An Integrated Seasonal Flood Outlook for Agriculture Risk Management

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It has long been recognized that if society could have advance information on climate variability and climate risk, the adverse effects associated with it could be minimized. Prevalence of traditional forecast practices in various parts of the world reflects the demand for long-range ensembles forecasts to manage uncertainties associated with climate variability. Recent advancements in climate prediction promise huge benefits for society. But the challenges remains to interpret, translate, and communicate science-based risk information into user-friendly early warning information to understand uncertainty. This research aims to develop a seasonal flood forecast/outlook for agriculture risk management using APCC's state of art MME climate forecasts together with multiple weather ensemble (EPS) forecasts of the European Center for Medium Range Forecasts (ECMWF), integrating hydrological models, and combining these with GIS and local user needs. The integrated model output able to interpret, translate, and communicate science-based risk information into user-friendly long lead seasonal early warning information products to assist agriculture extension workers and farmers.