ANNEX B

Applying cost benefit analysis
ANNEX B: APPLYING CBA AT A COMMUNITY LEVEL

INTRODUCTION

As summarized in the main report, a variety of studies have been undertaken using CBA at a community level to evaluate and inform disaster and climate risk reduction programmes. The synthesis of findings has clearly highlighted that CBA at this level can be very useful, especially where it is part of a wider qualitative evaluation process, but that it also has a number of significant limitations, particularly in data- and resource-constrained contexts.

It is clear that CBA cannot and should not be used across the board. Hence the question: in what context can CBA be useful for application at a community level?

APPROACHES TO APPLYING CBA AT A COMMUNITY LEVEL

The research to date suggests that there are three possible approaches to a CBA at a community level, requiring progressively increasing amounts of data and resources. These three approaches are by no means absolute – they are categories along a continuum and therefore studies may combine elements from different approaches. Nonetheless, the three approaches help to provide a framework for discussing the application of CBA at a community level.

These approaches are applicable to any organization implementing CBDRM and/or CCA programmes, including NGOs, government, and donors.

Approach 1: Qualitative assessment
As with the ISET study in Nepal, the principles of CBA can be used to engage in a more qualitative line of questioning with communities through focus groups and other participatory tools, but without actually quantifying benefits in full for a detailed CBA. This approach can be very beneficial as it encourages a greater discussion around outcomes (as opposed to outputs). This approach can be used in scenarios where capacity and/or resources are significantly constrained, or proposed interventions are too small to justify a more in-depth analysis. Focus is on the process rather than the product.
Approach 2: Basic CBA
A basic CBA should be used where quantitative analysis/findings are desired, but where there is not enough resource or capacity to do a thorough statistical sampling of the population. It can be run alongside existing VCA/M&E processes, and hence does not need to be time-intensive. Fieldwork can be undertaken by project partners, staff or local counterparts. Some specialist assistance may be required for modelling the findings.

Approach 3: Full-scale CBA
A full-scale CBA should be used where a significant investment is being made, or where a detailed analysis can help inform wider discussions on scaling up of particular DRR/CCA interventions. For example, where governments are interested in prioritizing certain initiatives in national level policy and planning, CBA at a community level may be appropriate to ensure that implementation of these policies will be effective and takes account of local conditions. Primary data is gathered through surveys, specifically on hazard characteristics and their impacts on lives and livelihoods, as well as the potential reduction in impacts through DRR/CCA. GIS maps can be used to visually represent impacts. This type of study may be particularly relevant in larger/consolidated populations (e.g. urban) where the costs of risk management interventions could be high.

WHICH APPROACH?
Organizations will need to decide where and when to use CBA, if at all. Clearly, CBA is not applicable nor beneficial across all programmes within an organization. Rather, it should be used strategically within an organization to make programming decisions in areas that are of key importance or focus, where significant sums of money are designated and/or plans include scaling-up of activities.

There is no right answer as to which approach to use – it depends very much on the mission and strategic focus of the organization, levels of resourcing, and levels of capacity (see Box 1). It also depends on the type of organization wishing to undertake the assessment and their motivation. CBA can be used for a range of purposes – to demonstrate cost-effectiveness of a specific intervention, to identify cost-effective measures across a broad geographical region, to generate ownership and facilitate decision-making as part of participatory processes with communities, to advocate for specific measures etc. – and these will vary depending on whether government is trying to inform policy making; whether an NGO is deciding how to work with a particular community; or whether a donor is making strategic decisions for investment.

Nonetheless, the flow chart on the following page suggests a number of steps/questions that can help to guide the decision-making process as to when and how to implement a CBA.
<table>
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<th>Box 1: What skills are required for CBA?</th>
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<td>The implementation of a CBA at a local level, by practitioners who are not experienced in the tool, has had mixed results – some are surprised by how intuitive they find the process, whereas others find it challenging.</td>
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<td>Clearly CBA involves technical analysis and requires a sound understanding of the economic principles on which it is built. It also requires certain mathematical and computing skills. It cannot be implemented as an off-the-shelf product, but rather requires some level of training in its use.</td>
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<td>Equally, many aspects of a CBA are intuitive, and tie in neatly with existing processes such as VCA participatory approaches and data collection for monitoring and evaluation. This would suggest that, where local partners have good capacity in the skill sets required for VCA/M&amp;E, the data collection phase of CBA may be fairly easy to implement with a small amount of support. More technical support will likely be required for the data analysis phase.</td>
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