Strategic Environmental Assessment

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Some challenges require us to think strategically

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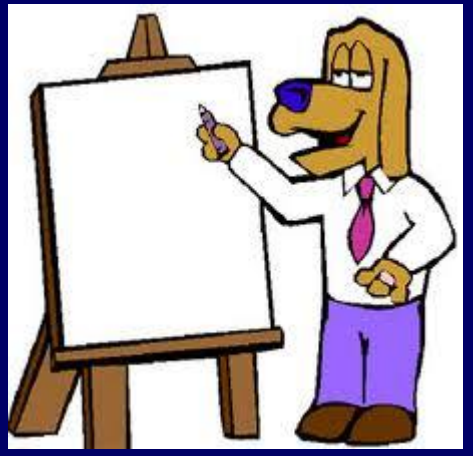
This presentation

- Value & importance of SEA
- What is SEA
- Definition and principles
- SEA and EIA compared
- Costs and benefits of SEA
- Why is SEA used?
- Techniques and steps
- SEA example – Namibia
- Useful help



Increasing uptake of SEA

- Countries and donors and countries are introducing **legal and other requirements** for SEA (eg EU SEA Directive – plans/progs - applies to 25 nations)
- **Emphasis of aid changed** from projects to strategic support (policies, plans and programmes)
- Traditional assessment tools for project planning (eg EIA) less effective at these higher levels - need a **complement** - a more holistic approach

What is SEA?

- A planning tool - **a process to improve strategic decision-making [upfront, big picture, not project-level]**

- **SEA complements planning with:**
  - **knowledge** of environment & poverty
    - A solid **analysis** and **assessment** of environmental issues and their linkage with socio-economic issues
  - **dialogue** on these issues
    - a well structured public & government **debate**
  - **influence**: institutions & governance
    - A **mechanism** to take the results of assessment and debate into account

Definition of SEA

- **analytical** and **participatory** approach
- to **integrate** environmental considerations into policies & plans
- to evaluate the inter linkages with **economic** and **social** considerations.

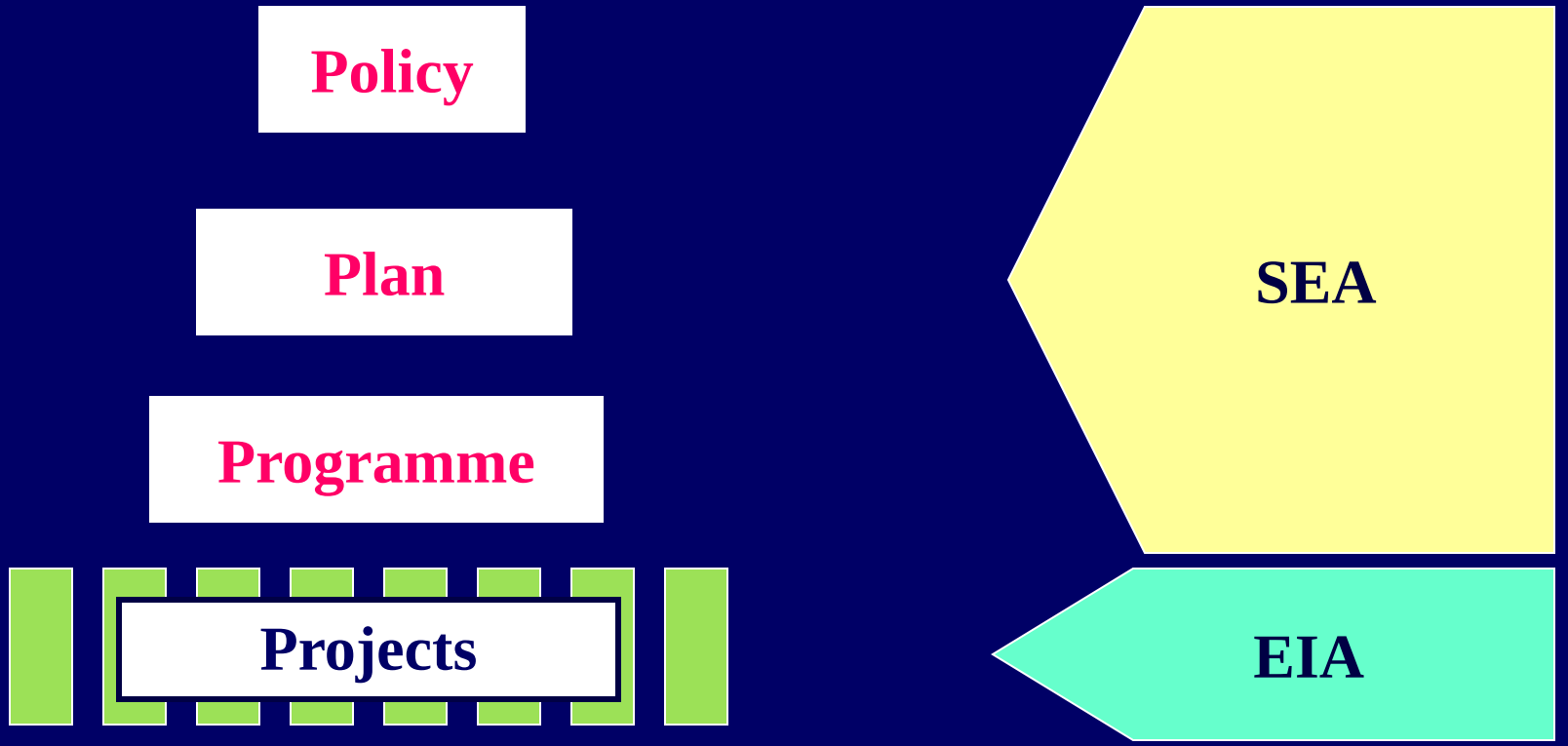
OECD DAC SEA task force (2006)

