



Four-step approach (1) Assess vulnerability



On behalf of
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The four-step approach: the basic adaptation planning process (1)

- **The systematic process deals with all questions relevant for planning adaptation.**
- **Going one step at a time avoids mental blocks due to the over-complex challenge.**
- **The four-step approach of the project is crucial to orient strategic planning. This is the step before operational planning.**





The four-step approach: the basic adaptation planning process (2)

Four steps:

- 1. Assess vulnerability**
- 2. Identify adaptation options**
- 3. Select adaptation measures**
- 4. Develop an M&E framework**





Rationale

Objective

- First step of planning adaptation
- Analyse the system of interest's vulnerability and define areas with need for action

Importance

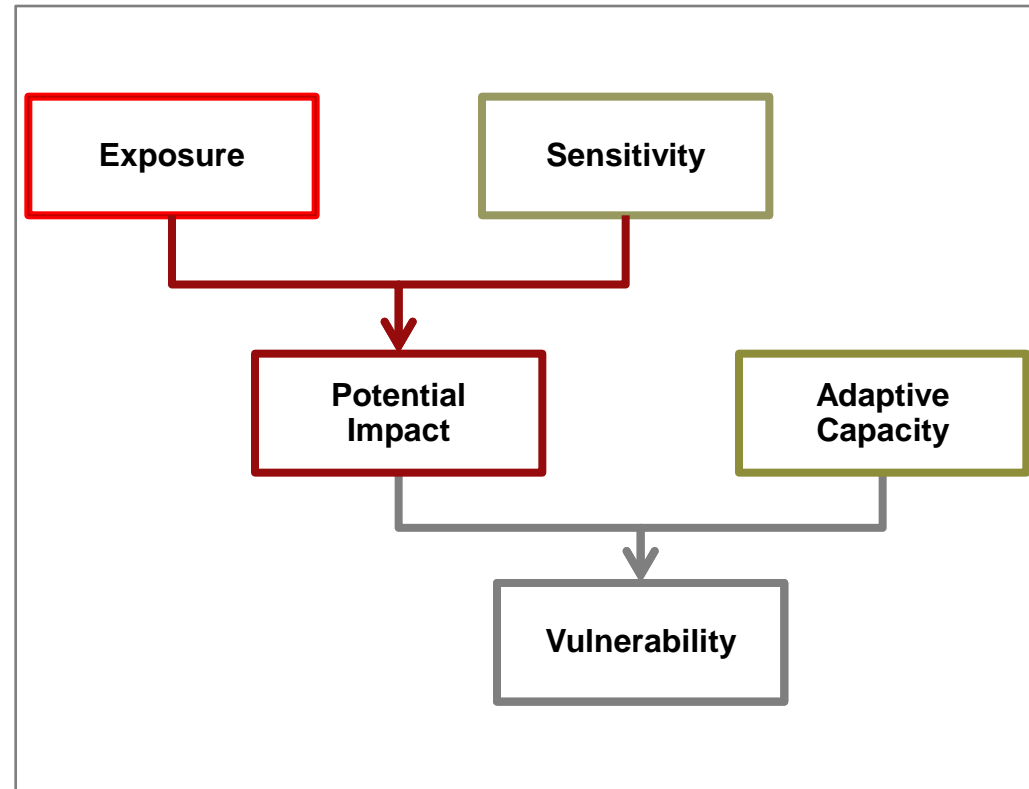
- Establishes the basis for developing solutions: an agreed identification of problems





Terminology

- **System of interest**
(human, natural, economic)
- **Sensitivity**
- **Adaptive capacity**
- **Exposure/Climate signal**
- **Impacts**
 - Biophysical
 - Socio-economic
- **Vulnerability/need for action**





Exercise (1a)

Context

- **Update South State Water Program (State Water Authority (SWA), Ministry of Water (MoW), Ministry of Agriculture (MoA))**
- **Development funding will be allocated for priority activities to improve water management under climate change**
- **SWA has established an advisory group to support the integration of climate change adaptation in the revision of the South State Water Programme**
→ your working group





Exercise (1b)

- **SWA has decided to focus the revision on two key areas, that correspond with the National Development Plan (NDP)**
 - Increased and diversified agricultural production and rural incomes
 - Safe drinking water supply and sanitation
- **Exhibits**
 - Introduction to South State





Exercise (2a)

Your task, Part 1

- **Gather information necessary for Part 2**
- **Take stock of recent situation in the system of interest**
- **Use Matrix 3 and 4:**
 - In the first column brainstorm the natural and social assets and relevant actors within the system.
 - In Column A, list climatic changes already experienced.
 - In column B, consider if and how the system of interest's actors and assets are currently sensitive to climate variability.
 - In column C, elaborate factors influencing the system's current adaptive capacity.



Exercise (2b)

Your task, Part 2

- Deals with the future;
- Analyse potential impacts of climate change
- Define the vulnerability and need for action
- Use Matrix 5 and 6:
 - In column D, identify the key climate change signals to which the system is likely to be exposed
 - In column E, brainstorm the potential impacts to the biophysical part of the system
 - In column F, brainstorm socio-economic impacts
 - In column G, rate where there is need for action



Exercise (3)

Results

- (please specify)

Logistics

- Case work
- Presentation of results (please specify how)
- Reflection





Example – **Climate change vulnerability in rural India**

Local context

- **1/3 of geographic area is drought or flood prone**
- **High temperatures, and highly seasonal rainfall**
- **1/5 of GDP is from agriculture**
- **61% of land area is in agriculture**
- **60% of rural population with livelihoods in natural resources**
- **Current incentives support unsuitable crops**
- **86% of freshwater withdrawal is for agriculture**