

Changing tools in a changing climate: experiences from the Philippines

THE five Netherlands Partners for Resilience (PfR) agencies are working to adapt traditional participatory tools for community risk assessment to a changing climate. Such risk assessments play a key role in understanding vulnerability. They include people's capacities in a way that that helps implement effective and sustainable adaptation.

The PfR programme – a nine-country, five-year project of CARE Netherlands, Cordaid, the Netherlands Red Cross, the Red Cross Red Crescent Climate Centre and Wetlands International – aims to strengthen the resilience of communities dealing with increased disaster risk and the effects of climate change and environmental degradation. They have worked on harmonized risk-assessment tools that combine Disaster Risk Reduction (DRR) and Climate Change Adaptation (CCA) – the focus of this case study

– with Environmental Management and Restoration (EMR) to create a holistic risk-reduction strategy.

Experience from the Philippines

As our climate changes, we have to ask whether existing methods of working with communities will still be relevant. Are there changes in the seasonality, type, or number of crops that can be grown? What if traditional weather-forecasting becomes less effective? What if new types of hazards, including man-made problems like illegal logging, are emerging that communities aren't familiar with? How can we consider these changes and increased uncertainty in the development of community action plans?

While each of the PfR organizations is different, there are strong similarities in the participatory tools they and their local counterparts use when



Photo: Philippine Red Cross. Facilitators help communities understand the factors that drive vulnerability, particularly in the context of climate change and environmental degradation. Building capacity amongst communities is fundamental to the success in strengthening resilience.

working with communities to develop action plans to reduce disaster risk.

In the Philippines, the PfR team consists of the Philippines Red Cross and CARE¹ and their partners who agreed to focus on applying a “climate lens” to three tools that are common to participatory development: the seasonal calendar (which records what time of the year certain activities and issues occur, such as floods, harvests or dengue fever), the historical profile (which looks at major events that have taken place in the history of the community), and risk mapping (where a bird’s-eye view of the community is drawn and issues are identified). Many of these are standard participatory tools that have been developed in the past in the context of assumptions about a stable climate.

The Philippines Red Cross and CARE partners in the Philippines decided to train their community facilitators, who often include volunteers from the local area, to adjust these three tools to be more sensitive to climate. For example, they learned to draw a seasonal calendar applicable to the present, and developed questions on differences with 20–30 years ago. The facilitators then trialled the use of these three tools in 28 communities in areas vulnerable to disasters, such as in Cordillera, Metro Manila, Agusan del Sur and Surigao del Norte.

For example, in the municipality of Talacogon in the southern Philippines, flood waters of up to six metres high inundate several villages located along the banks of the Agusan River for one third of the year most years. Rice paddies and corn fields turn into lakes. Over the years, people see flood waters gradually rising and there are less fish to catch, which heavily impacts their food supply, especially during the flood season. They

¹ A shorter version of this case study originally appeared in BBC’s Climate Asia blog <http://climateasiablog.wordpress.com/2012/06/20/changing-tools-in-a-changing-climate-experiences-from-the-philippines/> written with assistance from PfR project officer Ansherina Grace Talavera.

blame loss of forest cover in the region due to extractive industries such as large-scale logging and mining.

In the Philippines, like many tropical countries, extreme rainfall is also likely to become more frequent and severe and communities have decided to pursue risk-reduction initiatives. Community members have taken part in training sessions that involve discussions about disasters, climate change and environmental management, and have committed themselves to creating contingency plans. They also identified risk reduction measures such as alternative livelihood activities and reforestation.

Box 1 – ‘Climate Smart’ Disaster Risk Reduction matters in the Philippines because ...

1. The country ranks **3rd out of 173** countries in the world considered as **most vulnerable to disaster risks** and natural hazards of the United Nations’ World Risk Index (2011)
2. In 2011, Asia was hit by 137 **disasters** (representing a global share of 45%), of which **33 occurred in the Philippines** (CRED, 2012).
3. The Philippines **has a ranking of ‘extreme’ on the climate change vulnerability index** and ranks 10th highest among 193 countries (Maplecroft, 2011)



Photo: ACCORD community risk map

Lessons learned

A March 2012 meeting brought together partners to reflect on the use of new tools adapted to field conditions.

The **“risk map”** was found to be useful for discussing not only possible climate change but also environmental degradation. CARE partners stressed the usefulness of having a comparison between the current situation and 20–30 years ago. It can also be useful for discussing scenarios for future change, such as more intense and frequent rainfall events, and also reasons for some of the changes that have been observed.



Photo: Philippines Red Cross

The **“historical hazard calendar”** was useful for recording observations related to changes in the environment and climate. In one community, floods were such an issue that they created a flood graph to show how the frequency of flooding increased over time. A discussion was held on lessons learned from events that have occurred. What actions were taken? What could be improved on?

The **“seasonal calendar”** was considered by all partners as one of the most useful tools for discussing changes being experienced by a community. One widely shared conclusion was that weather has

become more unpredictable and is not occurring at its usual time. Some people said it is now rainy when it should be dry, and dry when it should be rainy.

There were also reports that crops could only be planted once a year instead of three times. The tool is also very useful for project planning, to see when is the most appropriate time of the year for community action. It is also useful to include a diversity of people: fisherfolk, farmers, women, children, elders.

Conclusion and next steps

Work in the field shows it is important to facilitate a discussion about the multiple factors that may be leading to changes in the communities and their environment. It is important to stress that not all changes are due to climate change. Other risks and challenges must be considered.

But climate-sensitive risk assessment will help communities understand the changing nature of hazards and anticipate the negative impacts further aggravated by the changing climate. They will help plan risk reduction, ensuring that communities are more resilient.

PfR in the Philippines will improve climate-sensitive tools in more communities and make a short film for practitioners to demonstrate how they are facilitating the community discussion about climate change and environmental degradation.

BOX 2. Some PfR tips on climate-smart participatory assessments²**Seasonal calendars**

When discussing coping strategies and changes, explore whether existing strategies are working in the context of the changing environment. Discuss the need for new strategies in the context of climate change and introduce the concept of adaptation.

The seasonal calendar can be modified to indicate how things like planting and harvests are changing, new weather and health-related hazards emerging or appearing at unexpected times of the year. This could be modified for disaster types (like health) to show change over time. Explore positive as well as negative outcomes.

Historical hazard calendars

Remember there may be a bias in the timeline as events in recent memory are more likely to be noted. Men and women emphasize different things and this could be a useful starting point for discussing the varying capacities and coping strategies of women and men, and how they can be drawn upon to address the problems they face.

Discussing trends or changes in the frequency of events is an excellent opportunity to validate community observations that are in line with climate data. Focusing the discussion on the future can help understand community aspirations and how far they have planned for the future. It also eases communication on predicted trends.

Trends in the use of land (not just climate change) could be considered in this analysis and would enable environmental degradation to be considered.

Risk maps

Risk maps can be fundamental to planning, monitoring and evaluation. They can be integrated with spatial and transect maps to create a comprehensive version. Note any observations by communities that may be in line with the meteorological data that is available for the region and can validate people's observations. This can provide an opening to present the predicted future trends for the particular hazards.

Contrast community inputs with scientific data on land use and the status of ecosystems (and again to validate observations). Ask people to describe not only the current situation but also how it has been changing. Ask for specific measurements relating to changes.

Try to ensure that the map includes major environmental changes. Visit the mapped area with local people to verify the information (on a transect walk, for example).

² For more on integrating climate change in participatory tools, see the guidance note at the Climate Centre website: <http://www.climatecentre.org/site/community-risk-reduction>