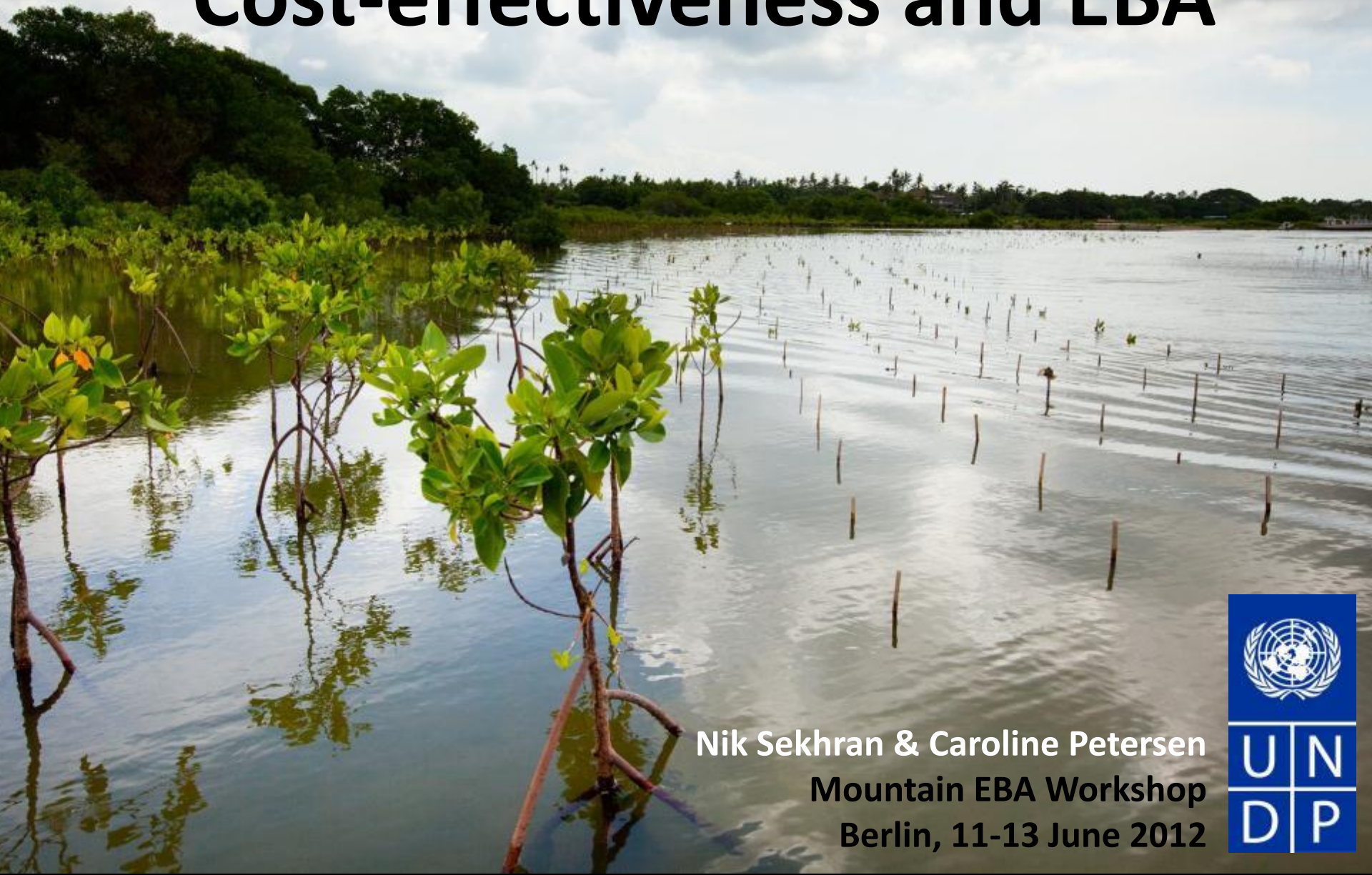


Cost-effectiveness and EBA



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Mountain EBA Workshop
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Comparing cost-effectiveness

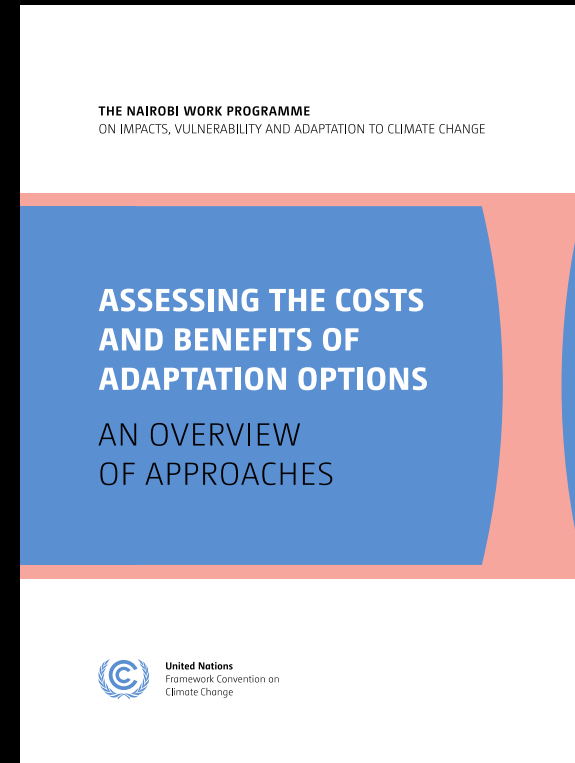
1. Informing choice:

- EBA - mangroves
- Structural - seawall
- Behavioural – setback

2. Costs and benefits of chosen intervention

Issue of timing

- Costs and benefits over what time-frame?
- Timing of intervention - cost of delay



Direct comparison of costs: Working for Water

- Demand outstripping supply, CC
- Traditional approach:
 - Reduce demand
 - Inter-basin transfers
 - Desalination plants
- EBA alternative: Improve catchment yield by clearing aliens from riparian areas
- Cost per litre of water



Seychelles: Cost-effectiveness of options

- Anticipated changes in rainfall and storm surges, vulnerable to water scarcity and coastal flooding
- Undertook cost-benefit analysis including desalination and artificial barriers for coastal zones

EBA methods found more cost-effective

- mangrove reforestation
- rehabilitation of sand dunes
- coral reefs rehabilitation
- removing alien vegetation

Combined with infrastructural measures:
small-scale water storage facilities (barrages)



Project components

- Component 1: Ecosystem-based adaptation approach to enhancing freshwater security in Mahé under conditions of climate change.
- Component 2: Ecosystem-based adaptation approaches along the shorelines of the Granitic Islands reduce the risks of climate change induced coastal floods.
- Component 3: Ecosystem based climate change adaptation mainstreamed into development planning and financing.
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Scale and effectiveness, cost-effectiveness

- Initial goals: mangroves (20 ha), sand dunes (5 ha), wetlands (30 ha) and fringing reefs (0.5 ha)
- Recovering such small areas may not have desired impact of reducing climate change induced coastal flooding
- Need to scale up for effectiveness
- Need for peer-reviewed scientific justification of whatever scale ultimately selected
- What about cost-effectiveness? – depends on transaction /capital costs relative to per hectare costs

Questions for discussion

1. Are there hard infrastructure / non-EBA alternatives for the interventions we want to make? How might one compare the costs?
2. Could we track and assess the costs and benefits of our EBA projects especially Component 3 interventions?
3. How might this help in making the case to government?