# Case Study of the Philippines National Red Cross Community Based Disaster Risk Management Programming SUMMARY: KEY FINDINGS AND RECOMMENDATIONS



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### EXECUTIVE SUMMARY

The International Federation of Red Cross and Red Crescent Societies (International Federation), in partnership with the Philippines National Red Cross (PNRC), undertook a case study of the impact and cost effectiveness of three PNRC community-based disaster risk management (CBDRM) programmes carried out in partnership with three different national societies (the Danish, German and Spanish Red Cross societies) and three different donors (DANIDA, DIPECHO and the German Ministry of Foreign Affairs). A draft cost-benefit analysis (CBA) methodology was piloted as a key feature of the assessment process.

While each programme differed from the others in various ways, all directly or indirectly shared a common objective: to reduce the vulnerability of communities to, and strengthen their capacity to cope with, disaster impacts. All three included activities to: create and train local disaster preparedness and response teams (called Barangay Disaster Action Teams or BDATs); conduct a Hazard, Vulnerability and Capacity Assessment (HVCA); prepare local hazard maps; and produce a Barangay Disaster Action Plan (BDAP). Small-scale physical mitigation works also were carried out, including the provision of health and water and sanitation facilities through the Danish-supported programme. The Danish- and German-supported programmes also trained and equipped Barangay Health Workers (BHWs) to provide basic health services and the German-supported program extended disaster preparedness and first aid training into schools.

#### Outcomes

The PNRC and its partners developed some of the world's early models for CBDRM, using integrated, multi-sectoral and multi-hazard approaches to programming. This innovative and experimental work was undertaken at a time when disaster management legislation in the Philippines, and the role of the PNRC, were defined largely in terms of response. As such, these pioneering programmes had the difficult task of creating an enabling environment for disaster risk reduction, ie of building up support at all levels of government, within communities, and within the PNRC itself. They also did not have the benefit of being able to draw from the experiences of prior CBDRM programmes to guide design and implementation decisions.

Within this context, the achievements of the PNRC's CBDRM programmes were considerable. This case study is one of the first long-term impact assessments conducted of CBDRM programming in the Philippines. Much of the learning about what works, and what does not work, was gained through trial and error and the findings will provide invaluable information to guide present and future generations of CBDRM.

#### Impact assessment

Overall, the PNRC and its partners have made a valuable contribution to reducing the vulnerability and increasing the coping capacity of beneficiary communities over the past 15 years. In most communities, disaster preparedness training has led to greater awareness of the risks and improved ways of organizing responses to hazards, mainly typhoons, floods and storm surge. The small-scale mitigation projects have made a substantial and tangible contribution to increasing community resilience to flooding and health hazards. This includes: economic benefits, such as farm crops saved from damage or the ability to get crops to market; health benefits such as access to safe water and improved hygiene; and social benefits, such as the safe access of children to their schools and pregnant women to health services, a greater feeling of safety (particularly among parents in relation to their children), and the increased socio-political status of some BDAT members. Most barangays continue to provide funds and labour to look after their facilities, a clear indication that they value them.

The PNRC has built up strong institutional relationships with Local Government Units (LGUs) and, in some cases, the LGUs continue to incorporate CBDRM into their municipal plans and budgets. Beneficiary satisfaction levels were generally good, though less so in communities whose mitigation projects suffered from maintenance problems or where only 'one-off' disaster preparedness training had been provided. Additionally, the PNRC has achieved a commendable level of integration of health and disaster management programming, an approach which could be further developed and act as a model for other national societies.

However, the sustainability of these benefits is at risk, due to a lack of follow up support by the PNRC and longer-term operation and maintenance issues, predominantly at the LGU level (despite the LGUs having signed Memorandums of Understanding with the PNRC to provide these ongoing inputs). In many barangays, the physical mitigation works are deteriorating and Barangay Councils alone cannot cover the maintenance and repair costs, although this also raises a question as to the length of time that a small-scale physical mitigation structure should be expected to last and the related level of immediate and ongoing investment that is appropriate and cost-effective to meet such a minimum threshold. Furthermore, the BDATs have become inactive and the Barangay Disaster Action Plans are not being updated and incorporated into municipal development plans/budgets; and the volunteers and some communities have not developed their disaster preparedness and health skills enough to retain them.

