

DIPECHO Brief

N E P A L

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NEPAL DIPECHO BRIEF – The “Nepal DIPECHO Brief” is a periodic newsletter of the seven organizations currently carrying out DIPECHO funded projects in Nepal. It aims to give regular updates on project’s progress, with periodic themed editions. While the work of the projects is supported by the European Commission, through its Humanitarian Aid department, the views expressed in the brief are those of the partner organizations alone.

“**Early Warnings: Saving Lives**” The first edition of “Nepal DIPECHO Brief” gave some basic

background on the seven DIPECHO projects active in Nepal. This second edition hopes to show some of the initiatives currently being carried out in the area of early warning, particularly where partners are collectively contributing to greater awareness, understanding and promotion of this key issue. Future additions of this brief will focus on other issues and themes central to the promotion of community based approaches to disaster risk reduction in Nepal, but as these briefs can only cover our work in the broadest brush strokes please feel free to contact partners directly for more information. Please read on.....

act:onaid COMPLEMENTING COMMUNITY INITIATIVES THROUGH CREATING EWS LINKAGES

ActionAid is working with 14 communities in five districts, helping people to reduce their vulnerabilities to flood, earthquake, landslide, fire and other forms of natural calamity. Within the project small scale early warning systems have been designed to inform people in advance where ever possible, with such advance warning, along with the life skill training and improved organizational capacity, expected to reduce disaster impacts among vulnerable communities.

In each of the communities, a public address system is being provided, connected to radio. DMCs (Disaster Management Committees) in each community will listen to the news and weather forecasts through local radio stations, getting regular information on impending concerns and calamities. These radio broadcasts, through the public address system, will be linked to listener’s clubs - dedicated teams from within the communities - who are responsible for both gathering and disseminating information. The portable public address systems will allow the DMC members to immediately move around their respective areas, announcing news on the environmental conditions and enabling communities to take advance measures, depending upon the likely severity of the impending disaster. In fire prone areas, small measures such as erecting wind-flags are expected to help communities to better identify the direction of the wind and hence take the necessary measures needed to prevent and stop the spread of fire.



Rai tole, Hetauda: The flag in the background is to show direction of wind... small steps to control fire...

ActionAid also has provision to support Disaster Information Centres at district level, in collaboration with the district administration offices, with these centres expected to receive, analyse and disseminate advance information on disaster situations, particularly during the periodic ‘disaster seasons’ such as the monsoon.

EUROPEAN COMMISSION



HUMANITARIAN AID





SAMADHAN-II

While putting effort into enhancing the capacities of vulnerable communities, through implementing Community Based Disaster Risk Management approaches (CBDRM) Care's SAMADHAN-II project is also emphasizing the importance of early warning.

The communities CARE Nepal works with in Doti and Kailali are particularly poor and marginalized and as such capacity building, be it through training, awareness raising, carrying out mitigation measures or enabling communities to establish early warning system (EWS) has been prioritised.

In the far west while Kailali suffers most from floods and inundation, Doti faces landslide and flash floods. In both project districts Disaster Risk Reduction Committees (DRRC) have been formed, trained in CBDRM with defined roles and responsibilities. A total of 328 DRRC members have already been trained and equipped with basic knowledge on preparedness, with importance being given to the issue of EWS. Under a Schools Education Programme 57 teachers have also been trained, with these now taking class room sessions on preparedness covering 4,740 students in 19 schools.

CSSD (Conscious Society for Social Development) & EDC (Equality Development Centre), CARE's implementing partners in Kailali & Doti have been instrumental in broadcasting Radio programmes on CBDRM, with the programmes covering important preparedness and awareness messages, seasonal disaster news, and views of community members on disaster preparedness.

While trying to improvise and systematise the coping mechanisms of communities the thrust of the programme has been to promote and use indigenous mechanism for EWS where ever possible. The Use of *Narasingha* (a local musical instrument) is a popular way to disseminate messages across communities, with the practice being that whenever there is an urgent message to be disseminated the designated person plays the *Narasingha* repeatedly,

either sitting in a community gathering place or sometimes walking throughout the community. This practice has existed in the communities for generations, with people attuned to the sound of *Narasingha* and its importance.

The *Narasingha man* is paid in either food or money and the communities plan to link this to a Community Emergency Fund, a monthly saving activity to meet any costs incurred due to disaster or to meet the unmet needs of the communities during a post disaster situations.

The *Narasingha man* is now a members of the DRRC, playing his age old role, but now conveying added information on disaster preparedness and Early Warning Systems.



Narasingha man playing the indigenous instrument, Narasingha



UNDP/DRRNLN – II: HOW A FEW SECONDS CAN SAVE YOUR LIFE BEFORE A DISASTER!

The fact that an effective Early Warning System, especially in areas that are prone to natural hazards, can save precious lives is irrefutable. With an efficient EWS in place, and vulnerable communities adequately sensitized about its operation and the measures they need to take before, say, an imminent flood, a huge difference can be made. The difference between saving or losing a life.

