EBA Decision Support Framework: *Moving from Principles to Practice*

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Coastal Climate Change Solutions - from Principles to Practice
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AIMS

New practical EBA Decision Support Framework and guidance in development to assist planners and decision-makers develop effective EBA interventions.

Three strategic questions:

a) How to compare and select EBA vs. other adaptation options?

b) How to design, plan and implement the most appropriate EBA option for a specific context?

c) How to evaluate the effectiveness and long-term adaptation outcome of specific EBA measure?

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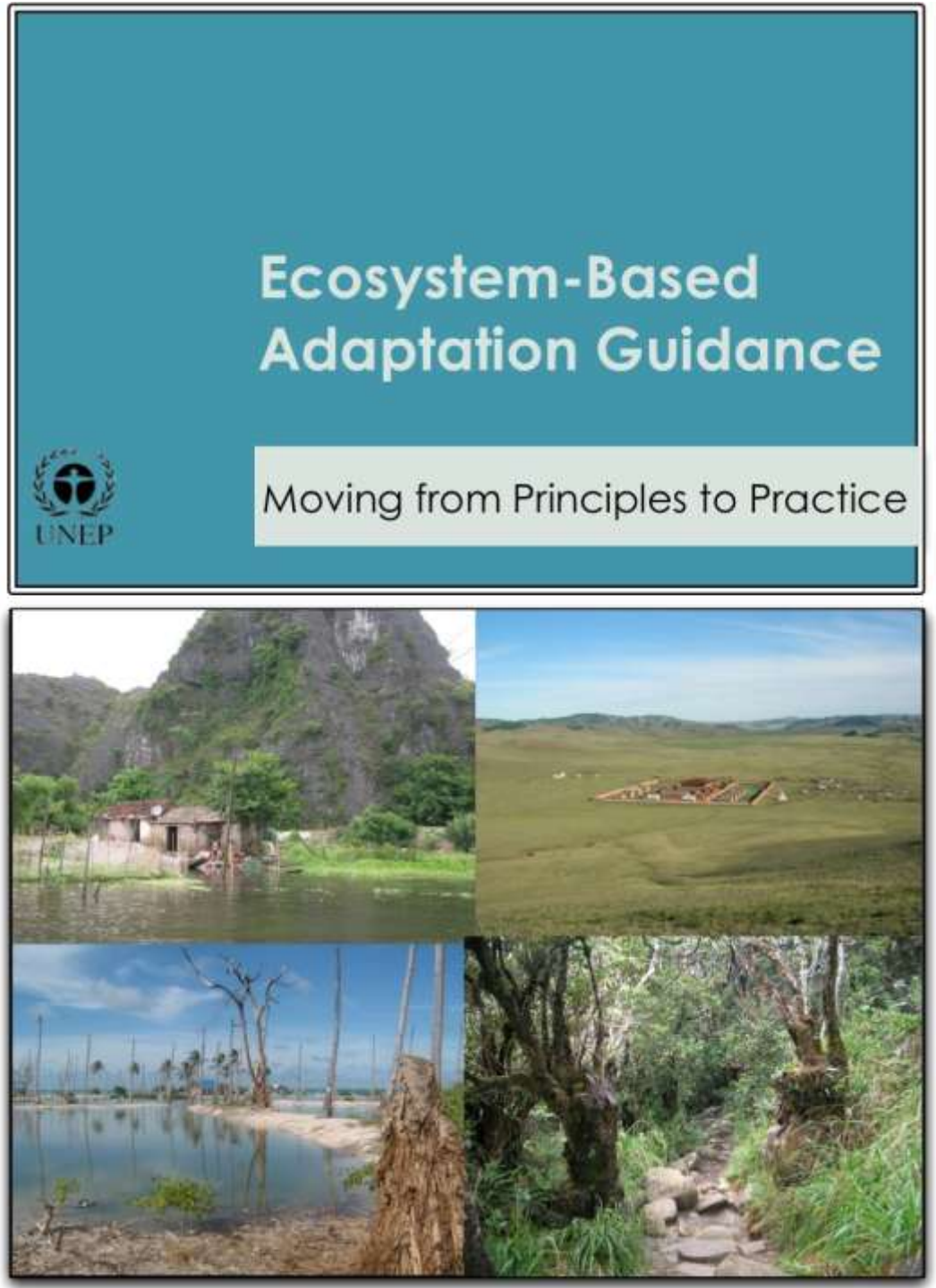

Input from a range of Partners:

- BirdLife International
- CIFOR
- Conservation International
- EBM Tools Network
- GEF Sec
- GIZ
- IUCN
- IIED
- James Hutton Institute
- SEI, PROVIA
- TNC
- UNEP-DHI Water Center
- UNEP-RISØ Centre
- University Sunshine Coast
- UNDP
- UNFCCC Sec
- Zambia Climate Change Network

Overview of principles for effective EBA (Adapted from TNC 2011)

