OVERVIEW OF STRATEGIC ENVIRONMENTAL ASSESSMENT

MEKONG RIVER COMMISSION
MRC
FOR SUSTAINABLE DEVELOPMENT

What is Strategic Environmental Assessment (SEA)?

"A formalized, systematic, and comprehensive process for evaluating the environmental effects of a policy, plan or programme (PPP) and its alternatives."

(Therivel *et al.*, 1992)

What is SEA? (Cont'd)

➔ The strategic component of a SEA refers to the set of objectives, principles and policies that give shape to the vision and development intentions incorporated in a policy, plan or program (PPP)

➔ SEAs deal with concepts and goals, not with particular activities

➔ SEAs aims to prevent unacceptable environmental damage

What are Policies, Plans and Programs?

Policy: a general course of action or proposed overall direction that a government is, or will be implementing

Plan: a purposeful, forward-looking strategy or design that elaborates and implements policy

Program: a coherent, organized agency or schedule of commitments, proposals, instruments and/or activities that elaborates and implements policy

Distinction between SEA and Project-Level EIA

➔ SEA is broader in scope and used for strategic planning

➔ Project-level EIA addresses specific issues and impacts at specific locations

➔ SEAs do not replace project-level EIAs

➔ Project level EIAs are necessary to provide detailed analysis

Need for SEA

Promote sustainable development:

   by enhancing the integration of environmental concerns in policy and planning processes

Address the limitations of Project EIA:

   even when cumulative effects are incorporated in project-level assessments some potential impacts will likely be overlooked

Why Assessment at the Policy Level is Important

➔ Increases the level of scrutiny of environmental and social concerns (i.e., to a comparable level as economic, technological, and financial considerations)

➔ Provides an opportunity to proactively guide development in ways that are sustainable (e.g., incorporate sustainability considerations into upper levels of decision making, increases opportunities to affect projects)

Why is Assessment at the Policy Level Important? (Cont'd)

➔ Provides an opportunity for genuine consideration of a broad range of alternatives which are often ignored or not feasible in project EIA (e.g., sites, technology, lifestyle choices, resource use)

➔ Improved analysis of cumulative, large-scale (i.e., regional, national and global), and non-project impacts (e.g., agricultural practices)

Why is Assessment at the Policy Level Important? (Cont'd)

➔ Encourages consideration of environmental objectives within all government agencies (i.e., not just environmental departments)

➔ Facilitates and increases consultation between different government agencies

➔ Provides an opportunity to identify views of the public

Why is Assessment at the Policy Level Important? (Cont'd)

➔ Strengthens project-level EIA (i.e., limitations are due primarily to the relative late stage in decision making at which EIA takes place when only limited consideration can be given to the need of the project and alternative possibilities, or to the cumulative effects of related actions)

➔ Enhances efficiency via tiering (i.e., make project specific EIA more efficient)

Tiering

Tiering enhances efficiency by ensuring that proposed projects are consistent with the type of development already considered in the strategic environmental assessment

Comparative Features of Project-Level EIA and SEA

EIA

SEA

Is reactive to a development proposal

Is proactive and informs development proposals

Assesses the effect of a proposed development on the environment

Assesses the effect of the environment on development needs and opportunities

Comparative Features of Project-Level EIA and SEA (Cont'd)

EIA	SEA
Addresses a specific project	Addresses area, regions or sectors of development
Has a well-defined beginning and end	Is a continuous process

Comparative Features of Project-Level EIA and SEA (Cont'd)

EIA

Assesses direct impacts and benefits

Focuses on the mitigation of impacts

SEA

Assesses cumulative impacts and identifies implications for sustainable development

Focuses on maintaining a chosen level of environmental quality

Comparative Features of Project-Level EIA and SEA (Cont'd)

EIA	SEA
Narrow perspective and a high level of detail	Wide perspective and low level of detail
Focus on project-specific impacts	Creates a vision and overall framework against which impacts and benefits can be measured

General Differences

➔ SEA occurs prior to project-level decision making

➔ SEAs are more variable in form and scope than project EIA ⟶ wide range of strategic decisions to which SEA is applied from broad policies to specific plans

➔ SEA incorporates a greater scale of analysis (e.g., geographic area, environmental components considered, range of alternatives considered)

