Communicating changing risks

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Communicating about climate change is crucial for effective disaster risk management.

Climate change is increasing disaster risk, particularly for the most vulnerable people. Instead of starting new programmes to address these new risks by themselves, the challenge is to integrate them into our humanitarian work. The international community needs to understand and accept that traditional ways of thinking about disaster response no longer apply. Preparing for, reducing the risk of and responding to natural hazards is what many humanitarian actors already do, in collaboration with those most at risk. In the face of climate change, we just need to do more, and do it smarter, shifting from response to risk reduction, and making use of relevant climate information.

The solutions may lie in early-warning systems, storm-resistant housing or in alternative crops that can thrive in soils turned saline by the seepage of rising sea levels or coastal floods. Or in commonplace measures: educating children on how to behave in emergencies, evacuation plans, action teams, escape routes, disaster calendars or planting trees on hills and shorelines against landslides and surges.

Indeed, many such strategies for climate change adaptation are indistinguishable from conventional risk management. The important difference is not so much in the outputs but rather in the process; in a changing climate, we have to reassess risk patterns, and communicate and address those changing risks rather than prepare for the disasters we have witnessed in the past, or wait to respond to the steadily rising number of disasters.

Ground-breaking work by the Samoa Red Cross has shown that adapting to climate change in the Pacific is not just about building expensive sea walls. The process begins with internal communication, reassessing priorities, rethinking strategies and approaches.

When first starting to address this issue, Maka Sapolu, the Samoa Red Cross Society's climate change and disaster preparedness officer, led workshops with staff and volunteers on Samoa's two main islands. They discussed what climate change was, what it meant for their people and how the Red Cross could assist in addressing it. Then they sat down with community leaders and government to see how climate change could be integrated into disaster management. The process brought new contacts with the Departments of Meteorology, Environment and Health, the National Disaster Management Office, the Water Authority and NGOs. Common concerns were soon found, such as growing water shortages. Samoa holds some of the oldest weather records in the Pacific and they show a steady increase in temperature and a decrease in rainfall. Community talks confirmed that scarcity of water had become a major issue, and government departments have made it a key priority.

Winner of climate change poster contest in schools in Nicaragua, 2006, organised by the Nicaragua Red Cross Society.

One of the National Red Cross Society's most practical steps has been to assist with the interpretation of meteorological information and weather warnings. Nearly every village in Samoa has a different term for north, south, east and west, making it somewhat problematic to issue early warnings or direct people to shelters when an emergency approaches. The Samoa Red Cross now assists with the interpretation of meteorological information and weather warnings.

The Samoa Red Cross organised a drama, puppet shows and poster competitions at schools, incorporating climate change and disaster risk reduction. Poster competitions have also been carried out by other Red Cross Societies in the Pacific like the Solomon Islands and Tuvalu.

Recent advances in science and technology have led to a remarkable growth in the development of forecasts that can help reduce the negative impact of expected

conditions. With predictions ranging from seasonal forecasts of a heavy monsoon to shifts in rainfall patterns due to climate change, humanity faces two new challenges: not just preparing for the foreseeable climate but also modifying decision-making processes in order to incorporate the availability of new information.

Prediction is not enough

People must both understand and trust warnings, and they must have the capacity to respond in an adequate manner. In the year 2000, the Limpopo river basin in southern Africa experienced a very substantial rainfall for many days as a result of unusual cyclones. Experts knew that it would result in serious flooding – of a magnitude never experienced before by rural communities in Mozambique. Yet very few villages were informed about it.

Most communities had no electricity or radio, yet people had previously been able to successfully predict floods by observing ants. Ants build their homes underground; when groundwater rises, they leave their nests – and people know that the water is rising. On this occasion the flood came so rapidly there was no time for the groundwater to rise, or for ants to react before the river overflowed. When someone who had heard the experts' prediction drove to a certain village to tell them to evacuate, the local chief asked him, "Who are you and why should I do what you say? Since the times of my ancestors, floods have only occurred after ants leave their homes. Now the ants are not moving and you come and ask me to leave?"

As in most of the Limpopo valley, many people did not evacuate. About 700 people drowned. The global climate is changing, and traditional knowledge is increasingly unreliable because our past experience does not necessarily apply to present and future risks. In that light, the key is to learn how to communicate new knowledge about future conditions in ways that can be understood and trusted.

While most people in vulnerable communities have already noticed unusual extreme events taking place, they often explain such events through supernatural forces, such as divine punishment or intervention by angry ancestors. This kind of explanation leads to the belief that things will soon return to normal or to fatalism and inaction. As a Mozambican woman farmer said during a Red Cross workshop: "If God wants to punish me, I will be punished, no matter what I do."

However, that form of thinking can be changed by access to new information. After learning about the very basics of the climate change process and watching a short video on the impacts of more frequent flooding in Argentina and Bangladesh, the same farmer said: "I thought my community was the only one punished this hard, and that it wouldn't happen again. But now I see that women all over the world are suffering in similar ways; so maybe it is true that the rains are changing and will continue to change, and maybe I can do something about it."

Now the cyclone warning system set up by the Mozambican government uses a colour-coded system with flags to label approaching cyclones. The Mozambique Red Cross helped design and implement the system, asking communities about traditional forecasting methods and sharing information about new ways to make predictions. A recognisable system was set up, based on radios, flags and whistles for broadcasting alerts. Escape routes and other response options were identified and publicised at community level. This greatly contributed to minimising human losses during the next intense cyclones to hit the country.

In Colombia, a number of activities were organised around a forum on climate change. In two villages schoolchildren wrote and produced a play about climate change. Communication students at Javeriana University made banners and developed materials for children on what climate change is and what children themselves can do to contribute to preventing climate change and address rising disaster risks. The students also produced a very successful puppet show about the earth being ill and running a temperature; the script, with music, is available in Spanish from the Red Cross/Red Crescent Climate Centre.

Climate change is with us and is already making humanitarian work more difficult. Things are expected to get worse. We will have to be smart and efficient, not just to keep up with the changes but to stay ahead of them.

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