# Scholars an Africa

## DEPARTMENT OF AFRICAN STUDIES FACULTY OF SOCIAL SCIENCES UNIVERSITY OF DELHI, INDIA www.as.du.ac.in

#### About

The Department of African Studies has launched an initiative called "Scholars on Africa" with the primary objective of promoting the research ideas of scholars and faculty members on current happenings and contemporary issues related to the African continent. This initiative serves a dual purpose, as it not only facilitates academic exploration but also provides valuable insights the to policymakers of India on matters concerning Africa. By actively engaging with scholars and faculty members, the initiative aims to foster a better understanding and relationship between India and Africa, bridging the gap between the two worlds

Under the "Scholars on Africa" initiative, Scholars of the Department of African Studies are encouraged to contribute write-ups on various African issues, not exceeding 1000 words in length. It is noteworthy that these write-ups will be forwarded by any faculty members of the Department. These writeups serve as a platform for scholars to express their personal views and insights on a diverse range of topics, including History, Politics, economics, culture, and social issues prevalent in

#### **Advancing Water Resources in Africa:**

#### The Impact of IAEA Initiatives

On International World Water Day, Fri, **22 March, 2024**, the focus was on 'Water for Peace', highlighting how important water is for global peace and sustainability. Water cooperation means everyone peacefully managing and using freshwater, even across borders. The International Atomic Energy Agency (IAEA) is leading efforts to make water cooperation better through its Global Water Analysis Laboratory (GloWAL) Network.

In Africa, water resources face mounting pressure due to increasing water demand, deterioration in water quality, and the impacts of climate change. Notably, over 41 groundwater aquifers are shared among multiple countries on the continent, emphasizing the advantages of a collaborative approach towards their preservation and management.

IAEA plays a pivotal role in enhancing water resource management in Africa. Introduced during the UN 2023 Water Conference, GloWAL represents a significant advancement in water analysis, empowering nations to produce chemical and isotopic water data independently. This initiative fosters collaboration, knowledge-sharing, and capacity building among laboratories globally, addressing technical disparities across countries of different income levels. GloWAL aims to facilitate independent data generation in low- and middle-income countries, bridging technical gaps, attracting financial support, and fostering scientific innovation in water analysis. The (GloWAL) Network empowers African countries to independently generate water data, facilitating informed decision-making and effective resource management. This initiative ensures timely access to accurate information regarding water. For example, researchers in the Sahel region have made significant progress in identifying high-quality groundwater sources, owing to the application of a nuclear technique and a decade-long collaboration with the IAEA. Similarly, in Kenya, the IAEA is conducting projects employing nuclear and isotopic methodologies to educate farmers on maximizing the efficiency of their limited water resources, applicable to both rainfed and irrigated agricultural practices. One such initiative focuses on promoting "drip irrigation," a financially viable technique proven to decrease water consumption by up to 50% compared to alternative irrigation methods. In another recent development, the IAEA has supplied the Applied Hydrology and Environmental Geology Laboratory at the University of Lomé, Togo, with a laser isotope analyzer designed for the measurement of stable isotopes of oxygen and hydrogen in water samples. This laboratory, supervised by Togolese scientist Goumpoukini Boguido, will benefit from enhanced analytical capabilities for water research and environmental studies.

Besides these the IAEA also focuses on capacity building, equipping local laboratories and researchers with advanced water analysis techniques. By enhancing scientific collaboration and knowledge-sharing, the agency stimulates innovation in water management, contributing to research advancements in water quality assessment, pollution control, and ecosystem monitoring.

Aligned with Sustainable Development Goal 6 on clean water and sanitation, the IAEA's efforts promote sustainable development in Africa. Additionally, the IAEA aids African nations in building resilience to climate change impacts. By strengthening monitoring and assessment capabilities, countries can better adapt to changing hydrological conditions, mitigating associated risks. In fact, the IAEA's activities related to water resources in Africa play a crucial role in advancing scientific research, enhancing institutional capacity, and fostering sustainable development in the region.

\*Views are personal



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