



Community-based Cost  
Benefit Analysis (CBCBA)  
Tool  
Part III: Step-by-step Guide  
to Analysing and Reporting

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# Report Summary

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The present document is Part III of a three-part CBCBA Tool. It is a step-by-step guide to analysing data and reporting for CBCBA. It provides practical, user-friendly guidance for analysts and practitioners who undertake CBCBA. The text on each step includes both a general discussion and a list of tasks that must be completed by the CBCBA analyst. Many steps also include simple worksheets or template documents to help analysts complete the specified tasks.



# SECTION 1

## Data analysis phase

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The goal of data analysis is to assess the net benefits delivered by the intervention being examined. These benefits could fall into different categories, most notably improved basic development status and increased resilience to climatic and disaster shocks. While conceptually clear, this distinction between ‘development’ and ‘adaptation’ outcomes may be less clear in practice, since these two categories of benefits can overlap. Such overlaps are particularly likely in places where climatic shocks have become endemic, and therefore could be said to represent “the new normal”. The present analysis seeks to sidestep this debate over development vs adaptation benefits by simply talking about benefits to the target populations in the “with” intervention and “without” intervention scenarios. That is, it examines net benefits to target communities, without seeking to disentangle to what degree these benefits stem from better core development or greater resilience to climatic shocks. Analysis of the intervention’s impact involves analysing the primary evidence gathered using this tool, namely evidence from the districts and communities targeted by the intervention being examined. Where possible, it also involves linking this primary data to relevant secondary data, notably monitoring and evaluation (M&E) data from the organisation implementing the intervention.

Quantitative measures of net benefits are generated by aggregating benefit and cost data then comparing total benefits to total costs. Where relevant, the costs of other interventions that also contributed to the observed community-level outcomes are also integrated into the analysis. Calculations including future costs and benefits are multiplied by the relevant discount rates. Sensitivity analysis is also conducted to show the robustness of the study findings under various plausible assumptions. In order to maximise the reliability of its findings, analysis must be conservative at every stage. Qualitative data are also generated to contextualise the quantitative findings and ensure the analysis tells a holistic and complete story.

### *Step 1: Record and clean the data collected*

Once primary data for the CBCBA have been collected by following the steps in Part II of the CBCBA Tool, these data must be analysed. The first step of data analysis is to record and clean these data. This involves entering the information gathered during data collection into relevant computer files, then rationalising and organising this information. Template documents are provided for this process. One “Interview Summary” template document should be completed for each meeting conducted as part of data collection for the study.

When cleaning data from FGDs, the analyst must determine which data on benefits will be quantified, and which will be treated as qualitative data. For each FGD, at least one benefit must be quantified. This question only arises in the case of FGDs, since target villagers are generally the only ones who can provide authoritative testimony about the *numeric* benefits of the intervention. In some cases, however, the implementing organisation may also have gathered sound evidence on the numeric benefits of an intervention.

Clearly, any benefits to be quantified must include numeric measures of impact. As such, one determinant of which benefits to quantify will be whether numeric impact measures fit naturally with the observed benefits described by the FGD participants. Among those

benefits for which numeric evidence is available, only the best and most complete data should be selected for quantification. Benefits selected for quantification should also be among the most important benefits of the intervention, as opposed to those having only a minor impact. Typically, the benefits most amenable to quantification will emerge during the data collection process, and can therefore be emphasised during data collection.

