Country story: Mexico and the implementation of the 6.3.2 methodology using GEMStat data

Background

Comisión Nacional Del Agua, the Mexican national water agency (CONAGUA) operates a well-established and extensive water quality monitoring network designed to understand the physico-chemical and microbiological characteristics of the country's main lentic, lotic, coastal and underground water bodies.

CONAGUA submits data to <u>GEMStat</u>, GEMS/Water's global water quality data base. GEMStat brings together voluntary contributions from countries and organisations from their own monitoring networks.

In 2020, CONAGUA requested that data submitted to GEMStat be used to calculate the SDG indicator 6.3.2 score

Method

GEMStat data were extracted from the database and verified by CONAGUA staff.

A summary of data used:

- Over 120,000 monitoring records for five core parameters (collected between 2017 and 2019)
- Over 2300 monitoring stations (both rivers and lakes)
- Over 1000 water bodies were defined (based on CONAGUA water body definitions)
- 13 administrative hydrologic regions defined by CONAGUA
- Target values used in the calculation:

	Nitrate- N (mg.l)	Total P (mg.l)	Electrical conductivity (μS/cm)	рН	Dissolved oxygen saturation (%)
Rivers	<1	<0.5	<1000	6.5 - 8.5	>60
Lakes	<1	<0.33	<800	6.8 - 8.5	>60



Outcomes

UNEP calculated the indicator and returned the calculations to CONAGUA for validation.

A summary of the results of the SDG indicator calculation are shown below.

Metric	Rivers	Lakes
Number of assessed water bodies	763	271
Number of monitoring stations used	1576	796
Number of monitoring values	97,740	22,206
Proportion of water bodies classified as "good"	51.8 %	56.1 %

The water quality of Mexico was classified as "good" in over half or the water bodies assessed.

Combining the scores for both rivers and lakes produced a national indicator score of **52.9** %. This represents the percentage of monitored water bodies, at national level, with good quality.



Future

Going forward, and in readiness for the next data drive CONAGUA and UNEP will:

- retrospectively calculate the indicator score for the 2017 reporting period; and,
- look to identify the parameters in water bodies that failed to meet the "good" classification.

This is one of the first examples that used data contained in GEMStat to calculate a national SDG indicator 6.3.2 score. The case study serves as a good example of how robust, representative information meaningful for a country can be obtained.