PRINCIPLE	REQUIREMENTS	DETAILS
Promote resilient ecosystems	• Modeling of projected climate change • Revised systematic planning • Revision of protected area systems design	EBA approaches cover a broad spectrum in land management, policy and project implementations.
Maintain ecosystem services	• Valuation of ecosystem services • Determine climate change impact scenarios • Identify options for managing ecosystems or managing use • Involve user communities in adaptation action • Trade-off analysis	Maintaining ecosystem services is key – and, again, something that the field of conservation must develop better understanding of how to design and implement, and especially improve our ability to effectively measure benefits provided.
Support cross-sectoral adaptation	• Include approaches in national adaptation plans • Incorporate ecosystem services in land/coastal management frameworks	New opportunities are opening up for partnerships and natural system solutions with many of societies sectors impacted by climate change.
Reduce risks and disasters	• Restore key habitats that reduce vulnerability: • Involve vulnerable communities in restoration efforts	There is growing interest in the security, public safety and disaster prevention communities -- we are seeing increasing awareness of climate impacts and for the potential of natural system solutions.
Complement infrastructure	• Dam re-engineering – maintain ecological flows in rivers • Dams, levees – Restoration of floodplains for flood attenuation	Innovations and strategies like these, for complimenting infrastructure, are being tested now around the world.
Avoid maladaptation	• Improve analysis of impacts from adaptation activities • Avoid inadvertent impacts on natural ecosystems and communities	Some engineered solutions can have significant negative impacts to natural systems

Barriers to Develop and Implement Effective EBA

- Uncertainty and long timeframes
- Lack of information on EBA options compared to 'traditional' technologies
- Unclear objectives and no single definition of success
- Unclear definitions, such as 'resilience', which may have different meanings in different contexts.
- Diverse vulnerability factors and attribution

Challenges to Measuring Effective EBA

- Lack of guidance in indicator selection and/or provision of example indicators that do not meet evaluative criteria and do not align to local context.
- Disconnect between the creation of the monitoring and evaluation framework and implementation (theory of change is ‘lost’ along the way).
- Limited financing to establish baselines and implement regular monitoring activities.

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SOME KEY CONSIDERATION/FINDING

EBA activities are taking place in a wide range of ***contexts*** pertaining to different ecosystems, climate change risks, scales etc. Subsequently, it is apparent that no comprehensive or inclusive definition of EBA exists as a 'one-size-fits-all'.

→ **Rather, a clear 'context-specificness' or 'it depends factor' is most explicitly recognised by *the organizational objectives of implementing agencies.***

KEY OBJECTIVES OF THE DSF

EBA Decision Support Framework should :

- enable consideration of EBA against a suite of other alternatives, and comes with an acknowledgement that EBA is not necessarily the best adaptation solution in all contexts.

- Bring together complex information in accessible format to help decision-making a different levels – assessing EBA among other adaptation options.

- Enabling decision-making processes to compare conventional adaptation options (i.e. typically delivering a smaller range of services that are easier to quantify) with EBA options (i.e. deliver a greater range of services that are more difficult to quantify).

- Provide a flexible training resource process addressing local needs rather than standard ‘Off-shelf-resources’

KEY OBJECTIVES OF THE DSF ***Effectiveness***

A EBA Decision Support Framework should:

- Pro-active - framing M&E guidance to address key questions in early project design phase and throughout the life-cycle of EBA initiative.
- Built an M&E framework that is both adaptive and reflective to inform the process of selection, design and implementation of EBA initiatives.
- Ensure that the user has the ability to monitor the effectiveness of their selected intervention in achieving its intended outcomes

