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Towards a community-led approach to improve the design of early warning systems and anticipatory action for flood risk preparedness

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As the world faces an uncertain future due to climate variability, environmental and climate change, and an increase in extreme hydrometeorological events, investing in early warning early action mechanisms can be an effective way to prepare and adapt to changes and extremes and reduce any impending impacts. Such an investment will require an understanding of the information needs of the users/user-groups, and in particular, the communities at risk, to ensure the design of tailored anticipatory actions, as well as an evaluation of how forecasts perform in detecting these extreme events and their impacts. This helps to ensure that flood-risk preparedness actions are better contextualised and not taken in vain. Community-led approaches for anticipatory action planning are based on the engagement with the communities at risk and can be an effective way of ensuring that: 1) the information needs of the specific user-groups are identified and integrated with the development of preparedness actions and plans; 2) data on loss and damages to lives and livelihoods can be used to demonstrate how reliable the forecasts are in informing early actions at the community level; and 3) gaps and challenges that hinder effective use of early warning information are identified across user-groups to help improve on the design and dissemination of early warning information. In this talk, we bring together information collected at the community and disaster management levels together with a recent evaluation of flood forecasts using impact (loss and damage) reports at a district level, to show how community-led approaches can help towards improving early warning mechanisms. By integrating global hydro-meteorological forecasts with information on crop calendars and impact reports collected from farmers and local communities, an enhanced impact-based flood early warning system focusing on crop impacts, as well as the natural hazard, is developed for a flood-prone district in Uganda (Katakwi).