millions of people affected by floods over the last 20 years
- 9.7 millions people affected by drought in Burkina Faso over the last 30 years
- Key affected people in agricultural sector and urban areas

Impacts of Floods in the Volta River Basin

Impact Year	Number of victims of the flood	Number of deaths	Number of people injured	Number of houses damaged	Area of farmland flooded (ha)	Number of livestock perished (head / cattle, goats, poultry, etc.)	Number of dams destroyed	Distance of road destroyed (km)	Number of bridges destroyed	Number of schools damaged
2006	3,476 (Be)	-	-	1,382 (Be)	5,459 (Be)	-	-	-	-	-
2007	146,202 (BF) 300,000 (Gh.)	83 (BF)	74 (BF)	26,833 (BF)	-	20,000 (BF)	-	-	-	-
2008	24,676 (BF)	5 (Be) 5 (BF)	54 (BF)	-	15,498 (Be)	3,190 (Be)	-	-	-	-
2009	180,386 (BF)	41 (BF)	62 (BF)	33,172 (BF)	-	-	-	-	-	-
2010	680,000 (Be) 25,112 (Gh)	46 (Be) 17 (Gh)	-	55,000 (Be) 3,234 (Gh) 3,832 (Tg)	-	1,109 (Gh)	-	-	-	455 (Be)
2011 - 2015	46,871 (Be) 255,849 (BF) 1996 (CI)	25 (Be) 211 (CI)	215 (Be) 3 (CI)	11,652 (Be)	140,287 (Be)	37,339 (Be)	-	-	-	119 (Be)

Impacts of Floods in the Volta River Basin

❖ Socio-Economic Impacts of Floods in the Volta Basin

- Loss of lives and property
- Deplorable health, water and sanitation facilities
- Decreased economic and social activities
- Hindrance to economic growth and development
- High financial cost



3 components of Volta project

Target thematic areas identified by the six partner countries in their 2014-2016 needs assessments:

Component 1: Develop capacity and established frameworks at the local, national and regional levels to ensure risk informed decision-making

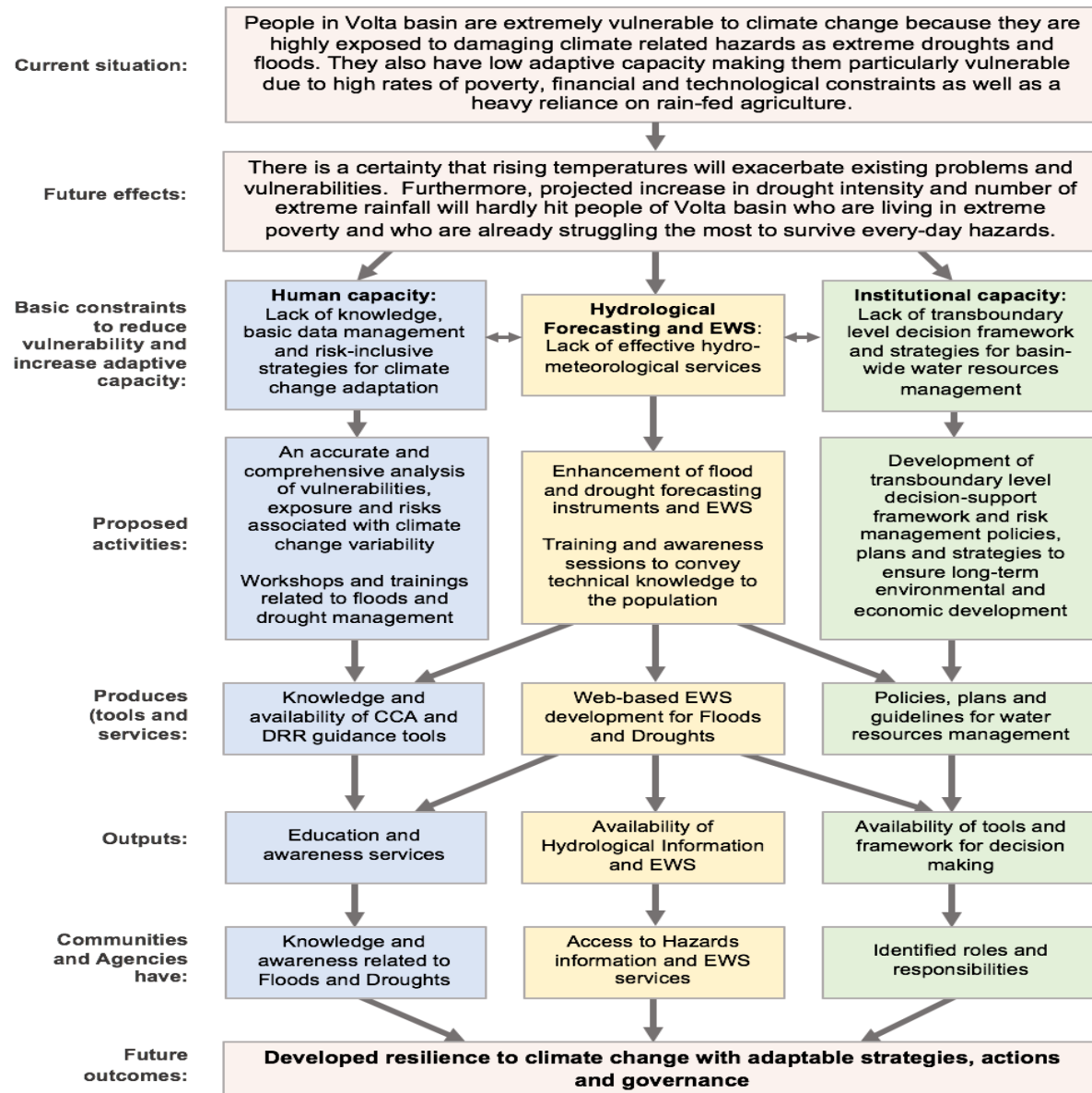
Component 2: Develop concrete adaptation and environmentally friendly actions with an integrated approach

