



# Strategic Environmental Assessment

A Practice-Orientated Training for Policy Makers,  
Administration Officials, Consultants and NGO Representatives

## What is Strategic Environmental Assessment (SEA)?



## What is SEA?

- **Analytical** and **participatory** approach
- that aims to **integrate environmental considerations** into policies, plans and programmes (P/P/P)
- and **evaluates inter linkages with economic and social considerations.**



## Key international developments in SEA

- **OECD/DAC Good Practice Guidance on SEA (2006)** – endorsed by key donor agencies, and International Financial Institutions
- **SEA Protocol to UNECE Convention on EIA in Transboundary Context (2003)** – signed by 37 countries
- **SEA Directive in EU (2001)** – implemented in 25+ EU member states and accession countries.



## SEA can

- **Evaluate an existing P/P/P or the one that is about to be revised (to highlight its sustainability consequences which should be considered);**
- or
- **Provide inputs into developing a P/P/P (so that it addresses sustainability dimensions effectively).**



## Outcomes of SEA

SEA provides:

- **Suggestions for optimising P/P/P (so that it effectively addresses key sustainability issues)**
- **SEA Report (for decision-makers and key stakeholders - to facilitate transparency of the whole process)**



## SEA may have different forms

It may:

- focus on environmental impacts or integrate all three dimensions of sustainability;
- engage a broad range of stakeholders or be limited to expert evaluation;
- be conducted in a short time frame or over a long period;



## SEA is not necessarily....

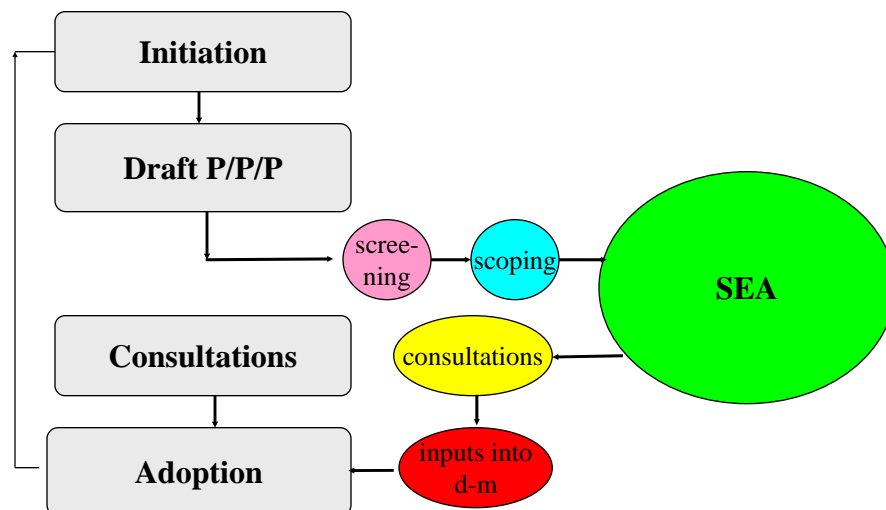
- a 'stand alone' procedure - it can be also carried out as part of the P/P/P formulation
- 'mega-EIA' - it also may be based on quick appraisal techniques

## Key entry points for SEAs

### Key entry points for SEA: Country level

- National-level overarching strategies, programmes and plans
- National Policy reforms and Budget support programmes
- National sectoral P/P/P, e.g. energy or health sector reform
- National and sub-national spatial development plans and programmes
- Trans-national plans and programmes (including multi country plans and investment programmes)

## SEA once draft P/P/P is ready



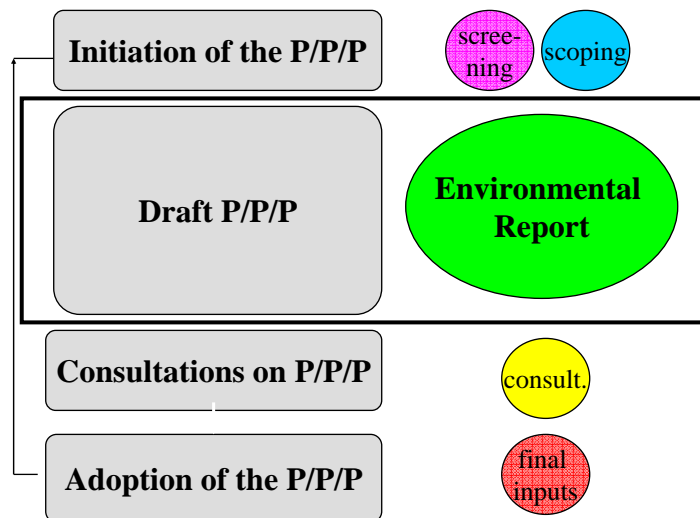


## SEA parallel to P/P/P elaboration

- SEA experts work **separately but concurrently** with the planners.
- Various **assessments/inputs presented** to the planning team **during elaboration of P/P/P** - briefing notes in the various stages of the P/P/P formulation
- **Does not necessarily prolong** elaboration of the P/P/P.
- **Requires effective communication** between planning team and SEA team (e.g. leader of the SEA participates as observer on the sessions of the planning team and vice versa).
- SEA report brings all this information together and **summarizes key open issues for decision-making**



