



Second meeting of the global network of basins working on climate change adaptation
Session 4: Developing and implementing transboundary climate change adaptation strategies

Monitoring and evaluation of climate change, impacts and adaptation in the transboundary context

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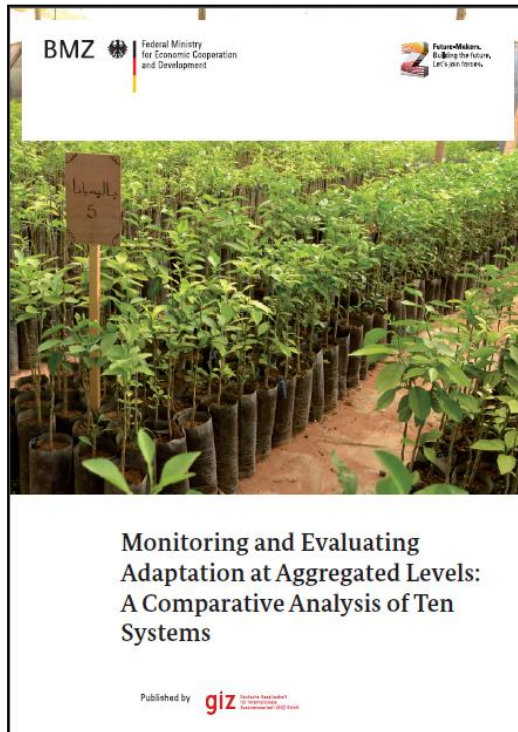


Outline

- 1) GIZ: Analysis of M&E of adaptation at aggregated levels
- 2) MRC: Establishment of the MRC system for monitoring and reporting on climate change, impacts and adaptation in the Lower Mekong Basin



Analysis of M&E of adaptation at aggregated levels – undertaken in 2013 –



M&E of adaptation focused mostly on development of indicator systems at **project and programme level**.

Little attention for higher or more aggregated levels – i.e. portfolio, national, regional and international – with **more strategic questions**, such as:

- How is the climate changing?
- What are the observed impacts of climate change?
- What is the progress towards meeting national/regional adaptation and development goals?
- What is the progress in implementing adaptation activities that respond to climate impacts?
- What are the benefits or results of implementing these adaptation activities?
- What works in adapting to climate change and why?

Link to publication:

https://gc21.giz.de/ibt/var/app/wp342deP/1443/wp-content/uploads/filebase/me/me-guides-manuals-reports/GIZ_2013-M+E_of_Adaptation_Comparative_analysis.pdf

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Analysis of M&E of adaptation at aggregated levels – Comparative analysis of 10 systems –

Country or Program	M&E for adaptation framed in terms of	Purpose	Level(s) of application	Aggregation based on
Nepal	National Climate Change Program (CCP)	Monitor progress, achievements, and lessons-learned from the implementation of the CCP	Program	Eight national projects of the CCP
	Environment Friendly Local Governance (EFLG) framework	Monitor and evaluate environmentally friendly development activities (including the integration of climate change into local development plans and programs.) NOTE: This is not a M&E system for adaptation only.	Subnational	Sectors (environment, climate, disaster risk reduction and waste management)
Norway	2008 Adaptation Action Plan; 2010 National Vulnerability Assessment	Learn what is working in adaptation and why (focusing on qualitative information) in order to inform policy	National, Municipal	Results of surveys, research, pilot projects, and consultations
Philippines	2011 National Climate Change Action Plan (NC-CAP)	Monitor progress in implementing the NC-CAP and evaluate the efficiency, effectiveness and impacts of the Plan	National	Seven strategic priorities of the NCCAP
Pilot Program for Climate Resilience (PPCR)	Climate-responsive development planning; PPCR activities	Monitor national progress towards climate-resilient development and monitor and report on implementation of PPCR	National Program	Projects from the 18 PPCR countries
United Kingdom (UK)	2013 National Adaptation Program (NAP)	Monitor the country's preparedness to climate impacts in priority areas	National	Seven policy themes of the NAP

Dekens et al. (2013).