Component 3: Strengthening policy and institutional capacity for integrated flood and drought management at the local, national and transboundary levels

Project concept note: [click here](#)

Project Proposal : [click here](#)

Schematic representation of the Volta project framework



Expected outcomes for component 1: risk informed decision making from local to regional level

- 1.1. Improved knowledge of risks, climate change impacts and risk management capacities through knowledge sharing and participatory mechanisms**
- 1.2. Bridging the gap towards integration of knowledge into future scenarios (economic, urban, climate, environment etc.)**
- 1.3. Risk management strategies in short, medium and long-term to be integrated into development plans (economic, social, environmental aspects)**

Expected outputs for component 2: development of integrated risk reduction and adaptation measures, incl. Early Warning System

- 2.1. Improved flood and drought forecasting instruments and EWS and coordination at the transboundary level to reduce disaster risks in vulnerable communities**
- 2.2. Demonstration of the added value of the E2E EWS VoltAlarm through a series of pilot testing during monsoon and dry seasons**
- 2.3. Strengthened awareness of vulnerable people on hydro-meteorological risks, prevention, preparedness, and response strategies through education programs using participative solutions**

Expected outputs for component 3: policy coordination and community capacity building at transboundary, national and local level

3.1. Decision support and policy development for strengthening resilience at the local, national and transboundary levels of the Volta Basin

