

Understanding the Role of Drought Management Plan in Disaster Risk Reduction in the Indian Context

Anuva Chowdhury¹, Richa Sharma¹ and Surajit Ghosh²

¹*Department of Remote Sensing, Birla Institute of Technology Mesra, Ranchi, Jharkhand, India*

²*International Water Management Institute, Colombo, Sri Lanka*

E-mail: anuvachowdhury11@gmail.com

Abstract—Drought is a complex, multifaceted, and one of the most widespread natural disasters causing economic loss in billions of dollars. Among all natural disasters, drought is frequent in India causing significant impacts on agriculture, food security, and water resources leading to economic loss. The launch of the Disaster Management Act, of 2005, with the mandates of a country-specific National Disaster Management Plan, acted as a precursor to the Manual for Drought Management report in 2016. The manual hints at a system for drought management plan and programs that acted as a guiding light for the Government at Central, State, and local administrative levels, along with agencies engaged through the delineation of the roles and responsibilities. The plan has a multi-pronged facet wherein the inputs are diverse into gathering information related to drought (phases and typology) to policy and institutional framework for decision-making, risk assessment, and action-based strategies for comprehensive drought management.

The present study reviews the current status of the drought management framework in the context of drought mitigation strategies at various levels of the administrative pyramid. The study comprehends the opportunities to integrate Early Warning systems and EO-based observations at sub-district levels to incorporate into the drought management framework. Secondly, a fostered collaboration among stakeholders, and timely dissemination of drought-related information, needs to be streamlined. Thus, the study will help in providing a comprehensive outline of the existing drought mitigation strategies and scope for further consideration to align with the country's commitments to the Sendai Framework and UN Sustainable Development Goals (SDGs) for Disaster Risk Reduction.

Keywords: Drought Management Manual, Drought Mitigation, Sustainable Development Goals, Sendai Framework, Disaster Risk Reduction.