Key principles of SEA

- Be **integrated** with existing policy and planning structures
- Be **customised** to context
- Analyse potential **effects and risks** of policy, plan, programme and its **alternatives**
- Identify environmental and other **opportunities and constraints**
- Address the **linkages and trade-offs** between environmental, social and economic considerations
- Be **transparent**
- Build **capacity** for both undertaking and using SEA

How does SEA relate to EIA?

SEA needed to address bigger picture, interactions with other sectors, trans-boundary, cumulative effects,focus EIAs/efficiency, etc,



How is SEA different from EIA?

EIA	SEA
Projects	**Policies, plans, programmes**
Limited range of alternatives	**Broad** range of alternatives (scenarios)
Prepared/funded by project **proponents**	**Government**
Obtaining **permission** (feedback to PPP rare)	PPP **implications** for future lower-level decisions
Linear, **simple** process	Cyclical, **complex** process (feedback loops)
Mitigation, compensation	**Prevention**, setting objectives
Little focus on cumulative impacts	**Strong** focus on cumulative impacts

Costs of SEA

- Costs vary depending on the complexity of the P/P/P and the approach taken to SEA
- In Europe, SEA usually adds 3-15% to the total planning costs
- These costs are marginal when compared with benefits of SEA

Benefits of SEA

- Identifying better development opportunities
- Prevent costly mistakes
- Building cooperation & stakeholder commitment
- Reduce poverty more effectively
- Preventing conflicts
- Do cheaper and more effective EIA
- Inter-disciplinary process
- Joined-up thinking & analysis
- Environmental & social analysis upfront & linked to economic analysis
- Identifies opportunities - help govt. decide where it wants to go (beyond risks & fatal flaws)
- Provides picture of cumulative effects (+ve synergies that contribute to growth

SEA to avoid costly mistakes

Thermal Power Generation Policy, Pakistan

Issue

- This policy provided incentives for investments in thermal power generation
- Various investors were given the freedom to choose the site, the technology and the fuel
- No SEA was undertaken but Environmental Impact Assessments were made for the individual power plants

Key costs

- Relocation of plants due to public pressure and lobbying at considerable cost.
- Delayed delivery of energy.

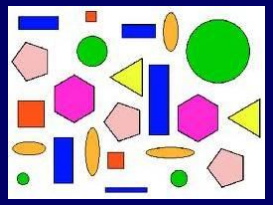
SEA to build cooperation

Argentina flood protection

- 50 flood protection projects in 3 river basins
- SEA looked at cumulative effects of all projects in a river basin
- SEA showed: coordination of cities and agencies in a basin urgently needed

How to do SEA?

