



## **Communicating probabilistic flood forecasts in Nepal**

Mirianna Budimir (1), Sarah Brown (1), Alison Sneddon (1), Puja Shakya (2), Dilip Gautam (2), Sumit Dugar (2), Madhab Uprety (2), Michael Cranston (3), Paul Smith (4), and Amy Donovan (5)

(1) Practical Action, Rugby, United Kingdom (mirianna.budimir@practicalaction.org.uk), (2) Practical Action, Kathmandu, Nepal, (3) RAB Consultants, Lichfield, United Kingdom, (4) ECMWF, Reading, United Kingdom, (5) Kings College London, London, United Kingdom

In Nepal, Practical Action has been piloting a low data approach to flood forecasting with the Nepal Department of Hydrology and Meteorology (DHM). This forecasting method has been rolled out across major and minor river basins in Nepal, extending current lead time further by 5 hours. This enhanced lead time probabilistic flood forecasting information is available on the Nepal DHM website, and is being shared and accessed by technical and national/sub-national stakeholders (e.g. 50 key personnel: NGO flood specialists, DHM, and sub-national government officials). Probabilistic forecasts with longer lead times have the potential to improve preparation and action in advance of flood events. This research project uses existing information, workshop engagement with stakeholders, and key informant interviews to explore the following questions:

- Are people receiving, understanding, and acting on the existing information?
- What are the gaps and challenges in the EWS?
- What are the benefits of communicating probabilistic forecast?
- How can we best communicate probabilistic early warning to targeted stakeholders?
- How can we best ensure uptake (and action) based on this enhanced probabilistic early warning?
- What are the next steps for the EWS to improve decision making around forecasts?