General Differences (Cont'd)

➔ Technical content and specificity are of lesser detail in a SEA

➔ Impact prediction uncertainties are greater for a SEA

➔ SEA may relate to geographical regions, industrial sectors or social issues

➔ Time scale is more variable in SEA (i.e., ranging from the immediate to the very long term)

Potential Uses of SEA

➔ Identify proactive strategies for pursuing sustainable development - identify options and opportunities

➔ Assist in evaluating the need and feasibility of government initiatives and proposals

➔ Evaluate environmental issues and impacts associated with policies, plans and programs

➔ Establishing an appropriate context for project EIA, including the early identification of issues and impacts that warrant detailed examination

Application of SEA

SEA can be applied to:

→ Sectors (e.g., energy, tourism)

→ Geographic areas (e.g., land use or development plans at various scales - local, regional, national, international and global)

→ Actions that do not give rise to projects but that may result in significant environmental impact (e.g., new technologies, privatization, agricultural practices)
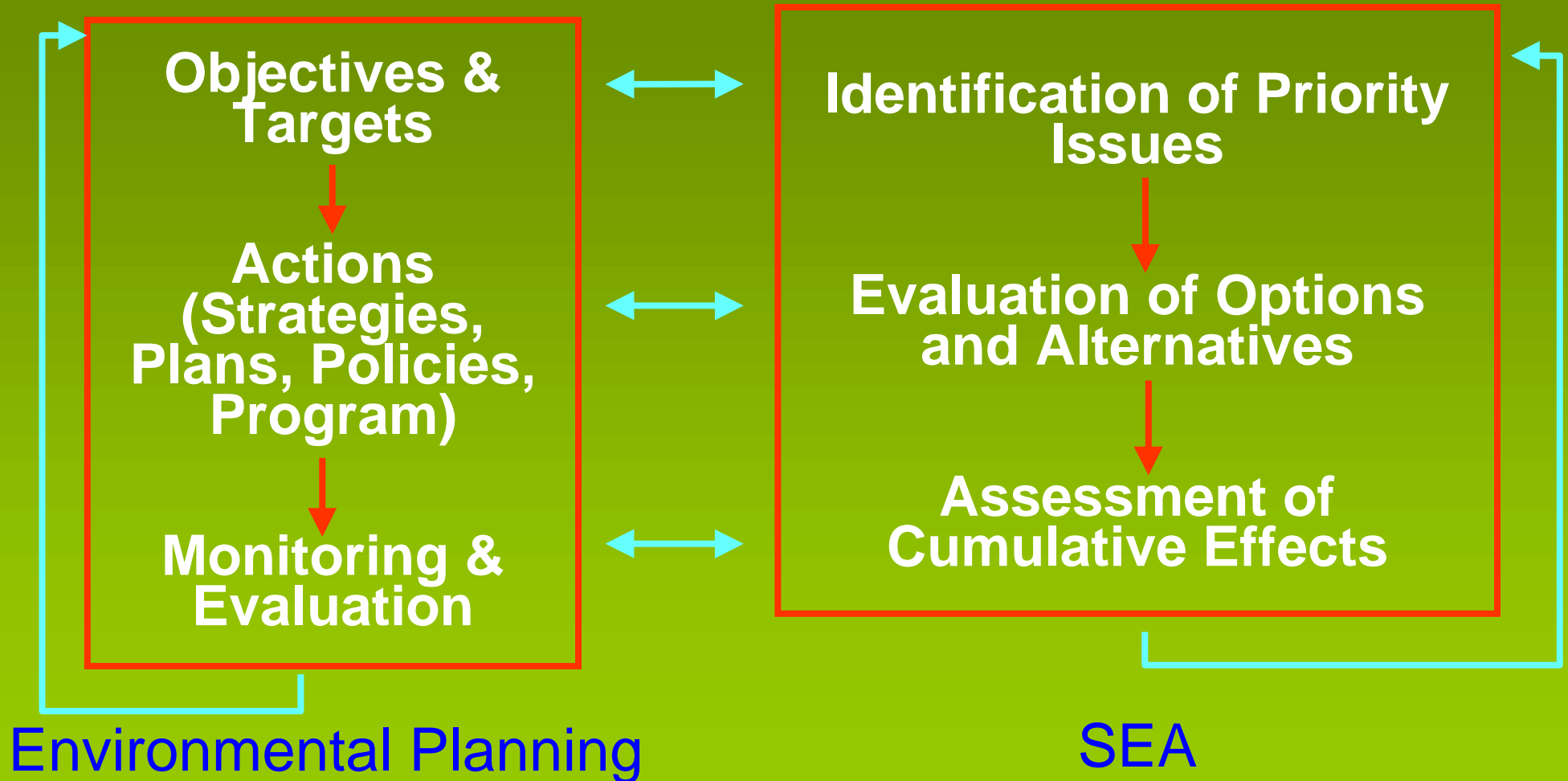
Application of SEA (Cont'd)