- Many forms and shapes



- Tailor made depending on context:
  - Abstract policy or concrete plan?
  - Time available?
  - Data availability?
  - Environment only, integrated or sustainability assessment?
  - Fit to Botswana's policy and planning processes

Techniques

Includes:

- **Techniques used for project-level EIA (eg checklists, surveys, public consultation, matrices)**
- **Techniques typically used for policy analysis/plan evaluation (e.g., scenario building and analysis)**
- **No one single technique can be used to fulfill all the steps in a SEA**

Impact Analysis Techniques

- Literature Review
  - State of Environment
  - Case Comparison
- Analytical Techniques
  - Scenario development
  - Modeling and mapping
  - Risk assessment
  - Policy impact matrix
  - Indicators and criteria
  - Benefit-cost analysis
- Expert Judgement
  - Delphi surveys
  - Workshops
- Consultative Tools
  - Interviews
  - Selective consultation
  - Policy dialogue

Crucial steps for SEA of plans/programmes

Establish context

- Screen the need for the SEA
- Set objectives
- identify stakeholders and develop a communication plan

Participation
- Who and when?
- Handling information
- Use internet creatively

Implement the SEA process

- Collect (available) baseline data
- Scope in dialogue with stakeholders
- Identify alternatives and their impacts
- Identify options for mitigation and compensation
- Arrange quality assurance of the assessment

Baseline
- Lack of time & resources
- Scientists always want more data - the "good enough principle"

Scoping
- Geographic scope
- Time perspective
- Reasonable alternatives
- Who will be impacted

"the art of intelligent simplification" the daring to exclude

Alternatives
- What is reasonable alternative in/to PPP?
- Alternatives;
  - No action
  - Alternative ways of reaching objectives
  - Worst case – is the PPP robust?
- Do decision-makers want alternatives?

Inform/influence decision making

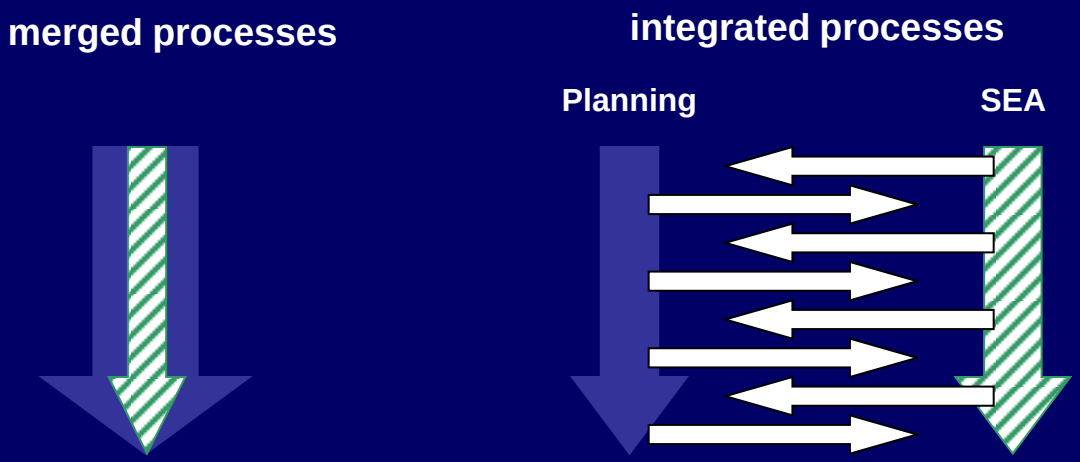
Make recommendations in dialogue with stakeholders