#### Tasks for step 1

- For each meeting conducted during data collection for CBCBA, complete the following tasks:
- Select the appropriate template document for recording the notes of the meeting in question.
- Title and save this document following a standardised format, such as “Interview type / place / implementing organisation / date”. An example is “FGD / Qorka village, Marsabit / Solidarites International / 23 Jan 2016”.
- Enter data collected into the relevant cells of the Interview Summary template, including evidence from all the different speakers at meetings in as much detail as possible.
  - Qualitative benefits: Write out the comments of interviewees in as much detail as possible. Ideally, this will be in the form of complete sentences or phrases that convey the thoughts of interviewees. For meetings where translation is used, these words will necessarily be approximations of what interviewees said, since interviewees’ answers will have been transmitted to the analyst via a translator. These words should nonetheless be taken as the words of the interviewees, since the translator will be doing their best to convey these words verbatim.
  - Quantitative benefits: Enter data on quantifiable benefits into the relevant tables of the Interview Summary template. These data are only gathered during FGDs.
  - In-kind costs: Enter any data on in-kind costs into the relevant tables of the Interview Summary template. Where in-kind costs are found, they are likely to be in the form of an increased labour burden on target households due to intervention activities. However, the intervention could instead reduce the labour burden on households. It is also possible that the activity increases labour inputs by households but that this is not seen as burdensome by villagers, since they have underutilised labour resources and these activities are considered advantageous. In the former case, numeric estimates should be provided for the in-kind costs incurred. In the latter two cases, a value of ‘0’ can be entered for in-kind costs. In all cases a brief narrative explanation should accompany entries on labour effects.

#### *Step 2: Enter selected data into the Data Summary template*

Once the primary data gathered during each interview have been organized and entered into “Interview Summary” templates, the next step is to enter relevant parts of these data into a “Data Summary” template document. This document summarises the various types of evidence gathered for the CBCBA. It also includes the analyst’s observations regarding the evidence presented.

Not all data from the Interview Summary documents need be entered into the Data Summary template. The lion’s share of the relevant data should be transferred, but pieces of evidence that are either redundant or less than fully clear need not be transferred. The end result should be that the Data Summary template includes all the clearest and best pieces of data, while meticulously ensuring that the retained findings represent all key perspectives voiced during interviews. To maximise the objectivity of this process, a statistical overview of

different categories of comments will be provided based on the raw data contained in the Interview Summary documents.

### Tasks for step 2

- Enter data from the Interview Summary documents into the relevant cells of the Data Summary template.
- Use a different font colour for data originating from each distinct Interview Summary document, in order to ensure that the comments from each Interview Summary are readily identifiable by the font colour used.
- After examining the evidence gathered, enter comments into the cells labelled 'analyst's observations'. These could flag issues or problems raised by the evidence. Alternatively, they could highlight testimony that is particularly insightful or offers actionable suggestions.
- Complete a statistical overview of the data collected by tabulating the data from the various Interview Summary documents generated for the CBCBA.

### Step 3: Identify and address outstanding data gaps

The process of entering the collected data into the Interview Summary and Data Summary template documents should flag up any gaps in the data collected. Given the difficulties of conducting FGDs and the importance of 'going with the flow' to a degree so as to ensure that rapport with villagers is good, it is likely that notes of FGDs will sometimes include data gaps. For instance, perhaps one FGD has insufficient detail on the hazard profile of the village.

Fortunately, this need not be a problem, provided the other FGDs conducted for the study generate good data on the relevant points. One exception is evidence on the benefits of intervention activities, which must be gathered in full for each distinct FGD. Within evidence from FGDs, data gaps regarding the benefits selected for quantification are the most problematic, since any such gaps could make quantification impossible.

The following is a recap of the five categories of data needed for each benefit that will be quantified by the analysis.

- Testimony from households: Testimony from at least three different villagers participating in the FGD regarding the benefit in question. In all cases, this testimony should include estimates of numeric benefits to the speaker's household. These estimates should be accompanied by qualitative comments from each speaker elaborating on their household's experience. The information provided should contrast the 'before' intervention and 'after' intervention scenarios, in order to highlight the changes delivered by the intervention. Alternatively, these benefits could be framed as contrasting the experience of the speaker (i.e., a household benefiting from the intervention) with the experience of neighbours who are not beneficiaries.
- Expected duration of benefit: Beneficial impacts of an intervention may last for a shorter or a longer time. Interventions into vulnerable communities often seek to deliver lasting benefits, but this is not always successful. Assessments of net benefits must be based on estimates of the actual duration of observed benefits. For each quantified benefit, an estimate of its duration is needed in order to calculate its expected benefit stream over time. CBCBA defines three options for specifying the estimated duration of benefits, namely when the intervention ends, 5 years after it ends, and 10 years after it ends. One of these three options must be selected for each benefit to be quantified. During FGDs, the analyst should ask target communities to comment on the expected duration of the each benefit they describe. The first question is whether they see strong reasons to believe the benefits cited will

persist once the intervention's funding ceases. The second is how long they see these benefits persisting. During data analysis, the analyst should use the comments of villagers to classify each benefit into one of these three categories. Any comments about benefits lasting 'indefinitely' or 'forever' should be interpreted as an expected duration of 10 years, given the importance of ensuring the analysis is conservative.