Analysis of M&E of adaptation at aggregated levels – Comparative analysis of 10 systems –

Country or Program	M&E for adaptation framed in terms of	Purpose	Level(s) of application	Aggregation based on
France	2011 National Adaptation Plan (NAP)	Monitor progress in implementing NAP actions and, eventually where possible, evaluate their impacts	National	20 sectors of the NAP
Germany	2008 German Strategy for Adaptation to Climate Change (DAS)	Monitor climate change impacts and adaptation responses for the 15 action fields outlined in the DAS	National	15 action fields (including two cross-sectional fields) of the DAS
Kenya	National Climate Change Action Plan (NCCAP) 2013-2017	Measure, monitor, evaluate, verify and report the results of adaptation actions	National County	Sector and geographic scale
Mekong River Commission (MRC)	Adaptation planning at different levels in the Lower Mekong Basin	Monitor and report on the status of climate change and adaptation in the Mekong region	River-basin	Sector and geographic scale
Morocco	System for Regional Information on Environment (SIRE)	Monitor and report on the status of climate change impacts, vulnerabilities and adaptation in two regions	Sub-national	Sector (water, agriculture and biodiversity/forests) and geographic scale

Analysis of M&E of adaptation at aggregated levels - MRC

Country or Program	M&E for in terms
France	2011 National Plan (NA)
Germany	2008 German Strategy for Adaptation Change
Kenya	National Action Plan 2017
Mekong River Commission (MRC)	Adaptation at different levels in Mekong
Morocco	Systematic Information (SIRE)

Mekong River Commission: Lower Mekong basin-wide monitoring and reporting system on climate change and adaptation

Context

Programmatic context

The Climate Change and Adaptation Initiative (CCAI) is a regional initiative of the Mekong River Commission (MRC), an inter-governmental body established in 1995 between the governments of Cambodia, Lao PDR, Thailand and Vietnam². CCAI was established in 2009 and the Member Countries agreed on a Program Implementation Plan (PIP) in 2012 through a consultation process. The CCAI is a long-term initiative and will be implemented up to 2025. It aims to guide and harmonize climate change adaptation planning and implementation through improved strategies and plans at various levels and in priority locations throughout the Lower Mekong Basin (LMB). This will be done among other things by developing and implementing a basin-wide system for monitoring and reporting on the status of climate change and adaptation in the Lower Mekong region.³

About the Mekong River Commission (MRC)

The MRC is an inter-governmental agency that works directly with the governments of Cambodia, Lao PDR, Thailand and Vietnam on their common specific interests – joint management of shared water resources and sustainable development of the Mekong River.

As a regional facilitating and advisory body governed by water and environment ministers of the four countries, the MRC aims to ensure that the Mekong water is developed in the most efficient manner that mutually benefits all Member Countries and minimizes harmful effects on people and the environment in the Lower Mekong Basin.

Serving its member states with technical know-how and basin-wide perspectives, the MRC plays a key role in regional decision-making and the execution of policies in a way that promotes sustainable development and poverty alleviation.

Source: www.mekong.org

Purpose of the M&E system

The stated purpose of the monitoring and reporting system is to monitor changes in climate, impacts and vulnerability to climate change and climate adaptation actions and performance at regional, national and sub-basin levels in the LMB. Specifically, the stated objectives of the system include to:

- improve understanding on climate change,
- detect trend and magnitude of change,
- monitor actual impacts of climate change,
- monitor progress and performance on adaptation planning and implementation, and
- improve prediction and early warning on flood and drought.



Photo: GIZ

The potential target users of the system include decision-makers and planners on climate change issues at regional, national, and local levels, technical staff and researchers and other organizations who implement climate change adaptation activities in the LMB.

Level of application and aggregation

The system operates at the river-basin level.