Monitoring & evaluation

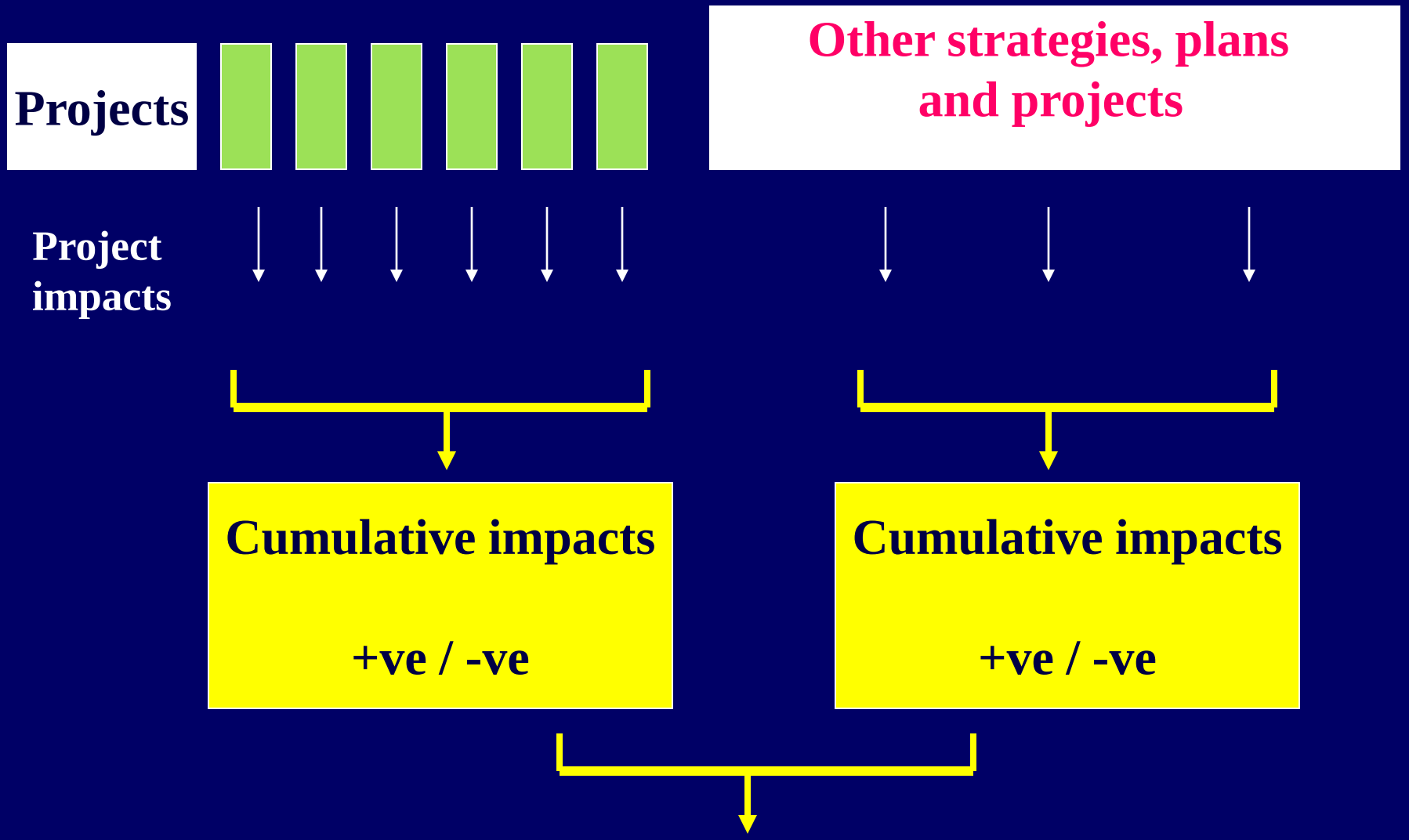
Begin M&E process

How to integrate SEA in planning & policy-making?

The two best options are:



