

## 3.7.1

### SERIES 3

#### Building Resilience



# Developing A Terms of Reference

### Activity 3.7.1

This activity is based loosely on the format used by the European Commission to solicit pre-feasibility studies. This format can easily be adjusted to the needs of your team, but touches on the main areas required in most terms of reference and provides some standard text and main bullets.

#### IN THIS ACTIVITY YOU WILL:

- ✓ Develop a terms of reference to ensure that the right team is hired for the CBA process

## ACTIVITY 3.7.1: DEVELOPING A TERMS OF REFERENCE

### INSTRUCTIONS

Step 1: Read through the climate framed cost-benefit analysis terms of reference below.

Step 2: Review the reminders in the left hand column; these describe what should be contained in each section.

Step 3: Work with your team to build draft terms of reference.

#### A. STUDY BACKGROUND

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**A:** Information concerning the background of the Hiring Authority and the agreement that will be made between the Consultant and the Hiring Authority.

#### B. STUDY OBJECTIVES

"This study will provide the {*hiring authority*} in the {*organization, governmental department, etc.*} with the ability to make informed decisions concerning the adoption, rejection or modification of {*project interventions under review*} to ensure more informed decisions are made, with climate information integrated in the project appraisal."

**B:** Information concerning the overall objective of the cost-benefit study and how it will support your team.

### C. STUDY RESULTS

This Cost-Benefit Analysis of the *{proposed project interventions}* will include the following:

- A comprehensive listing of all data needed or desired to conduct the cost-benefit analysis as planned. This will be recorded in a data framework checklist similar to the one attached.
- Assessment of whether all needed data is available, and if so, collection and compilation of all needed data and useful supplemental data.
- A hazard analysis associated with future climate scenarios for *{specify future time period that is to be assessed}*
- An analysis of current vulnerabilities. This analysis may include exposure, fragility or damage information of current asset stocks, etc.
- An analysis of the proposed risk reduction strategies in terms of losses by frequency or recurrence period of future climate events compared to a business-as-usual scenario (current conditions without interventions).
- A discounted cash flow analysis that looks at each alternative risk reduction strategy and identifies at least the net present value and benefit cost ratio (but is not limited to looking at only these aspects).
- Recommendations on how to prioritize risk reduction activities, including detailed information concerning timeline of implementation, cost to implement, and overall feasibility.
- A set of recommendations stemming from the analysis.
- *{Others to be included}*

### D. Issues to be studied

The consultants will study:

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C: Information concerning the expected outputs that your team requires of the consultants. This is not limited to just the cost-benefit analysis, but can include a more comprehensive review.

D: Information about the larger issues concerning the study: the background behind why risk reduction actions are being proposed and why this CBA is being undertaken, gaps in current information the CBA study is designed to fill, etc. This may include information that the cost-benefit study will generate or areas that the cost-benefit study should focus on.

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## E. WORK PLAN

The consultants should provide a detailed plan for how they will structure and implement the proposed cost-benefit analysis. This could include:

- How the data collection phase will be conducted, which agencies will be contacted, whether data is free or will need to be purchased, etc.
- How they will determine whether critical data needed for the analysis is available (i.e. verification that the CBA can be conducted as planned), and by what date this will be accomplished.
- How they plan to integrate local participation, perhaps using the Shared Learning Dialogue Approach.
- How the current proposed interventions will be analyzed.
- What methodology will be used for the vulnerability assessment.
- What will be included in the final report?

## F. EXPERTISE REQUIRED

The consultant will be sure to assemble a team that includes the following experts:

**Economist:** A quantitative CBA requires an economist with the following experience:

- Has conducted and understands the steps to conduct cost-benefit analysis.
- Understands how to read and develop depth damage curves.
- Can use valuation techniques to determine market and potential non-market values.
- Familiarity with sourcing and identifying many types of data.

**Climate Scientist:** The climate scientist will need to work with both the city planning team and the CBA economist to identify the point at which climate events become an issue for the proposed or implemented resilience project.

E: Desired work plan activities, deliverables, and due dates.

F: Key qualifications required for the study. For the purposes of the cost-benefit analysis, the suggested key team has been described.

- Has experiencing analyzing weather and hazard trends.
- Has experience conducting frequency analysis and developing climate scenarios that can be used by the economics team.

**Hazard Specialist:** The hazard specialist will work with the economist, climate change scientist and city planning team.

- Has experience working with communities to identify future or current hazards.
- Can provide qualitative information concerning the benefits and negative benefits of current risk reduction strategies.

## G. REPORTING

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## H. TIME SCHEDULE

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G: Details required by the contracting group.

H: A Gantt Chart detailing out the timeframe for each element in the work plan.