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Title: The CIMH CARIWIN experience: Enhancing Integrated Water Resources Management (IWRM) in the Caribbean through capacity building, enhanced data management and analysis, and the development of hydro-meteorological products.

Water resources management in the Caribbean faces many challenges which are expected to increase in the future as a consequence of (i) climate change and variability, (ii) population growth, (iii) land use conflicts, (iv) increasing urbanization, (v) the need to preserve valuable eco-services, (vi) increasing food production and (vii) expansion of the service and industrial sectors. Given these challenges, the Caribbean Water Initiative (CARIWIN), a collaboration between the Brace Centre of Water Resources Management at McGill University, the Caribbean Institute for Meteorology and Hydrology (CIMH) and three Caribbean States, promoted the concept of Integrated Water Resources Management (IWRM) as an effective tool for managing water resources in the Caribbean.

Capacity building in the water resources sector in the Caribbean is critical for addressing many of the problems facing the sector. Given CIMH's role as the primary training institutions in weather, climate and hydrology/water resources management, the project enhanced CIMH's capacities to address some of the needs of the water sector in the Caribbean through the provision of specialized field and laboratory equipment, books and periodicals, hydrological modelling software and support for training of the trainers. Through this investment, CIMH has (i) strengthened its role as a centre of excellence in training and information provision in IWRM, (ii) expanded the range of products and services it provides to CMO Member States [e.g., the services provided by Caribbean Drought and Precipitation Monitoring Network (CDPMN) which was implemented in tandem with the project] and (iii) enhanced its ability to support and influence policy development in the water sector in countries participating in the project (Jamaica, Guyana and Grenada). Although the CARIWIN project focused primarily on the three participating states, all CMO Member States as well as the greater Caribbean region benefited significantly from the project. This was particularly the case with the operationalisation of the CDPMN in 2009 in response to extreme drought conditions across the region. The CDPMN proved to be the most important tool in the region for monitoring and forecasting the progression and intensity of drought conditions across the Caribbean, with the outputs often influencing water resources management actions and policies in many states in the region.

States participating in the project received significant benefits. All states benefited from training and awareness building workshops sponsored by the project. In several instances, the outputs of these projects have translated to changes in practices and policies at the national level. In particular, the implementation of the National Water Information System (NWIS) in Grenada has been transformational and has lead to

changes in water resources management policy and data sharing among national stakeholders. In other participating states, resources provided were utilized in coordination with CIMH to enhance hydrological monitoring in at-risk communities. Experience gained from such monitoring will be mainstreamed to other communities facing similar risks.

This paper will delve into greater detail on the benefits of the project to CIMH and the participating states, and the Caribbean as a whole.