Cumulative effects



Cumulative impacts

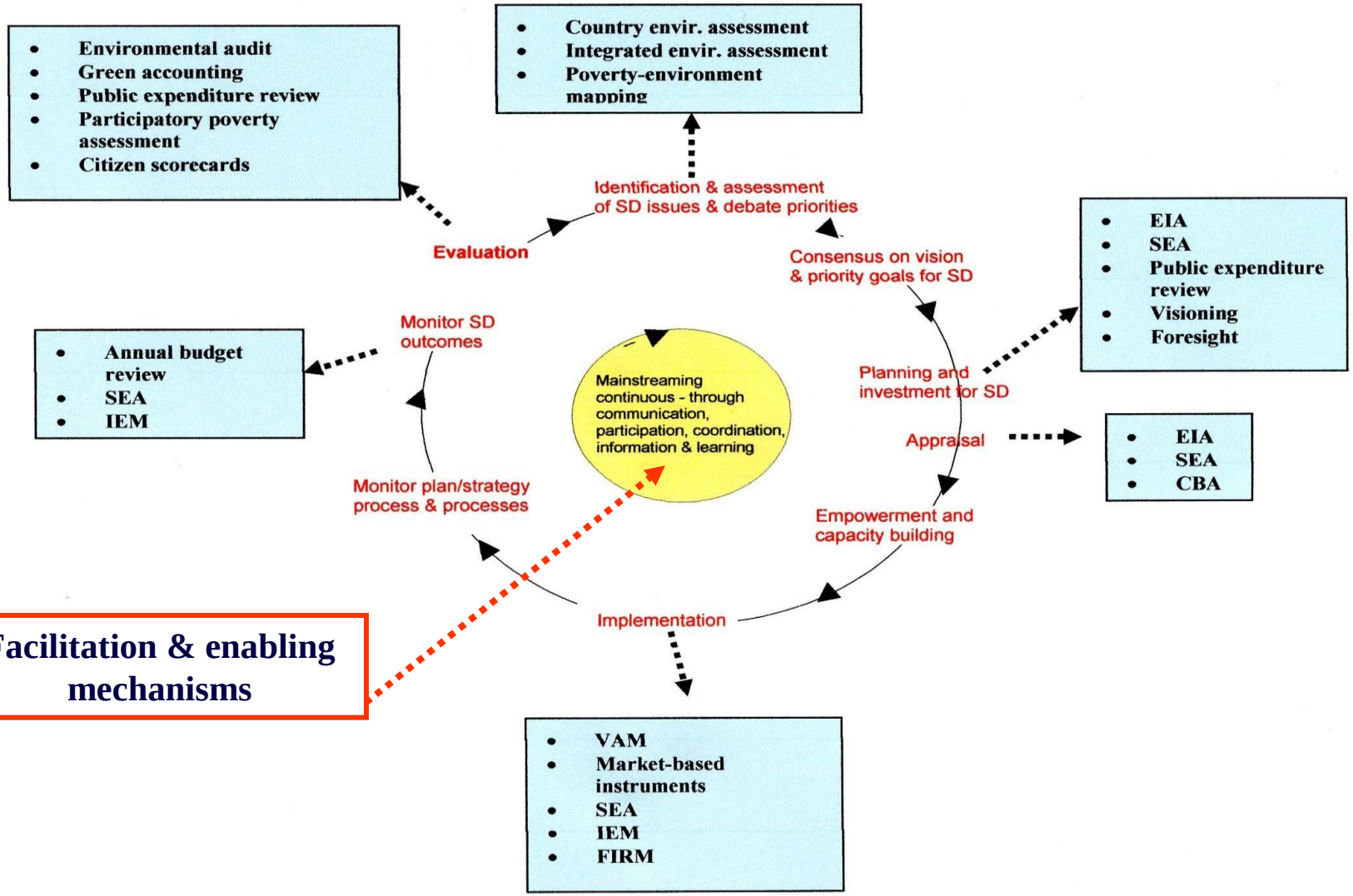
SEA topic	Part of PPS / Alternative (e.g. policy 1-7) 1	2	3	4	5	6	7	Potential cumulative impact of PPS
Biodiversity etc.	+	-	+	+	0	…		no effect
Population	—		0	—		…		
Human health	0	?	0	?	?			more study needed
Soil	+	?	-	?	?			
Water	+		0	—				
Air	+	+	0	++				
Climatic factors	-	--	-	0	--			Potential adverse effect Suggest appropriate mitigation measures here
Material assets								
Cultural heritage	cumulative effects on SEA topic can be identified by 'reading across'							
Landscape								
Interrelationship	…	…						

Alternatives

Comparison of Evaluating Alternatives

ALTERNATIVES	A	B	C
Maximal access, minimal detrimental impacts 	✗✗	0	✓✓
Quality built environment, efficient land use 	✗	✓	✓✓
Quality housing available to everyone 	0	✓	
Bio-diverse, attractive natural environment 	✗✗	0	✓✓
Minimal pollution levels 	✗	✓	✓
OVERALL	✗	✓	✓

Opportunities & leverage points



Note: As portrayed, the figure suggests that the overall process involves a rigid sequence of steps. However, in practice, these are on-going and necessarily overlap. Key features of the central tasks are stakeholder identification, strengthening capacity, collaboration and outreach.

