WASP

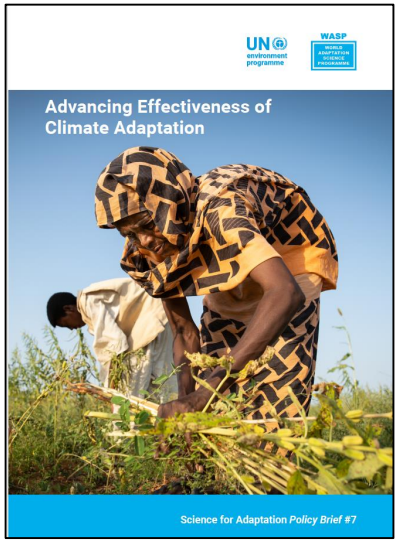
WORLD ADAPTATION SCIENCE PROGRAMME

making science work for climate adaptation

adaptation futures 2023

Session #464

Effective adaptation: What is it and how can we measure and manage it?



UN environment programme

WORLD METEOROLOGICAL ORGANIZATION

United Nations Climate Change

ipcc INTERGOVERNMENTAL PANEL ON climate change

GREEN CLIMATE FUND

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Session Agenda

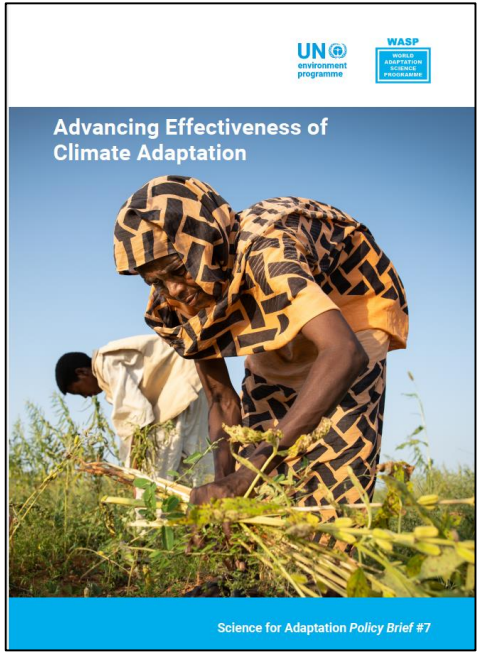
- ❑ **Welcome – Maarten Kappelle, UNEP**
- ❑ **Launch of Adaptation Effectiveness Science for Adaptation Policy Brief (SAPB)**
- ❑ **Introducing the Adaptation Effectiveness Core Project and Science for Adaptation Policy Brief – Cynthia Rosenzweig (NASA GISS and Columbia University) and SVKR Prabhakar, (Institute for Global Environmental Strategies – IGES)**
- ❑ **Panel Discussion – Lindsey Paul Jones (The World Bank), Estefania Arteaga (Griffith University), Donovan Burton (Informed City) and Henry Neufeldt (UNEP Copenhagen Climate Centre), Moderated by Timo Leiter (London School of Economics)**
- ❑ **WASP AE Core Project Plans, Community Input, and Small-Group Discussions**
- ❑ **Report-Backs**
- ❑ **Concluding Remarks**

Welcome – Maarten Kappelle, UNEP

Launch of the Adaptation Effectiveness Science for Adaptation Policy Brief (SAPB)

Right now!

Link: https://wasp-adaptation.org/wasp-publications/wasp-brief-7-advancing-effectiveness-for-climate-adaptation



About WASP and Introducing the WASP Advancing Effectiveness of Climate Adaptation Science for Adaptation Policy Brief (SAPB)

