

**CGE TRAINING MATERIALS ON  
VULNERABILITY AND ADAPTATION  
ASSESSMENT**

Integration, Mainstreaming,  
Monitoring, and Evaluation



# Outline

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- Integration
- Mainstreaming
- Monitoring and evaluation (M&E)



# Understanding integration

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- **Unite**
  - **Combine existing and new**
  - **Incorporate into a larger unit**
  - **Bring together into a single system that functions as one**
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- **End result - of a process that aims to bring together different elements so that climate change becomes part of a larger, more comprehensive system.**

## What is the principal objective of doing integration of vulnerability and adaption assessment outcomes across sectors?

- The objective of integration is to understand the interrelationships between sector-specific climate change and the relative importance of risks to help inform impact and adaptation priorities across sectors.



# Why is integration important?

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- Impacts **do not happen in isolation**:
  - a) Impacts in one sector can adversely or positively affect another
  - b) Some sectors are affected directly and indirectly
  - c) Others just indirectly
  - d) Sometimes a change in one sector can offset the effect of climate change in another sector
- Integration across an economy or society can help in **understanding the vulnerability** of a municipality, region, or country
- Climate change adaptation - Sustainable development



# Main approaches to integration of results

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- Integrating impact assessment outcomes:

- a) Cross-sector:**

- Link related sectors
      - Water and Agriculture
      - Water and Human health
      - Coastal Resources

- b) Multi-sector:**

- Economy or system wide
    - Sectors may not be related to each other
      - **Integrated assessment models**
    - Economic models



# Cross-sector integration

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- Qualitative:
  - a) Identify links between sectors and highlight the direction of impacts
  - b) Rely on the application of expert judgement:
  - c) Extended process using a broader group of stakeholders
- Quantitative integration
  - a) Use common metric, e.g., water supply to examine linkages



## Multi-sector integration

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- Should be as comprehensive as possible, covering as many affected sectors, regions and populations as possible
  - A clear understanding of how society as a whole might be affected by climate change:
    - a) Breadth of impacts
    - b) Severity of impacts
  - Two common approaches:
    - a) Economic impacts as common currency (based for example on general equilibrium economic models)
    - b) Qualitative prioritization
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# Multi sector-integration: Simple approach-matrix/ranking

Table 4.9.1: Cross-linkages between the targeted sectors

SECTORS	Climate Change	Water Resources	Agriculture	Forests and Biodiversity	Energy Production	Glaciers and GLOFs	Human Health
Climate Change	-	XXX	XXX	XX	XX	XXX	XX
Water Resources	XXX	-	XXX	XX	XXX	XX	XX
Agriculture	XXX	XXX	-	XXX	X	XX	XX
Forestry and Biodiversity	XX	XX	XXX	-	XX	XX	X
Energy Production	XX	XXX	X	XX	-	XX	X
Glaciers and GLOFs	XXX	XX	XX	XX	XX	-	XX
Human Health	XX	XX	XX	X	X	XX	-

*X: Little Impact*

*XX: Significant Impact*

*XXX: Very Significant Impact*



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*Mainstreaming Climate Change*



# Why mainstream?

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- Mainstreaming focuses how to incorporate climate change vulnerability and adaptation in planning, both at the local and/or national level.
- It is to ensure that:
  - a) The potential impacts of climate change is given due consideration in the development.
  - b) The necessary resources/budget are provided for in plans, projects and programmes.



# UNDP principles for mainstreaming

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- Understand linkages between climate change and development
- Mainstream into ongoing processes, e.g.,
  - a) National development plans
  - b) Sustainable development plans
  - c) Poverty reduction plans
- Incorporate adaptation into
  - a) Budgeting and finance
  - b) Implementation
  - c) M&E



# Approach

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- Find entry points:
  - a) Identify links between climate change and national development priorities
- Mainstream into policy processes:
  - a) National development plans
- Implementation challenge:
  - a) Ensuring that it is mainstreamed into budgets and financing
  - b) Implementation and monitoring



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# What is the difference between integration and mainstreaming?