In certain communities, these outcomes reflect changes in the political leadership over time – particularly after a period of 10 or more years – and consequent changes in their priorities. In a small number of cases, the sustainability risks may reflect a situation of actual decreased risk over the past five-ten years since the programmes were implemented. The importance of achieving equity and 'do no harm' principles in the selection of communities to receive assistance (especially in conflict-affected areas of Surigao del Norte), meant that a few barangays were included in the CBDRM programme even though the disaster risk was lower and, hence, longer-term commitment to activities could be expected to be lower.

The HVCA and related community development processes have become shortened and diluted over time, losing some of their strengths in adapting general disaster preparedness guidance to the specific community context and building local ownership of the CBDRM programming. Much of the disaster preparedness capacity-building being carried out is not building sufficiently from pre-existing community coping skills and making only a limited and tenuous contribution to improving the protection of homes and livelihoods; more emphasis also could be given to strengthening existing local early warning systems. The social and gender analysis capacities of the PNRC staff need further development too, as some inequity in the distribution of programme benefits has occurred.

The provision of 'one-off' training programs is not enough to build sustainable capacity in disaster management, either within communities or within the BDATs. At least three-five years is needed to fully inculcate skills and knowledge and change attitudes and practices towards risk. Follow-up coaching, mentoring and refresher training is required, as are concrete activities and budgets to implement the Barangay Disaster Action Plans. BDATs also could undertake community awareness-raising activities to reinforce learning. Educational materials may benefit from periodic review to determine if they are contributing to the desired risk behaviour change among the targeted audiences or if they need updating and adjustment, particularly given an evolving communications environment (eg mobile phones, Facebook) and the different linguistic and cultural contexts within the Philippines.

CBDRM appears to be only tenuously institutionalised and resourced as a core part of the PNRC's business. If the PNRC is to develop a sustainable institutional capacity in CBDRM, then it will need to consider developing a more strategic approach in coordination with its

partners. This includes a realistic assessment of its capacity to engage long enough and deeply enough with barangays to cement the skills attained through BDAT training and other related initiatives; expanding programming to new locations on the basis of capacity; and continuing to develop its skills and resource base to effectively manage this work.

Despite these challenges, the PNRC and its partners have laid a strong foundation in the communities where it has provided CBDRM assistance. In most cases, it would not take substantial new investments to protect or regain the benefits of the assistance already provided.

# Cost Benefit Analysis

The aim of undertaking the CBA was twofold: firstly, the study aimed to test the applicability of CBA as process that can be used more widely within the Red Cross/Red Crescent, and secondly the study aimed to produce indicative findings on the value of the programmes themselves. Due to considerable data limitations, the CBA could only be carried out on some of the small-scale physical mitigation projects undertaken through the PNRC's CBDRM programmes. The data limitations also meant that significant assumptions had to be made, and the results of the CBA should be viewed as an indicative, rather than as a definitive, basis for decision-making.

Despite these limitations, the analysis produced some interesting and useful indicative findings on the value of these projects. A CBA process was carried out for structural measures in three barangays – a hanging footbridge, a dyke and a sea wall. The results suggest that two of these activities brought a valuable range of quantitative benefits (e.g. protection of assets), in addition to the many qualitative benefits that cannot be valued in the CBA process (e.g. greater sense of safety). The analysis resulted in a range of Benefit to Cost Ratios, from 24 in the case of the footbridge and 4.9 in the case of the sea wall (positive returns), to 0.7 in the case of the dyke (negative return). In the case of the dyke, the negative return may be due to: gaps in the available data; a higher proportion of non-quantifiable benefits; or a possible need to have given greater consideration to maximizing benefits during project design and implementation.

