

Enhancing capabilities to monitor the marine coastal environment in ARASIA States Parties

The challenge...

Marine resources are highly important to the States Parties of ARASIA (Co-operative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology). Detecting and identifying the origin of pollutants, organic or radioactive substances and toxins dispersed as a result of natural or engineered processes, and understanding the consequences of their unplanned redistribution within the marine coastal environment, is essential. The development of monitoring capabilities and cooperation among the ARASIA States Parties are critical to detecting such pollution and to ascertain its movements along the Mediterranean, the Red Sea and the Gulf coasts. This will, in turn, help alleviate and reverse marine coastal contamination.

The project...

Two IAEA technical cooperation projects have helped ARASIA States Parties to coordinate efforts to protect and rehabilitate the marine environment and to harmonize sampling and analytical methodologies on a regional scale. The projects also assisted with skills maintenance through training, and equipment was provided to enhance and upgrade laboratories to assess marine pollution in the region.



Collection of marine algae in Aden, Yemen.



Sediment sampling in Aqaba Gulf, Jordan.

The impact...

These projects have improved and strengthened both human resources and technical capabilities through training and regional interaction within the participating States Parties, and a number of national monitoring programmes have been established, which feed validated data on coastal pollution into the regional database and then into the IAEA's global web based database.

Harmonized procedures for sampling and analysis of radioactive and non-radioactive pollutants have been developed and a marine database has been established. The data gathered are comparable with a wider network of marine laboratories, allowing a more comprehensive assessment of baselines, sources and potential contamination events.

The activities and outcomes of these projects are contributing to long term ecological and economic sustainability, environmental risk assessment and the remediation of polluted environments.