A Framework to Facilitate Design and Evaluation of NAMAs at the National Level

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Manish Kumar Shrivastava, Neha Pahuja, Ritika Tewari, Swati Agarwal, Nimisha Pandey, Tamara Law Bilimoria

Overview of the Presentation

1. Key steps in NAMA cycle

2. To identify constituent elements defining national appropriateness.

3. To facilitate making a choice of the most ‘appropriate’ mitigation action from a broad spectrum of options using a multi-criteria evaluation framework

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Key steps in NAMA Cycle

1. Define accounting and reporting principles
2. **Define policy or action**
3. **Identify effects and map causal chain**
4. Define GHG emission boundary
5. Estimate Baseline
6. Estimate GHG effects ex-ante
7. Monitor performance
8. Assess GHG effects ex-post
9. Verify
10. Report

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1. Data Collection
2. Policy Interaction
3. Cost analysis

Need for aFramework

- Environmental problems are complex: high level of uncertainty; political in nature
  - Same extends to climate change problem, especially mitigation
  - Selection of appropriate mitigation options is a complex problem

- Different ways of constructing the problem and different paths to solving it
  - Mitigation actions can range from purely technological to purely behavioural or as combinations
  - Availability of different mitigation options/choices. But, what is the best ? And the most appropriate, in a given temporal and spatial scale with limited resources?
  - How do we make it more inclusive & participatory ?

- Instrument that works well in one country may not work well in another country with different social norms and institutions (IPCC, 2007)

- Each NAMA would be a policy making exercise, thus would need to rely on the domestic institutional arrangements in the country.
- Institutional arrangement for NAMAs can be centralised or decentralized.
- Thus, policy makers would have to make an informed choice from the different mitigation options available/possible

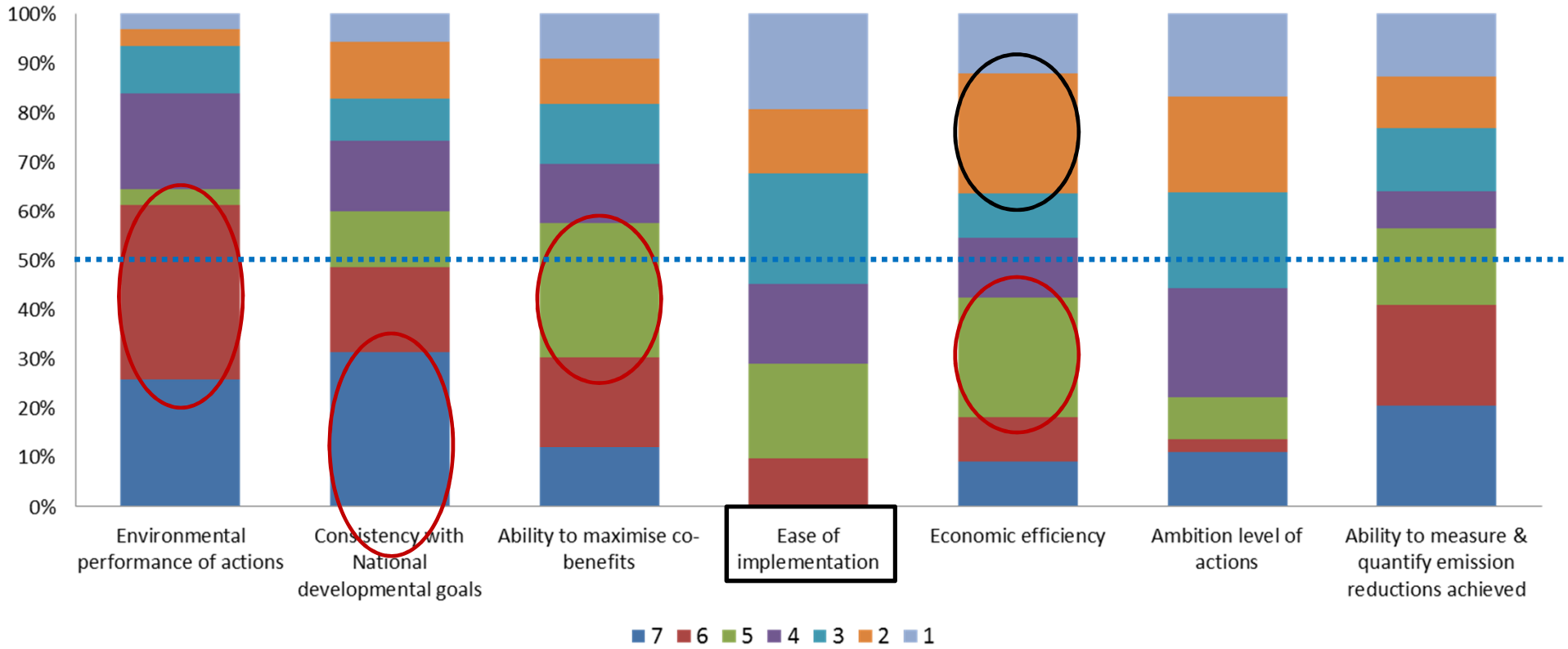
Assessment of a mitigation action as being 'nationally appropriate' , at any level of decision making, would require an evaluation framework.

