Strategic Environmental Assessment (SEA): A Substantive and Sectoral Approach for Capacity Building Measures (CBM)

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Abstract: **The strategic environmental assessment is a new field of expertise in consideration of environmental and social constraints in a planning process of developmental activities to identify the 'upstream' impacts and offers the solution of shortcomings commonly attributed to project level environmental impact assessment (EIA). The present approach in this paper reveals that strategic environmental assessment inherent to considering cumulative and landscape scale effects which are not attributable or cannot be regulated in isolation. The strategic environmental assessment dealt with regional planning in a technocratic, sectoral divided manner, aimed at maximization of each function in different location for the sake of environment. The capacity building measures for impact assessment under umbrella of IAIA (International Association of Impact Assessment) integrate SEA with policy development process. The strategic environmental assessment is more flexible rather than EIA (Environmental Impact Assessment) does not follow structured procedure and steps. It is driven by concept of sustainability, conceptualization, participative with limits of acceptable changes.SEA focus mainly on the biophysical environment characterized by goal of mainstreaming and upstreaming environmental consideration into strategic decision making at the earliest stages of planning processes to ensure that they are fully included and appropriately addressed. The spectrum of SEA is based on the three pillars of sustainability and aims to assess environmental, social, economic concern in an integrated manner..The SEA (Strategic Environmental Assessment) is referred to a family of tool that identifies and addresses the environmental consequences and stakeholders concern in the development of policies, plans, programme and other high level initiatives(Partidário, 2003).**

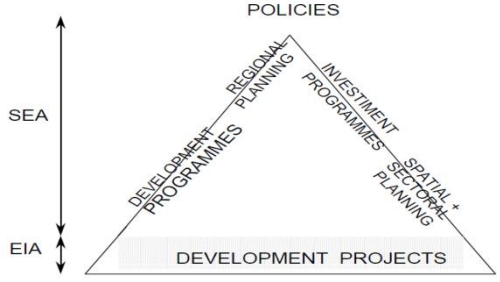
Keyword: SEA (Strategic Environmental Assessment), EIA (Environmental Impact Assessment), CBM (Capacity building measures) Substantive approach and Sectoral approach.

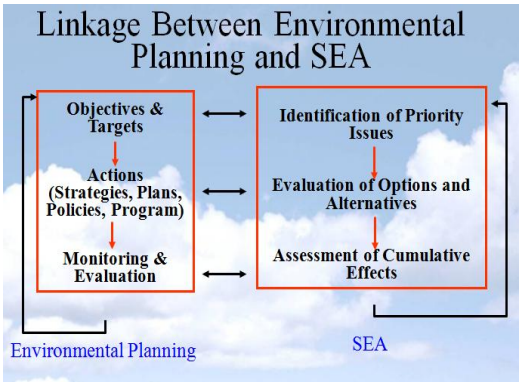
I. INTRODUCTION

This definition characterizes the earlier days of SEA representing an extension of project EIA to the so-called earlier levels of decision making, as noted in the expressions "systematic procedure", "preparation of a written report" and "using the findings in publicly accountable decision-making"."SEA is a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision-making on par with economic and social considerations". SEA is a systematic, on-going process for evaluating, at the earliest appropriate stage of publicly accountable decision-making, the environmental quality, and consequences, of alternative visions and development intentions incorporated in policy, planning or programme initiatives, ensuring full integration of relevant biophysical, economic, social and political considerations A formalized, systematic, and comprehensive process for evaluating the environmental effects of a policy, plan or programme (PPP) and its alternatives." 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) (Sadler1999).

II. OBJECTIVES

1.Describe the elements of strategic environmental assessment (SEA) 2.Describe the potential application of SEA in guiding development of regional policies, plans and programs (PPP), 3.Driven by sustainability and conceptual framework, 4.Define SEA and describe its potential application in assessing PPP, 5.Identify shortcomings of conventional project-level EIA and CEA which can be addressed using SEA, 6.Describe key steps in the SEA planning and implementation process. SEAs deal with concepts and goals, not with particular activities1.SEAs aims to prevent unacceptable environmental damage2.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)3.SEAs deal with concepts and goals, not with particular activities4.SEAs aims to prevent unacceptable environmental damage5.SEA is broader in scope and used for strategic planning(World Bank,1996).