Cynthia Rosenzweig
NASA and Columbia University

SVRK Prabhakar
Institute for Global Environmental Strategies

About WASP

Vision

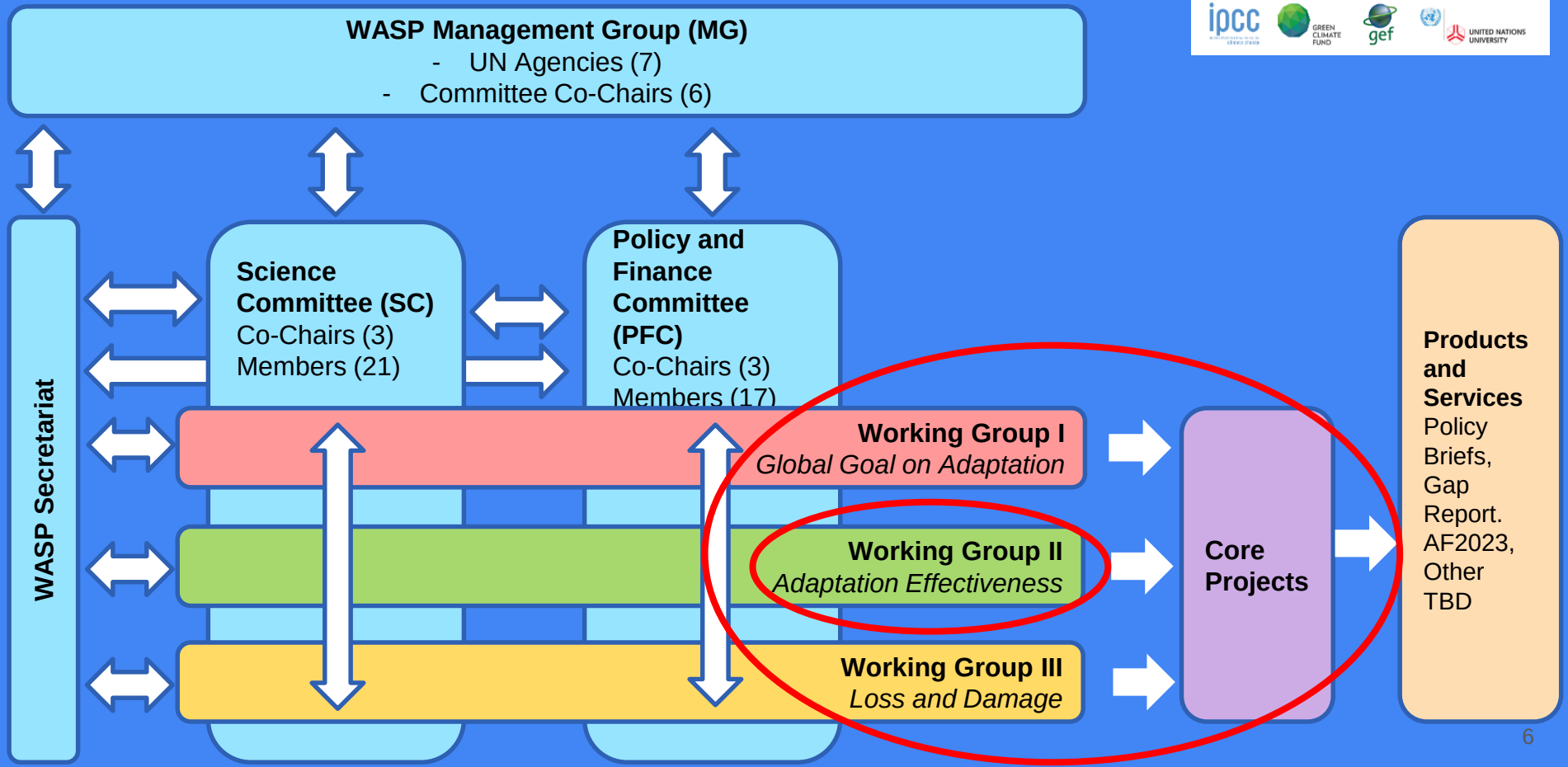
WASP's core vision is ensuring that **climate adaptation knowledge gaps** are filled to inform evidence-based **policies, solutions and actions** for successful adaptation to new climate conditions. Our priority is addressing the **knowledge needs in vulnerable developing countries** and providing **policy-relevant science for decision-makers.**

1. Catalyze bridging current knowledge gaps
2. Catalyze bridging potential future knowledge gaps
3. Provide policy-relevant guidance through WASP products

Mission

WASP's overall mission is **to make science work for climate change adaptation.** WASP ensures that researchers, policymakers and practitioners have the **knowledge, capacity and solutions** to underpin and implement effective adaptation to climate change. Its work focuses primarily on **providing products and services** to the UNFCCC process, IPCC assessments, GCF projects and GEF projects.

