WHAT MONITORING PROGRESS LOOKS LIKE

GHANA – WASTEWATER TREATMENT (SDG TARGET 6.3)

**Progress indicator:** Reporting of data on SDG indicator 6.3.1
Proportion of wastewater flow treated

**Level of impact:** Capital area, Greater Accra (5.5 million people)

**Result:** In 2022, Ghana had sufficient information and capacity to – for the first time – calculate the volumes of wastewater generated and treated, so it is now known that 40% of the country’s wastewater flows undergoes treatment.

SITUATION

Due to rapid industrialization, the volume of industrial wastewater released into streams and rivers in Ghana continues to increase. As the first step towards achieving Sustainable Development Goal (SDG) target 6.3, there is a need to assess the quality and quantity of industrial effluents before allowing them to be discharged into the environment.

Forming part of Ghana’s Ministry of Environment, Science, Technology and Innovation, the Environmental Protection Agency (EPA) oversees the implementation of the National Environmental Policy and is mandated to monitor environmental pollutants and their impact on recipient water bodies. As part of this mandate, EPA monitors and reports on pollutant concentrations in industrial wastewater for all industries in the Greater Accra Region on a quarterly basis.

Industrial wastewater discharge is collected and analysed based on sector-specific parameters as prescribed in the Ghana Standard for Environmental Protection. For a company to renew an environmental permit allowing it to discharge treated wastewater into a recipient, it must submit monthly or quarterly reports to EPA, which include data on compliance with wastewater-related standards. EPA has the authority to renew (or not renew) these permits for industrial facilities in order to improve water quality and protect the environment. Industry-submitted data on water quality, as well as unannounced field visits for wastewater sampling and quality analysis, conducted at EPA or sometimes at independent laboratories, are used to ensure that industrial wastewater meets the requirements for wastewater discharge, as set out in Ghana’s standards.

PROGRESS MADE

Before 2022, EPA collected data on pollutant concentrations in industrial effluents in the Greater Accra Region. It also controlled river water quality, allowing it to respond to problems reported by local communities in relation to pollution and the quality of ambient and
drinking water. However, information about the volumes of water used and treated, as well as the pollutant loads discharged to the environment, was missing.

In 2021–2022, with support from the United Nations Human Settlements Programme (UN-Habitat), EPA conducted research to estimate the national wastewater flows generated and treated by industrial and domestic activities. Wastewater data from 143 industrial wastewater discharge sources and 7 municipal wastewater discharge sources were analysed and reported, resulting in new statistics on the volumes of water used, the wastewater discharged, and the pollutant loads eliminated and discharged by activity type.

Wastewater received at least some treatment at 40 per cent of these 150 industrial and municipal facilities that reported on both the generation and treatment of total wastewater flows. Industrial sources account for most of the wastewater generated and the pollutant loads discharged (expressed as biochemical oxygen demand and chemical oxygen demand).

Although data availability remains a challenge at the national level, the work done in Ghana demonstrates that industrial (and domestic) facilities can be reliable data sources, which are needed for implementing pollution control programmes such as setting wastewater standards for industrial effluents. As such, the work can prompt regional and global progress on the monitoring and safe management of wastewater, advocating for the need to design and implement national monitoring programmes addressing wastewater data management deficiencies, in particular with regard to industrial sources.

**KEY SUCCESS FACTORS**

- Country-led process with UN support
- Understanding of the importance of wastewater data for effectively managing water quality and improving environmental health
- Regulatory framework that allows authorities to collect data from industrial companies (and withdraw discharge permits in the event of non-compliance)

**LEARN MORE**

- Podcast with EPA about their work on SDG 6.3.1 monitoring
- Overall progress on SDG 6 in Ghana

Version February 2023