- Relation to the wider target population: In order to assess net impacts of the intervention, estimates are needed of how the experiences of the FGD participants who share their personal testimony relate to the experiences of the wider target population. The goal is to get a sense of what proportion of people in the wider target population enjoy similar benefits to those described by these individuals. To determine this, the analyst needs data about the wider target population, which is best obtained from the implementing organisation. For example, if the FGD selects "reduced livestock deaths" as a key impact of the intervention, then the testimony of individual FGD participants will specify their personal experience of livestock deaths with and without the intervention. Yet this testimony must then be related to how many livestock are owned by the entire target population in order to gauge the intervention's impact on reducing livestock deaths.
- The following three-step process can be used to translate testimony from individual FGD participants to an estimate for the wider target population: (a) make a conservative estimate of benefits to each beneficiary household from this activity based on the testimony of FGD participants, (b) estimate the total number of beneficiaries of this activity, (c) multiply the estimated household benefit from the activity by the total number of beneficiary households.
- Clearly, this three-step process involves assumptions, such as the activity being similarly effective across the various communities where it is applied. Yet the procedure of estimating net benefits of interventions targeting small-scale farmers or pastoralists requires such assumptions, since otherwise the complexity and expense of the assessment would become unmanageable. Emphasis on following a conservative approach should help ensure that the resulting findings are nonetheless credible and reliable.
- Prices: If quantitative values are to be compared, they must first be converted into a common metric, and the metric used in CBCBA is monetary value. To convert quantitative estimates of intervention impacts into monetary values, relevant price data are needed. Because the benefits are observed within target communities, all prices should reflect community-level realities. Examples of relevant price data for use with CBCBA include daily wage rates, crop prices, livestock prices, and prices of wood fuel or charcoal. For certain prices, estimates must include price values for both "good times" vs "bad times", since price levels tend to vary sharply between moments perceived as "good" (i.e., the rainy season) and "bad" (the dry season). The types of price data needed will depend on the types of benefits being quantified, and must be determined by the analyst.
- In-kind costs: When calculating total costs, it is important to consider not only costs to the implementing organisation, but also to the target community. The key cost that is sometimes incurred by communities is increased labour demands, so the question of labour demands of the intervention activities should be raised with FGDs. If the participants suggest that an activity does not increase their labour burden, then there is no need to estimate in-kind costs. If however villagers say the activity increases their labour burden, then this additional labour burden should be estimated.



In addition to these village level data, several other types of quantitative data are needed, notably data on costs. The data needed include:

- Intervention costs: Total costs of the intervention (or activity) to the implementing partner, including relevant administrative or overhead costs, which should be obtained from the implementing organisation.
- Other costs: If any other interventions played a key role in delivering the quantified benefits, then these other interventions should be integrated into the analysis. Ideally, this should include obtaining a rough estimate of the costs this other intervention incurred in the target area of the intervention being examined. If this is not possible, however, it is essential to at least list any other intervention that contributed directly to the outcomes observed while specifying its contribution.

Where gaps in the evidence collected are identified, these can be addressed by conferring with the implementing organisation. This follows because those individuals from the implementing organisation most involved in delivering the intervention should be deeply familiar with the target communities. Specifically, they should have a firm grasp of both the context of the target communities and the activities being implemented there under the intervention. As such, they are well placed to provide rough approximations of relevant data.

### Tasks for step 3

- Ensure that data have been gathered for the full range of relevant data categories.
- Most importantly, for each benefit to be quantified by CBCBA, ensure that solid data has been gathered for each of five data categories, namely numeric testimony from target beneficiaries, expected duration, relation to wider target population, relevant prices, and in-kind costs.
- If data for any of these five categories are missing, obtain estimates of the relevant amounts from the implementing partner.