III. AN INCLUSIVE APPROACH OF STRATEGIC ENVIRONMENTAL ASSESSMENT

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,
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,
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),
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),
Encourages consideration of environmental objectives within all government agencies (i.e., not just environmental departments),
Facilitates and increases consultation between different government agencies and provides an opportunity to identify views of the public.
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., makes project specific EIA more efficient),
Tiering enhances efficiency by ensuring that proposed projects are consistent with the type of development already considered in the strategic environmental assessment,
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.

IV. DISCUSSION

It is important to point out that SEA is not EIA, because it is necessarily different in nature. At project level decision making is about a concrete set of activities that makes up a specific development proposal (Therivel, 1998).EIA concentrates on activity effects relationship. Strategic decision making is less about the concrete activities that will follow from the plan as it is about identifying and assessing and comparing the different ways in which the plan can achieve its objectives(Wood, 1995).The process of designing and approving a project is more amenable to linear structuring and simplification than the commonly more changeable and politically charged development plan and policy.EIA aims at better projects, SEA aims at better strategies ranging from legislation and countrywide development policies to more concrete sector and spatial plans. SEA is applied at each planning tier and higher level SEAs inform those at a less strategic level so no overlap in a assessment. The aspect in which SEA is different from EIA is the more expansive spatial and temporal horizon that is addressed. The SEA is state of art with current thinking, flexible as the procedure no size fit for all approach which is parallel or integrated within a planning process.

V. EFFECTIVENESS OF SEA

It provides structuring the public and government debate in the preparation of policies, plans and program robust assessment of the environmental consequences and their interrelationship with social and economic aspects and ensuring that the results of assessment and debate are taken into account during decision making and implementation (Sadler1999). A good quality of SEA Process informs planners, decision makers and affected public on sustainability of strategic decisions, facilitates the search for the best alternatives and ensures a democratic decision making process with cost effective as well as time effective.

VI. PERFORMANCE CRITERIA OF SEA

Integrated: It is tiered to policies in sectors, regions with incorporation of biophysical, social and economic aspects.

Sustainability led: Facilitates identification of development options and alternative proposal that are more sustainable.

Focussed: Concentrates on key issues like cost effective and time effective in decision making process.

Participative: Inform and involve of interested and affected public and government with explicitly address their inputs and concerns in documentation and decision making.

Iterative: Provides sufficient information on the actual impacts of implementing a strategic decision, to judge whether this decision should be amended and to provide a basis for future decision.

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

VII. CONCLUSION

The use of SEA at the earliest possible stage of the planning process guarantees that environmental and social issues beyond the boundaries of the project area are incorporated in design process. Project-level EIA and CEA do not provide enough information to make environmental decisions on a regional, national or larger scale so SEA offers a systematic process for evaluating the environmental consequences of PPP at an early stage of decision making. It also incorporate Tiering of project-level EIA, CEA and SEA helps ensure that proposed projects are consistent with PPP and emphasis laid on economical viable, ecological sustained and environmental benign decision making process.

REFERENCES

[1]. Partidário, M.R., 2003. Strategic Impact Assessment for Spatial Planning methodological guidance for application in Portugal, Final report of a research project, FCT-UNL.
[2]. Sadler, B.1999. Environmental Sustainability Assessment and Assurance, in Petts (ed) 1999: 12-32.
[3]. Therivel, R., 1998. SEA of development plans in Britain, EIA Review, 18 (1): 39-57.
[4]. Wood, C., 1995. Environmental Impact Assessment: a Comparative Review, Longman, Edinburgh.
[5]. World Bank, 1996. Regional Environmental Assessment, Environmental Assessment Sourcebook. Update number 15, Environment Department, The World Bank.