SEA Example: Rural Development Programme Northern Namibia (MCC – 5 yr compact: 2008-2013) US$304m SEA: 6 months, $1.6m

- Objective: poverty reduction, through:
  - Build human resources capacity
  - Improved productivity (on + off farm)
  - Increased livestock value
  - Improved rangeland management

AGRICULTURE COMPONENT

- Livestock component
  - Improved land access & management
    - Communal land support
    - Community-based rangeland & livestock management
  - Improved livestock health & marketing
    - Vet. Control Fence on Angola border (later abandonned)

- Indigenous natural products component
  - Producer & processor organisation development
  - INP applied research & innovation facility
  - INP market information delivery & IPPT (Indig.Plant Task Team) strengthening

TOURISM COMPONENT

- Improved management & infrastructure development of Etosha National Park
- Marketing Namibia tourism
- Ecotourism development in Conservancies

EDUCATION COMPONENT

- Improving quality of education
- Improving vocational & skills training
- Improving access to & management of textbooks
- Investing in regional study & resource centres
- Expanding & improving access to, & equity & sustainability of, teritiary education
- Cross-project support for HIV/AIDS programme

Inter-Ministerial Advisory Committee (IMAC)

Millennium Challenge Corporation

Project Management
Team Leader, Deputy Team Leader, Project Administrator, ARD support

Team:
15 experts
5 nationalities

Phase I: Initial Assessment

Baseline data collection
- Livestock expert
- Rangeland expert
- Social survey & PP expert
- Gender expert
- Wildlife expert
- GIS & Data Mgt. team

Benefits to poor farmers analysis
- Socio-economic issues
- Gender issues

Resettlement & social impacts of VCF
- Rangeland expert
- Livestock expert
- CBNRM expert
- Land Tenure expert
- Socio-economic experts

VCF-induced wildlife impacts
- Wildlife experts
- GIS & Data Mgt.team

April-May

Phase 2: Theme Analysis

Livestock and rangeland
- Improving livestock quality
- Improved marketing
- Changing mind-sets
- Better range management
- Veterinary support
- Improved infrastructure
- 'new' grazing areas
- Networking

Tourism
- Park infrastructure
- Conservancy lodges
- Wildlife translocations
- Marketing & packaging
- Capacity building & studies

Indigenous products
- Capacity building (NR mgt.)
- Product development
- Marketing

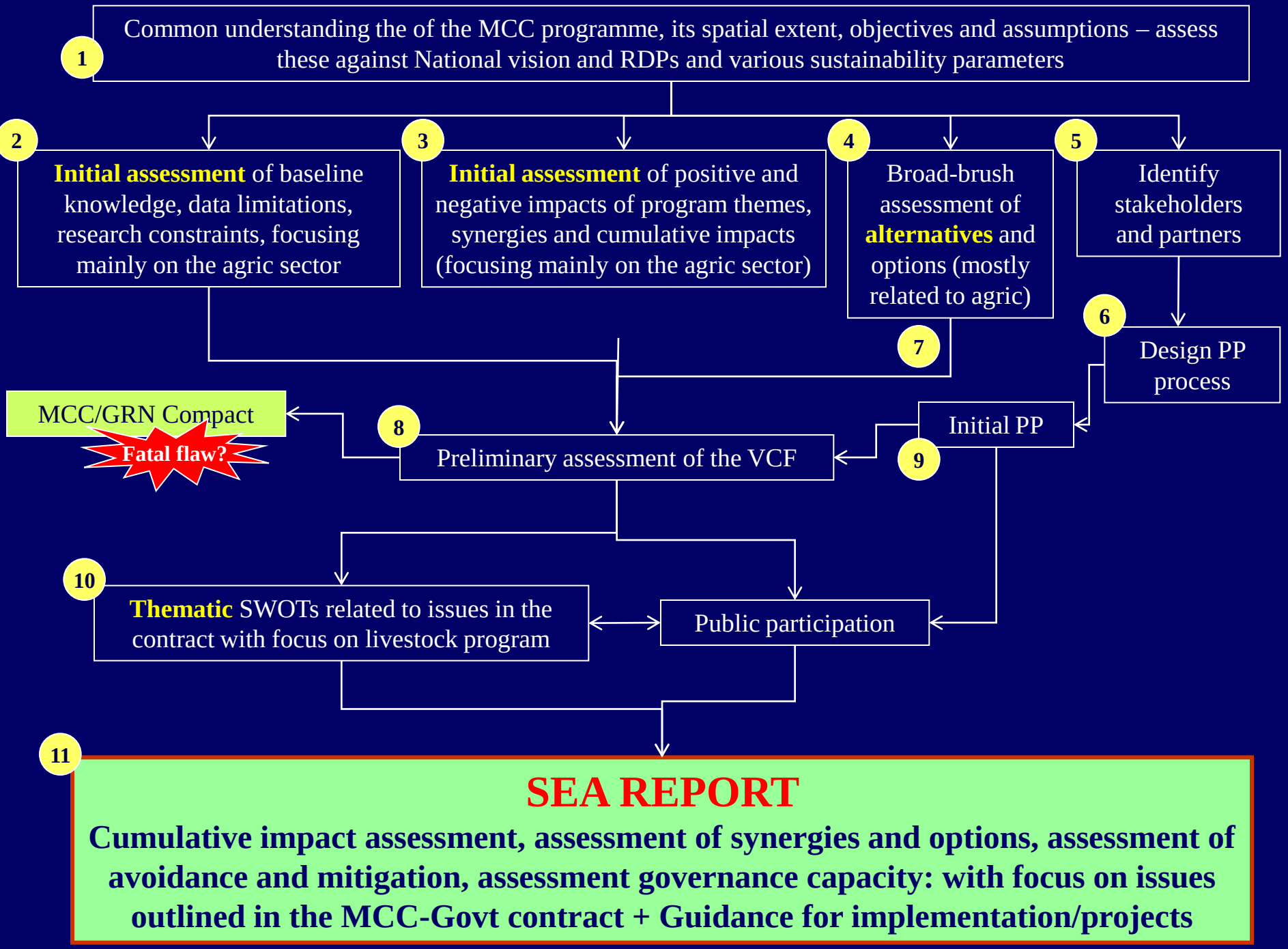
Education
- Schools, VTCs, books, etc.

