

## National Adaptation Plan (NAP) Country-level training

# Appraisal of adaptation options

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On behalf of



Federal Ministry  
for Economic Cooperation  
and Development

In cooperation with



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# Which adaptation options to choose?

Disaster response



Water management



Improved resource use



Relocation



Capacity development





## Why is it necessary to appraise and prioritize among adaptation options?

- **Limited resources for implementation**

Financial means, time, institutional capacities, people, etc.

- **To assess usefulness and feasibility**

What adaptation benefits would an option bring and how much would it cost? Would it be feasible to implement?

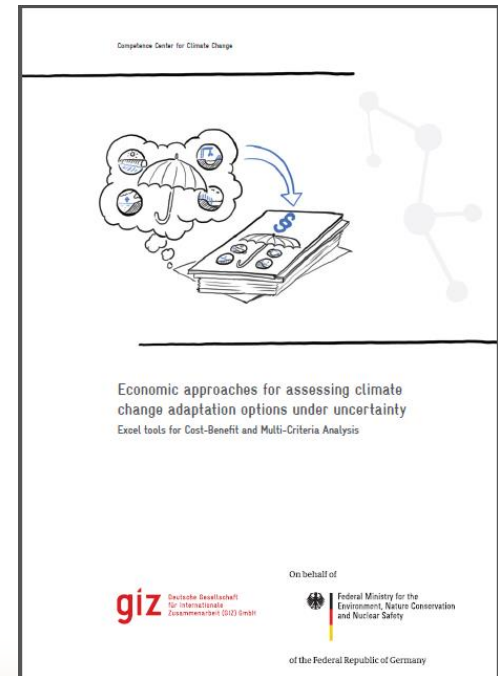
→ Selection or prioritization needs dialogue with stakeholders to ensure acceptance

→ Agreed criteria assist the process.



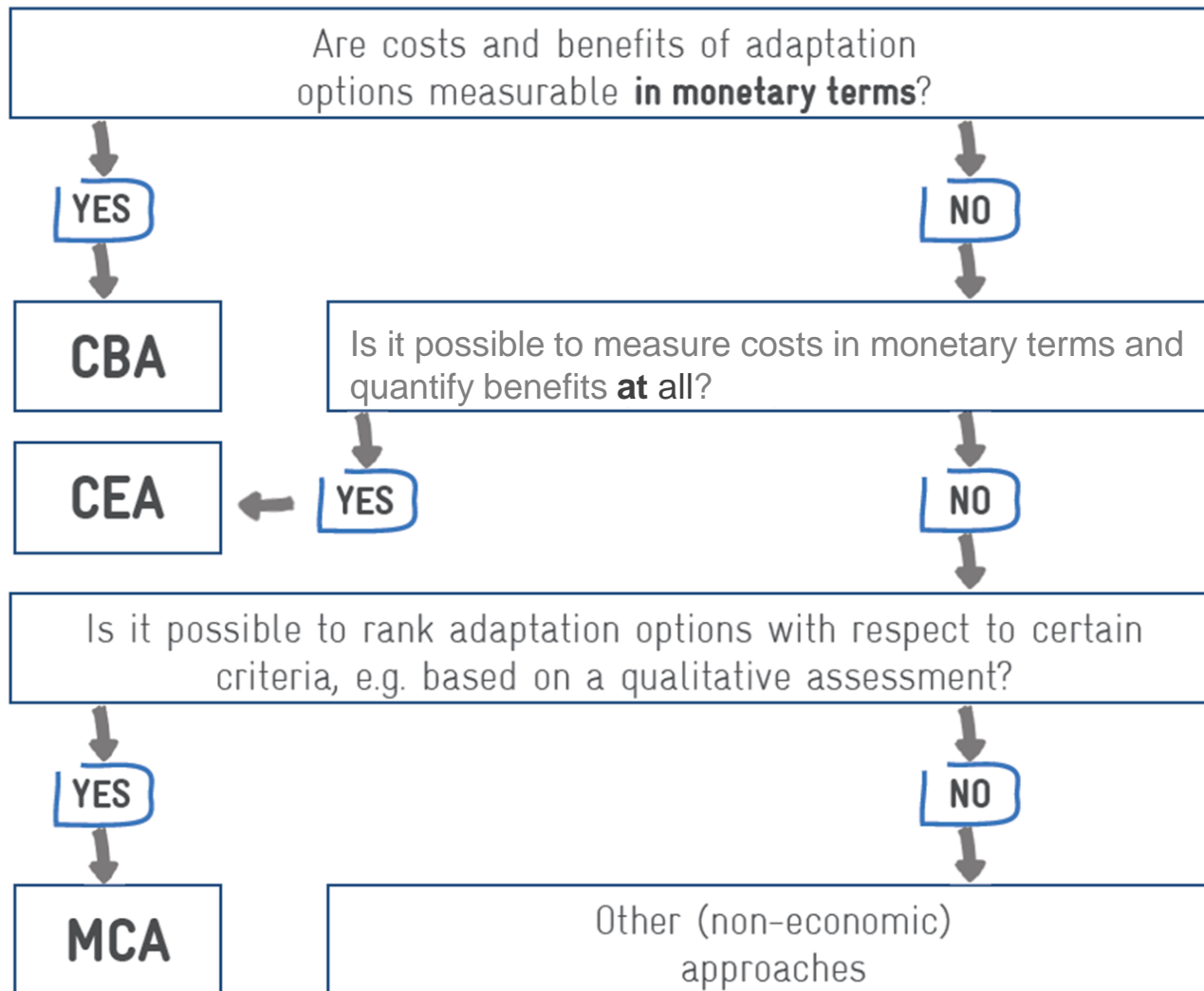
# Decision support tools to selection adaptation options