### Step 4: Determine the discount rate

Most of the data needed to generate quantitative measures of an intervention's net benefits can be obtained directly from the various worksheets provided in the data collection component of this tool. Yet one additional piece of information will be needed in order to generate these measures, namely the discount rate. This value could potentially be specified by the institution funding the CBCBA, since it involves a judgement call. The text below nonetheless provides guidance on determining a suitable value for this variable.

The discount rate is used to discount costs and benefits occurring in the future. This is done because people typically place a higher value on benefits experienced in the present (e.g., current consumption), and a relatively lower value on benefits expected to accrue in future. A simple way to see this is to ask yourself whether you would rather be given \$100 today or \$101 in a year's time. For most people, this would be an easy question, since they would clearly prefer \$100 now. If the money offered in one year's time were somewhat higher, say \$110, you might still prefer the \$100 today, but it would be less clear-cut. If however the second sum were much higher, say \$1,000, then most people would prefer to wait for this bigger reward, and be willing to delay their consumption.

A second aspect of the discount rate is that future benefits are valued less and less the further into the future they fall. For instance, if you were offered \$100 now or \$1,000 fifty years in the future, you would most likely prefer the \$100 now. Yet if you were offered the \$1,000 just five years in the future, you may well prefer to wait for this \$1,000.

A similar logic applies to diverse actors, including individuals, households, communities, businesses and governments.

The discount rate used in CBCBA strongly affects how the different costs and benefits associated with an intervention are weighted. If a high discount rate is used, benefits accruing in several years will matter less than benefits accruing in the near-term, while costs due in several years would also matter less. As such, the choice of discount rate to be used is central to how CBA will assess an intervention or investment. Intuitively, the question here is, “What do we assume about the degree to which the relevant actors prefer present benefits over future benefits?”

Fortunately, selecting a discount rate to use can be straightforward. This follows because the discount rate is often taken to reflect the average return one might expect if the same money were invested in an alternative project. As such, this rate can be determined simply by looking at the rates used for other interventions in the target country. Alternatively, one could look at the discount rate used by the development banks in the country in question. A discount rate of 10% per annum can be taken as a default value.

#### Tasks for step 4

- Determine the discount rate to be used in the analysis following one of the above approaches.

#### Step 5: Generate quantitative measures of net benefits

Now that all the relevant data have been gathered in full, the next step is to generate benefit-cost ratio (BCR) values. These are quantitative measures of the net benefits generated by the intervention – or specific intervention activities – being examined. The BCR is a simple and intuitive statistic for gauging the cost-effectiveness of an intervention or specific intervention activities.

The BCR compares the total benefits delivered by an intervention with the total costs incurred, then indicates the level of benefits that will be delivered for every unit of costs. For instance, it might show that a given investment will generate £2 worth of benefits for every £1 of investment, which would give a benefit-cost ratio of 2. Any BCR greater than 1 suggests that the benefits of the intervention outweigh its costs, and hence that it is worthwhile from a financial perspective. Conversely, anything less than 1 indicates a negative financial return, i.e., that the investment would result in net losses, or losing money. While BCR findings can be potent as stand-alone measures, they can also be used as a means to compare alternative possible options for funding, such as different possible resilience interventions targeting vulnerable farming communities. When used to compare options, the higher the value of BCR, the greater the financial argument for a given option.

BCR estimates are based on the benefits the intervention is predicted to deliver over its lifetime, coupled with the costs it is expected to accrue. All costs and benefits used in the analysis must be expressed in terms of present-day monetary value. This means that all costs and benefits accruing in future must be discounted to varying degrees, depending on how far in the future they lie.

