

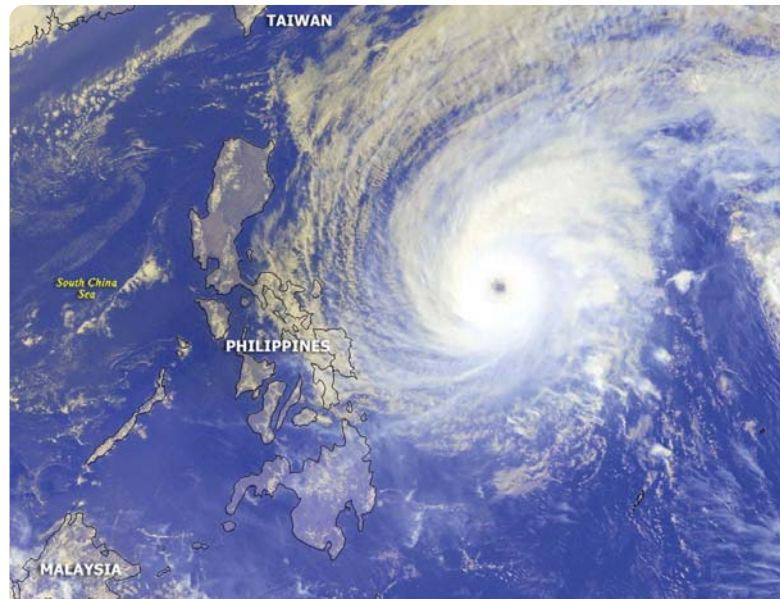
# Risk reduction in practice: a Philippines case study

In the past 20 years, disasters have killed over 31,000 and affected more than 60 million people in the Philippines. While volcanic eruptions and earthquakes occasionally strike, windstorms are the deadliest hazard. During the 1980s and 1990s, nine massive typhoons lashed the archipelago, killing 13,000 people, affecting 51 million and costing US\$ 2,8 billion in damage alone. Public and non-governmental agencies, as well as the Philippines National Red Cross (PNRC), have traditionally provided relief to disaster-affected people. But since 1995, the PNRC has broadened its approach towards more proactive risk reduction. With support from the Danish Red Cross (DRC), PNRC initiated community-based disaster preparedness in five mountain, coastal and urban provinces.

## The intervention

Much can be done – with relatively simple means – at the community level to reduce the impacts of natural disasters. The PNRC encourages people to collaborate in protecting their lives and the resources on which they depend. The approach is called integrated community disaster planning programme (ICDPP) and employs six steps:

- 1. Partnership with municipal and provincial government units:** This helps to root the preparedness concept in local planning, to gain technical and financial support for mitigation measures, and to ensure the programme's long-term sustainability.
- 2. Community disaster action team formation and training:** The core of the programme is the group of community volunteers (including fishermen, women, youth and businessmen) who are trained in vulnerability and capacity assessments, disaster management and information dissemination. They work with the community to prepare a disaster action plan.
- 3. Risk and resources mapping:** This identifies the most important local hazards, who and what may be at risk, and which mitigation measures are possible. The maps are often employed as land use planning tools by local government units.
- 4. Community mitigation measures:** Based on the disaster action plan, the community will initiate mitigation measures, which may be physical structures (e.g. seawalls, evacuation centres), health related measures (e.g. clean water supply) or planning tools (e.g. land use plans, evacuation plans). These meas-



*Several typhoons hit the Philippines every year and is the hazard type that affects the largest number of people. Typhoons are strong low pressures that bring powerful winds, torrential rains, and cause storm surge along coasts, and trigger landslides and flash floods in the mountains.*

ures are undertaken by community volunteers with support from the Red Cross and local government.

- 5. Training and education:** This is integral to all steps of the programme – both in training the disaster action teams and in disseminating information to the whole community.
- 6. Sustainability:** Long-term impact can only be ensured by embedding the concept of community-based disaster preparedness within local government units (LGUs). This means incorporating the recommendations of community disaster action plans into LGU land use planning and annual budgeting. Sustainability also implies regular update training of the disaster action teams.

## Positive impacts

- The ICDPP project covers 75 rural communities in 16 municipalities across five provinces. A total of 105 mitigation projects have been completed, including seven sea walls in three provinces. From 1995-2000, the project directly benefited 154,700 people.
- During 2000, a typhoon hit a project area on Limasawa island in Southern Leyte province. The community safely evacuated 300 people without injury or loss of life.



Concrete slabs for a seawall are moulded and hauled manually by the volunteer working groups.

- Community disaster action teams – a new approach – have proved to be an important core element. Volunteer labour has been invaluable in helping to build mitigation structures.
- Collaboration with local government units (LGUs) has been a prerequisite for the programme's success and long-term viability. Many LGUs have incorporated community disaster action plans into their own development plans – resulting in projects such as: planting trees to prevent landslides, cleaning canals to prevent flooding, constructing flood control dykes. LGUs have paid up to 75 per cent of the costs of these mitigation measures, as well as providing specialist equipment and technical design input.
- Red Cross hazard mapping has helped to capture local knowledge of natural hazards and transfer this information to municipal planners for incorporation into land use planning.
- Community-based disaster preparedness is helping strengthen the public system of disaster coordinating councils at municipal and village levels.
- The programme has given PNRC the evidence needed to lobby the national government to incorporate preparedness activities within their disaster response budget line.
- Construction of physical mitigation structures by community volunteers has created a sense of solidarity among people that, together, they can reduce vulnerability to disasters.
- Preparedness and mitigation have gained a higher profile within the PNRC's disaster management services, strengthening the organisation's capacity to reduce disaster risk.



Many of the mitigation measures are health-related. They are improving the daily lives in the community, and not only during hazard situations.

## Lessons learned

- Mitigation is not just about natural disasters. Some measures are health-related (e.g. tapstands to provide clean drinking water and reduce the risk of disease).
- Capacity building of community disaster action teams must not be underestimated. Staff must clearly understand the causes, signs and effects of different risks. They must be trained in hazard mapping and skilled in community work. Follow-up support is needed to keep disaster action teams busy and interested.
- Persuading communities to prioritise long term disaster mitigation measures (e.g. dykes, evacuation centres) above more immediate concerns (e.g. upgrading already-safe drinking water supplies) can be difficult.
- Continuous lobbying of local politicians is needed to ensure that community risk maps and disaster action plans are incorporated into public land use planning. It is challenging to maintain Red Cross collaboration with local government units without establishing a political dependency that may collapse at the next election.

## Conclusion and recommendations

An integrated, community-based approach to disaster preparedness and mitigation has proved very popular and effective in reducing the vulnerability of thousands of Filipinos to both natural hazards and health risks. The success of the Red Cross programme depends on collaboration with local government. This in turn helps the PNRC to advocate for stronger preparedness and mitigation measures to be incorporated in local public land use planning. Community-based disaster

preparedness is only a supplement to – not a substitute for – regional and national disaster management. ICDPP is best suited for reducing the impact of small-scale local hazards, although elements of the approach can be adapted to alleviate the effects of larger disasters as well.

## For more information on the programme, please contact:

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