WASP Organigramme, Projects, Products and Services

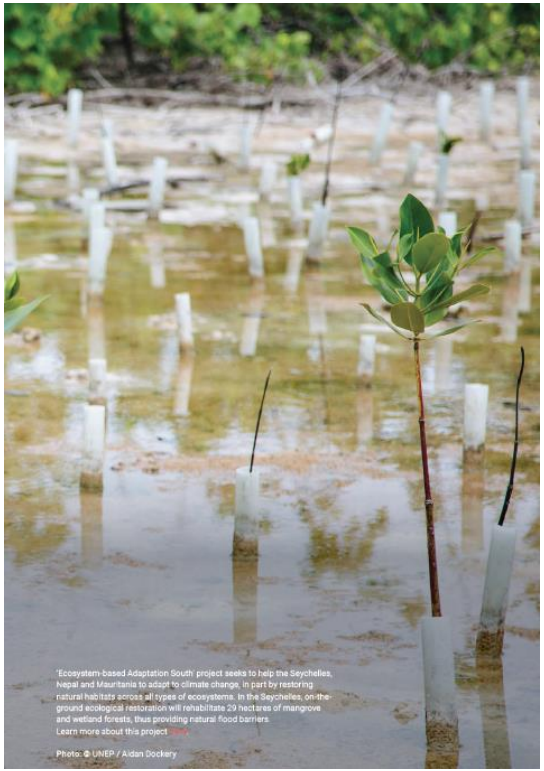


Overview of WASP Core Projects and Working Groups

1. Global Goal on Adaptation – Research linked to UNFCCC process. Research topics include **adaptation metrics, measuring and tracking progress** and **assessing benefits** of adaptation. Analysis of **transboundary** and **transdisciplinary** aspects, and identifying **quantitative goals**.

2. Effectiveness of Adaptation – Research linked to strengthening the **evidence base** for effectiveness of adaptation interventions. It aims to enhance the understanding of the effectiveness of climate adaptation by elucidating the **dynamic framing for adaptation policy and action** and **measuring adaptation effectiveness** of actions on the ground.

3. Loss and Damage – Research linked to **outcomes of COP27**. Addressing loss and damage associated with **impacts** of climate change in developing countries that are particularly **vulnerable to adverse effects** of climate change. Includes enhancing **knowledge and understanding** of **comprehensive risk management approaches.**



Mangrove planting in Seychelles

Adaptation Effectiveness SAPB – Key Messages

I. Evaluating the effectiveness of adaptation policies and actions is key to **understanding** whether they have **reduced climate risks and achieved other intended outcomes**. The goals are to ensure that adaptation is adequate to **address climate risks, do not foster negative unintended consequences** over space and time, and **inform adaptation financing.**

II. 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).**

III. However, despite the urgency to implement effective adaptation at scale, understanding adaptation effectiveness **is still evolving** and the development of ways to measure it is ongoing. The diverse contexts and adaptation interventions make it challenging to understand and operationalize adaptation effectiveness. Specifically, **measuring change requires a definition of the baseline conditions and measurement of change against that baseline**. Attributing outcomes to investments is also challenging.

