Towards a Pan-African Water Quality Program (PAWaQ)

WWQA
World Water Quality Alliance

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ABSTRACT

The workstream 'Towards a Pan-African Water Quality Program (PAWaQ)' aims to develop a framework for a Pan-African Water Quality Program (PAWaQ). It responds to a request from the African Ministers' Council on Water (AMCOW) to help accelerate the water security agenda in Africa. It will achieve this by establishing the status quo of water quality monitoring in Africa, the capacity that exists and innovations that could be included to advance water quality monitoring and management in Africa. From this baseline assessment a framework for the monitoring and management of water quality in Africa will be designed.

This workstream has direct links to the "Africa Use Cases" and the "Capacity Development workstreams".

CONTACT

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UPDATE ON PROGRESS

- A report on the capacity for monitoring and management of WQ in Africa has been produced.
- A report on innovations in monitoring and management of WQ in Africa has been produced.
- These two reports will be circulated for review, including by AMCOW.
- Research results were disseminated during the Africa Water Week 2021 under the session titled: *Water quality monitoring initiatives in transboundary basins: Towards a Pan Africa Water Quality Monitoring Programme.*

ACHIEVEMENTS

An Africa-wide survey was conducted to assess the state of water quality monitoring and pollution control in African countries.

- 31 Countries, 76 respondents
- 44 questions probing on
  - sources of pollution
  - key pollutants
  - water quality monitoring capacity
  - laboratory testing capacity
  - pollution control strategies

Figure 1. African countries participating in the Africa-wide survey.

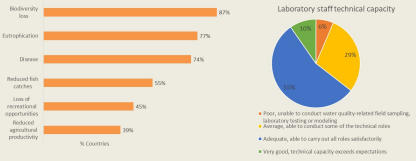

Figure 2. Survey results: (a) Impact of water pollution in Africa (b) technical capacity of laboratory staff

KEY FINDINGS TO DATE

WATER QUALITY MONITORING AND MANAGEMENT INNOVATIONS

- Biological monitoring is a high priority intervention for inclusion into national water quality monitoring programmes as it is low-tech and shows the direct impacts of water quality deterioration.
- New technological advancement such as earth observation show great potential for adoption in a rapidly digitizing environment.
- Lack of basic capacity for water quality monitoring and management among some African countries, hinders innovation. As such, real innovations need to be based on available capacity – such those that are low-tech or that avoid the need for high skilled persons.
- Catchment based water quality management should be promoted and holds great potential for success.
- Nature based solutions offer opportunity for managing pollution in African countries based on the rich natural infrastructure that already exists e.g. wetlands.
- Developing awareness on the importance of good water quality is essential and fosters the need to monitor and protect thereby building evidence based management

FUTURE OUTLOOK

- Two draft reports have been produced, the first on the capacity for monitoring water quality (Phase 1&2) and the second on innovations in monitoring and management (Phase 3&4).
- After review, these reports will be released as IWMI Research Reports.
- The PAWaQ framework will be finalized during 2022.

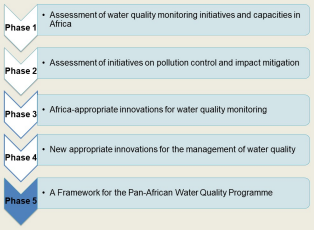

Figure 3. Phases in developing the PAWaQ Framework

Every drop counts Count every drop
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