



Discussion facilitated by
Dr. Dilip K. Gautam during
upstream visit

CBEWS pivotal for making communities resilient

Department of Hydrology and Meteorology (DHM) provides regular monitoring services of weather and rivers in general and weather forecasts for public, mountaineering expedition, civil aviation, and for the mitigation of natural disasters in Nepal. Close collaboration with DHM and Practical Action to extend and scale up CBEWS in Nepal has proved to be effective as it has helped in reducing the risk and vulnerabilities of the flood prone communities.

Before collaborating to promote flood EWS, DHM had extended its monitoring network

of river water level and rainfall with modern and upgraded system to generate timely information on more scientific basis but it was not accessible to other district stakeholders and the local community, besides DHM.

“We are using telemetric system to scale up and extend the network along with the modernisation of the system. Most countries have satellite based telemetric system but since Nepal does not have a satellite, this system became costly, so the most feasible option for us was to use VHF wireless set to collect the data once a day or at hourly basis

during monsoon,” explains Dr. Dilip K. Gautam, Chief, Flood Forecasting Section, DHM. Now, we have upgraded the system with mobile phone based telemetry. He further adds, “though we had the data, we did not know when, how and whom to issue the warning. Although this was not a Herculean task, we were unable to do it. This is when CBEWS became very essential.”

Dr. Dilip stressed that DHM has limited capacity to work directly with the community to establish CBEWS, but collaborative work has made it easier. Cross learning and utilisation of each others expertise was the basis of collaborative action. For example, Practical Action’s expertise was best utilised in community mobilisation, awareness raising and institutional set up such as formation of DMC. Whereas, the installation of equipment and devices for observation, identification of flood danger level as well as communication of warning information was done jointly by community and DHM with facilitation from Practical Action for establishing CBEWS.

Moreover, activity such as the upstream visit for the flood affected community other district and local level stakeholders has been important in building the confidence of the community and trust worthiness

towards the system. The involvement of the community in identification of danger level and lead time during these visits has been crucial in making the community internalise the system as reliable and legitimate.

CBEWS is effective for identifying the risk faced by the community, through this knowledge they are encouraged to identify the danger level by themselves. This practice has furthermore developed a sense of ownership of the system to the community.

Like Practical Action, Dr. Dilip asserts that the community might not be able to manage CBEWS in the long run if the local government authorities, especially District Disaster Relief Committee under Ministry of Home Affairs from central government, DHM under Ministry of Environment, and Disaster Management Section under MoHA, and the community do not coordinate with each other and collaborate. Although the entire system is ultimately for the disaster risk reduction of the community, he further adds that community alone cannot sustain EWS, neither can government alone sustain it, but the mutual cooperation between these units is the ultimate reason for the sustainability and effective functioning of the system. Hence, strengthening the relationship, understanding and cooperation between these three units is vital.