Status as of October 2013

The process is at the **early design stage**. MRC countries agreed on a concept note and an implementation plan for the design, development and operation of the system. Initial steps towards the development of the system are underway and comprise the indicator selection (including data needs and calculation methods), the calculation of some indicators and the methodology development for assessing vulnerability in selected priority themes.

Process

Institutional arrangements

The CCAI is under the MRC Environment Division (ENV), which is a cross-sectional division of the MRC which generates data, information and knowledge to support decision-making. Besides climate change monitoring and reporting, one of the responsibilities of ENV is to establish systems for monitoring the Basin's environmental health. At regional level, the development of the climate change and adaptation monitoring and reporting system is coordinated by the CCAI in close collaboration with other MRC Programmes and the Member Countries.

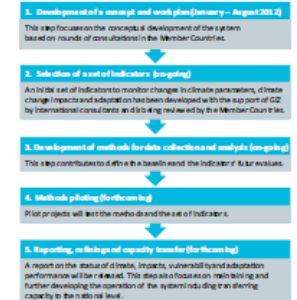
At national level, activities related to the establishment and operation of the system are coordinated by the **National Mekong Committees (NMCs)**. The implementation of the system in the long run will be the responsibility of the MRC countries in line with the MRC decentralisation process. It is expected that this responsibility will be gradually transferred from the CCAI programme to the countries. The exact institutional set up may vary from one country to another and will be decided through the development of a decentralisation plan.

The CCAI Program Document (2013-2015) mentions the establishment of a Mekong Panel on Climate Change (MPCC) as an independent expert body made up of climate change specialists from national, regional and international levels. This expert body has not been created yet as of October 2013.

Establishment process

The establishment of the basin-wide monitoring system includes the following key steps:

Figure 1 Key steps of the establishment process of the system



Implementation process

No information available yet.

Content

Approach

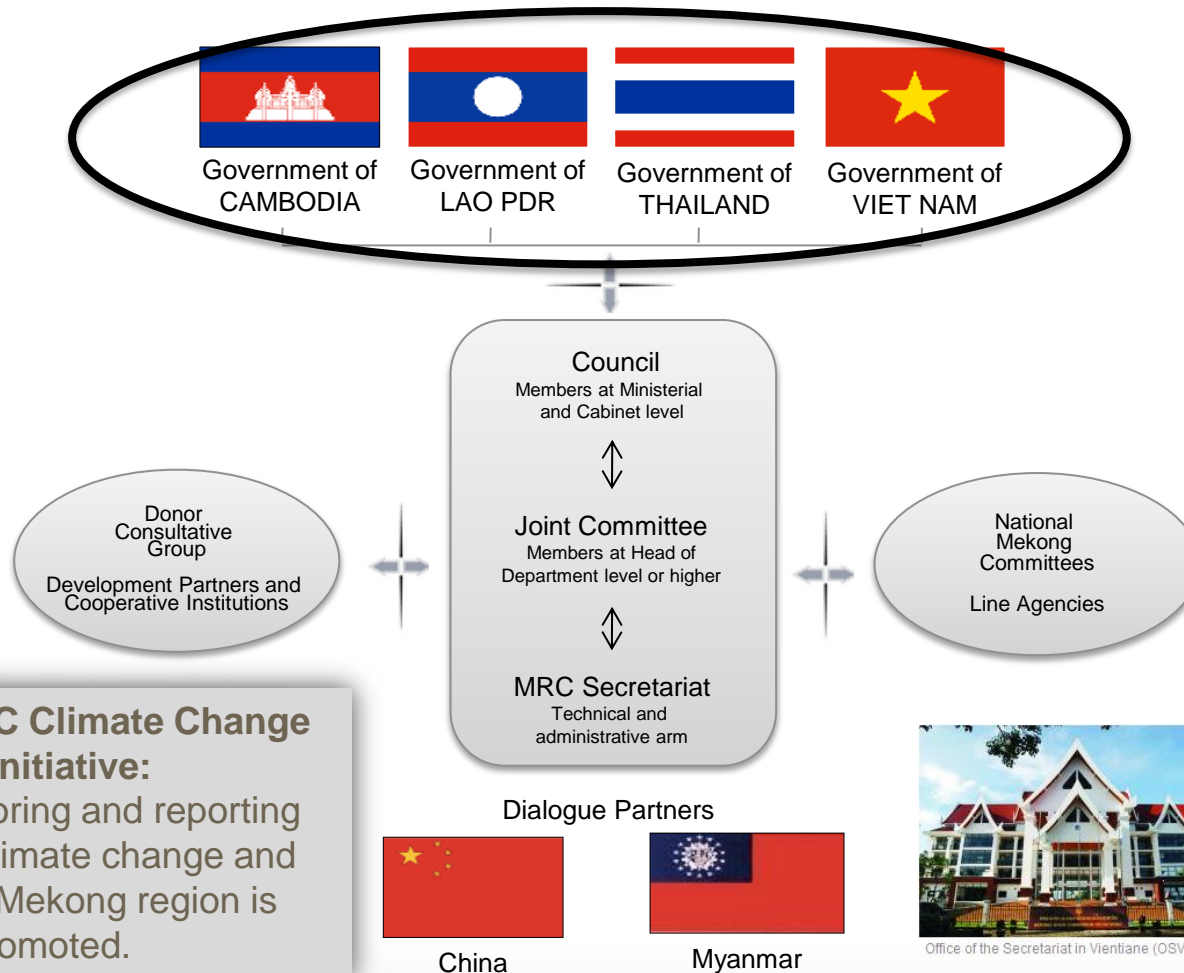
The proposed approach for the basin-wide monitoring and reporting of climate change adaptation in the LMB is the **indicator-based approach**. Baselines will be mainly established based on the calculation of values of climate, impacts and adaptation performance indicators over the baseline period (i.e. 1981-2010 tentatively). Data collection will be on-going using different time intervals to monitor the changes of indicators over time.