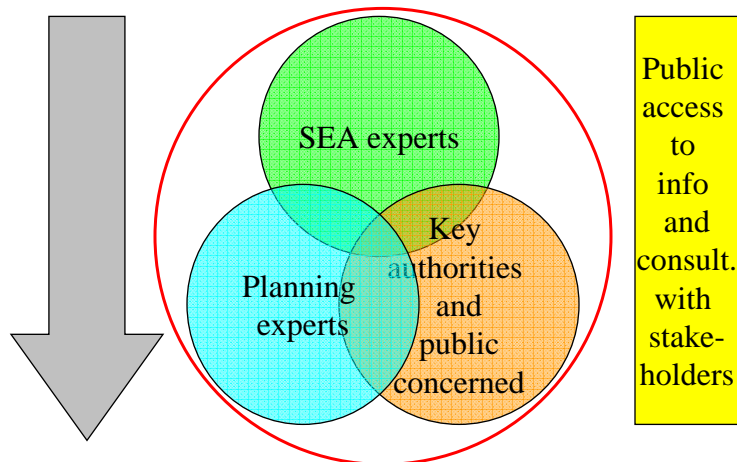
## SEA parallel to P/P/P elaboration



## SEA fully integrated into P/P/P formulation

- SEA experts are an **integral part** of the planning team.
- SEA experts draft key questions – they **jointly carry out various assessments with planners**
- **Facilitates elaboration** of the P/P/P
- **Increases understanding of SEA** among planners
- SEA experts need a **clear mandate and role within P/P/P team**
- Systems for review of **conflicting views** need to be in place
- Requires **effective internal communication** with the planning team.
- SEA report **documents the entire assessment process**

## SEA fully integrated into P/P/P formulation





SEA is definitely not...

...a 'blueprint approach'



**Why is SEA important,  
what benefits it brings and  
how much does it usually cost?**





## Why is SEA important

Many key decisions are no longer made on project level:

- Decision-makers increasingly cope with **multiple** and often **closely interlined** development interventions and projects
- **Shrinking natural resources** and **sustainability challenges** call for strategic management
- **Strategic interventions** and **specific projects** need to be coordinated



## Benefits of SEA at glance

SEA can:

- **support sustainability-based evidence to decision-making**
- **identify new opportunities and win-win options**
- **prevent costly mistakes**
- **build public engagement in decision-making**
- **facilitate trans-boundary co-operation**



## 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: Examples

## SEA helps to identify new opportunities and win-win options

### Case: **SEA of the Ghana Poverty Reduction Strategy (GPRS) Revision**

- First GPRS reflected environment only as “add-on”. Problematic since many economic activities rely on utilisation of natural resources.
- Complex SEA process launched in 2003 **parallel to GPRS revision**.
- Involvement of many **stakeholders** and application at two levels: national and district.
- Main outcome: Policy recommendations, alterations of national and district policy plans including budgeting.

## SEA helps to prevent costly mistakes

### Case: **Thermal Power Generation Policy, Pakistan**

- This policy provided **incentives** for investments in thermal power generation
- Investors were given the **freedom to choose the site, the technology and the fuel** -> many of these plants installed with EIA but no reflection of cumulative impacts. Many plants clustered around big city.
- **Relocation of plants** due to public pressure and lobbying at considerable cost.
- **Ex-post SEA** performed to demonstrate benefits of SEA. After that the Planning and Development Department requested SEA for major initiatives.