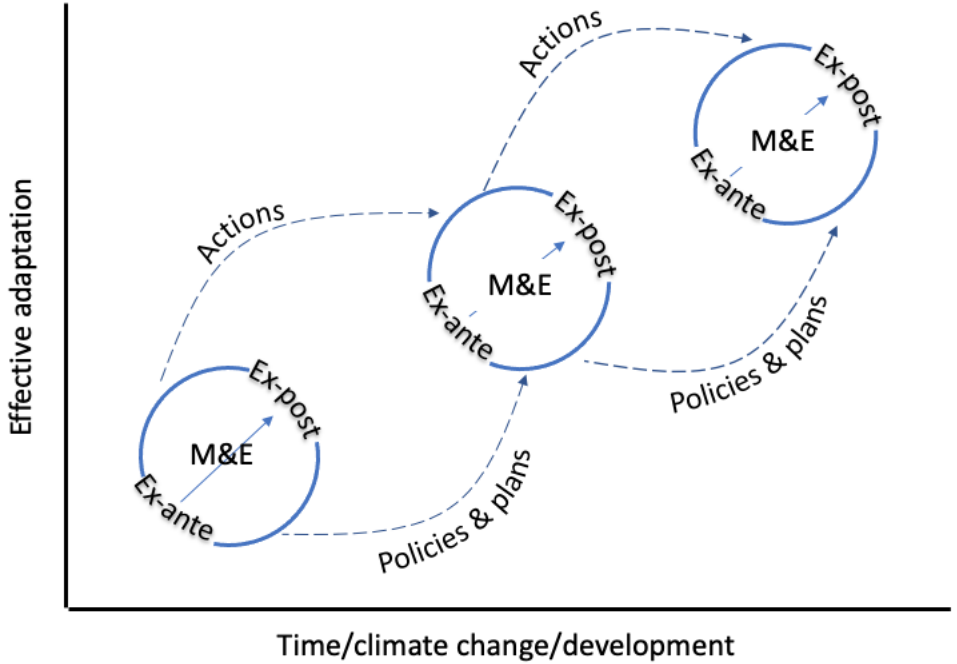
Key Messages (continued)

IV. Determining the effectiveness of adaptation policy and action needs to take account of the **dynamic nature of adaptation**. Regular **reevaluation** of **adaptation policies and actions** over time can help to enhance adaptation effectiveness overall.

V. Adaptation interventions need to be **assessed for their potential effectiveness (ex-ante) and measure actual effectiveness (ex-post)** using a set of metrics identified based on specific criteria. **Monitoring and evaluation** during implementation helps to ensure climate risk reduction.

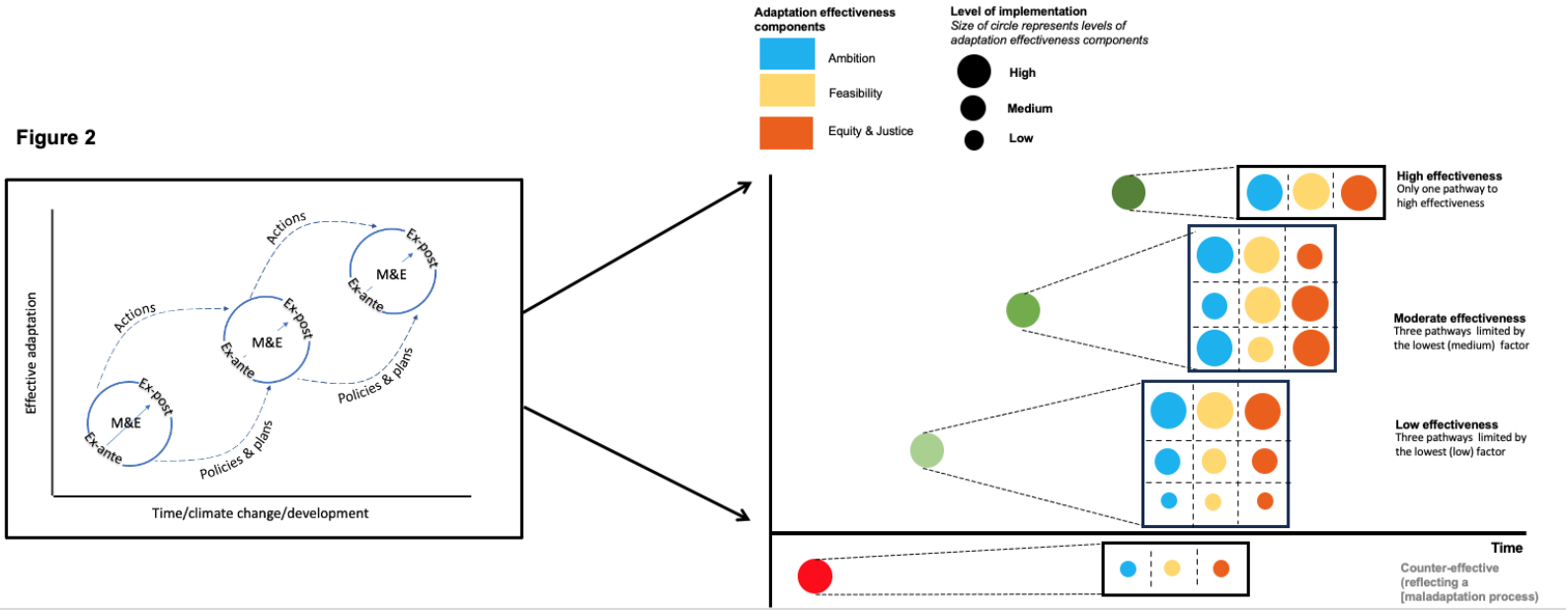
VI. Useful metrics for effectiveness in adaptation policy and action include **quantitative and qualitative measures for risk and vulnerability reduction**. Qualitative indicators include composite measures of ambition, feasibility, and equity/justice.