June-August

SEA integration and report

- Executive Summary
- Introduction
- Programme & theme overviews
- Methodology followed
- Consultation
- Observation
- Literature review
- Stakeholder opinions
- Overview of theme impacts
- Cumulative impacts analysis
- Cumulative negative
- Synergistic (+)
- Antagonistic (chose the best)
- Linkages analysis (+ and -)
- Conclusions & recommendations
- Frame conditions
- Programme & project design
- EIA guidance
- Other guidance
- SEMP
- Targets
- Indicators

August - September

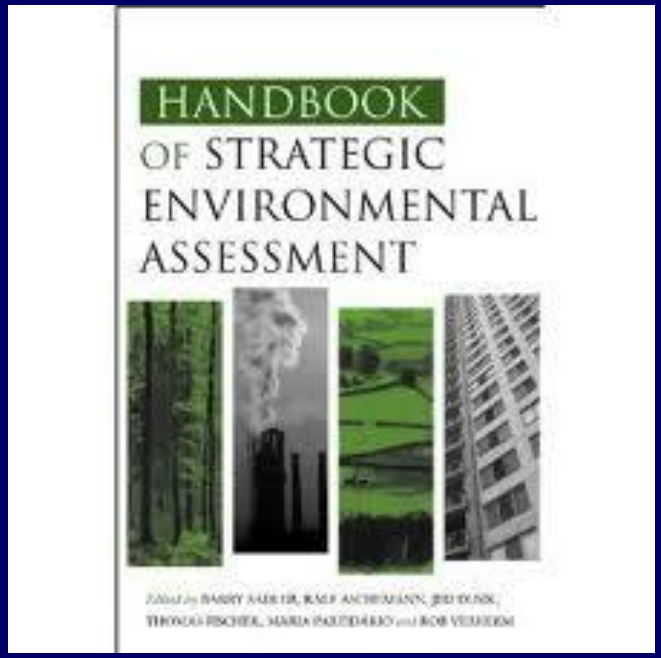

1
Common understanding the of the MCC programme, its spatial extent, objectives and assumptions – assess these against National vision and RDPs and various sustainability parameters
2
Initial assessment of baseline knowledge, data limitations, research constraints, focusing mainly on the agric sector
3
Initial assessment of positive and negative impacts of program themes, synergies and cumulative impacts (focusing mainly on the agric sector)
4
Broad-brush assessment of alternatives and options (mostly related to agric)
5
Identify stakeholders and partners
6
Design PP process
7
MCC/GRN Compact
Fatal flaw?
8
Preliminary assessment of the VCF
Initial PP
9
10
Thematic SWOTs related to issues in the contract with focus on livestock program
Public participation
11
SEA REPORT
Cumulative impact assessment, assessment of synergies and options, assessment of avoidance and mitigation, assessment governance capacity: with focus on issues outlined in the MCC-Govt contract + Guidance for implementation/projects