Having said this, UNDP/ Disaster Risk Reduction at the National Level in Nepal (DRRNLN) – II is not directly

involved in Early Warning Systems as such, but rather tries to highlight their importance, thus reducing risk through increasing general awareness. Accordingly, in all its mass media awareness generation campaigns, the project has made it a point, especially with regard to floods, to draw attention to the fact that people need to get early warning and improved information about forthcoming

disasters through all available media, be this radio, television or other sources and, accordingly, take adequate and appropriate measures such as moving to higher ground and/or other places of safety.

What it boils down to in the end is that what ever kind of disaster is faced, if an Early Warning System is to save lives, it should be efficient and fully known to vulnerable communities through adequate sensitization and capacity building in the areas of timely response and evacuation.

Those few precious seconds before a disaster can make all the difference !



Early warnings allow communities to identify and recognize the first signs of a risk event, identify actions that can mitigate the negative impacts of an event, avoid unpleasant surprises and reactive decision-making, help to plan appropriate programme strategies for different scenarios, and assist people in making the right decisions in reacting to an emergency situation.

Early warning systems are an important part of DRR, ensuring community safety and preparedness. But who are the most vulnerable groups at the community level? Sure, the answer will be pregnant women, children, senior elders and people with disabilities, but it is often seen that PwDs (People with Disabilities) are missed from the list. They are less visible, often have additional, complicated, individual needs and when considered are often regarded as merely passive beneficiaries or recipients. But EWS need to be inclusive if we want to achieve comprehensive coverage and awareness and be better prepared for emergencies. It is critical that PwDs themselves are asked their opinions and needs, and about the best ways for them to hear, see and understand early warnings.

The Handicap International, Nepal DIPECHO Project is developing recommendations on inclusive EWS for DIPECHO



partners and wider stakeholders, and other more general recommendations on inclusiveness for use in project implementation and community mobilization activities. The guiding principals behind these are that;

- People with disabilities should be encouraged to participate. People with disabilities should be consulted while preparing evacuation/early warning systems, to make sure that their specific needs are addressed.
- People with disabilities are Involved in early warning task forces.
- Early warning systems and plans must be developed which meet the diverse needs of different categories of people with disabilities within the community.

Hall marks of an inclusive Early Warning System ?

An auditory signal system/alarms; Posters written with large characters and color contrasts; visual signal systems to back up auditory ones – i.e. use of bright flags, large symbols, turning warning lights off-on frequently, big pictures, clear and brief announcements by identified workers and volunteers.



EARLY WARNING - AN INTEGRATED APPROACH

Mercy Corps's operational sites lie along the Mohana River where floods represent one of the greatest hazards to the population. The Mohana River and its 3 tributaries have a total catchments area of approximately 1400 km², and regularly flood the adjacent areas and erode river banks. These cause immense losses every two or three years, significantly affecting the livelihoods of households in the area and occasionally forcing entire villages to relocate to safer areas. Prior to the project intervention no systematized flood warning existed and people relied on their 'instincts', visible storms up stream, and smells and sounds related to their experiences of floods in earlier years.

Early warning systems (EWS) are one of the key tools the project is using to reduce the vulnerability of communities, equipping individuals and communities so that they can act in sufficient time and in an appropriate manner to avoid flood related risks. Mercy

Corps' approach is to build an effective, integrated system that includes a) knowledge of risks faced, b) technical monitoring and warning, c) building an information dissemination system, and d) increasing public awareness.

Knowledge of risk: Disaster Preparedness Committees (DPC), community stakeholders, teachers, partner staff, and VDC level stake holders have already attended disaster risk management trainings.

Technical monitoring and warning service/Method:

- a) To determine critical rainfall indicators, historic data from the Department of Hydrology and Metrology (DH&M) is being correlated with past years' flood records;
- b) Calculation of Lag time (Time to reach a certain point) of flood is being analysed to assure timely evacuation
- c) Real time monitoring of water levels will be used, using local recording stations (rainfall and staff gauge) upgraded by the project. Upstream recorders will measure rainfall and water levels every 3 hours. When the river surpasses its critical flood level the recorders will notify the local emergency committee.

Dissemination of warning: Flood warnings will be transmitted in the local language via local radio stations, telephone and/or security networks. Focal people in the communities will then sound sirens and drums to further alert people, with the estimated total reach of the early warning system being up to 130,000 inhabitants.

Public awareness and preparedness: ongoing awareness campaigns in schools, households and via radio programmes, combined with community disaster management plans and EWS test simulations will make people aware of the EWS and the proper responses advised when the system is sounded.