Dynamic monitoring and evaluation framework for adaptation effectiveness



An approach to assess potential adaptation effectiveness

Figure 2



Components of the Figure

- The first component relates to **“ambition”** and describes 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** – Ambitious adaptation projects relating to sea level rise and storm surge can include multiple, simultaneous, and larger-scale interventions, such as widening riverbeds, moving dikes inland, digging flood channels, and expanding green spaces to provide long-term flood safety as well as offer co-benefits.

- The second component refers to the **“feasibility”** of the option or group of options, and that depends on a series of enabling conditions such as for example, affordability and the existence of adequate governance arrangements.

→ **Example** – Watershed management as an adaptation intervention can be feasible if technology, human capital, and financial resources are available; however, its feasibility can be low if local institutional capacity is lacking.

- The third component relates to **“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.

→ **Examples** – There is a need for climate-resilient development plans for informal settlements to place equity and justice at the forefront regarding access to electricity, clean water, sanitation, and waste collection.

Conclusions and Recommendations

Recommendations for International Policy

- Support the development of guidance and tools for assessment of adaptation effectiveness related to policies/planning and action.
- Support the development of adaptation effectiveness methods that can be applied to specific contexts, but still allow for comparing various contexts, (for example, synthesis assessments by the UNFCCC for the GST).

Recommendations for National Policies and Plans

- Develop country-context or regional-context frameworks and indicators for national policies.
- Design strategies to build capacity at subnational levels that enable the development of adaptation policies rooted in local contexts taking into account climatic and socio-economic realities.
- Utilizing the dynamic M&E adaptation effectiveness framework, identify national goals on adaptation, which could be aggregated into a global goal on adaptation.

Conclusions and Recommendations (continued)

Recommendations for Action

- Establish coordinated monitoring and evaluation systems at national and local levels with identification of roles, responsibilities, and interactions.
- Strengthen data collection systems and analytics for social, environmental and economic variables such as exposure at the local level.
- 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.
- Develop metrics for key criteria of potential effectiveness including ambition, feasibility, and equity and justice.
- Build capacity of both men and women stakeholders to engage in formulation and implementation of adaptation in the areas of understanding climate risks, developing adaptation metrics, establishing monitoring and evaluation, and using tools and techniques.

Questions for Panel and Small Group Discussions

- **Why it is not sufficient to define AE as a mere reduction in risk and vulnerability and an increase in the adaptive capacity?** What additional requirements must be met for adaptation to be effective and how to incorporate them into the existing risk and vulnerability assessment and M&E frameworks? Why these elements are important, and how to avoid the complication of introducing them at the implementation level of AE.

- **What is the single most cutting-edge research question to advance the discourse on AE to implement action (adaptation finance, project/program/policy formation and implementation)?** The research question must satisfy the following criteria: Clear and focused, not too broad, and too narrow, not too easy and too difficult to answer, researchable, and analytical.

- **What should be the core elements/design elements/elements/principal elements of an AE research project?** (participatory, national vs. international, comparative (rich vs. poor resource conditions), benefactors (i.e., NAPs or Global Goal, etc.).

Panel Discussion

- Moderated by Timo Leiter – London School of Economics
- Lindsey Paul Jones – The World Bank
- Estefania Arteaga – Griffith University
- Henry Neufeldt – UNEP Copenhagen Climate Centre
- Donovan Burton – Informed City

WASP AE Core Project Plans, Community Input and Small-Group Discussions

Report Backs

Concluding Remarks

Thank You

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