➔ SEA occurs at all different scales from local ⟶ regional ⟶ global

➔ Different scales address different types of impacts (e.g., international-level SEAs focus on global issues while local SEAs address local issues)

➔ All SEAs address cumulative impacts

➔ Most common application of SEA has been the assessment of environmental impacts of land use plans at the municipal and regional level

SEA as a Tool For Environmental Planning

➜ Define goals and criteria

➜ Examine land-use trends for problems and 'hot-spots'

➜ Develop future scenarios

➜ Predict likely effects

➜ Evaluate impacts and value of alternatives

➜ Modify alternative goals with new constraints

Linkage Between Environmental Planning and SEA

Objectives & Targets ⟷ **Identification of Priority Issues**

Actions (Strategies, Plans, Policies, Program) ⟷ **Evaluation of Options and Alternatives**

Monitoring & Evaluation ⟷ **Assessment of Cumulative Effects**

Environmental Planning

SEA

Limited Use of SEA

Potential advantages of SEA are well known, however, the use of SEA still remains relatively low

Barriers to Implementing SEA

→ Lack of clear definition, established methodology and mechanisms for implementation

→ Political resistance

→ Difficulty defining when and how SEA should be applied (i.e., policies, plans and programs are generally nebulous, non-linear, complex and iterative making it difficult to know exactly what and when a policy should be assessed)

Barriers to Implementing SEA (Cont'd)

➔ Inherent complexity in analyzing policy impacts (e.g., high uncertainty, lack of knowledge, many and unclear cause and effect relationships)

➔ Tendency to apply assessment after policy has been developed

➔ Institutional difficulties in pursuing integrated policy and planning practices (e.g., difficulty in adopting holistic and broad scale thinking, inter-agency coordination, development of mutual policy)

Barriers to Implementing SEA (Cont'd)

➔ Uncertainty and technical limitations

» since SEAs generally cover large areas, collecting and analyzing data is very complex

» subject to greater levels of uncertainty

» limited information available, specially when collecting data from different countries (e.g., determining ecological and socio-economic carrying capacities)

Barriers to Implementing SEA (Cont'd)

➔ Accepting short-term pain for long-term gain

➔ Lack of resources (e.g., information, expertise, financial)

➔ Lack of strategies for effectively involving the public

SEA Methodology

➜ Methodologies are not as well-developed as for project-level EIA ⟶ comparative studies are needed on the use of various techniques

➜ No one standardized method (i.e., depends on specific use of SEA - upper level policy development ⟶ local land use planning)

SEA Techniques

Includes:

→ Techniques used for project-level EIA

→ 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

Requirements for Effective SEA Systems

➔ Political commitment and organizational support

➔ Clear provisions and requirements

➔ Use of appropriate methods

➔ Mechanisms for overview and monitoring, compliance and performance

➔ Follow-up and feedback capability

Concluding Thoughts

Important points to remember are:

→ Project-level EIA and CEA do not provide enough information to make environmental decisions on a regional, national or larger scale

→ SEA offers a systematic process for evaluating the environmental consequences of PPP at an early stage of decision making

→ Tiering of project-level EIA, CEA and SEA helps ensure that proposed projects are consistent with PPP

Concluding Thoughts (Cont'd)

Additional points to remember are:

➔ SEA techniques are not as well developed or refined as for project-level EIA or CEA

➔ Available project-level EIA and CEA techniques often need to be 'mixed and matched' in conducting a SEA; no single standardized method exists