# Monitoring and Evaluation

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- Identifies **progress** towards defined objectives
- Identifies **factors that affect progress**
  - a) Factors that contribute to success
  - b) Barriers that limit or inhibit success
- Provides useful information to contribute to **modification of design or implementation** of programs



# When could Monitoring and Evaluation be used

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Programme design: Can help clarify objectives



Mid term review: Facilitates modification



Retrospective: After the programme is completed



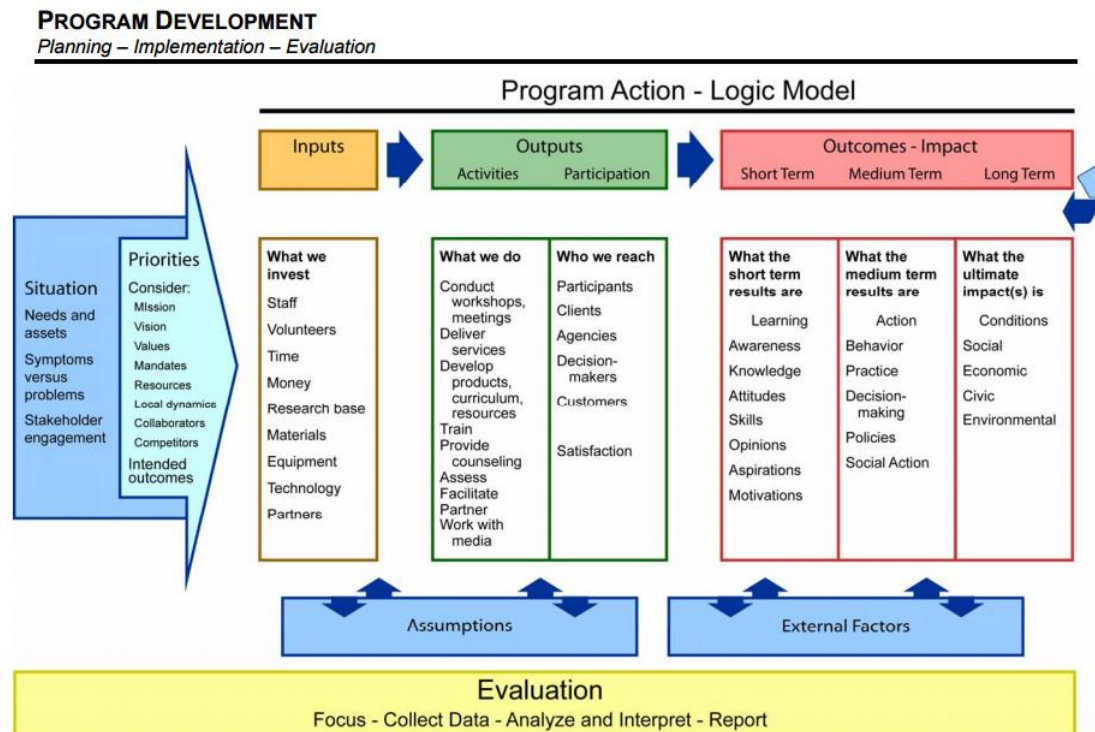
Real time evaluation: Done throughout the programme





# Major Monitoring and Evaluation components

- Questions that M&E needs to answer
- Evaluation framework
  - a) Typically logic model or theory of change



# Challenges of Monitoring and Evaluation

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- Monitoring performance of adaptation can be challenging:
  - a) Defining successful adaptation
  - b) Defining and evaluating success against moving baselines
  - c) Determining contribution of the program
  - d) Identifying conclusive indicators
  - e) Gathering relevant performance data to assist in evaluating impacts



# Evaluation

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- The evaluation of both the **process** undertaken and the **outcomes** is an important component.
- Evaluation of the process should consider any particular **problems encountered** during the process or **suggestions for improvement** and be recorded for future reference.
- Evaluation of outcomes considers the appropriateness of any predictions made.



# Elements of Evaluation

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- a) **Progress of implementation** of the recommended adaptation measures, including the involvement of key stakeholders and the incorporation of impacts of climate change into planning processes;
- b) **Baseline indicators** established during the scoping stages are used as reference for assessment of changes over time.
- c) **Monitoring and surveillance of the status** of the potentially affected sectors/systems. It may be relevant to include new mechanisms for collection data that demonstrates links to climate conditions;



Thank you