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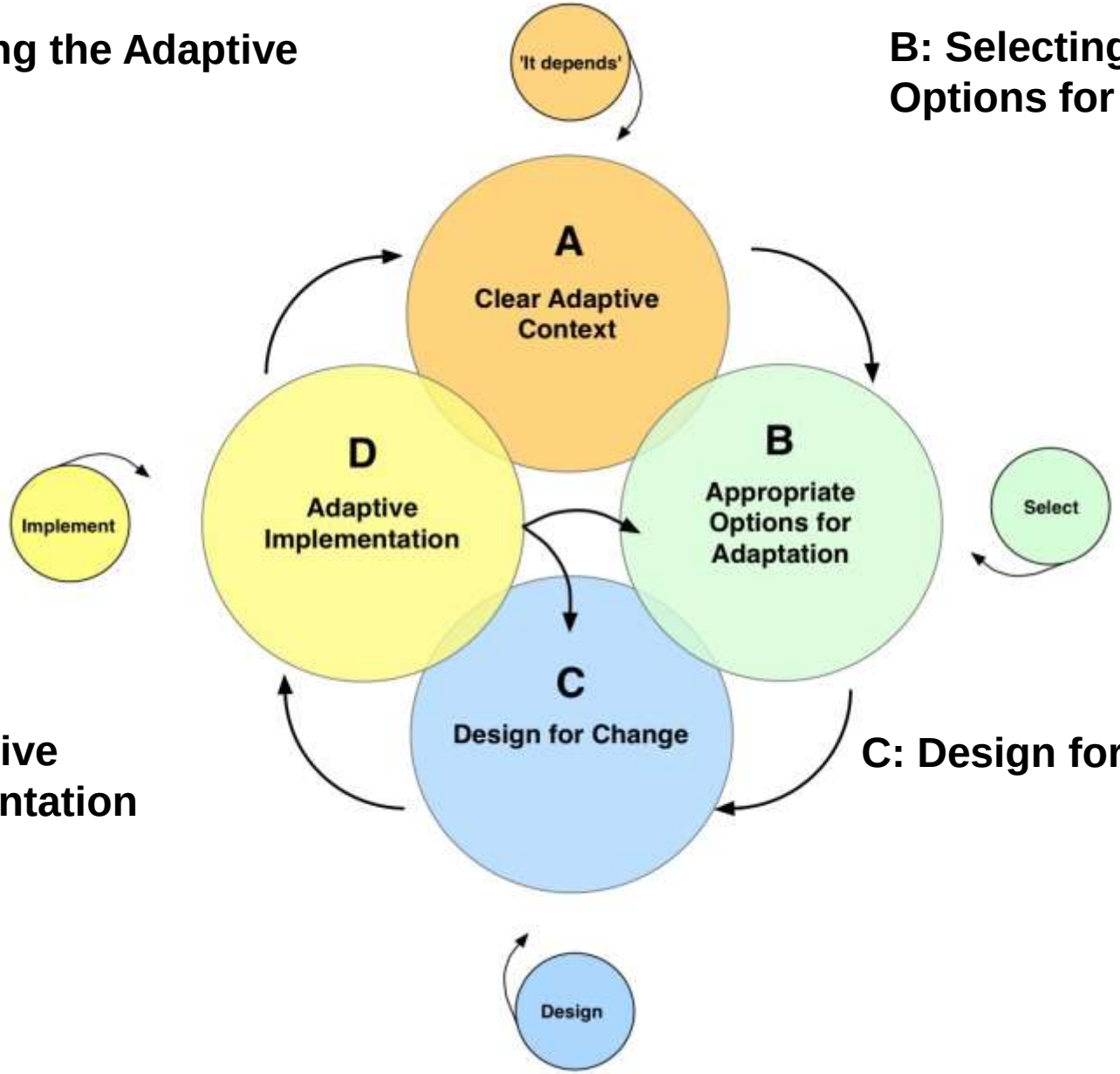
A: Setting the Adaptive Context