- Cost-benefit Analysis (CBA)
- Cost-effectiveness Analysis (CEA)
- Multi-criteria Analysis (MCA)





## Selecting a method for assessing adaptation options

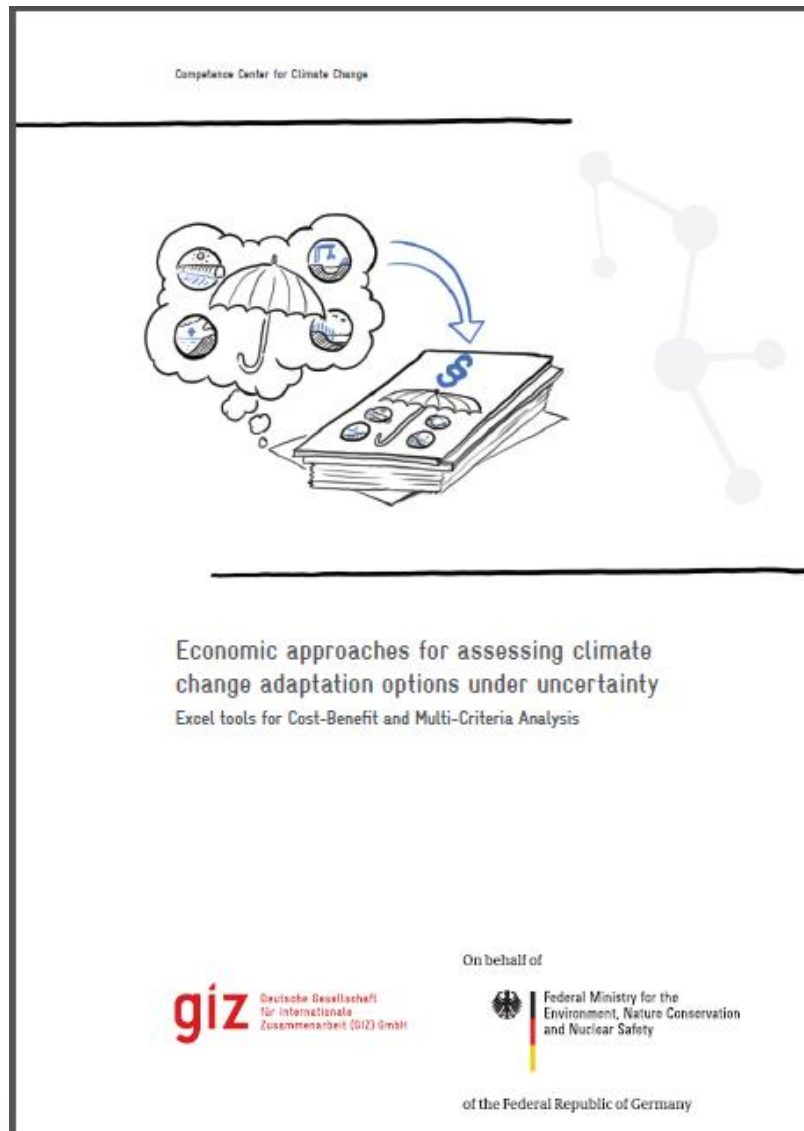


CBA = Cost-benefit Analysis

CEA = Cost effectiveness Analysis

MCA = Multi-criteria Analysis

Source: GIZ (2013)



## Further reading

GIZ (2013): Economic approaches for assessing adaptation options under uncertainty.

- **Explains CBA, ECA and MCA**
- **Excel-Tools for CBA and MCA**
- Available on:  
[www.AdaptationCommunity.net](http://www.AdaptationCommunity.net)
  - Knowledge
    - Mainstreaming
    - Further reading





## Exercise: multi-criteria-analysis (MCA)

You are invited to **score each adaptation option** according to the criteria:

- Availability of know-how for implementation
- cost intensity
- Co-benefits for sustainable development

Use a **scale from 1-5:**

- 1 (worst / most expensive) to 5 (best / highest / least cost-intensive)



## Example

Adaptation option	Ranking from 1-5				Total score
	Know-how available	Cost intensity	Co-benefits for development	<i>Add criterion</i>	
Integrate adaptation into development planning					





## Example

Adaptation option	Ranking from 1-5				Total score
	Know-how available	Cost intensity	Co-benefits for development	<i>Alignment with NAP process</i>	
Integrate adaptation into development planning	3	4	4	5	16



## Multi-criteria analysis: an example from the Netherlands

Ranking of adaptation options based on an MCA in preparation of the Netherlands' national strategy for climate adaptation.