Indicators

A **draft indicator framework** proposes to focus on three types of indicators: **climate, climate change impact and adaptation indicators**. Further details on the indicators are not yet available. The final list of indicators will be consulted and agreed with MRC Member Countries. First calculation of the indicators based on available data will be conducted.



Mekong River Commission – Impacts and change?

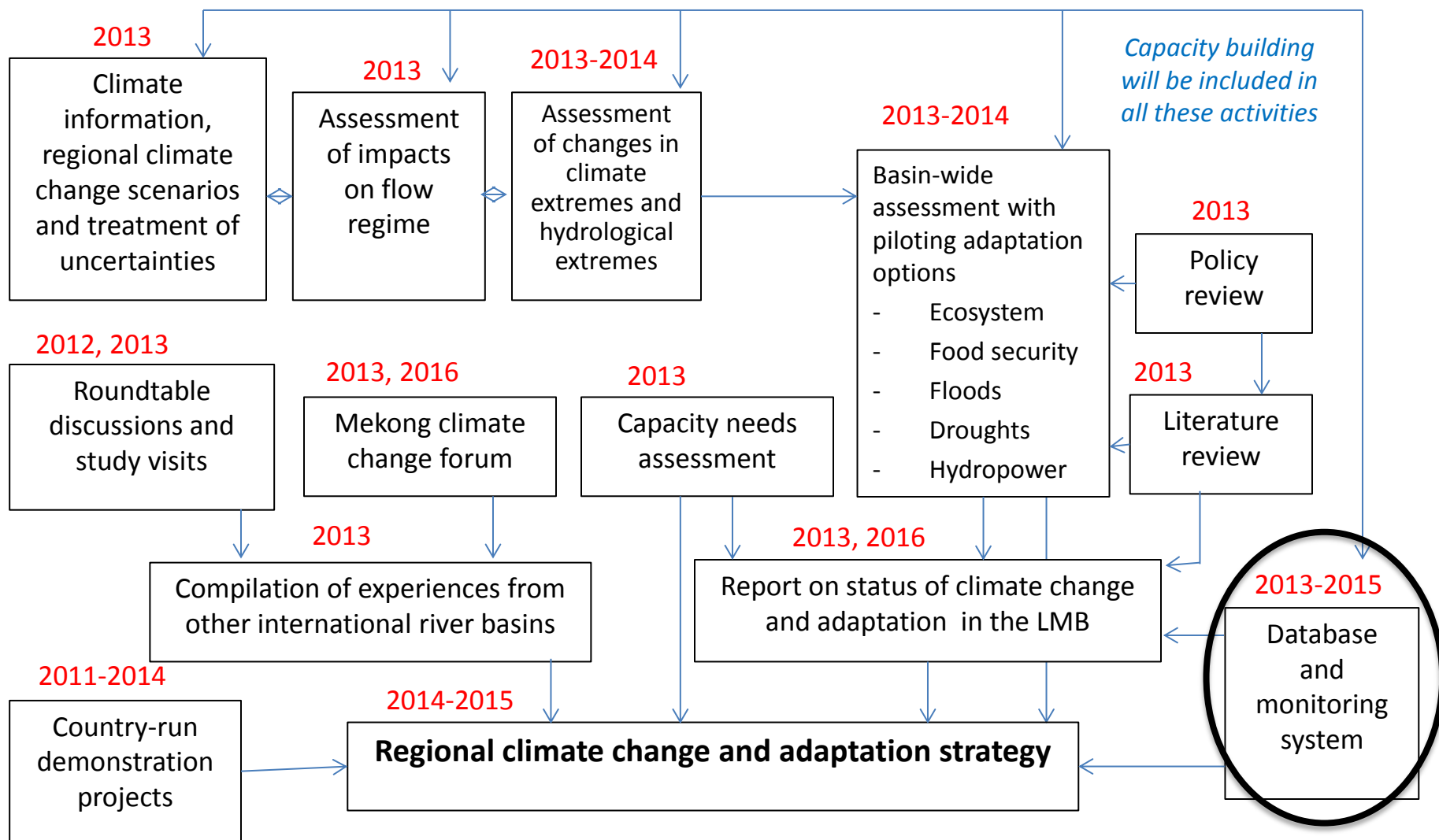


Output 3.2 – MRC Climate Change and Adaptation Initiative:

System for monitoring and reporting on the status of climate change and adaptation in the Mekong region is developed and promoted.