B: Selecting Appropriate Options for Adaptation



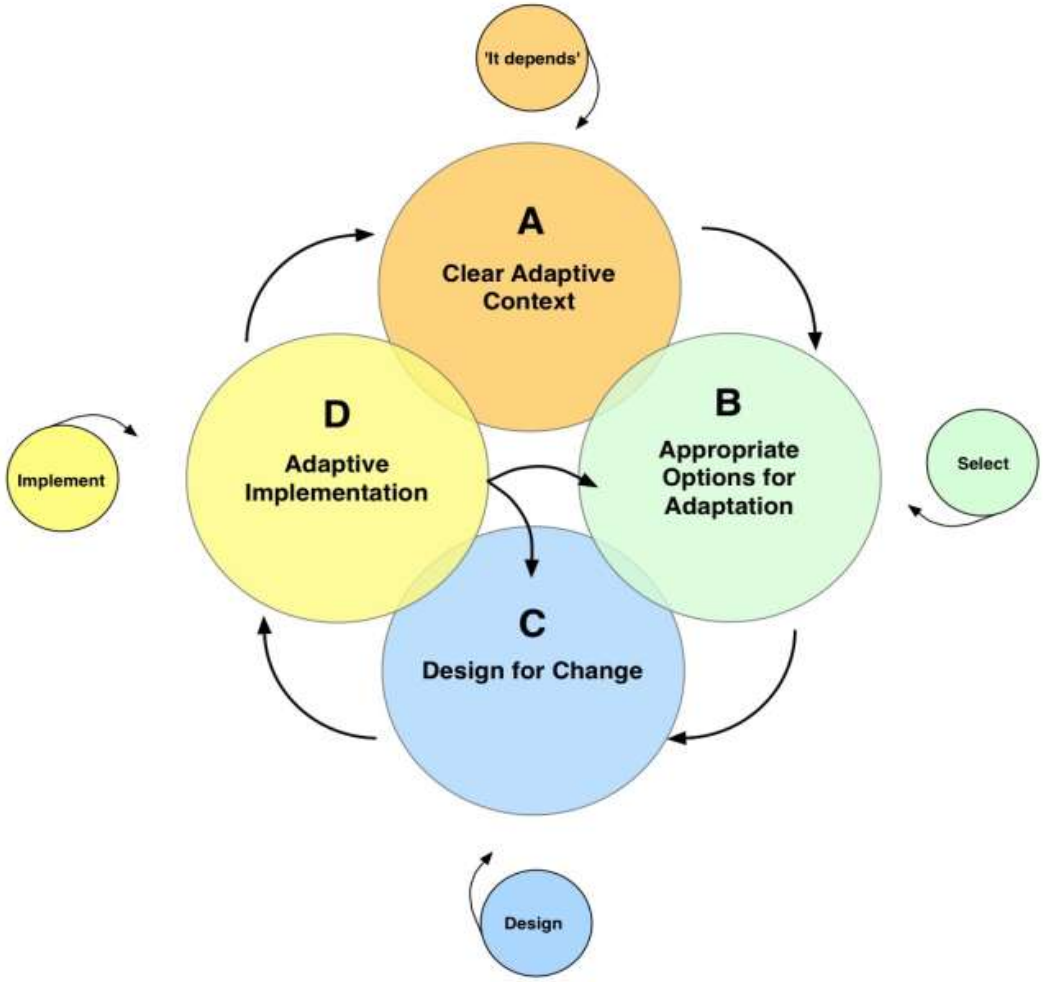
D: Adaptive implementation

C: Design for Change

EBA Decision Support Framework

DSF CYCLIC APPROACH – FOUR MAIN COMPONENTS

- Each prompts series of strategic questions to guide decision-making and planning
- Boxes background and considerations
- Comprehensive technical resources in easy, accessible format
- Users can enter at different stages



TARGET AUDIENCE:

Mid-level decision-makers and planners setting up adaptation imitatives at national or local level

A: Setting the Adaptive Context

What does your system look like?

How is it used?

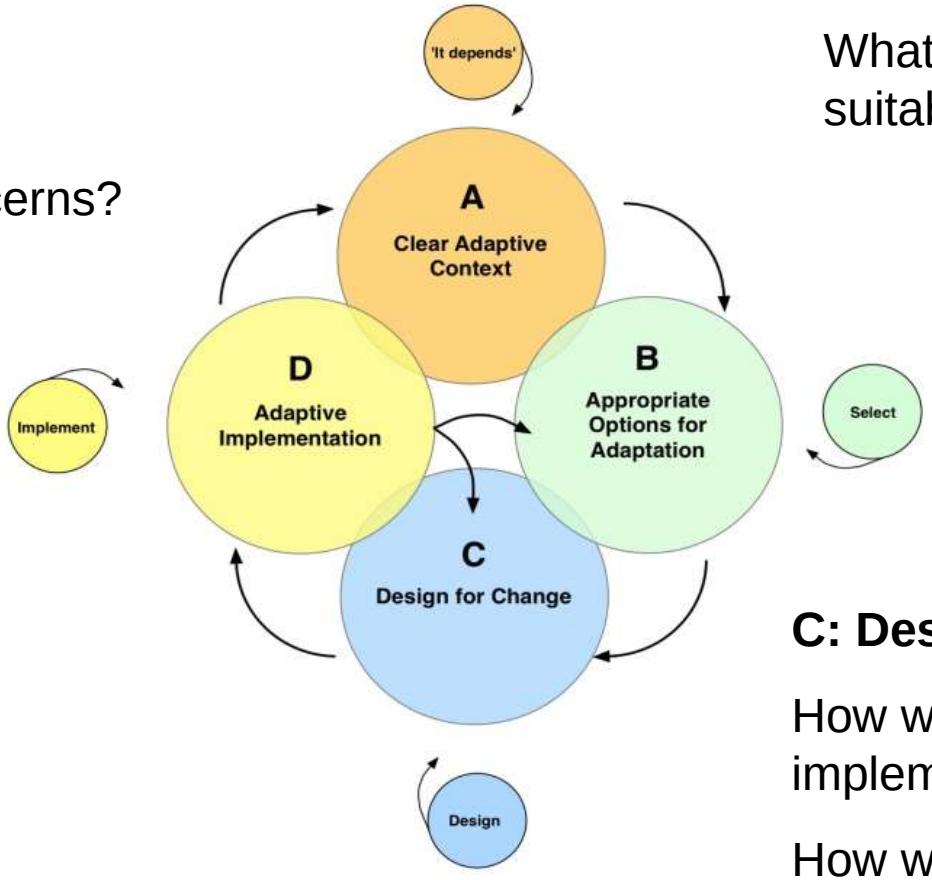
Management concerns?

Adaptation goals?

B: Selecting Appropriate Options for Adaptation

EBA approaches available?

What approaches are suitable for your context?



D: Adaptive implementation

Monitor

Interpret

Reflect and adapt

Evidence for persuasion

C: Design for Change

How will the measure be implemented?

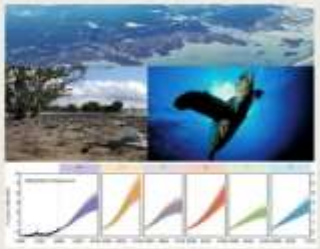
How will you know if the measures are effective?

EBA Decision Support Framework

AT A GLANCE.....