#### Tasks for step 5

- a. Obtain benefits data
  - Generate a formula for calculating the gross benefits of each project activity being quantified. This must include a conservative measure of its physical impacts, relevant local price values, number of target households, and the estimated duration of observed benefits. If physical impacts were

- differentiated by climatic year, then different formulas must be generated for each distinct type of climatic year and its estimated frequency.
- Using the quantitative benefits data obtained during data collection for CBCBA coupled with other key measures, calculate the gross benefits generated by the quantified activities over their estimated duration, not including discounting.
  - Convert these gross benefits data for each quantified activity into the currency of analysis.
  - Convert these gross benefits data for each quantified activity into their discounted value using the chosen discount rate.
  - Determine the total quantitative benefits for the intervention being examined by adding together the benefits from the different activities quantified.
- b. Obtain costs data
- Working from the project's budget documents, determine the total cost of the project being examined, including all associated costs, e.g., staffing, transport, office space, administration, monitoring and evaluation.
- If the study only examined part of the project's target population, determine what proportion of the project's work is focused on this stratum.
  - If some of the project's costs fall in the future, discount these costs accordingly. If the project costs fall wholly in the past, discounting is not necessary.
  - Determine the proportion of the project's total costs devoted to a particular activity. First, determine if the activity focuses wholly or only partly on the stratum examined by the study. If it focuses wholly on this stratum, then simply determine the total cost of this activity. If it focuses only partly on this stratum, then multiply its total cost by the proportion of this activity focused on the stratum being examined. Determine total activity costs as follows: Add together all activity costs from the project's budget, then divide the listed activity costs by the total activity costs to obtain the percentage of the project's activity costs devoted to this activity. To obtain the total costs for this activity (i.e., including staff, transport, M&E...), multiply this percentage by the total project costs.
  - Determine if the intervention incurred any in-kind costs. If so, estimate these costs and add them onto the costs side of the ledger.
  - Determine if other interventions made a significant contribution to this outcome. If so, integrate these costs into the analysis in one of two ways. If data can be obtained on the costs of this other intervention, then obtain this cost data and include them on the costs side of the ledger for the CBCBA analysis. If obtaining these costs proves difficult, an alternative approach is to estimate the proportion of the observed outcomes due to the intervention being examined and the proportion due to these other interventions. Using this value, adjust the benefits side of the ledger accordingly. For instance, if the intervention being examined is deemed to be responsible for just  $\frac{1}{2}$  of the observed outcomes, then the benefits calculations should be multiplied by 0.5.
- c. Generate benefit-cost ratios
- For each intervention or intervention activity being quantified, generate BCR values by dividing its discounted benefit measure by the relevant discounted cost measure.

## Step 6: Conduct sensitivity analysis

Sensitivity analysis is a way to test the robustness of CBCBA's quantitative findings. It assesses whether an intervention would still be justified from a financial perspective under differing conditions.

Sensitivity analysis examines how varying key assumptions or parameters used in the quantitative analysis affects its findings. It involves running the calculations to generate BCR statistics several times using differing assumptions, then drawing conclusions about the analysis based on how these changes affect its findings.

One parameter that could be examined by the sensitivity analysis is the discount rate. Another is differing assumptions about the incidence of future climatic shocks.<sup>1</sup> A third is differing assumptions about the expected duration of the intervention's benefits, such as whether they will last 5 years or 10 years. Other parameters that could also be examined as part of sensitivity analysis are unusually high or low rates of population growth, spontaneous dissemination of outcomes to non-targeted households or communities, or eventual failures of various types. Alternative plausible assumptions selected should cover both more optimistic and more pessimistic scenarios than those used in the core analysis.

### Tasks for step 6

- a. Re-run the quantitative analysis from step 5 to generate alternative estimates for the BCR based on varying key assumptions.
  - Reiterate the core assumptions for the analysis, which must include a discount rate and estimated duration of benefits, but might also include other factors as needed.
  - Select several alternative plausible assumptions to examine that cover both more optimistic and more pessimistic scenarios than those used in the core analysis. More optimistic scenarios might include longer duration of benefits or spontaneous dissemination to those not specifically targeted by the intervention, while more pessimistic scenarios might include shorter durations or various types of failures.
  - In all cases, these alternative assumptions should include (1) using a discount rate of 0%, (2) benefits continuing for a longer or a shorter period, (3) benefits disseminating beyond their target beneficiaries.
  - For each intervention or intervention activity being quantified, generate BCR values by dividing its discounted benefit measure by the relevant discounted cost measure.
- b. Discuss the implications of this exercise for the robustness of the CBCBA's quantitative findings, as well as the importance of support institutions like government or donors providing certain types of support in order to create an enabling environment.

