

WASTEWATER SURVEILLANCE FOR AFRICA INITIATIVE



KEY INFORMATION

Region: 54 countries in Africa

Timeline: Jul. 2024 to Dec. 2026

Budget: 4,000,000 USD

Financial Partner: European Health
Emergency Preparedness and
Response Authority (HERA)

Execution: United Nations
Environment Programme (UNEP)

The Wastewater Surveillance for Africa (WWS) Initiative aims to support governments and relevant stakeholders in scaling up wastewater surveillance systems across Africa to enhance public and ecosystem health, and pandemic preparedness. Building on the success of similar programs around the globe during the COVID-19 pandemic, this initiative will focus on capacity building, harmonizing methodologies, and fostering knowledge exchange within the African context, in the spirit of leaving no one behind.

The initiative is implemented by UNEP under the One Health approach, and in collaboration with key stakeholders such as the Global Consortium for Wastewater and Environmental Surveillance for Public Health (GLOWACON), the World Health Organization (WHO), Africa Centres for Disease Control and Prevention (Africa CDC) and the Global Wastewater Initiative (GWWI).



Wastewater from our houses and toilets, often referred to as a mirror of community health, contains traces of pathogens, chemicals, and pollutants, making it a valuable resource for monitoring disease prevalence, pollution levels, and risks to ecosystem health.

During the COVID-19 pandemic, wastewater surveillance emerged as a critical method for early detection and monitoring of viral outbreaks, providing a fast, cost-effective, anonymous and non-invasive alternative to traditional clinical testing.

*Wastewater surveillance
requires relatively low
resources, making it an ideal
choice for low-income regions.*

Data from wastewater surveillance aids in tackling public health issues and risks to the environment. It offers insights into land-based sources of pollution, informs ecosystem preservation efforts, and contributes to the development of policies to protect the freshwater and marine biosphere.

KEY OBJECTIVES

Strengthen technical capacities in 54 African countries: Train 500 stakeholders on wastewater surveillance in low-resource settings and in strategic locations.

Develop strategies: Support countries to develop wastewater and environmental surveillance frameworks for pandemic preparedness and environmental protection.

Enhance collaboration: Promote knowledge exchange and foster regional cooperation on wastewater surveillance.

STAKEHOLDERS

This Initiative will engage with government officials working on wastewater management, as well as environmental protection and public health specialists from key ministries of African countries. International and regional organisations, airport and port authorities, academia, research institutes and NGOs will also be involved.



KEY ACTIONS

Capacity building: A capacity needs assessment will be developed to identify Africa's needs for wastewater surveillance systems.

Five sub-regional workshops will strengthen the assessment and inform a targeted training program to equip stakeholders with the necessary skills.

A comprehensive roadmap will be developed, outlining strategies and actionable steps to that effect.

Wastewater surveillance detects health threats 4 to 10 days earlier than clinical testing in a population.

Outreach and communication: An outreach strategy will guide the work of the Initiative and will be complemented by the dissemination of materials such as infographics, factsheets, and web stories to enhance visibility of the Initiative and stakeholder engagement in the activities.

A knowledge-sharing tool will consolidate key resources and training materials gathered and developed throughout the lifespan of the Initiative.

Surveillance in strategic hubs: Airports and ports are key hubs for wastewater surveillance, providing early warning of diseases. Capacity building on wastewater surveillance will be conducted at selected airports and ports across Africa. A compendium of lessons learned will be developed, providing guidance for surveillance initiatives at such transportation hubs.

More info:
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