SETTING ADAPTIVE CONTEXT

Component A is intended to assist the user in defining a clear adaptive context for decision making at the outset of adaptation project design. Context setting is undertaken with an ecosystem lens.



Why should I use this guidance?	You want to establish clear context specific adaptation goals and objectives built around: • Understanding of vulnerability. • Understanding the role of ecosystem services within your area of interest. • Vision of alternative future where adaptation has occurred.
What do I need to know to inform decision making process?	• Awareness of your vulnerability profile: sectors, locations. • Projections for future change in climate for your area. • Understanding of likely impacts on 'key elements' in your specific project context. • Consensus from key stakeholders on what a preferred
What activities do I undertake to help make decisions?	
What should I exp	A clear adaptive de role of ecosystems

AT A GLANCE.....

ADAPTATION OPTIONS

Assists the user in evaluating the applicability of adaptation options, including EBA options, to address specified adaptation goals. The user is provided with guidance on (i) a range of options available relative to ecosystem services; and (ii) decision making process to select the most appropriate for their context.

When should I use this component of the guidance?	You want to prioritise potential adaptation options to treat your identified problem and meet your specified adaptation goals. This guidance should be used during project planning phase to ensure that the full range of adaptation technologies, including EBA, are evaluated on relative merit for the discrete adaptation context.
What do I need to know to inform decision making process?	• Clearly defined adaptation goals and objectives that are cognisant of ecosystem services in your context. • Information on opportunities and limitations of available options.
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AT A GLANCE.....

DESIGN FOR CHANGE

Component C supports the transition from a list of selected prioritised intervention measures to develop a programme that will guide implementation and to define a plan to evaluate and reflect on performance.

Why should I use Component C of the guidance?	You want to develop a plan to implement and evaluate an initiative built upon: • A participatory approach. • An understanding of short and long term adaptation goals. • An adaptive framework.
What do I need to know to inform decision making process?	• Prioritised adaptation measures that have been developed with a EBA lens. • Resources that support program design. • An understanding of performance evaluation.
What activities do I undertake to help me	Develop an initiative that will demonstrate: • Accountability and transparency

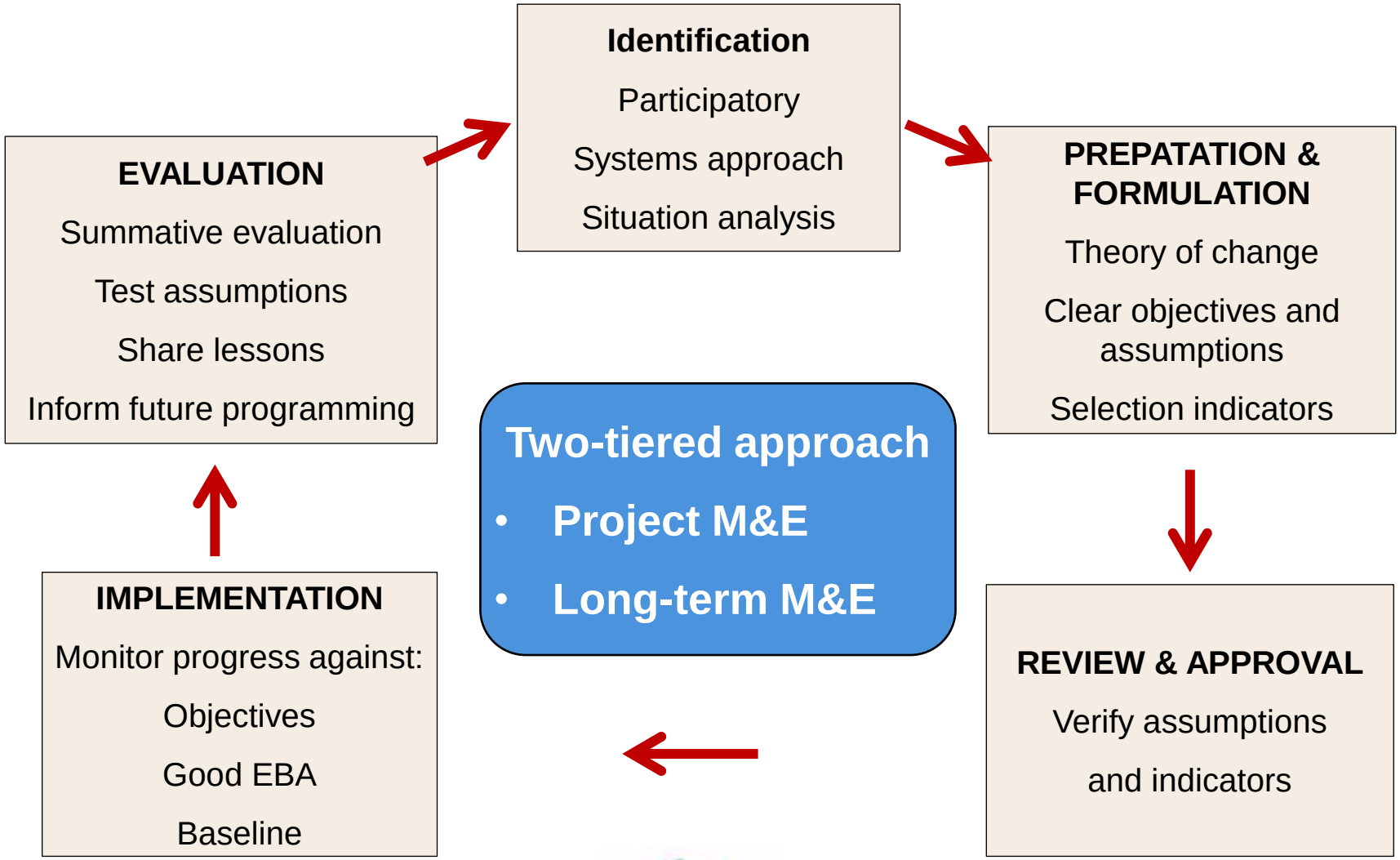
AT A GLANCE.....