Adaptation option	Importance (40%)	Urgency (20%)	No regret (15%)	Co-benefits (15%)	Mitigation effect (10%)	Weight sum
Integrated nature and water management	5	5	5	5	4	4.9
Integrated coastal zone management	5	5	5	5	4	4.9
More space for water						
Regional water system	5	5	5	5	4	4.9
Improving river capacity						
Risk based allocation policy	5	5	5	5	4	4.9
Risk management as basic strategy	5	5	5	5	4	4.9

Source: de Bruin et al. (2007): Adapting to climate change in The Netherlands: an inventory of climate adaptation options and ranking of alternatives. *Climatic Change*, 95: 23–45.



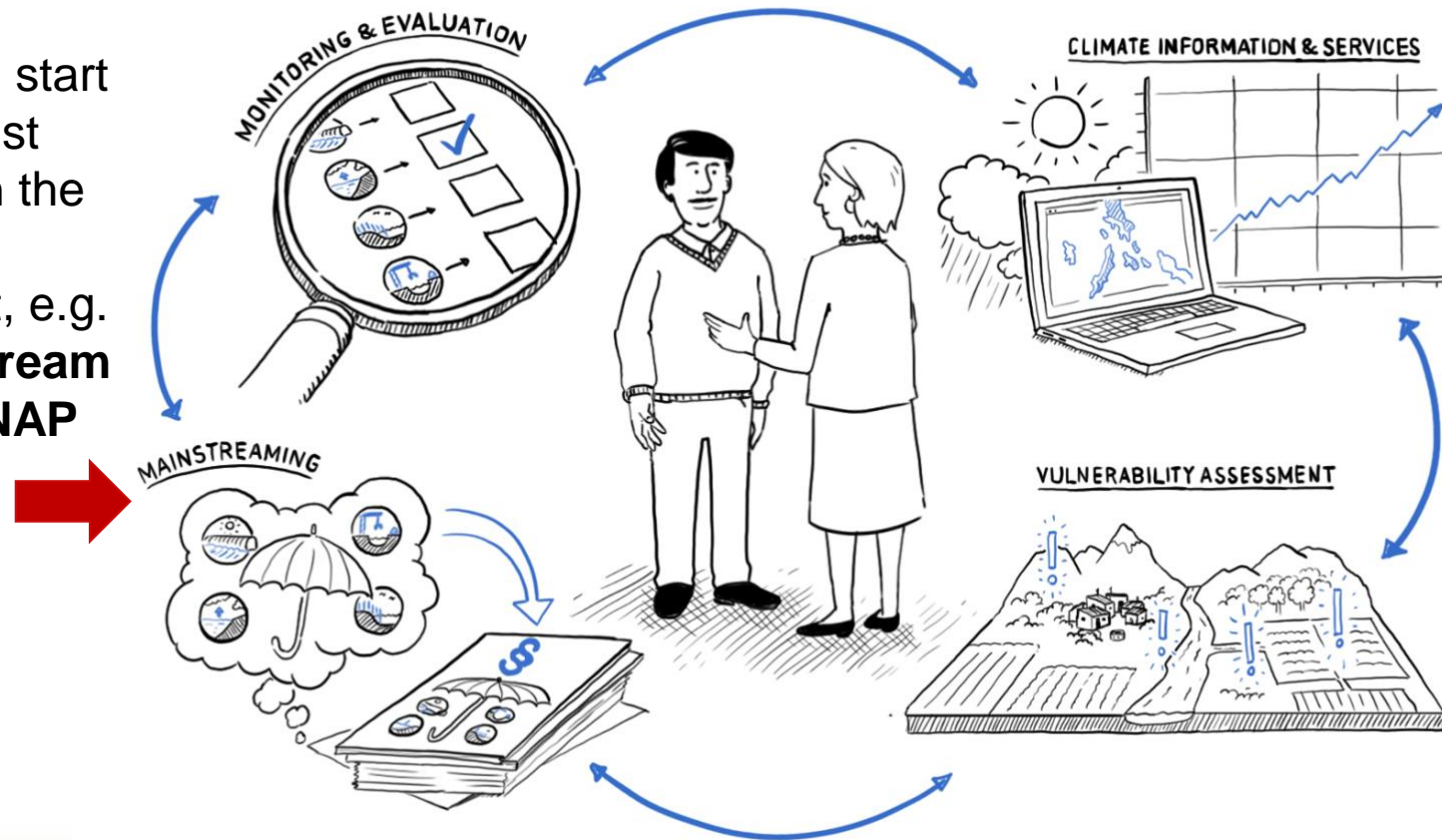
## Take home messages

- MCA useful to account for more than just economic criteria
- Can be done in absence of quantitative data
- Need to define each criterion carefully
- Need to decide on weighting of criteria
- Ranking can vary based on criteria selection and weighting
- Appraisal tools inform decisions, they don't provide definite answers



Download of publications, factsheets and webinar recordings on M&E: [www.AdaptationCommunity.net](http://www.AdaptationCommunity.net)

On the start page just click on the topic of interest, e.g. **Mainstreaming & NAP**





***Thank you very much!***

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