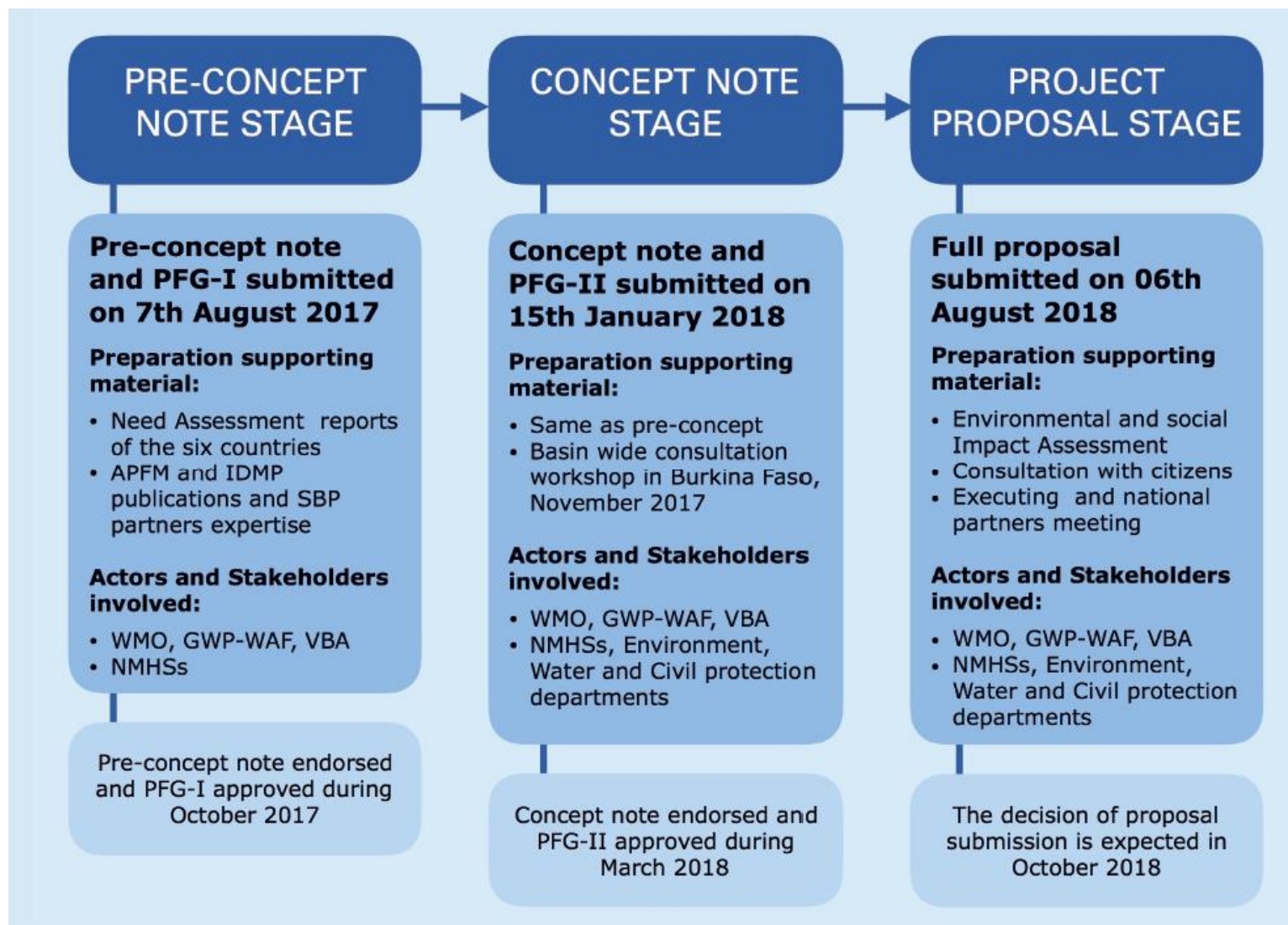
3.2. Strengthened capacities of actors and decision makers at national and transboundary level on long term risk management policies, plans and strategies

3.3. A collaborative process is developed to ensure those instruments and strategies are accepted by the local organization and communities and adapted to the local context

Main points

- **Coordination with past and on-going projects (World Bank, GEF, CREWS....) to benefit and build on existing information/methodologies**
- **Identify appropriate Early Warning Solutions for the current capacities (data, network, IT, human resources....)**
- **Embed Flood and Drought forecasting into a unique Warning System**
- **Integrate medium and long term climate variability**
- **Community involvement and capacity building**
- **Coordination at basin scale with national partners**
- **Ensure coordination role of Volta Basin Authority**

Planning and Next steps



Thank you Merci



More information on APFM:
<http://www.floodmanagement.info/>



More information on IDMP:
www.droughtmanagement.info