ADAPTIVE IMPLEMENTATION

Component D provides users with guidance to be confident in implementing change if and when required.

Why should I use Component D of this guidance?	You want to ensure an adaptive approach to initiative implementation that will: • Demonstrate transparency and accountability; and • Facilitate adaptive management in the long-term to deliver positive outcomes for ecosystem services.
What do I need to inform the decision making process?	• A plan for performance assessment. • The schedule for performance reflection, including list of participants and mechanisms for reporting. • Flexibility of your initiative: who to notify when change is required, what changes are within the realm of the initiative and what changes must be delivered through broader activities.
What activities do I undertake to help me	• Monitor progress. • Data Interpretation.

M&E at the heart of the DSF – Two-tiered approach



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Question A4: Do you have clearly defined adaptation goals?

Adaptation goals refer to the intended outcomes of the adaptation intervention, both during the lifetime of the initiative and in the future (i.e. longer term adaptation goal). Importantly, these adaptation goals should be cognisant of ecosystem service delivery for your area of interest.

IF YES:

You understand the primary problems at your intervention site from a systems perspective and have formulated context-specific adaptation goals and objectives to inform selection of adaptation options through Component 'B'

Go to COMPONENT 'B'

IF NO:

Consider the following questions:

- **What is your problem statement?**
- **What would your preferred future look like?**
- **How would you get there?**
- **How would you know if you had achieved your desired results?**

For guidance on answering these questions refer to BOX 7.

BOX 7: GUIDANCE ON DEFINING PREFERRED FUTURES AND CONTEXT-SPECIFIC ADAPTATION GOALS

1. **What would your preferred future look like?**

   Describe the characteristics of your ideal future system, including social, cultural, environmental and ecosystem specific characteristics

2. **How can you get there?**

   Consider all of the activities that would need to take place to ensure that the system transitioned to this new future. Some of the activities will be outside the control of your intervention. However, make sure all activities are recorded. You can then be clear later in the project design how your activities contribute to this future and what is beyond the scope of your project.

3. **How would you know if your system had transitioned to the new desired state, what would it look like?**