Our approach for the study

We build upon: *Review, dialogues, questionnaire survey, discourse analysis…*

- ✓A multi-criteria approach is unavoidable
  - Captures **complexity and multiplicity of perspectives**, central to environmental decision making
  - Provides **comprehensive, participatory and qualitative** assessment
- ✓Measurability of criteria
- ✓Room for deliberations
- ✓Simplicity and flexibility key
- ✓International context important component for evaluation
- ✓*A tool to assist in structured decision-making*

Considerations that are important while designing NAMAs



- ✓ Consistency with national development goals regarded as most important consideration
- ✓ Followed by environmental performance of actions
- ✓ Followed by ability to maximize co-benefits and economic efficiency
- ✓ Economic efficiency, however has an equal lower ranking
- ✓ Ease of implementation least ranked consideration
- ✓ **High Rankings**: **environmental performance, national development goals, co-benefits, ability to measure and quantify emissions reductions**

NAMA Evaluation Framework

Cluster

Criteria

Options

Deliberation table

Cluster [G]	Cluster Score(+)	Cluster Score(-)
Political Acceptability of International Support		
Transformation		
Cost-effectiveness		
Social and Local Acceptability		
Environmental Impacts		
Institutional Feasibility		
Domestic Resource Component		
Potential Negative Impacts		

Weightage

Preference

-1, 0,+1

How to apply the framework

Define Action

Conceive a NAMA Concept

Elaborate according to the framework

Score Action

Assign weights and preference

Calculate cluster scores

Revise

Deliberate: Go or Revise

Readiness assessment

Capacity of stakeholders

Resource availability

Governance framework

Assessment of Readiness

Capacity of Stakeholders	• Existing experience • Awareness • Technical Know-how (plan, design, implement, MRV)
Resource Availability	• Human Resources • Infrastructure • Financial
Governance Framework	• Presence of a national strategy • Necessary laws and regulations • Organizational framework (ownership) • Political Position on NAMAs

NAMA Evaluation Framework: An illustration

Cluster → **Political Acceptability of International Support**

Criteria →

Type of finance	Nature of technology transfer	Capacity building needs	Source of finance	MRV implications
Options → Grant	Concessional	Institution level	Green climate fund/UNFCCC	International MRV (all aspects of project)
Equity	Commercial	Systemic level	MFIs/ Outside UNFCCC	International MRV (only supported component of Project)
Concessional loan	IPR license	Individual level	Bilateral funding/ODA	Only Domestic MRV
Commercial loan	Joint R&D		Private investors/FDI	Part Domestic, Part International MRV
ODA	Knowledge		Individual/ Philanthropic	MRV of support
Philanthropic				

Weightage

Preference

-1,0,+1

Political Acceptability of International Support

Criteria [C]	WCi	Preference	Options	Project Score	Guide for Project Score	Criteria positive score	Criteria negative score	G(+)	G(-)
Type of Finance	.2	0	Equity	0.6	% of total investment	0.12	-0.08	1.24	-0.56
		1	Concessional loan	0					
		-1	Commercial loan	0.4					
		0	ODA	0					
		0	Philanthropic	0					
Nature of Technology Transfer	0.2	1	Concessional	0	Yes (1) / No (0)	0.2	-0.2		
		-1	Commercial	1					
		1	IPR license	1					
		1	Joint R&D	0					
		1	Knowledge	0					
Capacity Building	0.2	1	Institution level	1	Yes (1) / No (0)	0.6	0		
		1	Systemic level	1					
		1	Individual level	1					
Source of finance (under/outside FCCC)	0.2	1	Green climate fund/UNFCCC	0.6	% of total investement	0.12	-0.08		
		-1	Multilateral Financial Institutions/Outside UNFCCC	0					
		-1	Bilateral funding/ODA	0					
		-1	Private investors/FDI	0.4					
		0	Individual/philonthrophic	0					
MRV implications (Ref. to BAP 1bii; what, who, how?	0.2	-1	International MRV of all aspects of project	1	Yes (1) / No (0)	0.2	-0.2		
		1	International MRV of only supported component of Project	0					
		1	Only Domestic MRV	0					
		1	Part Domestic, Part International MRV	0					
		1	MRV of support	1					

Deliberation Table (Large hydro in India)

Cluster [G]	Cluster Score(+)	Cluster Score(-)
Political Acceptability of International Support	**1.24**	**-0.56**
Transformation	1.2	-0.08
Social and local acceptability	0.2	-1.6
Environmental Impacts	1.0	-0.6
Cost effectiveness	1.0	-0.2
Institutional Feasibility	1.0	0
Domestic Resource Component	1.0	0
Potential Negative Impacts	0.6	-0.2

Criteria clusters

- ***Political Acceptability of International Support***

Type of finance	Nature of technology transfer	Capacity building needs	Source of finance	MRV implications

- ***Transformation of economy***

Technological	Private sector participation	Energy security	Impact on manufacturing capability	Lifestyle changes

- ***Cost effectiveness***

Cost of action	Cost of compliance	Cost to government	Cost to beneficiaries	Cost recovery period	Resource efficiency

- ***Social and Local acceptability***

Reducing income disparities	Job creation	Impact on marginalized sections of society	Safeguards	Cultural acceptance

- ***Environmental Impacts***

GHG reduction potential	Impact on air quality	Impact on biodiversity	Impact on water resources	Impact on Soil	Waste management

- ***Institutional feasibility***

Changes in institutional arrangements	Compliance with existing laws and regulations

- ***Domestic resources***

Human resource	Natural resource	Financial capital	Technological capital	High emission lock-in

- ***Potential negative impacts***

Import intensity	Impact on domestic manufacturers	Diversion of resources	Conditionality of support	Livelihood losses	Pollution	Hazardous waste	Balance of payments	High emission lock-in

Further details can be accessed at:
http://www.teriin.org/projects/nfa/cc2bwp1.php