Country Story: Sierra Leone and Capacity Development

Background

Sierra Leone reported for SDG indicator 6.3.2 for the first time in 2020.

In 2017, during the baseline data drive for this indicator, the national focal point **highlighted data gaps**, and identified the need to **build capacity** in the country to ensure water quality data could be collected reliably.

As a first step, the national focal point, Mr Mohamed Sahr E Juanah, Director of Hydrological Services of National Water Resources Management Agency (NWMRA) undertook a **Postgraduate Diploma in Freshwater Quality Monitoring and Assessment** with the UNEP GEMS/Water Capacity Development Centre, University College Cork, and went on to complete his Master's thesis.

Using the **knowledge** gained he:

- designed a monitoring programme;
- secured suitable field equipment;
- implemented the programme and collected data; and
- analysed the data and classified the water quality of the Rokel River basin for the first time.

Rokel River at Rogbere bridge, Sierra Leone

Outcomes

The new monitoring programme included the establishment of:

- defined monitoring stations and monitoring regime;
- prescribed analytical procedures;
- quality control and quality assurance protocols; and
- standard operating procedures.

The first data set collected for Sierra Leone using these criteria, will be used as a baseline for future monitoring campaigns.

Staff of the NWMRA were trained in water quality monitoring and assessment.

It was identified that the Rokel basin has naturally very high phosphate and very low electrical conductivity values.

An SDG Indicator score of **41.7** was reported. Of the 12 water bodies classified, seven failed to meet the 80% compliance criteria and measures to tackle the causes of pollution are needed.

Future

Expand monitoring to neighbouring basins and eventually to national level.

Develop laboratory-based analytical capacity.

Ensure additional staff are **trained** through continuous professional development courses.

Develop a **data management** framework that allows the data to be stored, analysed, and shared more easily.

Further refine the **target values** used to classify water quality, to improve the sensitivity of the assessment.

Implement **management actions** to identify and **mitigate against pollution** and **improve water quality** over time.