INCLUSIVE WARNINGS

Involving everyone in warning processes

Key Points
- Listening: Everyone has something to contribute and to learn.
- Representation: Society's diversity should always be involved.
- Redundancy: Use multiple media, forms, and formats.

State of the Art

Inclusive warnings are designed to support people to fulfil their own needs for warnings. No group is homogenous, whether a specific gender or a general category such as people with disabilities. Preferences for and abilities with technology and interpreting information differ, so warnings should cover a variety of modes, messaging, exchanging, and formats. Using audio signals only, such as sirens, excludes people with limited hearing while using visual signals only, such as flashing lights, excludes people with limited vision. Evacuation routes requiring stairs inhibit people with mobility difficulties. Relying on a single technology, whether the internet or texting, could mean that people do not receive warning material when that technology fails. Tonga lost all internet access after a volcanic eruption in January 2022 cut the country's main link with the outside world. Non-technological approaches, including word-of-mouth and sitting in a circle to talk, can convince people how to act on hazard-related information far more readily than formal training.

Core Needs

The core need for inclusive warnings is involving everyone and tailoring warnings to all people's needs, not just the majority, by covering everyone's characteristics - while considering them in combination (called 'intersectionality'). Characteristics of individuals and groups include sex, gender, sexuality, age, race, ethnicity, caste, abilities (considering physical, mental, and cognitive), religion, belief systems, languages, communication forms, and precarity which could mean being detained, undocumented, homeless, or seeking or having been denied asylum.

Recommendations / Guidance

Inclusive warnings:
- Are long-term social processes working with people to help them lead themselves.
- Use multiple channels, modes, and formats for communicating and exchanging [1].
- Are relevant to everyone, covering a range of timeframes and spatial coverage.
- Connect all governance levels, including local, national, and international.
- Extend beyond warning dissemination to include damage prevention/mitigation advice and actions.
- Facilitate early action and anticipatory action, which will also contribute to reducing inequalities and inequities across society regardless of the hazard / threat.

To implement this requires:
- Focusing on the first mile rather than last mile – what do people and groups need to act on a warning?
- Developing successful policy and action through co-creation, co-production, and co-implementation.

Women's Weather Watch in Fiji [2]

Following flooding in North Fiji in 2004, it became clear that local women had been excluded from designing, planning, and implementing disaster relief and reduction efforts. In 2009, during the aftermath of Cyclone Mick, it was observed that women were once again excluded from the relief efforts. Supported by a range of partners, Fijian women led this initiative to monitor and warn about weather through exchanging with and interpreting messages from the Fiji Meteorological Service. As an interoperable communication platform, it centres on two-way communication between communities and the Women's Weather Watch hub. Leaders are trained on receiving, understanding, and communicating technical weather information using two-way community radio, bulk SMS systems, social media, and local radio and media (fewer than half of Fijians have access to the internet). They develop their communication and engagement skills to ensure useful translation of the technical information into messages in local languages to which people can respond. Collaboration with and feedback to and from the government help to avoid mistakes, particularly when using radio and social media to provide information.

In addition, the Women's Weather Watch provides updates to those generally overlooked – women living in hard-to-reach areas; women living with disabilities; and lesbian, bisexual, and transgender women and intersex persons. The programme has supported women to become leaders, improving the warning situation for everyone. Fijian women know how to manage crops when drought hits, and teach each other skills to survive and provide food for the families. This example highlights the value of supporting the people who can best help their community, and work within technological constraints. Focusing on the first mile has resulted in long-term improvements, the development of a highly effective network, and gender inclusion benefitting everyone.

Key issues to consider when developing inclusive warnings:

- The availability and use of data is often limited for understanding differential impacts and how to generate appropriate warnings.
- Representation of societal diversity needs to be present at and included in policy and planning.
- Warning systems need continuity and long-term dedication from everyone involved in creating and managing them [3].
- Dedicated funding for research and data is required, to keep informing how to prepare for and respond to disasters without assuming a one-size-fits-all approach.
- Deep understanding of what people trust and respond to comes from long-term work and observation, uncovering the reasons behind the way people act and react.

Girls globally should be encouraged to be leaders for inclusive warnings (photo Ilan Kelman)

References
[1] Glantz, M.H. 2007. How about a spare-time university? WMO Bulletin, 56, 2, 1-6.
[2] UNDRR. 2022. Inclusive and accessible multi-hazard early-warning systems: learning from women-led early-warning systems in the Pacific. UNDRR (United Nations Office for Disaster Risk Reduction), Geneva.
[3] McBride, M. Morgoch, and H. Smith. 2022. Considerations for creating equitable and inclusive communication campaigns associated with ShakeAlert, the earthquake early warning system for the West Coast of the USA. Disaster Prevention and Management, 31, 79-91.