

TEMBO Africa

Transformative Environmental Monitoring to Boost Observations in Africa

Dam Reservoir Management



Overview

TEMBO Africa dam reservoir management utilises cutting edge monitoring and control technologies to optimise the management of water resources and to enable effective electricity generation in hydroelectric dams, while averting potential risks. Specifically, the service preserves the equilibrium between water release and storage, and facilitates the precise regulation of water levels. This ensures efficient operation of dams, strengthening their infrastructure resilience, and reducing the risk of floods.











Where?

The service is being piloted in Ghana and Zambia, and will later be available for any country in Sub-Saharan Africa.

For whom?

The service is suitable for governments, and parastatal and private organisations responsible for dam operation.

Smart Gains for Smart Dams

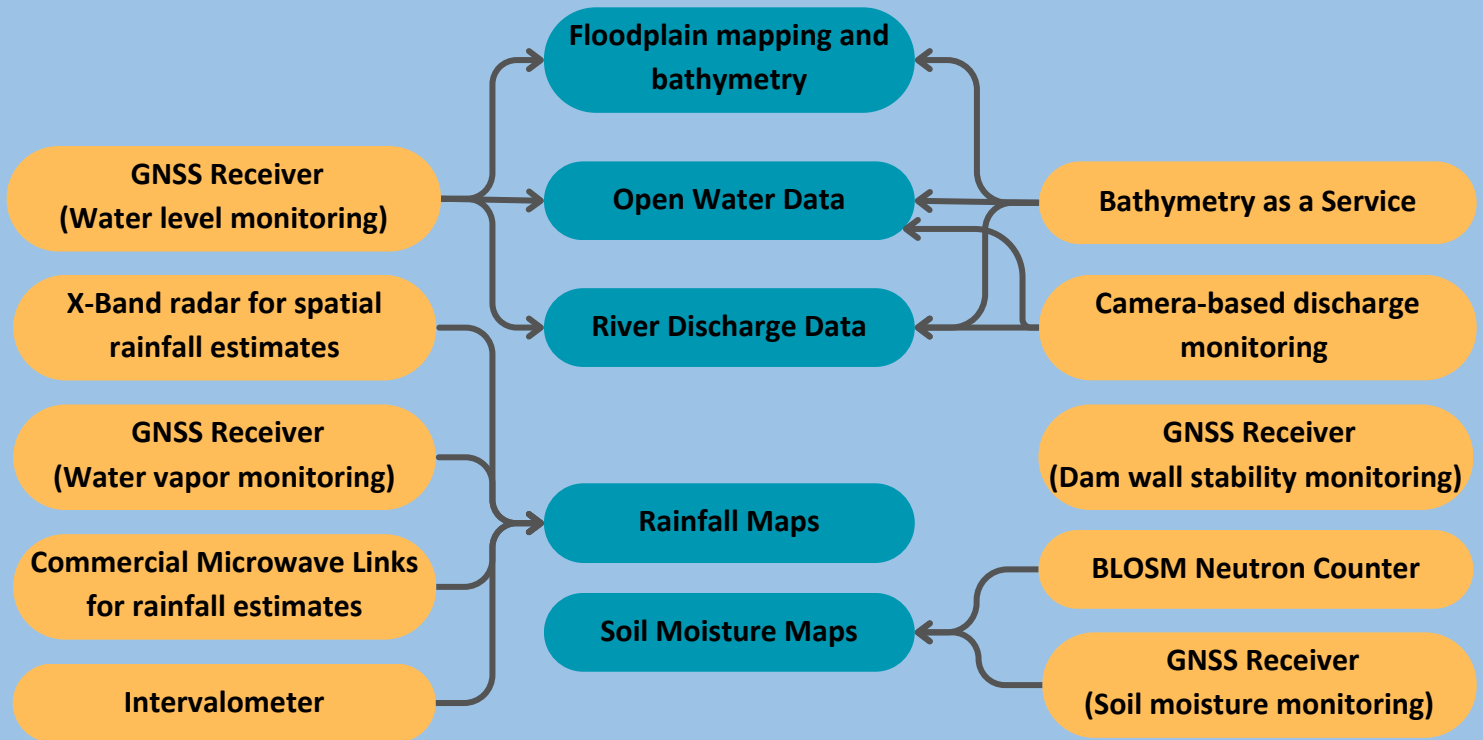
-  Informed **decision making** and better timing of releases.
-  Avoidance of **dam failure** and **flash floods**.
-  Avoidance of **dam spillage**, which may cost dam operators about €1M/day.
-  **Cost reduction** and **low maintenance costs**.
-  More stable **hydroelectricity** production.
-  Precise monitoring of **flow rate** and **seepage** control between upstream and downstream dams.
-  Improved **water allocation** and **irrigation management**.
-  Improved **environmental** management downstream of the reservoir.
-  High temporal **resolution** (from seconds to minutes) of data measurements.
-  Easy verification of data generated at dam sites and **simple visualisations** through customised dashboards.



This project has received funding from the European Union under the Horizon Europe Research & Innovation Programme 2021-2027 (grant agreement no. 101086209). The Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither can the European Union nor the granting authority be held responsible for them.

Flexible, customizable, and adaptable!

TEMBO Dam Reservoir Management is characterised by a “Lego®-ised” approach, leveraging a range of **sensors** and **products**, enabling its customisation and application under different conditions and needs.



Partners involved



Contact us and learn more!



temboafrika.eu



info@temboafrika.eu



TEMBO Africa