## Tasks in SEA, its analytical, logic and critical issues for application



## Basic stages in SEA (1)

(accord. OECD/DAC)

1. Establishing the context for the SEA
  - Screening
  - Setting objectives
  - Identifying stakeholders
2. Implementing the SEA
  - Scoping (in dialogue with stakeholders)
  - Collecting baseline data
    - Assessment
  - Identifying alternatives
  - Identifying how to enhance opportunities and mitigate impacts
  - Quality assurance
  - Reporting



## Basic stages in SEA (2)

3. Informing and influencing decision-making
  - Making recommendations (in dialogue with stakeholders)
  
4. Monitoring and evaluating
  - Monitoring decisions taken on the P/P/P
  - Monitoring implementation of the P/P/P
  - Evaluation of both SEA and P/P/P



**Corners of Idea**



## Corners of Idea

SEA should provide especially the following services:

1. Thoroughly analyse positive and negative environmental impacts (e.g. longer-term trends – impacts of individual actions, cumulative effects, etc...)?
2. Involve key stakeholders (e.g. env. authorities & public)?
3. Provide early and „user-friendly“ inputs into elaboration of the P/P/P (e.g. alternatives, mitigation measures, etc.)?
4. Comprehensive but perhaps less detailed overview of key environmental, economic and social implications (risks, opportunities) of proposed developments



## Introduction to the training course



## Target groups

In developing and transition countries:

- Administration officials and planners in environment, planning, sector ministries.
- National SEA consultants/experts
- NGO representatives

Within donor agencies:

- planners and consultants in environment, planning, and other sectors.



## Training approach

- Based on the OECD Development Assistance Committee (DAC) “Good Practice Guidance for Development Co-operation: Applying Strategic Environmental Assessment”
- Uses Harvard Business Case Methodology
  - Focuses on practical ‘case work’
  - Allows discussion on locally/regionally appropriate SEA approaches (based on insights brought forward by trainees)
  - Conclusions formulated through joint debate – rather than providing ‘ready-made’ teaching messages

## Examples of Applications (I)

- **Tunisia:** Cumulative impact assessment regarding Infrastructure Programme
- **Benin:** Greening the Poverty Reduction Strategy Paper
- **Namibia:** Elaboration of regulations for the Environmental Management Bill
- **Mauritania:** National assessment approach on emerging extractive industry (gas sector)



## Examples of Applications (II)

- **Indonesia:** Strategic advice on Tsunami-reconstruction measures, trainer pool for SEA; lessons learnt provide source for infrastructure programmes at national level
- **China:** Capacity development in the context of State Directive on SEA
- **Vietnam:** Integration of protecting interests of the National Park Tam Dao in District / Province-socioeconomic development planning; national road map



Train-the-trainers in Bonn 06/2006:  
Participants from South Africa, Vietnam,  
Indonesia, Tunisia, Morocco, Australia,  
Slovakia, Czech Republic, Germany



## Examples of Applications (III)



- **International Association for Impact Assessment (IAIA):** Official training prior to annual conference 2007 in Seoul



- **McGill University Canada :** McGill-UNEP Intern. Master Programme in Environmental Assessment will use materials in Winter term 2007 and beyond



- **African Development Bank:** Mid-term objective: structured learning programme on SEA in order to internalise procedures



- **Asian Development Bank:** "Core Environment Program" in the greater Mekong Subregion (including transnational SEAs); joint Capacity development program in Vietnam;



- **EASY-ECO 2005-2007:** EU's Sixth Framework Programme for Research and Development - Marie Curie Actions, UNEP, University of Manchester, REC...and GTZ

## Training elements

Most modules based on:

- Individual reading and preparation
- Short introductory lecture
- Case Work
- Wrap-up sessions to formulate conclusions
- Facilitated debate on "how does this relate to our context?"
- Games/Exercises ('Action learning')



## Modules of the training

### Introduction to SEA

#### Case works

- Link P/P/P and SEA, design appropriate strategy for SEA
- Determine the right issues and scope of assessment
- Analyze the baseline trends (zero alternative)
- Assess proposed development objectives and elaborate their alternatives
- Assess proposed actions and consider their alternatives
- Use effective means of participation
- Ensure sufficient management and monitoring in implementation of the P/P/P
- Manage SEA efficiently within budgetary and time constraints

### Evaluation and Follow-up of the GTZ/InWent SEA Training

+ Further inputs, resources and reading



## Case materials

- Fictive country Ganama. Factsheet gives background information.
- Case work on SEA for formulation of the Transport Infrastructure Development Programme
- There is a 'chronology' in the case with new information and development coming in.
- New cases will be added in the future

## Information on Ganama



## Screenplay of the case

- MoT of Ganama will elaborate „Transport Infrastructure Programme for Ganama“.
- MoT decided to carry out pilot SEA for it.
- There are no legal requirements for SEA in the country.
- The MoT will be carried out parallel to the envisaged planning period of 10 months.
- You are hired by the MoT as a group of external advisors.



