

Appraisal and prioritization of adaptation options

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Outline

- Thoughts on 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

- **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 transformational 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. **Cost benefit Analysis (CBA)**
 6. **Multi-Criteria Analysis (MCA)**

1. 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
- + easy, trusted by decision-makers
- reliability of results will depend on expertise and objectiveness of the group; could be considered exclusive

2. 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

3. 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

4. Criteria weighting method – Numerical

- Evaluate programme alternatives by specifying evaluation criteria based on the performance
 - Individual criteria are selected in advance and options are scored against the criteria
 - Compare to create a rank order of their performance related to criteria which is treated independently
 - Weighted criteria can help in NAP by narrowing down the list of options using ONE criteria against the other such as cost : efficiency
 - Weighted sum is calculated and the options with highest scores are prioritised
 - Decision-making tool to evaluate alternatives
 - Tool to prioritize adaptation activities rather than vulnerabilities or risks.
- + 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

5. Cost-benefit Analysis (CBA)

- Balancing the cost of interventions against their benefits (on impacts)
 - Relevant costs and benefits to society to all options are valued then estimates a net present value or a benefit : cost ratio
 - It involves calculation and comparison all costs and benefits
 - Efficiency is the main criteria.
- + straight forward results (using a single metric)
- Lack of data and monetary valuation for non-market sectors and non-technical options

6. 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