

REPORT AFRICA WATER QUALITY PLAN PRESENTED TO UNECA

1. **The Challenge:** Water and food security are fundamental to human development. Access to safe, clean water is a basic necessity and the inability of African societies to preserve and manage clean water costs millions of lives each year. Options exist to improve water quality, but action requires much closer management of water systems. African scientists have a major opportunity to develop and apply technologies to enable communities to access and manage clean water.

2. Emerging Response - AFRICA Water Quality Plan

The Pan African Chemistry Network identified two actionable goals:

- National Water Quality Monitoring Networks (NWQMN)
- Improved access to safe water through adoption of treatment technologies

3. Way forward. We propose to develop the capacity of African scientists to meet the particular challenges in African river basins. These activities should be linked to larger implementation projects of monitoring and management in a number of African countries

African Water Quality Monitoring Network

Purpose: Networking scientists with users, private and public sector, funders and policy makers to develop a clear understanding of water quality issues in African communities and the technological options to improve it. Provide the scientific capability to monitor water quality, develop and support centres of excellence in analytical chemistry in universities.

Activities: To set up a round-table to review the problems of water quality in different regions of Africa, and develop a fundable implementation plan to establish a WQMN in three or more nations, using technologies appropriate to rural and urban communities. To identify fundable R&D needs for specific problems, *e.g.* SODISWATER.

Outputs: A fundable plan to build the African WQNM, *e.g.* creating centres of excellence with the right skills and equipment, as PACN is currently developing in Nairobi and Addis. A network of public and private partners ready to roll-out the network, once funded.

Cost: *Workshops, regional consultation meetings and reporting, centres of excellence. Plan development. Approx: USD 200K pa*

Capacity building to increase adoption of water treatment technologies

Purpose: To increase the capacity of African science and technology to develop and implement “fit for purpose” water treatment technologies.

Activities: Technical review of the full range of water treatment technologies, the perceived and potential value of clean water to African communities, identifying who pays, who gains and who administers and legislative and funding arrangements.

Regional field and lab schools: Scientists and field technicians work with communities to trial water treatment technologies, to seek cost-effective methods of analysis, data management and reporting and to learn the realities and identify opportunities for new technologies.

Annual updates: Back-to-back meetings to review new technical insights and analysis of conditions and to clarify the messages to policy-makers.

Output: A community of field-experienced scientists and technicians, connected with suppliers, policy-makers and local administrators, as well as technologies that are “fit for purpose”.

Cost: *Review, field and lab schools (3/yr), annual updates over 3 years: Approx: USD 200K pa*

Alejandra Palermo, 24 June 2010