## Steps undertaken so far

- You have elaborated a scheme to link the necessary tasks of the SEA with the envisaged planning procedure.
- You analysed the quite fragmented relevant data in the country and deducted a number of highly relevant environmental and social issues:



## Results of scoping

### Key issues of sustainable development in Ganama

- Increasing land pressure
- Increasing deforestation
- Increasing demographic pressure
- Increasing food insecurity resulting from population growth, degraded arable lands and mismanagement of water resources
- Air pollution in the industrial areas of the North.



**Secret Code**



**You are entering the next step:**

**Analyzing the baseline trends  
(zero alternative)**



## Aim

- Describe the **past trend** (overall trend and key concerns) for all environmental/SD issue that SEA focuses on
- Outline the **likely future evolution** of this trend if the proposed P/P/P would not be implemented (i.e. consider impacts of already approved development initiatives)
- Identify any **constrains** and **opportunities** that these trends pose for the respective P/P/P
- Document any **serious lack of information**



## Why is it important

- Describes **“zero alternative”** (no P/P/P) outlining ‘future environmental context’ in which the P/P/P will operate
- Helps to determine whether certain environmental trends pose serious **threats** or **opportunities**
- Provides input for determination of key impacts on this “future environment” and helps to assess positive or negative impacts of proposals contained in the P/P/P
- Provides **basis for assessment of cumulative impacts**

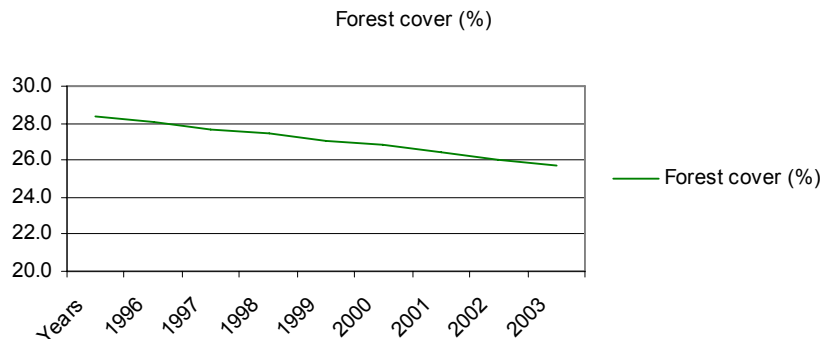


## Tools

- **Quantitative data** available – it is possible to analyze key trends and extrapolate them
- **No quantitative data available** – expert assessment of past and current trends (strengths and weaknesses) and explanation of key future issues (threats and opportunities) – this can be done by ‘story line’ for each issue or within the overall analysis of the development context (e.g. SWOT)



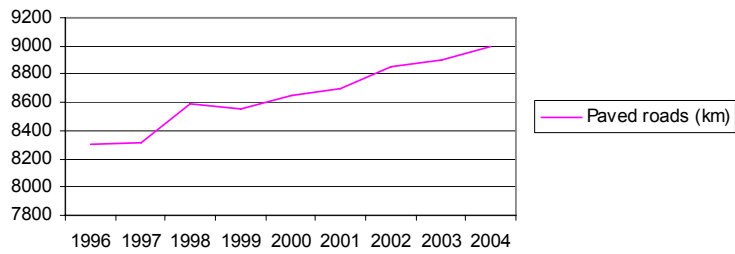
## Issue no. 1: Deforestation and increasing pressure on land



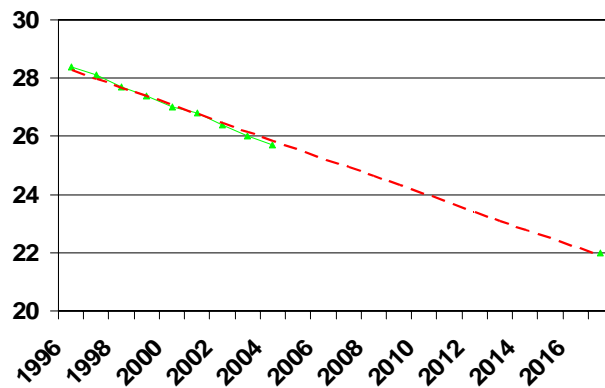


## Issue no. 1: Deforestation and increasing pressure on land

Paved roads (km)