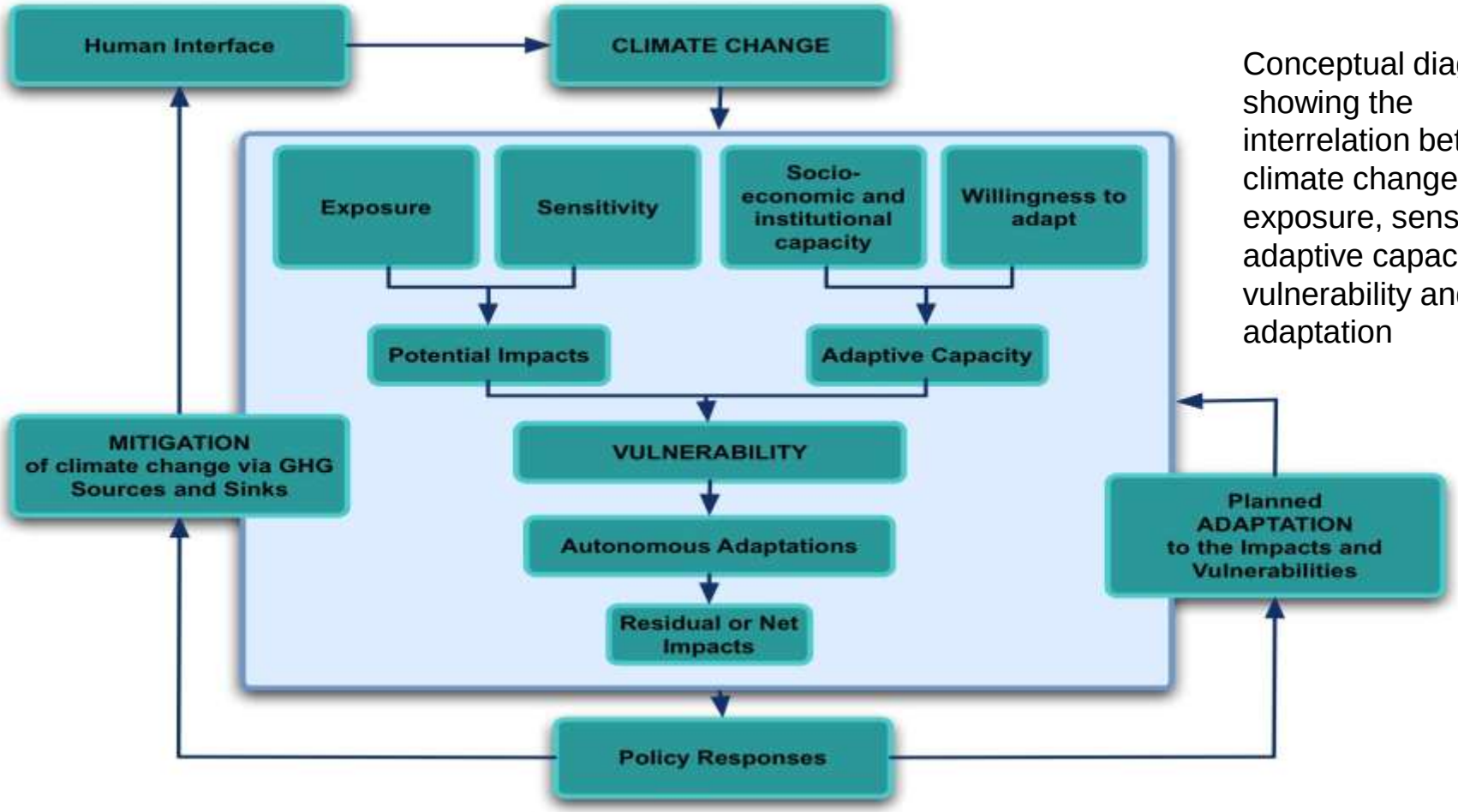
   Work with stakeholders to describe 'what success looks like'. Refer back to your preferred future and describe what this looks like in your context. For example, if you noted that your future system would have resilient livelihoods, explain what a resilient livelihood looks like in your context – e.g. households have tin roofs.

4. **What are the thresholds for unacceptable change?**

   Discuss the expected system changes based on socio-economic and climate projections and the associated impacts. Through a collaborative process, work with stakeholders to define the unacceptable changes in your system**.**

BOX 3: ASPECTS TO CONSIDER WHEN IDENTIFYING POTENTIALLY VULNERABLE AREAS

1. How exposed is the area to the influence of climate change?
2. How sensitive is the area to the influence of climate change?
3. What is the capacity of the system to manage the impacts of concern?



Conceptual diagram showing the interrelation between climate change exposure, sensitivity, adaptive capacity, vulnerability and adaptation

SOME CONCLUSIONS AND KEY MESSAGES

- Lack of robust information on EBA options and measures in comparison to more ‘traditional’ adaptation technologies. Need further easy information to inform the decision making process.
- EBA capacity building expertise has yet to be extended to the provision of support for on-the-ground decision-making at a project level.
- Recognising context-specificness is essential – ‘No-one-size-fits-all’
- Coupling social and ecological features in participatory M&E.
- Quantifying wider ecosystem services gained via EBA for comprehensive cost-benefit assesments
- Realising Cost-effective cross-sectoral EBA implementation

WHERE TO FROM HERE?

- Pilot testing in variety of ecosystem and decision contexts
- Development of training package and regional training (e.g. support to NAPA and NAP implementation)
- Synthesis and sharing of practical learning
- Address priority capacity building needs in countries/regions

Specific EBA-DSF modules:

- Practical M&E module
- Coupling social & ecological M&E
- Practical cost-benefit analysis
- Ecosystem specific DSF's - Coastal DSF, Mountain DSF, etc

Thank you!

