

Weaker Without Hydrography

Iâ€™ve come to realise that explicit consciousness of hydrographyâ€™s importance to the 21st centuryâ€™s world socioeconomic and environmental wellbeing resides with those involved professionally and academically with the discipline. This realisation is stark when, in discussions with the average person, the benefits of modern society are enjoyed without any awareness of hydrographyâ€™s contribution, through safe navigation and support for ocean exploration and enjoyment, to the fulfilment of many of their needs. This is probably nothing new to many of you reading this article.

In developing and underdeveloped countries and regions, this lack of realisation can translate into under-funded hydrographic services, training and education. This is certainly the case in regions such as Africa and the Caribbean. In Western Africa, the International Federation of Surveyors' Commission 4 has taken steps, through its working group 4.5, Hydrography in Africa, to increase consciousness among government officials and decision makers so as to motivate increases of funding for hydrography and hydrography-related matters. The working group has engaged key stakeholders and decision makers in Nigeria and Ghana through a series of strategic meetings and workshops.

This lack of funding linked to the lack of realisation described above can hamper even the development of appropriate mitigation and adaptation strategies for climate change threats such as storm surges and Sea Level Rise (SLR), which are receiving much contemporary research attention. I'm part of a multi-million (Canadian) dollar socioeconomic vulnerability project, contributing GIS-based spatial SLR models to assessments of selected Caribbean coastal communities' vulnerabilities. For example, Bequia is a popular tourist destination with obvious links to the economic wellbeing of the island nation of St. Vincent and the Grenadines. Another project area, Grande Riviere (Trinidad and Tobago), hosts the densest nesting site of endangered leatherback turtles which directly impact the socioeconomic wellbeing of the community through tourism. Coastal topography at both sites makes them potentially vulnerable to SLR. Implemented socioeconomic impact assessments are enriched by the spatial impacts assessments. However, there is much difficulty in obtaining good quality long-term primary or secondary tidal data (used to input estimated mean sea levels into the models) for the project sites. The spatial impacts assessments are diminished by this lack of hydrographic data. Funding for obtaining additional hydrographic data is often contingent upon successful independent project proposals to international financial institutions or national governments. This can be a hard sell unless tied to other initiatives of more easily perceived national importance.

By implication, whether dealing with the adaptation and mitigation strategies that may be developed through the project, or in relation to the numerous 21st century benefits taken for granted, many hopes, plans and initiatives are weaker without hydrography. This consciousness ought to be continually impressed upon decision makers to ensure that hydrography-related activities receive adequate funding and recognition.

<https://www.hydro-international.com/content/article/weaker-without-hydrography>