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<sup>1</sup> For instance, if a hazard event such as flooding is unlikely in the target area but would have a major impact, then sensitivity analysis could examine how changing assumptions regarding the frequency of flooding affects the cost-effectiveness of the intervention being examined.

*Example to illustrate generating benefit-cost ratios and conducting sensitivity analysis*

| Priority activities | Quantitative evidence of benefits (physical measures)   | Expected duration | Relevant price data                                       | Target population <sup>2</sup>                           | Calculation of benefits  |
|---------------------|---|-------------------|---|--|--|
| Fodder production   | Gains to target households fell into three categories, namely selling fodder, using fodder to fatten livestock for sale, and selling milk from animals fed on this fodder. Gains were concentrated in the dry season, namely:<br>(1) Fodder sales of 3,000 Ksh/mo. for 6 mos. / year.<br>(2) Livestock fattening of 3,000 Ksh/mo. for 6 mos. / year<br>(3) Dairy production of 11,500 Ksh/mo. for 8 mos./year, since milk production lasts longer due to fodder production.   | 10 years          | Goat= 5,000 Ksh<br>Milk= 150 Ksh/litre<br>Cow= 30,000 KSh | 450 target households, spread across three target groups | Earnings from fodder sales<br><br>(sales per month)*(# of months sold per year)*(estimated duration of benefits)*(# of target households)<br><br>(3,000/month)*(6 months)*(10 years)*(450) =<br><br>Earnings from livestock fattening<br><br>(monthly profits from animal sales)* (# of months sold per year)* (estimated duration of benefits)* (# of target households)<br><br>(3,000 Ksh)*(6 months/year)*(10 years)*(450) =<br><br>Earnings from milk production<br><br>(sales per month)*(# of months sold per year)*(estimated duration of benefits)*(# of target households)<br><br>(11,500 Ksh)*(8)*(10)*(450) = |
| Small business      | Members of VSLA group start new businesses that generate alternative income sources for their households. This income delivers diverse welfare benefits to these communities (e.g., higher food consumption, covering school fees), but is also used to increase the livestock holdings of households. These livestock enhance the household's asset stocks, and can also be used to earn money through milk production or fattening and resale. The monthly earnings of these shops vary from 20,000-40,000, while their | 5 years           |   | 1,100 target households                                  | Earnings from small businesses<br><br>(profits per month)*(# of months sold per year)*(estimated duration of benefits)*(# of target households)<br><br>(10,000 Ksh)*(12 months/year)*(5 years)*(1,100) =   |

<sup>2</sup> Please note that this wider target population only covers the population within the stratum being examined by CBCBA, in cases where the wider target population of the intervention being examined was stratified.

| Priority activities | Quantitative evidence of benefits (physical measures)  | Expected duration | Relevant price data | Target population <sup>2</sup> | Calculation of benefits |
|---------------------|--|-------------------|---------------------|--------------------------------|-------------------------|
|                     | profits vary from 10,000-20,000. Following the project, some non-beneficiaries are seeking to copy the activities of the beneficiaries by starting shops of their own. |                   |                     |                                |                         |

#### Project costs

| Intervention/activity                             | Project costs (£) | Costs to other organisations | In-kind cost data |
|---|-------------------|------------------------------|-------------------|
| Save the Children project (pastoral stratum only) | 1,538,614         | -                            | -                 |
| Fodder production                                 | 707,762           | -                            | -                 |
| Small business development (VSLA)                 | 646,218           | -                            | -                 |

#### Relevant benefit data and benefit-cost ratios

| Intervention/activity                             | Benefit estimates (£) | Headline benefit-cost ratios |
|---|-----------------------|------------------------------|
| Save the Children project (pastoral stratum only) | 6,782,027             | 4.4                          |
| Fodder production (fodder sales only)             | 390,660               | 0.6                          |
| Fodder production with spin-offs                  | 2,778,027             | 3.9                          |
| Small business development                        | 4,004,000             | 6.2                          |