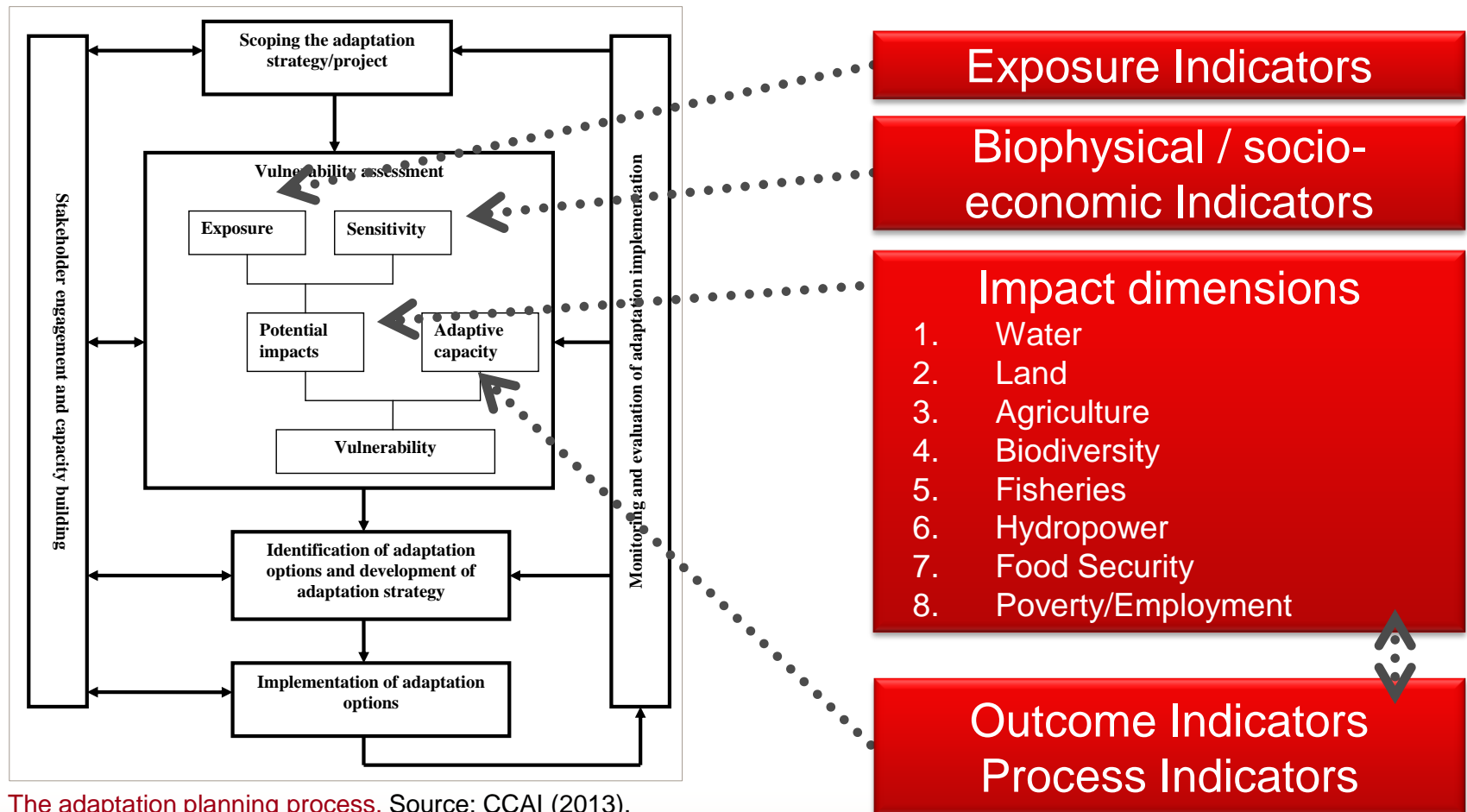
Work plan of CCAI

Assessments and Development of Adaptation Strategy 2013-2015





Identified areas for monitoring





Indicators: Selection Criteria Approach

Step 1: Long list of existing indicators

- Within LMB
- Outside LMB

Step 2: Selection Criteria

- Relevant to climate change and MRC/LMB → **98 indicators**

Step 3: Priority Setting

→ **Score for each indicator**

- Significance to CCAI
- Measurability
- Data Availability
- Acquisition Costs
- Ease of Understanding
- Applied by MRC

List with 98 selected indicators

Indicator		Selection Criteria (1=negative, 3=positive)						
		CCAI	ability	ability	costs	nding	MRC	core
Indicator		Coverage Spatial					Time	Temporal
Indicator		Data source						
Indicator		Indicator					Calculation	
EXPOSURE	Change in annual temperature							
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	Change in greenhouse gas emissions							

Source: CCAI.



Next steps of the establishment process of the MRC system

2. Selection of a set of indicators (on-going)

An initial set of indicators to monitor changes in climate parameters, climate change impacts and adaptation has been developed with the support of GIZ by international consultants and is being reviewed by the Member Countries.



3. Development of methods for data collection and analysis (on-going)

This step contributes to define the baseline and the indicators' future values.



4. Methods piloting (forthcoming)

Pilot projects will test the methods and the set of indicators.



5. Reporting, refining and capacity transfer (forthcoming)

A report on the status of climate, impacts, vulnerability and adaptation performance will be released. This step also focuses on maintaining and further developing the operation of the system including transferring capacity to the national level.

Dekens, J. et al (2013).



Thank you very much for your attention!

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