



EFFECTIVE CLIMATE ACTION THROUGH WATER: A CASE STUDY FROM EGYPT

The main driver to water demand is Egypt's population that has grown from 4 million in 1805 to 104 million in 2022. More than 95% of the population is clustered within 20km along the banks of Nile Valley and delta, on 3% of the land. 40% of the population is urban.

The Nile River provides 97% of Egypt's fresh water, supplying 55.5 billion cubic meters (BCM) annually. Minor contributions include groundwater (2.1 BCM), sporadic and low rainfall (1.3 BCM), and desalination (0.35 BCM). Current water needs are almost double- projected at 114 BCM. The reuse of agricultural drainage and treated wastewater adds 21 BCM to bridge the shortfall.

Egypt is extremely vulnerable to the effects of climate change due to its large population and densely populated areas, particularly along the Nile Delta, which is threatened by sea-level rise, droughts, and flash floods. Key vulnerable sectors include agriculture, coastal zones, water resources, settlements, and human health.

Egypt Water Tracker report summarizes the major threats and challenges facing Egypt through the



THE WATER TRACKER CAPTURES THE MAIN COMPONENTS OF EGYPT'S CLIMATE MITIGATION AND ADAPTATION EFFORTS, REVEALING HOW DEEPLY ADAPTATION OF DIFFERENT SOCIAL, ECONOMIC, AND ENVIRONMENTAL SECTORS DEPENDS ON INNOVATED WATER RESOURCES MANAGEMENT.

water sector. It captures the main components of Egypt's climate adaptation and mitigation efforts including the latest nationally Determined Contribution, impacts of temperature increase and rainfall variability, as well as technology innovations to enhance water security to meet the triple challenges of population, economic growth and climate change. Applying the Water Tracker to Egypt's water and climate sector reveals how deeply adaptation of different social, economic and

The Water Tracker highlighted:



The existing climate planning framework in Egypt



Institutional mechanisms which support the development and implementation of climate plans and policies

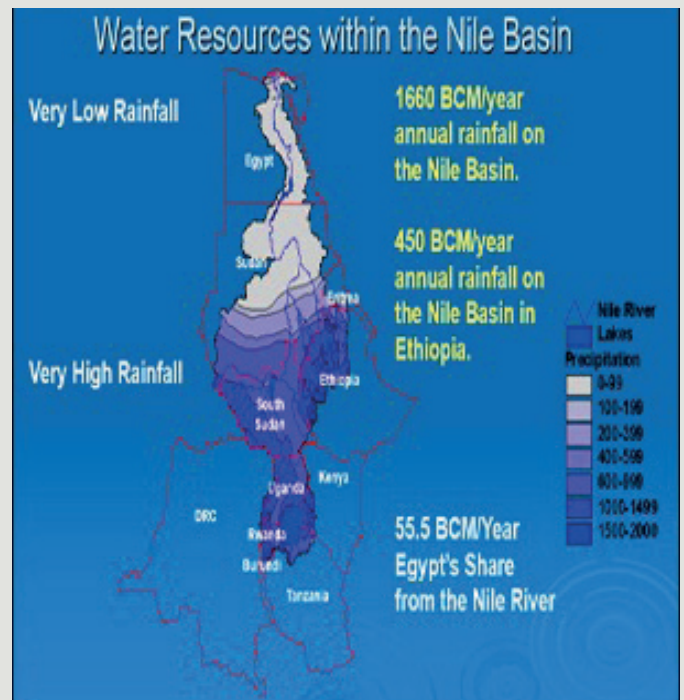


Opportunities for capacity building and multi-sector engagement to advance climate adaptation action

environmental sectors to climate change depend on innovative water resources management, and careful stewardship of the quality and quantity of limited water.

The Water Tracker identified key areas where Egypt is demonstrating leadership and innovation in climate planning. Water-related climate impacts are well understood and documented in climate instruments, including the National Climate Change Strategy (NCCS) and the National Water Resources Plan (NWRP). The National Council for Climate change (NCCC) serves as the institutional mechanism for coordinating implementation of climate policies and plans, which includes members from across relevant ministries. Water resource management and adaptative planning for the Nile River are well advanced, and promote locally-led solutions for climate adaptation.

The application of the Water Tracker also revealed several opportunities to enhance national climate planning frameworks and coordinate national and sub-national actions for water resilience. The institutional structure for climate planning could be enhanced by engaging climate focal points in all ministries to ensure a more comprehensive inventory of data collection and tracking of climate resilience actions. A well-coordinated multi-sector capacity-building approach that engages various stakeholders, including the most at-risk to the effects of climate change, is necessary to ensure a shared understanding of water resilience and to lay the groundwork for effective implementation of climate plans and policies. Capacity building for decision-making under conditions of uncertainty is crucial, as there are acknowledged gaps in existing



data. Additional clarity is recommended to ensure linkages between the NCCS and financing streams, and to track financial allocations and expenditures on climate action.

The report provides useful learning material and insights relevant for other water-scarce countries particularly in Africa and the Middle East. The next steps in the Water Tracker will be to develop an action plan to prioritize activities moving forward in response to the Water Tracker findings. This will reflect the opportunities identified by the Water Tracker as key areas for enhancing climate planning instruments to support increased water resilience in Egypt.

For more information contact Kelsey Harpham: kharpam@alliance4water.org

WWW.WATERTRACKER.CC