The project is being implemented in close coordination and with contribution from district and local level stakeholders and in coordination with DH&M to ensure effectiveness and sustainability. The project also aims to link the systems established with the DH&M forecasting division, mainly so information can be shared on issues such as the arrival date of the monsoon, duration of rain, flood estimates, etc. Most of the existing hydrological (4) and metrological (6) stations in the project area will be incorporated into the EWS, with some (4) new locations needing to be established for the monitoring of water levels. Ultimately Mercy Corps hopes to expand the system, through a local network, to cover the entire watershed.



READING THE SIGNS, ENSURING THE CRITICAL "LAST MILE" ...

How early does early warning come about ? Can it be calculated by the tick of the clock, the passing of days, or the waxing of the moon ?

In disaster risk reduction, early warning comes not as a prophecy but as something succinct based on the patterns of the weather, knowledge of the events of the past, and qualified by scientific data; all supported by relay mechanisms on the ground.

Early warning requires not only the 'gadgets' but also the organic system that is needed to ensure that messages get through and are understood. They also require the disaster preparedness plans that enable orderly evacuation to safety.

Through the Community Based Multi-Hazard Risk Reduction (CBMHRR) Programme, the Danish Red Cross (DRC) provides technical support to the Nepal Red Cross Society (NRCS) to capture and enhance best practices at the community level. The experience of DRC interventions in the eastern coast of Sri Lanka, where CDRTs (Community Disaster Response Teams) form the human link between high-tech gadgetry and community level early warning mechanisms, affirms the need for a localized and practical approach in early warning.

Although the CBMHRR Programme in Nepal does not have a direct focus on achieving early warning set-up, the Programme nevertheless ensures that mechanisms are in place in target communities. These include the organizing of DP (Disaster Preparedness) units to function as the critical "last mile" link in the early warning relay. This role requires constant monitoring of news, through transistor radios, and utilising existing indigenous warning systems - the Katuwal (Kutuwal is a local system of early warning

whereby villagers take turns in watching the flow and depth of the river during the monsoon and warn other by using a brass trumpet).

Through the VCA process and community disaster preparedness planning, communities examine the patterns of hazard events and identify hazard areas. This enables them to create a blue print of events and scenarios to prepare for, and ways of responding to hazard events. Structural mitigation projects form part of this, while Information, Education, Communication (IEC) materials and public awareness programmes in the communities provide basic knowledge of the characteristics of the hazards prevalent in their areas.

All these programme activities contribute towards enhancing indigenous knowledge and ensuring early warning messages are relayed and understood – reading the signs and ensuring the critical 'last mile'.



CLOSING THE CIRCLE: MAKING THE LINKS

While a lot of interest has been shown in the technologies Practical Action intends to use in their EWS the organisation has been keen to emphasise that these are secondary considerations which will actually have a minor influence on whether systems succeed or fail.

In fact Practical Action has discovered that in Banke and Bardia many of the components of the system exist already, the various elements merely needing to be joined up for the links to be established. In upstream locations DH&M (Department of Hydrology & Meteorology) stations already exist, logging river levels and reporting by HF radio to regional and national DH&M stations; at district level emergency services are committed to supporting EWS activities, with the resources necessary to mobilise large scale evacuations when required; at the community level individuals are crying out for information, with the ability and willingness to organise collectively for swift and coordinated response.

With this in mind Practical Action has been concentrating on bringing the various stakeholders together, in as many forums as possible. To this end coordinated upstream visits have been made, in both districts, by teams representing the police, army, Red Cross, district authorities, DH&M and, critically, the media. These have taken place so collective understanding can be created on what resources already exist, where gaps exist, who is in the best place to plug these and where bottlenecks, either in terms of physical impediments (i.e.

lack of equipment) or structural issues (such as bureaucratic impasses) impede progress. By involving the media in all of these activities, full transparency has been achieved, with the added benefit that major contributors to the project can not renege on commitments !

Having now overcome most of the bureaucratic and technical barriers the same approach is being used to link all the key individuals in the system, bringing together community representatives, DH&M gauge reading staff, emergency services staff and "emergency room" personnel at both district, gauge station and community level. By making these contacts personal it is hoped it will build a greater degree of human responsibility into the system, which Practical Action sees as critical.



Kadga Bahadur Rawat Chhetri, gauge reader at Bagasoti, interacting with local media staff

This information bulletin has been produced by DIPECHO project in Nepal with support from **European Commission under its Humanitarian Aid department**. The contents and information has been provided by Peter Crawford (**Practical Action**); Ulla Dons (**Mercy Corps**); Rene Jinon (**Danish Red Cross**); Sanjukta Sahany (**CARE Nepal**); Irina Ulmasova (**Handicap International**) and P. V. Krishnan (**ActionAid**). To know more about individual projects, contact respective project managers at peterc@practicalaction.org; ulla@mos.com.np (Mercy Corps); drcdm@mos.com.np (Red Cross); dppm@hi-nepal.org (Handicap International); sanjukta@carenepal.org, om.mulmi@undp.org and Krishnan.pv@actionaid.org