As an early pilot, the process of conducting the CBA did not always go smoothly; a number of lessons were learned to strengthen the application of the methodology in an International Federation context, including improving data collection methods to be able to measure the value of disaster preparedness activities, and ensuring adequate training and technical support to the team conducting the next trial in the Sudan. The process of gathering baseline and monitoring and evaluation data for a CBA potentially could be integrated into existing needs assessment processes and tools, such as (H)VCA, and the Monitoring and Evaluation systems used by the Federation. However, the current level of Monitoring and Evaluation, as well as quantitative calculation and analysis, skills and experience of member national societies needs to be carefully considered in further developing an impact evaluation and CBA methodology for wider use.

## Recommendations

## Future CBDRM programming

 Build on or renew existing good relationships with local governments to: 1) assist communities to attract ongoing operation and maintenance contributions for their physical mitigation structures; 2) build support for the regular updating and inclusion of Barangay Disaster Action Plans in municipal development plans and budgets; and 3) encourage a more pro-active role for Municipal/Provincial Disaster Coordination Councils in CBDRM and climate change adaptation, in line with current strategies of the PNRC.

- 2. Develop longer-term CBDRM strategies and funding plans, in consultation with donors, to combine short-term funding from various sources and to ensure programme and funding continuity for a sufficient period to build sustainable CBDRM capacity.
- 3. Undertake an assessment of the financial and human resource capacity of the PNRC's provincial chapters to renew/extend assistance to barangays covered by previous CBDRM programming, and to extend activities into new barangays, with particular attention to the ongoing support needs of the volunteers and their communities.
- 4. Strengthen the organizational development components of CBDRM programming to continue to build the PNRC's institutional capacity, especially at the chapter level.
- 5. Review and update the content and approach to HVCA and community development to ensure it is achieving community information, mobilization and ownership needs; this includes strengthening the analysis of pre-existing community coping mechanisms and introducing social and gender analysis training for HVCA trainers.
- 6. Review the use of current information, education and communication materials, and update to ensure that they remain appropriate for the audiences to be reached.
- 7. Further develop PNRC's CBDRM participatory monitoring and evaluation, beneficiary accountability and knowledge-sharing systems, procedures and capacity.
- 8. Continue to build linkages between health and disaster risk reduction programming.
- Encourage coordination and collaboration with other organisations involved in CBDRM in the Philippines to highlight the specific contribution, and retain the leadership role, of the PNRC. This should focus on building relationships with players that have the potential to add value to PNRC initiatives and strategic thinking.

# Development of CBA Methodology

- 1. CBA should be developed as part of wider needs and impact assessment methodologies within the Federation, and not as a stand-alone tool. Existing approaches and tools, such as VCA, potentially could be adapted to include CBA data collection and analysis needs (as was done in the Nepal Red Cross CBDRM programme).
- 2. Findings from all three pilots of the draft CBA methodology (Nepal, the Philippines and the Sudan) should be collated and reviewed by the International Federation in order to draw overall conclusions and identify next steps.
- 3. CBA should not be applied across the board to all Red Cross/Red Crescent programmes, but rather programmes should be selected based on the timeframe when they were implemented, the availability of data, and the relevance/applicability of CBA to making future programming decisions in the specific country/region context.
- 4. For programmes where CBA can add value to the assessment/planning process, training in the methodology should be provided for those national society and/or other personnel undertaking the CBA; additionally, an internal or external technical adviser should be made available to provide support to the data collection and analysis processes.
- 5. CBA should be incorporated into the needs assessment, design and monitoring and evaluation processes from the outset of a programme, wherever possible, to ensure the accuracy and reliability of post-programming assessments.
- 6. If CBA is to be integrated into broader qualitative effectiveness or impact evaluation processes, then the capacity of the national society to carry out such evaluations should also be assessed.