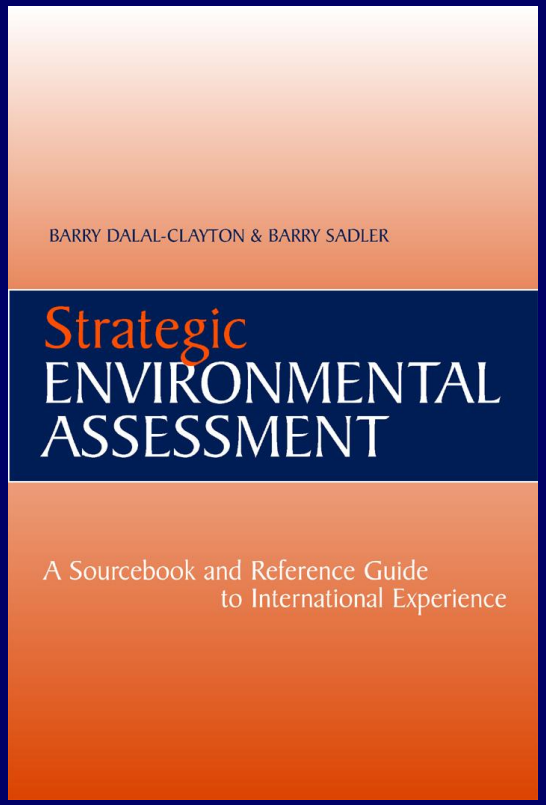
Fatal flaw identified

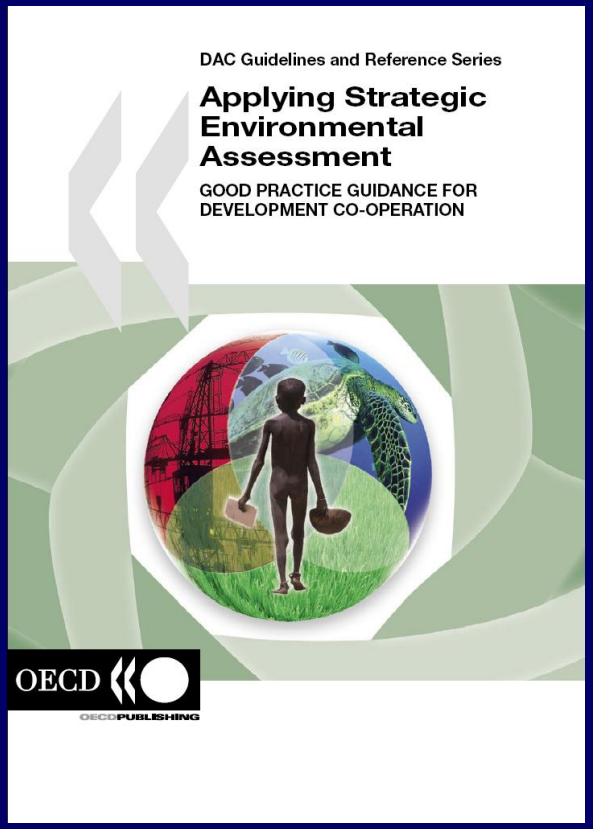
- Central part of N Communal Areas severely overstocked and degraded – Angolan pastures are a key coping strategy
- 0-10km zone south of the border is the primary impact zone of the VCF as cattle here graze in Angola daily
- Households up to 100km south of border move cattle to Angola less frequently, but transboundary pastures are important to them
- 130,000+ LSUs will need to be moved if VCF is constructed – much more than originally thought
- Costs of mitigation will likely make the VCF unviable for MCC at the moment
- There are a number of social, ecological and economic impacts and institutional concerns that make the VCF component of the programme risky from an MCC perspective

Useful Help

- www.iaia.org
- www.seataskteam.org








"That's all Folks!"
Cartoon Songs From
MERRIE MELODIES & LOONEY TUNES

Thank you