

**WASP****WORLD  
ADAPTATION  
SCIENCE  
PROGRAMME***making science work  
for climate adaptation*<https://wasp-adaptation.org>

# Advancing Effectiveness of Adaptation

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## Adaptation Effectiveness

- Adaptation effectiveness refers to the extent to which **policies and actions reduce present and future climate risks.**
- **Adaptation effectiveness cannot be seen in isolation of mitigation. i.e. higher the mitigation needs higher is the need for adaptation effectiveness. Hence, some scholars prefer to express adaptation effectiveness as “ an increasing concave (or linear) function of total mitigation level” (Furini and Bosello, 2020)**
- Adaptation effectiveness is a systems concept
  - It needs a unit of measurement
  - It needs to be expressed in some value terms
  - It benefits from a baseline (or a shifting baseline)
  - It also benefits from having a goal (such as Global Goal on Adaptation, goal setting can enhance the ambition levels)
  - It can have some pre-requisite/enabling conditions (equity, justice and fairness)

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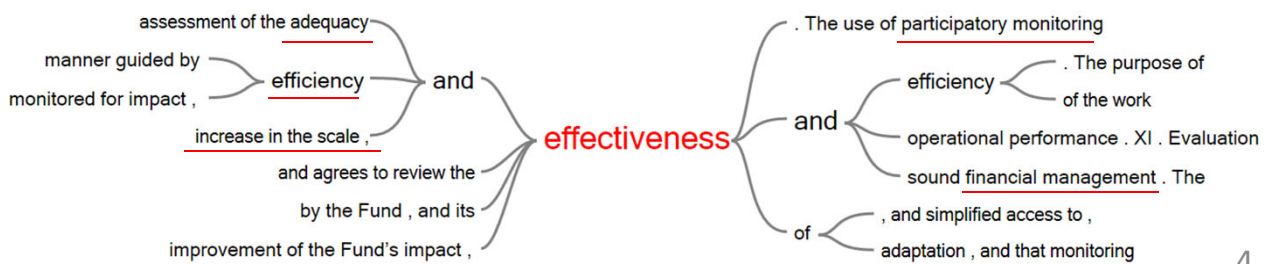
## The History of Adaptation Effectiveness

- Broadly we have 30 years of adaptation experience under UNFCCC
- We started taking concrete actions for adaptation since 2011 when NAPs were established.
- Where have we made progress in adaptation?
  - Project planning
  - Stakeholder engagement
  - Monitoring and evaluation (ex-ante, ex-post etc)
  - **Risk, vulnerability and capacity indicators, and assessment**
  - Composite indices

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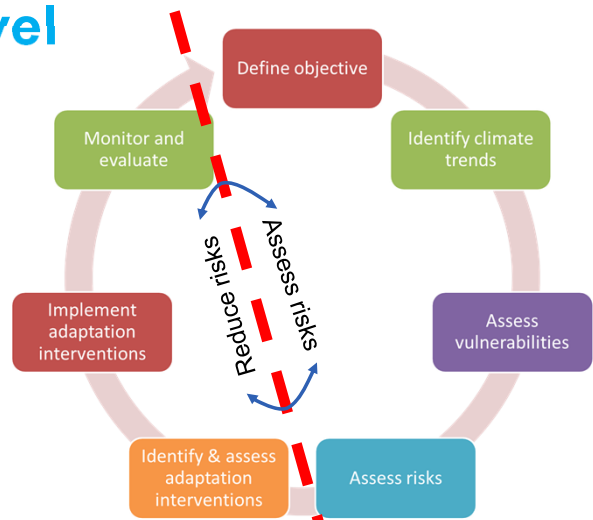
## COP28 Outcome Documentation: 'effectiveness' occurred 11 times!

- *Global Stocktake*: “Notes that there are **gaps in implementation of, support for and collective assessment of the adequacy and effectiveness of adaptation**, and that monitoring and evaluation of outcomes is critical for tracking the progress and improving the quality and awareness of adaptation action”



## Wholistic Perspective on AE: At the Project Level

- **Where can we go wrong?**
  - Defining right objectives
  - Unreliable RVAs
  - Identifying appropriate adaptation actions
  - M&E: Are we really measuring what we that we are measuring?



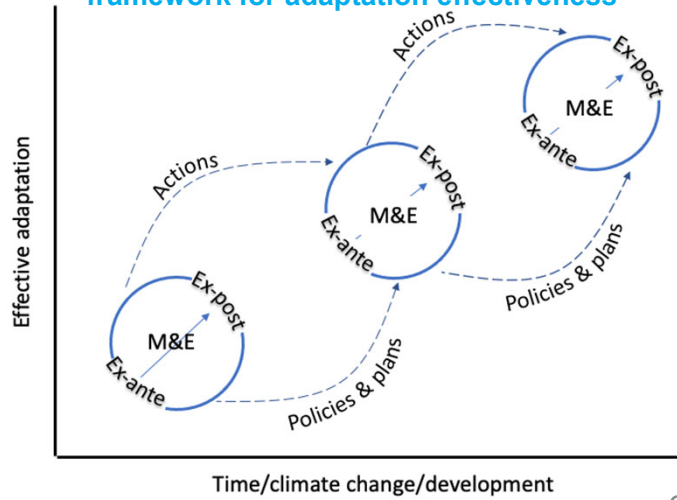
Adaptation Planning [Cycle/spiral] 5

## Wholistic Perspective on AE: At the Area Level

**Ex-ante (potential effectiveness):**  
 This is a **forward-looking perspective** for assessing adaptation effectiveness before the adaptation policies and actions are implemented.

