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SYMPOSIUM ON INTEGRATED APPLICATIONS (B5) Integrated Applications End-to-End Solutions (2)

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THE APPLICATION OF AN INTEGRATED NATIONAL ADAPTATION PLAN FOR CLIMATE-CHANGE INDUCED MIGRATION. FOCUS: BANGLADESH

Abstract

The United Nations Framework Convention on Climate Change (UNFCCC) has called on the least developed nations (LDCs) to submit medium- to long-term National Adaptation Plans (NAPs) as a response to the current effects of climate change and its impending future impact. The UNFCCC evaluates NAPs for the best method of delivering support to the country through finance, technology, and capacity building. These plans of action must address the vulnerabilities of a country, yet so far have failed to fully consider migration as a major consequence of, or adaptation to, climate change. This paper presents an interdisciplinary approach for the use of space-based assets to integrate migration into NAPs. We demonstrate the utility of our model through its application to Bangladesh, a densely populated nation that is predicted to be dramatically influenced by climate change. We show how the combined use of systems can be used to forecast climate trends and resource availability, thus enabling qualitative and quantitative assessments of the causes and effects of forced migration. The application of space-based assets in developing a framework for a migration plan serves countries and international organizations as a template for mitigation strategies to cope with the adverse effects of a changing climate.