

LEG Workshop Bangladesh
September 2002

Selection and Prioritisation of Adaptation Options

Henk Bosch, The Netherlands

Selection and Prioritisation

- What's so special?
- What do Guidelines say?
- What methods are available?
- Pros and cons of methods
- What method(s) to use?
- An example
- Computerised MCA

What's so special about Climate Change Adaptation?

- Climate (Change) related
- NAPA is about identification, not planning (yet)
- Selection on existing data
- Guidelines suggest criteria
- Guidelines indicate fields

What Do the Guidelines Say ?

Guiding elements	Criteria	Applied to (Fields/sectors)
<ul style="list-style-type: none">- Participatory- Multidisciplinary- Complementary- Sustainable dev't- Gender- Country driven- Sound environment- Cost-effective	<ul style="list-style-type: none">- Level of damage- Poverty reduction to enhance adaptive capacity- Synergy with MEAs- Cost-effectiveness	<ul style="list-style-type: none">- human health/life- Food- Water- Infrastructure- Environment/nature- Cultural heritage- Bio-diversity- Land-(use), forest, coastal areas

What Methods Are Available?

- Cost-benefit analysis
- Cost-effectiveness analysis
- Multi-criteria analysis
- Other

Method

Pros

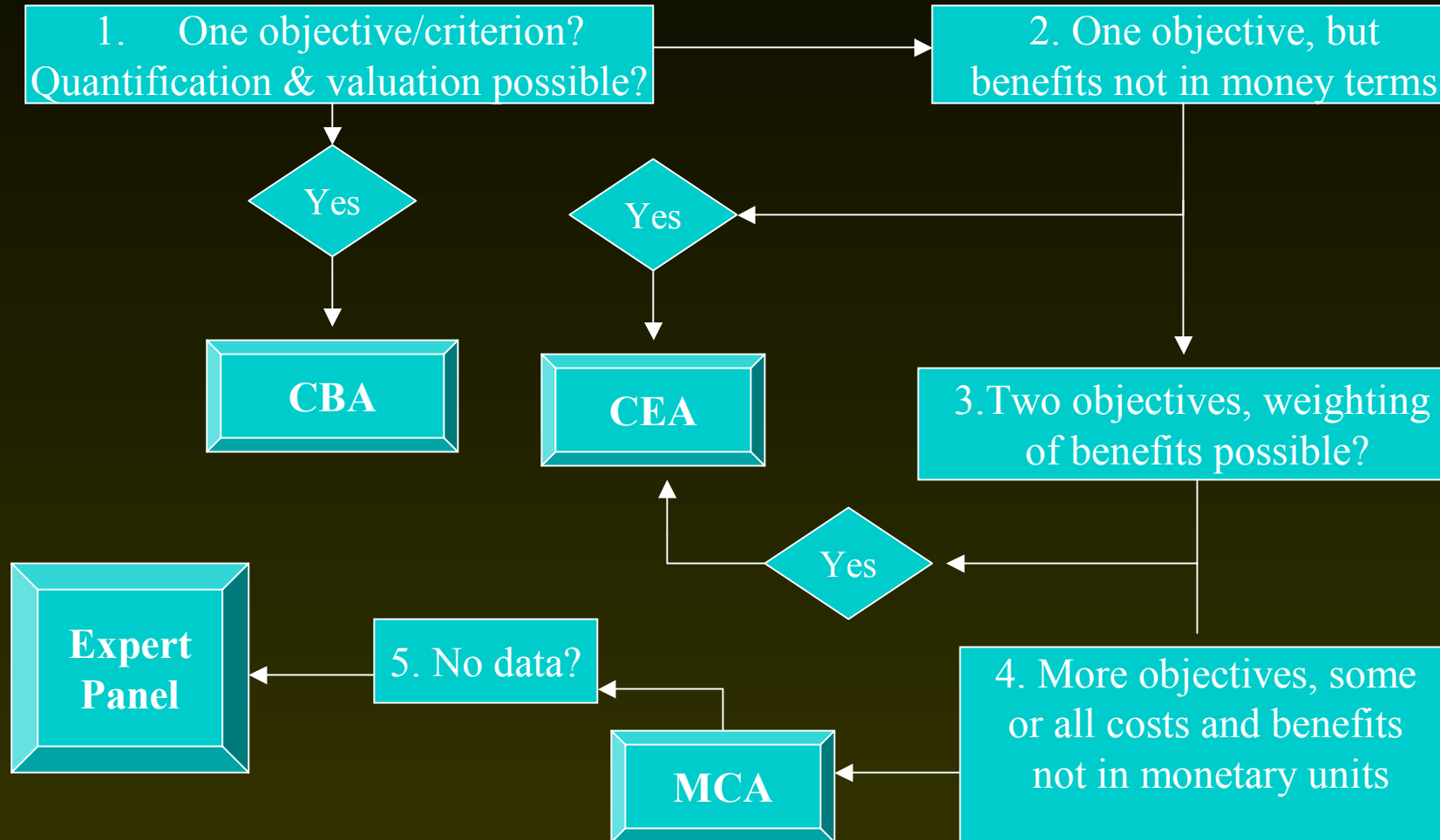
&

Cons

1. Cost-benefit analysis (CBA)	Allows comparison between sectors	Heavy on quantitative data
2. Cost-effectiveness analysis (CEA)	Provide budget estimate	Provides ranking only
3. Multi-criteria analysis (MCA)	more criteria possible, participatory approach	manipulation easy, provides ranking only
4. Expert judgement	flexibility	subjective

What method to use when?

$$\text{Quantity} \times \text{Price} = \text{Value}$$



Hypothetical MCA example

1. Scores	on	criteria				
	Costs (mln \$)	Agriculture (mln ha-days)	Health (mln DALYs)	Environment (mln \$)		
pumping	-700	1000	10	-70		
infrastructure	-800	800	8	-10		
labour	-900	300	3	-10		
bear losses	0	0	0	-50		
2. Scores		standardised			sum	Rank
pumping	0.22	1.0	1.0	0	.56	2
infrastructure	0.11	0.8	0.3	1	.68	1
labour	0.00	0.3	0.3	1	.40	4
bear losses	1.00	0	0	0.33	.33	3
Weight	0.25	0.25	0.25	0.25	1.00	

Computerised MCA

■ Advantages

- ◆ Fast
- ◆ No arithmetical errors
- ◆ Sensitivity & risk analysis
- ◆ Suitable for participative settings

■ Disadvantages

- ◆ Black box
- ◆ Manipulation easy

Workshop Tools

- 1. CBA/CEA: No
- 2. MCA:
 - ◆ HIVIEW
 - ◆ DEFINITE + Expert
- Suggested motto:

“There is no substitute for hard work”.