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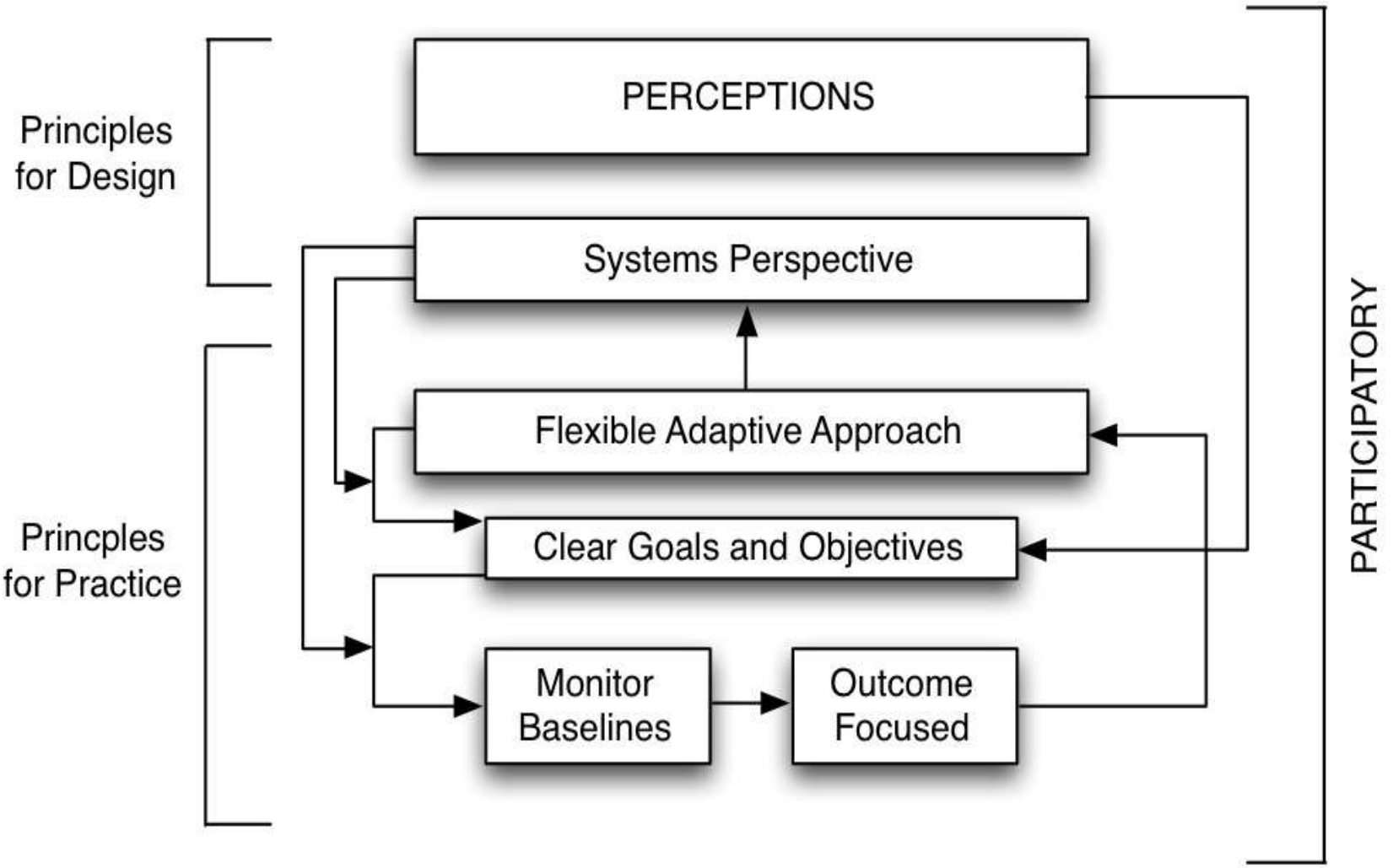
Component	A: Setting the Adaptive Context	B: Selecting Appropriate Adaptation Options	C: Design for Change	D: Adaptive implementation
Description	Supports selection of the most appropriate options for adaptation in a given context. Component A explores this context with a view to establishing where information gaps exist.	Identification of appropriate intervention measures and associated, context specific, adaptive actions.	Supports the transition from a list of selected intervention measures, to develop a program that will guide implementation and define a plan to evaluate and reflect on performance.	Provides users with guidance to be confident in implementing change if and when required.
Outcome	Clear adaptation decision making context defined with a particular understanding of the role of ecosystem services	Appropriate adaptation options prioritised in project context	Plan for implementation and evaluation	An adaptive approach to EBA implementation
Resources	A range of resources to assist in completing Component A is presented in Annex A1-A5. This includes tools, toolkits, reports and papers on ecosystem service valuation and climate risk screening.	A selection of resources for considering adaptation options is presented in Annex B1-B3. Key tools and methods for adaptation option analysis as well as a thorough overview of adaptation technologies is provided	A range of resources to assist in initiative design and monitoring and evaluation are provided in Annex C1-C3. Example indicators are aligned to ecosystem services and guide for selecting indicators are presented.	In text boxes outlining an adaptive approach to initiative implementation and links to adaptive management resources are presented in Annex D1
EBA Focus	Users are asked to consider their ecosystems and the associated services they provide to informing a problem development and goal definition. By defining the problem that an adaptation intervention may wish to address with an ecosystem lens, EBA options are placed on a 'level playing field' with respect to traditional adaptation technologies	Example adaptation technologies are grouped by ecosystem service with their associated benefits and limitations provided to guide the selection of ecosystem-based approaches to adaptation.	Users are guided in project design and evaluation to facilitate long-term adaptive management and deliver 'evidence for persuasion'. This sets the foundation for continued support for EBA initiatives whilst ensuring transparency and accountability in implementation.	Ecosystems-based approaches to adaptation require a long-term view. An adaptive, flexible and sustainable approach is advocated to meet this challenge.

Key principles for EBA design enabling effective evaluation



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