

➤ CASE STUDY:

Improving the delivery of hydromet services in Costa Rica and Panama

Capacity and Needs Assessments

These assessments were launched during the WMO HydroHub Phase I, in September 2020, with financial support from the Inter-American Development Bank (IDB) and are being implemented in collaboration with the Associated Programme on Flood Management (APFM), the Integrated Drought Management Programme (IDMP) and the Global Water Partnership (GWP).

Challenge

With approximately one-third of the total available fresh water in the world, Latin America and the Caribbean could be considered a relatively water-rich region. However, much of the land area is considered arid or semi-arid and the greatest concentrations of water resources are geographically far from the most populated areas.

For this reason, it is extremely important that the region embarks on a journey towards efficient and sustainable water resource management based on science- and technology-driven decisions.

Water resources management is a complex process that requires the integration of a series of technical and institutional processes that must be developed in a continuous and coordinated manner. These processes depend primarily on the quality of the data, on how the data will be used to produce the information needed to make decisions, and on whether the institutional and legal capacity exists to make such decisions.

To address this challenge, it is necessary to carry out an integral evaluation of the systems on which the monitoring, capture and processing of hydrometeorological information depend and how this information is used in the decision-making and planning processes.

Objectives

The integral evaluation has two main objectives:

1

To carry out detailed assessments at the country level – collecting information and identifying gaps – with the aim of contributing to and shaping the formulation of a roadmap for the establishment of high-level hydrometeorological services

2

To use the roadmap as a basis for the preparation of loan operations aimed at improving the capacity of existing agencies or, if necessary, for the creation or adaptation of laws and/or institutions required for the adequate and sustainable management of water resources.

The Methodology

The methodology has five steps:

- 1** Engagement and Institutional Assessment – to understand the legal and institutional framework of hydromet services in the country and to identify the national counterparts with a role to play in the management of such services.
- 2** Co-tailoring of Baseline and Service Delivery Matrixes for operational and technical assessments – to co-tailor assessment matrixes for defining the baseline and addressing the provision of services.
- 3** Operational and Technical Assessment – to carry out an in-depth operational assessments for the agencies that deal with hydrological prediction and water resources management in each country, ensuring that all parts of the hydrological value chain are addressed.
- 4** Verification, Value and Cost Analysis – to verify the information gathered in the previous stage to ensure it is complete, organized, consolidated and useful for the documentation of the roadmap.
- 5** Drafting the roadmap – to develop a roadmap with short-, medium- and long-term goals for improving hydromet services in the countries and present it to the participating countries for final endorsement.

Way Forward

- Implementation of the Roadmaps
- Twinning of National Meteorological and Hydrological Services (NMHSs) to carry out similar assessments
- Replication of the assessment in other countries in the Latin American region.

Partners



We are hopeful that the assessments will provide an important snapshot of our services and ensure the development of a solid strategy for enhancing the hydrometeorological value chain in Costa Rica. The roadmap will be instrumental in informing the National Meteorological for the development of its Strategic Plan and in informing the National Hydrological Service reorganization of processes and service provision.



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Panama is currently undergoing a process for the creation of a stand-alone National Institute for Hydrometeorology. The assessment that is being carried out could not be more timely, as it will support the transition efforts and help understand how the different elements of the Institute have to be integrated in order to strengthen and develop hydrometeorological services that successfully meet the needs of the Panama people.



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