#### Sensitivity analysis

| Parameter being altered  | New benefit estimates (£) | New benefit-cost ratios |
|--|---------------------------|-------------------------|
| Fodder production including spin-offs, if benefits lasted 5 years instead of 10  | 1,747,200                 | 2.5                     |
| Fodder production including spin-offs, if benefits lasted 20 years instead of 10 | 3,746,134                 | 5.3                     |
| If a discount rate of 0% were used for fodder production, including spin-offs    | 4,266,667                 | 6.0                     |
| If a discount rate of 0% were used for small business development                | 4,888,889                 | 7.6                     |

#### *Step 7: Couch these quantitative measures in their wider context using qualitative data*

While useful, quantitative measures only tell part of the story, since they only look at aspects of interventions that can be readily quantified. Yet resilience interventions targeting small-scale farmers and pastoralists tend to generate diverse benefits, many of which are difficult to quantify. As such, any analysis of these interventions must take this fundamental reality into account. In practical terms, this means that any quantitative findings obtained must be couched within their wider context. Specifically, they must be presented alongside qualitative measures that convey the qualitative impacts of the intervention, both positive and negative. Only such integrated findings can convey a balanced and inclusive picture of the efficacy of interventions into such communities.

Several hypothetical case studies illustrate this point. In the best-case scenario, positive quantitative findings are supported by positive qualitative findings, thus conveying a compelling picture of the intervention's efficacy. Another possible scenario is that positive quantitative findings are coupled with ambiguous qualitative findings, raising questions as to whether the intervention is truly as beneficial as the quantitative measures suggest. Still another possible scenario is that weak quantitative measures are coupled with strong

qualitative findings, suggesting that perhaps the intervention is beneficial to communities – and hence a worthwhile investment – despite weak quantitative findings. This third case shows that a low BCR need not mean that an intervention is not a good investment, since perhaps the benefits quantified represent only a small part of its true impact. Where this occurs, this fact could be highlighted by the analysis and supported by qualitative evidence, in order to ensure that the CBCBA findings provide sound guidance for future interventions.

Qualitative evidence of the intervention's impacts is integrated into the findings of CBCBA in two distinct ways. One involves gathering, summarising and commenting on the qualitative impacts data collected by the study. The other involves the CBCBA analyst generating a subjective ranking of each the intervention's activities, based on the quantitative and qualitative findings of the study taken together. This ranking involves awarding a score of between 1 and 5, where 1 represents a low score and 5 a high score.

#### Tasks for step 7

- Complete the sections of the Data Summary template that cover the qualitative impacts of the intervention being examined, namely tables 6, 8 and 13. Once completed, these tables clearly show the range of perspectives on key questions, including both (1) how the views of community members differ from those of implementing organisations and key informants, and (2) how views on key issues sometimes differ across target communities.
- Complete the analyst's observations sections of the relevant Data Summary tables.

#### *Step 8: Assess scope for using secondary data to enhance the study findings*

Pre-existing data on the intervention being examined can potentially be used to enhance the CBCBA study. For instance, this might include data gathered by the implementing organisation or local government. Notably, if the implementing organisation has gathered solid data on outcomes of their intervention, this could potentially be used to enhance the CBCBA study. Other types of data that could prove useful include evidence on the challenges facing target communities, the background context of these communities, the local hazard profile, and other promising interventions.

While such data could provide useful complements to the CBCBA process, they should not replace any of its steps. This follows because the process of data collection under CBCBA was carefully designed to first win the trust of interviewees, then to take them through a process whereby they share their observations and perceptions of a range of relevant factors. It cannot be assumed that other organisations have followed this same process. The other benefit of following a broadly similar set of procedures is that it means that the resulting findings should be broadly comparable.

#### Tasks for step 8

- Assess the scope for using existing datasets gathered by the implementing organisation, local government or others to enrich this analysis.

