

# Appraisal and prioritization of adaptation options – Part 1

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# Outline

- Introduction to appraisal and prioritisation tools
- Criteria for selection of adaptation options
- 6 of the commonly used appraisal and prioritisation tools

- The appraisal process needs to take into account where the adverse climate change impacts are likely to be most severe and who or which systems are most vulnerable to identify adequate adaptation options
- This can result in a very long list of meaningful options

# Introduction

- **Two reasons for prioritisation** – not all adaptation options are possible due to constraints in terms of finance, capacity or national priorities AND to exclude maladaptive options
- **Other reasons** – to meet the criteria of financial institutions and donors, such as GCF and the Adaptation Fund

- **No all-purposes tool** – priority options can be selected through different methods and tools depending on the needs, context, available data and capacity
- **Use of multiple tools and multi-step methods yields better results** – as each tool has its advantages or disadvantages, it is better to use several tools or design a method incorporating different tools
- **Use of renowned tools, methods and best practices gives credibility to choices**, increases acceptability of choices and the fundability of projects

# Criteria for selection of adaptation options

Governments are free to define own criteria for appraisal and prioritisation. Examples of commonly used criteria include:

- Timing/urgency for the action
- Social, economic and environmental benefits
- (Co-) benefits for mitigation/SDGs/DRR
- Consistency with national strategies and priorities
- Cost-efficiency (no regret, low/medium/high costs)
- Feasibility – in terms of risks and complexity
- Robustness and effectiveness
- Acceptance (social and political)
- Potential to realise transitional changes with long-term impacts

# Use of appraisal tools

- Methods for appraisal/prioritization can range from simple to more rigorous methods. Some examples:

- 1. Nominal group method**
2. Group perceptions
3. Barrier Analysis
- 4. Criteria weighing**
5. Weights and indicators
- 6. Multi-Criteria Analysis (MCA)**

# Nominal group method – Expert Group

- Responsibility for prioritisation is given to small group
- Group members assign decision-making criteria and score/rank by consensus
- The options with the highest score/rank are prioritised
  
- **Advantages:** easy, trusted by decision-makers
- **Disadvantage:** reliability of results will depend on expertise and objectiveness of the group; could be considered exclusive



# Group perceptions - Questionnaire

- Use of questionnaires/interviews to obtain perceptions on priorities from different groups
  - Answers are scored and options are ranked
  - Options with highest ranking are given the highest priority
- + Flexible, transparent, participatory
- Results and reliability of the information gained will highly depend on design of the questionnaires and the representativeness of the reference group

# Criteria weighting method – Numerical

- Criteria are selected in advance and options are scored against the criteria
  - Criteria are ranked in order of importance and numerical weights are assigned to each criterion, eg. 1, 2, 3.. Where 1 is least important. Criteria may have the same ranking.
  - Weighted sum is calculated and the options with highest scores are prioritised
- + Easy to agree upon and to use; quick; can be used for qualitative data and in cases where knowledge is lacking or data is not or partially available
- Subjective; less transparent

# Weights & indicators

- Criteria are selected in advance
  - Different weights are assigned to each criterion, based on importance as % or a fraction
  - Options are scored against the weighted criteria/indicators
  - Scores are calculated and the options with highest score are prioritised
- + **Transparent and easy to apply**
- Determining weights to be applied requires good knowledge of relative importance across different factors - need to involve stakeholders

## Barrier Analysis - overview

- Widely used for mitigation projects, but also for Technology Needs Assessments, including for adaptation. Can be used to identify:
    - Barriers that might prevent the implementation of an activity to estimate its feasibility and complexity
    - Baseline scenario and demonstrate that the project is not business-as-usual
  - Easy wins and low hanging fruit options can be prioritized for short-term implementation and the rest shifted to medium to long-term
  - Measures can be identified to counter the root causes
- + Can be used when concrete or quantifiable data is missing
- Subjective; less transparent

# Multi-Criteria Analysis - overview

- Ranking and prioritisation of adaptation options against a set of criteria, which can be quantitative or qualitative
- Need to find a common indicator (e.g. scores)
  - scores can be calculated
  - or be obtained via expert consultation
- + Can incorporate qualitative dimensions, such as urgency, no regret options, co-benefits, gender. In some cases can identify trade-offs and win-win situations
- + Relatively simple and transparent. Can be done low cost and fast
- + Can be used when valuation or quantifiable data is missing
- Subjective
- Provides ranking only, no information on economic efficiency