



18. Understand early warning systems and inform others

Rafiqul is a member of a local self-help group of persons with disabilities in Gaibandha, Bangladesh who is also involved in developing community based early warning systems and preparedness. ©CBM/Kaizer

Inclusive and accessible early warning systems are perhaps one of the most important factors in alerting people of an impending hazard and its severity. They are also critical in ensuring that all people know when and how to react in order to prevent a disaster situation, for example loss of lives and livelihoods.

You cannot possibly mainstream DIDRR in community development without carefully understanding these early warning systems, because they are the fulcrum around which safety and preparedness revolve³⁴.

Accessible early warning systems are pivotal in ensuring that everyone in a community is informed and kept safe. They are also a critical means of safeguarding development gains made through your community development work, so it is in your interest to get serious about this.

If you reside in an area that is prone to hazards, you are likely to be familiar with these. They can come in different modalities and colours and their task is simple: alert people that danger is approaching so they can take measures to protect themselves and their assets:

- Differently coloured flags
- Flood markers indicating rising water levels
- Community loudspeakers
- Warnings on radio and television
- Social media alerts
- Alerts via text message

Unfortunately, though:

- Messages are not always accessible, especially for persons with disabilities, such as those with visual disabilities or deaf people.
- People do not always know how to read early warning signs and what to do.
- Persons with disabilities and those who are most vulnerable (including those in more isolated and remote areas), more often than not, do not receive these messages or only receive them when it is too late.
- Even when communities know how to read these early warning signs, there isn't always a plan on how to react and how to include persons with disabilities as a priority.

³⁴ To learn more about the basics of early warning systems, see Trogrlić et al. (2022) [Early Warning Systems and Their Role in Disaster Risk Reduction](#). In: Golding, B. (eds) Towards the "Perfect" Weather Warning. Springer, Cham.

So, what can you do as part of your community development work?

While you may not always have direct influence on how these early warning systems work, as a community development practitioner with in-depth contextualised knowledge in close physical proximity to these families and communities, you can do multiple things. In the box below, we lay out a number of action points for you.

BE ACTIVE IN EARLY WARNING

Use participatory consultations to understand what families and communities need, the barriers they confront as well as the resources that can be capitalised on in relation to early warnings. This process cannot be done from a distance.

Learn about and become proficient in these early warning systems, what they mean, how they work and how to respond to each one, so that you can then explain them to others.

Be alert to and monitor weather forecasts and other information and know the implications as a regular activity in your working week.

Establish contact with government authorities and others imparting such information, and open a direct line of communication so that you are constantly up to date.

Whenever possible, inform and educate these stakeholders about the situation and needs of persons with disabilities, for example the barriers they face when confronting sightdependent warning systems.

Lobby for the design of more inclusive early warning systems using multiple formats and modalities, including messages that are both sight and sound dependent and that reach persons with disabilities as well as those who are close to them, notably families.

Push for early warning systems that are available in all indigenous languages and using culturally intelligible, contextualised and responsive modes of communication and representations.

Ensure that early warning systems are tied to an updated process of mapping.

Make sure that alerts, warnings and messages in the communication are clear, adapted, and unlikely to fail (e.g. that they are battery or solar powered).

Help inform the design of systems that allow sufficient time, accounting for delay between provision of message and evacuation, as well as the fact that some persons may be slower than others. In the absence of this, leverage communities to accelerate communication where it is most needed.

Establish contact with non-DRM-specific stakeholders, such as extension workers. While they may be entering isolated communities periodically to advise on agricultural practices, they may also impart other information related to hazards. You may play a critical role in educating about disability too.

Provide support for persons with disabilities and families to attend any training on early warning systems. Special attention needs to be given to those who live in more remote and isolated areas and who tend to be left out.



BE ACTIVE IN EARLY WARNING

Support a space for persons with disabilities and OPDs to coordinate the whole process of working with families and communities, as well as interfacing with government authorities and other stakeholders responsible for early warning systems.

Critically, as a community development practitioner you are an effective and critical interface between these formal messages and persons with disabilities, families and communities, especially those in more dispersed areas who are more likely to not be reached. So you can actively communicate information as part of your project activities.

Impart this information on hazards and also early warning systems and how these work in contextually and culturally relevant and intelligible ways, and how to prepare.

Do some background research on how communication reaches communities, what the preferred modes are, and their effectiveness in different places you work in. For example, in some rural communities there may be a high use of social media such as Facebook. But this excludes older people, for example those who do not own a smartphone and older adults. In other mountainous and more remote areas with scarce to no connectivity, information may be imparted via family, friends and acquaintances going to town and bringing back news. This includes for example local minibus drivers ferrying passengers in and out of very isolated places, that may become even more cut off during the rainy season when roads are inaccessible.

Help design contextually appropriate alerts for example through phone text messages that account for lack of connectivity. Combine different channels of communication, formal and also informal - for example one where a neighbour tracks official warnings, through radio or TV and personally alerts a family with a person with a disability.

Support or activate disability mapping that can kick into action following early warning signs of impending hazards that can inform evacuation.

Support with setting up community groups that can assist persons with disabilities and other vulnerable people during evacuation. These groups may already exist as part of other projects you are working on.

Teach about and use other (non-formal) early warning systems, such as changes in animal behaviour that can alert to an impending hazard³⁵.

³⁵ For more on issues and concerns in disability inclusive early warning systems, see Batchelor et al. (2021) [Towards Disability Transformative Early Warning Systems: Barriers, Challenges and Opportunities](#). Practical Action Consulting