## Result of linear extrapolation







## Discussion for the case work

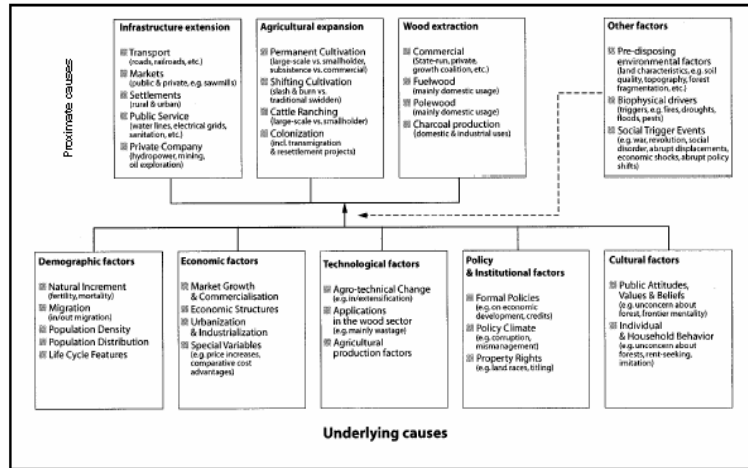
- How would you flag the key concerns?
- Is projection accurate enough / is information sufficient for predictions?
- What conclusions would you draw?



## Concluding remarks

- Analyzing future trends without the P/P/P is **difficult** but **very important** part of any strategic assessment
- **SEA experts** and **planners** can consider these threats/opportunities when (re)formulating objectives of the P/P/P or its actions
- It will provide how **useful insights** it gives and it will make your **further tasks in the SEA easier**
- Do not be afraid of **uncertainties** – just properly **acknowledge** them
- Where possible, **review** your baseline analyses **with planning team and key stakeholders** (authorities, academia, NGOs or even business) – they may provide very useful data or insights

## Causes of forest decline



## Case work 4

**Assess proposed development objectives and their alternatives**



## Aim

- To analyze **positive** and **negative** impacts of proposed development objectives, priorities or scenarios on the main environmental trends
- To check whether **opportunities** are sufficiently used
- To check whether **risks** are properly understood
- Recommend how the **proposed development objectives, priorities or general scenarios** may be **optimized**



## Why is it important

- Enables optimizing proposed development objectives or priorities of the P/P/P (through different approaches for achievement of objectives or suggestions for adaptation of objectives)
- When done concurrently with the P/P/P elaboration, it may recommend orientation or conditions for elaboration of future activities (i.e. conditions for further elaboration of the P/P/P)
- ! **Not a formality – proposed objectives/priorities/ scenarios are important since they orient and influence future thinking about proposed activities**



## Situation for case work

- The programming process moved forward and the planning team has formulated overall objectives and proposed priorities for the Transport Infrastructure Programme.
- You are invited to review these.
- You have also been given an alternative proposal by a NGO that tries to participate in the SEA.



## Instruction for the case work

- Outline environmental implications of generally formulated objectives and priorities of proposed alternatives of the Transport Infrastructure Programme. For simplicity, please use only the environmental issue of deforestation.
- If necessary, recommend changes to these strategic directions of the programme which were presented to you. Please try think creatively but also realistically – e.g. consider economic implications/limitations of proposals that you make.
- What additional analysis would you undertake to analyse these strategic impacts properly?

## Tools

### Impact matrices

Proposed objective, priorities, scenarios in the P/P/P	Relevant environmental issues/objectives				
	--	-	N/A	+	++
Key features of impact					
Impact features: Direct/indirect; Magnitude (local, regional, national); Severity (very negative – very positive), Duration (long-term, short-term); Reversibility					

## Practical suggestions

- In certain cases you might not use only symbols – try to explain main features of impacts
- Where possible involve:
  - planners (it may influence their future thinking in the formulation of the P/P/P) and
  - key stakeholders in this analysis (they may provide useful insights)
- Do not forget that the purpose of this analysis is to provide suggestions for optimizing development objectives and priorities



## Wrap-up - questions

- Were the relevant environmental issues/objectives clear enough for an assessment?
- Was there enough scope for better alternatives?
- Did you find the technique in the case work appropriate – what would work better in your practice?



## Transition of Training into day-to-day work



## Questions for discussion

- Which restrictions do you expect in your working environment to get a ,full-fledged SEA‘ accepted?
- Is the situation different if you have a legal requirement for SEA?
- Which responses do you see to combat restrictions against SEA?
- What do you consider indispensable elements of an ,streamlined‘ SEA?



## Concluding recommendations

- **De-monsterize SEA!** Search for the best way to influence decision-making even if it is not a ,full-fledged SEA‘
- In this respect cumulative impact assessment of relevant actions, tiering and cumulative monitoring might help
- Don‘t insist on ,**blue-print concepts**‘ if it becomes clear that they will not be influential



Thank you very much!