#### *Step 9: Draw out lessons learnt*

Various lessons learnt should be drawn out of the CBCBA findings by the analyst. Components of this discussion might include:

- The significance of the quantitative findings, including how qualitative findings affect interpretation of their meaning.
- Aspects of the intervention examined that appear to be particularly effective or less effective, based on analysis of the evidence gathered.

- Possible adjustments to the activities of the intervention being examined, in the event that similar activities were to be supported again in future.
- Potential gaps or future directions for supporting the target populations
- Potential improvements to the CBCBA approach

Beyond these lessons learnt to be highlighted by the analyst, a second aspect of learning involves the experience of various participants with the CBCBA process. At its best, this process can serve as a potent learning opportunity for participating stakeholders. Notably, this process could generate useful learnings for both the implementing organisation and its target communities. One source of learning could be CBCBA's focus on discussing a wide range of challenges to the community, as well as how they have changed over time and why. Another could be its relentless focus on perceived outcomes, including looking at the experience of individual households and how these relate to the wider village. A third could be thinking about benefits in terms of the three aspects of the 'triple bottom line', namely economic, social and environmental.

#### Tasks for step 9

- [Generate a narrative text on lessons learnt from the study that touches on as many of the considerations cited in the preceding two paragraphs as possible](#)

#### *Step 10: Solicit input from selected stakeholders*

In order to both strengthen the analysis and maximise ownership of its findings by its principal stakeholders, CBCBA involves soliciting input from these stakeholders into a draft version of its findings. The stakeholders included in this process are the implementing organisation of the intervention being examined and the funders of the CBCBA study. Once comments and suggestions are received, the analyst should revise the analysis and report as appropriate. If the study's budget allows it, CBCBA could also include making a presentation of its findings to relevant officials of the host country government to answer their questions and solicit their input, and then making final revisions to the report based on this input.

#### Tasks for step 10

- [Send the funding body and the implementing organisation a draft version of the analysis in order to solicit their comments and suggestions and ensure they feel part of a collaborative process in which their voice is fully heard.](#)
- [Integrate the input provided into the final report, where appropriate.](#)
- [If possible within the study's funding constraints, present the findings to relevant government officials, then answer their questions and note their comments and suggestions. Following these meetings, act on these comments and integrate these suggestions, where appropriate.](#)



# SECTION 2

## Reporting phase

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Given the complexity of CBCBA, reporting of findings will typically take the form of a stand-alone report. Potentially, however, CBCBA findings can simply be integrated into other reports, such as those on case studies or wider assessments.

Reporting should be as clear and intuitive as possible, and will necessarily include narrative discussion as well as tables that summarise key findings. Tables can be used to convey clear and concise summaries of quantitative benefits, qualitative benefits, adverse impacts and intervention costs. They can also be used to organise evidence that informs the discussions on opportunities, barriers, leverage points and lessons learnt.

The main sections of the CBCBA report will be as follows:

### 1. Background context and hazard profile

This text will include (a) the analyst's summary of each key factor, (b) comments on each factor from target communities, the implementing organisation and key informants, (d) the analyst's observations on the evidence cited. A table will also be provided to summarise the frequency with which different challenges were cited by target communities, to help convey a full picture of their concerns and perspective.

### 2. Brief description of the intervention

This text will briefly describe the intervention being examined via CBCBA, including its objectives, target population and activities.

### 3. Observed impacts

This text will include (a) a listing of the three activities perceived to be the most significant by target communities and a description of each activity, (b) qualitative evidence on the benefits of the priority activities, (c) quantitative evidence on the benefits of these activities, where possible, (d) expected duration of the observed benefits, (e) adverse impacts of the intervention. On each point, the discussion will include a brief summary of the factor in question, selected interviewee comments, and the analyst's observations of the evidence cited.

### 4. Discussion

This text will summarise the various lessons learnt from the study, make recommendations for future programming and policy, and draw conclusions. Specific sections will include (a) overview of lessons learnt, (b) opportunities, barriers and possible leverage points, (c) other barriers to building the climate resilience of these communities, and (d) recommended next steps.