## Dealing with Disasters

Rehabilitation and reconstruction efforts in the wake of natural disasters like the recent earthquake and tsunami that hit Chile should adopt a participatory framework

n 8.8-magnitude earthquake hit Chile on 27 February 2010, closely followed by a tsunami that devastated the coast, leaving, according to government estimates, about 500 dead, 96 missing, 800,000 injured or displaced, and damages of about US\$30 bn, equal to 17 per cent of Chile's gross domestic product.

The Chilean earthquake and tsunami were the latest in a series of major natural disasters that have rocked the world recently. Between end-September and early October 2009, the Philippines was severely hit by three successive typhoons—Ketsana, Parma and Mirinae—that caused

widespread damage and destruction, affecting about 10 mn people and killing nearly a thousand. On 29 September 2009, an underwater 8.0-magnitude earthquake in the Samoan island region generated a tsunami which caused substantial damage and loss of life in Samoa, American Samoa and

Tonga. Over 189 people were killed, most of them in Samoa. A day later, a 7.6-magnitude earthquake hit the Indonesian island of Sumatra, killing over a thousand. On 12 January 2010, a 7.0-magnitude earthquake struck Haiti, affecting above three million people, leaving 230,000 people dead, 300,000 injured, and 1,000,000 homeless.

Recent natural disasters have affected millions of people, destroying houses, schools, hospitals, roads and other infrastructure, as well as livelihoods. They have highlighted the continuing vulnerability of human populations to natural disasters. Equally, they have exposed the persisting weaknesses in disaster warning and response systems, and a lack of basic norms and regulations for urban and rural planning, construction and development, and environmental governance.

These disasters should serve as a wakeup call, particularly for governments. There is clearly need for a specific focus on coastal areas and vulnerable coastal populations, in the light of forecasts of sea level rise and extreme weather conditions associated with climate change. Almost a quarter

of the world's population lives within 100 km of the coast, and they are likely to increase in the future.

Experience and common sense highlight the need for disaster preparedness, particularly at the community level, as well as functioning disaster warning, communication and response systems. Good planning and construction norms can save lives and reduce destruction. Some reports from Chile, for example, have noted that adherence to building norms in urban areas helped reduce mortality significantly during the recent earthquake. It is equally necessary to put in place and implement measures to regulate activities that pollute, degrade or otherwise harm the coastal

environment and its capacity to protect coastal communities from future natural disasters.

As Chile gears up for the rehabilitation phase,

Experience from other disasters has also shown that reliable baseline data and information systems are invaluable for effective relief and rehabilitation.

it would do well to learn from the experiences of natural disasters elsewhere. Invariably, the poorest and most disadvantaged—who are also the most invisible in government records and have minimal assets in the first place—are the most vulnerable during and after a disaster. Following the 2004 Indian Ocean tsunami, for instance, there were allegations that disadvantaged populations, such as women fish vendors and processors, and small-scale fishers were among those who were not compensated for their losses.

In this context, there is need to pay heed to the proposal by CONAPACH, the fishworkers' organization from Chile, for the government to take note of the crop losses suffered this season by seaweed collectors and divers, who need help and compensation to face the coming winter. Compensation should not be limited to those whose losses are higher in monetary terms of vessels, motors and gear lost. Damage assessments and compensation should rather err on the side of socioeconomic justice. Also, rehabilitation works best when communities and their organizations are an integral part of the process.