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Insights into stakeholder perceptions of Impact -based Forecasting (IbF) and implications for operational implementation in hydrometerology

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Impact based Forecasting (IbF) represents a shift away from traditional hazard focussed hydrometeorological forecasts and warnings (e.g. wind gusts exceeding 80mph at a location and time), towards those that communicate the risk, as a function of probability of the hazard occurring and its consequence(s) or impact on society. To achieve this shift, there is recognition that the exposure and vulnerability of society to the hazard, need to be considered in addition to hazard forecasts. The methods by which these additional variables are integrated to provide IbF outputs varies, but there has been limited research to understand why this is the case and what implications this has for operational IbF services.

To understand the variation in perceptions around IbF and the possible consequences these perceptions may have for operational implementation, this work invited practitioners, forecasters and researchers, working within the NERC and FCDO Science for Humanitarian Emergencies and Resilience (SHEAR) Programme, to provide their perspectives on a range of IbF related topics. Semi structured interviews were conducted with individuals that were selected by the project team based on their experience and expertise regarding IbF. A total of 11 interviews were held with stakeholders from the UK, South Africa, Uganda, Kenya, India, and Nepal, with representation from international institutions and NGOs, research institutes and hydrometeorological agencies.

Our research aimed to answer the following questions: (1) Is there a shared understanding of what IbF is and means across individuals involved in its development? (2) Is there a shared perception of the challenges, barriers and opportunities associated with implementing IbF operationally? In this session, we illustrate areas of consensus and clarity, as well as areas of divergence, and knowledge gaps that could impede effective collaboration and implementation. We review the relevance of our findings for researchers and practitioners and explore how this might inform IbF activities in the future.