The PROVIA Guidance on Assessing Vulnerability, Impacts and Adaptation to Climate Change

Alexander (Sandy) Bisaro
Global Climate Forum
Addis Ababa, April 14-17, 2014
LEG Technical Guidelines: Element B

• Preparatory elements (pages 54–88):
  • Step B.1. Analysing current climate and future climate change scenarios
  • Step B.2. Assessing climate vulnerabilities and identifying adaptation options at sector, subnational, national and other appropriate levels
  • Step B.3. Reviewing and appraising adaptation options
  • Step B.4. Compiling and communicating national adaptation plans
  • Step B.5 Integrating climate change adaptation into national and subnational development and sectoral planning
### B. Analysing current climate and future climate change scenarios

1. **Analyse the current climate**
   - a. Analyse the current climate
   - b. Characterize future climate risk using scenario analysis

2. **Assessing climate vulnerabilities and identifying adaptation options**
   - a. Assess vulnerability to climate change at multiple levels
   - b. Identify and categorize adaptation options

3. **Reviewing and appraising adaptation options**
   - a. Appraise individual adaptation options

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Analyse the current climate</td>
<td>3.2.1 Describing current impacts</td>
</tr>
<tr>
<td>b. Characterize future climate risk using scenario analysis</td>
<td>3.4.3 Scenario analysis</td>
</tr>
<tr>
<td>a. Assess vulnerability to climate change at multiple levels</td>
<td>2.1 Identifying adaptation needs</td>
</tr>
<tr>
<td>c. Identify and categorize adaptation options</td>
<td>3.2.2 Modelling future impacts</td>
</tr>
<tr>
<td>a. Appraise individual adaptation options</td>
<td>3.2.3 Vulnerability indication</td>
</tr>
<tr>
<td></td>
<td>3.3.4 Knowledge elicitation</td>
</tr>
<tr>
<td>2.1 Identifying adaptation needs</td>
<td>2.2 Identifying adaptation options</td>
</tr>
<tr>
<td>2.2 Identifying adaptation options</td>
<td>2.3 Choosing approaches for appraising adaptation options</td>
</tr>
<tr>
<td>3.2.1 Describing current impacts</td>
<td>3.7 Formal decision-making</td>
</tr>
<tr>
<td>3.4.3 Scenario analysis</td>
<td></td>
</tr>
<tr>
<td>3.2.2 Modelling future impacts</td>
<td></td>
</tr>
<tr>
<td>3.2.3 Vulnerability indication</td>
<td></td>
</tr>
<tr>
<td>3.3.4 Knowledge elicitation</td>
<td></td>
</tr>
<tr>
<td>2.3 Choosing approaches for appraising adaptation options</td>
<td></td>
</tr>
<tr>
<td>3.7 Formal decision-making</td>
<td></td>
</tr>
</tbody>
</table>
2.1 Identifying adaptation needs

**Entry point**

**Adaptation situation:**
- Climate change is a concern, but its potential impacts – and specific vulnerabilities to be addressed – are not well understood.

**You want to:**
- Identify adaptation needs

FIGURE 2.1.1 Approaches to identifying vulnerability.
2.1.2 Choosing approaches to impact analysis

**Entry point**

**Adaptation situation:**
- Climate change is a concern for potential impacts – and specific vulnerabilities to be addressed – as it is understood.
- Knowledge on impacts is critical in shaping adaptation.

**You want to:**
- Identify adaptation needs
- Understand the potential impacts of climate change

**FIGURE 2.1.2 Choosing approaches for impact analysis.**
2.1.3 Choosing approaches to capacity analysis

**Entry point**

**Adaptation situation:**
- Climate change is a concern, but its potential impacts – and specific vulnerabilities to be addressed – are not well understood.
- Social, economic and institutional capacity are considered to be critical in shaping adaptation needs.

**You want to:**
- Identify adaptation needs
- Understand which social, economic and institutional factors shaping vulnerability and adaptive capacity are relevant

---

**FIGURE 2.1.3 Choosing approaches for assessing potential capacity.**
2.1.3 Choosing approaches to capacity analysis

Entry point

Adaptation situation:
- Climate change is a concern, but its potential impacts – and specific vulnerabilities to be addressed – are not well understood.
- Social, economic and institutional capacity are considered to be critical in shaping adaptation needs.

You want to:
- Identify adaptation needs
- Understand which social, economic and institutional factors shaping vulnerability and adaptive capacity are relevant

Type of adaptation situation?

- Private
  - Organizational self assessment
- Public
  - Capacity indication

FIGURE 2.1.3 Choosing approaches for assessing potential capacity.
2.2 Identifying adaptation options

2.2.1 Overview

**Entry point**

**Adaptation situation:**
- A specific adaptation problem or decision has been identified.

**This is what you want to do:**
- Identify adaptation options.

![Diagram of Identifying adaptation options](image-url)
FIGURE 2.2.2 Choosing approaches to support a public actor influencing individual adaptation.
2.3 Appraising adaptation options

**Entry point**

**Adaptation situation:**
- A specific adaptation problem or decision has been identified.
- A set of adaptation options has been identified.

**This is what you want to do**
- You want to appraise the options and choose the best.

*FIGURE 2.3.1 Overview decision tree for appraising adaptation options.*
<table>
<thead>
<tr>
<th>Empirical criteria</th>
<th>Formal appraisal</th>
<th>Intuitive/ deliberative appraisal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambiguity on options, outcomes and baselines)</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Interconnectedness of decisions</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Information gathering and processing costs</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Importance of money in decision</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Experience on similar decisions with immediate feedback.</td>
<td>Low</td>
<td>High</td>
</tr>
</tbody>
</table>
2.3.3 Choosing approaches for appraisal of options

**Entry point**

**Adaptation situation:**
- A specific adaptation decision identified.
- A set of adaptation options identified.
- It has been determined that on which option to pursue formalized.

**This is what you want to do:**
- Choose an adaptation option formal method.

---

**FIGURE 2.3.2** Choosing approaches for formal appraisal of options. Note that CBA refers to cost-benefit analysis, and CEA to cost-effectiveness analysis. These are described further in Section 3.7.