Goal 14 - Life Below Water

Conserve and sustainably use the oceans, seas and marine resources

Our oceans — their temperature, circulation, chemistry, and ecosystems — play a fundamental role in making Earth habitable. Our rainwater, drinking water, weather, climate, coastlines, much of our food, and even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea. Throughout history, oceans and seas have been vital conduits for trade and transportation. Careful management of this essential global resource is a key feature of a sustainable future.

From pollution to coastal habitat destruction, mapping human activity on land can help us understand our impact on oceans. Incorporating coastal communities, especially marginalized or underrepresented groups such as fishing villages, can help ensure that livelihoods and cultures are sustained through the protection of marine environments.

What has been done?

YouthMappers and COASTMAP-URABÁ: Last year, mapping groups in Universidad de Antioquia (Medellín, Colombia) recently joined efforts with an aim to provide an open-source map of the coastal zone of Turbo municipality. The main goal was to put on the map the fishing communities scattered along the coastline. An area of particular interest is El Uno Bay, a peri-urban fishing village severely affected by La Niña 2010-2011. In addition, the group aimed to map mangroves and freshwater wetlands within the area because they are important ecosystems for subsistence of coastal livelihoods. The ultimate objective of COASTMAP-URABÁ is to highlight that coastal wetlands are fundamental elements for the resilience of both fishing livelihoods and the entire coastal zone.

What else can be mapped?

- Import Marine Protected Areas into OpenStreetMap to understand coverage portion of territorial waters to protected areas and identify gaps
- Map mangroves and other important coastal habitats to monitor changes in land cover
- Map fish markets to monitor distribution of fish sellers to ensure legal practices as well as promote small local fishermen
- Map water and drainage to inform water flows into open oceans as well as pollution input