**Ex-post (actual effectiveness):**  
 This is a key perspective for measuring adaptation effectiveness after policies and actions have been implemented.

### Dynamic monitoring and evaluation (M&E) framework for adaptation effectiveness



Source: WASP SAPB #7

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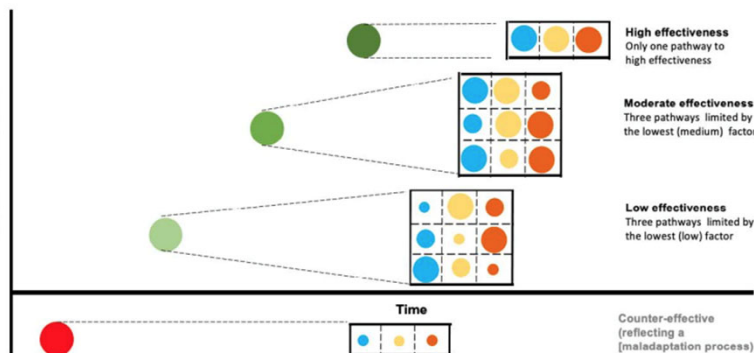
## AE Components: Ambition, Feasibility and Equity & Justice

**Adaptation effectiveness components**

- Ambition (Blue square)
- Feasibility (Yellow square)
- Equity & Justice (Red square)

**Level of implementation**  
 Size of circle represents levels of adaptation effectiveness components

- High (Large black circle)
- Medium (Medium black circle)
- Low (Small black circle)



**Ambition:** The degree of climate risk reduction (through vulnerability reduction and resilience increase) to be expected from a given option or a set of options.  
*Example: Sea level rise and storm surge*

**Feasibility:** Depends on a series of enabling conditions such as for example, affordability and the existence of adequate governance arrangements.  
*Example: Watershed management*

**Equity and justice:** Designating the degree to which equity and justice are at the center of adaptation policies, plans, and actions. This is a new criterion that can be measured by such indicators as the inclusion of community groups in adaptation decision-making.  
*Example: Informal settlements*

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## Adaptation Effectiveness Metrics are Location & Sector Specific

### Agriculture

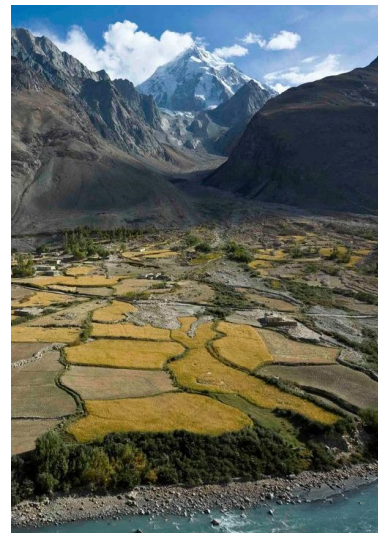
- Total official funding flows to the agriculture sector
- Proportion of agricultural area under productive and sustainable agriculture
- Income of small-scale food producers, by sex and indigenous status

### Cities

- Number of deaths and directly affected persons attributed to disasters
- Economic loss and damage to critical infrastructure attributed to disasters
- Proportion of local governments that adopt and implement local disaster risk reduction strategies

### Biodiversity

- Meters of coastline protected
- Area of ecosystems improved or protected (if adaptation-related)
- Number of new or improved methodological tools developed to address climate change and conserve biodiversity



Flood plain cultivation in Wakhan, Afghanistan  
© John Winnie Jr., WCS-Afghanistan

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## Recommendations

### International Policy

- Support the development of **guidance, tools for assessment and methods** of adaptation effectiveness related to policies/planning and action.

### National Policies and Plans

- Develop **country/regional-context frameworks and indicators** for national policies.
- Utilize the **dynamic M&E adaptation effectiveness framework to identify national goals on adaptation** (aggregated into a global goal on adaptation).

### Action

- Strengthen **data collection systems and analytics, establish coordinated M&E systems, and develop metrics** for key criteria of potential effectiveness.
- Collect the **evidence base for projects and programs** that have already been implemented, showcasing what has worked and what has not to inform future actions.

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## Key Messages

- Adaptation effectiveness cannot be achieved by focusing at one stage of the adaptation process, rather it needs an **all-encompassing approach**.
- The current **undue attention on a few stages** of adaptation planning needs to be reconsidered.
- Adaptation effectiveness is vital to **inform both national and local-level adaptation actions** as well as progress towards the **Global Goal on Adaptation** and the UNFCCC **global stocktake (GST)**.
- M&E requires a definition of the **baseline conditions and measurement of change against that baseline**.
- Due to the **dynamic nature of adaptation**, regular **reevaluation of adaptation policies and actions** can help enhance effectiveness.
- Useful metrics include **quantitative and qualitative measures** (e.g., ambition, feasibility, equity/justice) for risk and vulnerability reduction.



Mangroves in Belize © Manishka De Mel

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## The WASP Adaptation Effectiveness Core Project

### *Proposed Core Project Research*

1. What are the **key determinants and indicators** of adaptation effectiveness in national policies, especially NAPs?
2. How can AE metrics of local actions be **aggregated** to the national level and how can outcomes contribute to the Global Goal on Adaptation?
3. How can AE **metrics be integrated** into existing and evolving M&E frameworks?
4. Is effectiveness enhanced by combining adaptation measures; how can this be assessed/tracked and does it change over time differently from the effectiveness of single measures?
5. What **methods** can be used to assess the **potential effectiveness** of a wide range of adaptation options to reduce climate risks?

***We welcome your comments, ideas and participation for the WASP Adaptation Effectiveness Core Project!***



Mangrove planting in Seychelles © UNEP

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