Effective environmental assessment: Best practice in the planning cycle. Comprehensive options assessment¹

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Abstract

Minimising technical, environmental, social economic and financial risks involved in hydropower and dams' planning and management requires an accountable and comprehensive planning and decision-making procedure to ensure that the most convenient and appropriate response has been selected from the assessment of the full range of available options. The selection should be based on a transparent, comprehensive and participatory assessment of all policy, institutional and technical options ensuring that human, social, environmental, technical, economic and financial considerations get appropriate weight in the final decision. Given the large and even increasing needs in terms of water and energy services and limited resources, it is recognised that the most appropriate solution will not be necessarily a matter of competence and exclusion between options but more of their sound combination and timing.

Stakeholders involved in the dams and development debate have broadly agreed that comprehensive options assessment is a necessary step and a priority early input for fully informed decision processes to achieve sustainable outcomes. A multi-stakeholder international workshop on Options Assessment was convened by DDP on September 2003 in Geneva. The meeting discussed the characteristics, roles and responsibilities, implications, challenges and opportunities for effective incorporation of options assessment into the planning cycle.

This paper presents the outcomes of the workshop dealing with the role of needs assessment and comprehensive assessment options as key strategies to build an enabling policy and financial environment for renewable energy sources leading to public accepted sustainable solutions.

1. INTRODUCTION

The UNEP Dams and Development Project (DDP) aims to improve decision-making, planning and management of dams and their alternatives promoting dialogue on the basis of the core values and strategic priorities recommended by the World Commission on Dams. In pursuance of this objective the DDP facilitates dialogue on dams and development at national and global level. National dialogues aim to raise awareness on the country dam issues, analyse the core values and strategic priorities in the national legal context and produce recommendations on policy and procedure to improve the country dams' decision-making framework. The approach is multi-stakeholder in nature seeking to involve all groups including government, private sector, affected people, NGOs and academia. Dialogue activities and processes have taken place so far in Argentina, Indonesia, Kenya, Malawi, Namibia, Nepal, South Africa, Sri Lanka, Thailand, Vietnam and Zambia.

At global level, the dialogue is channelled through the Dams and Development Forum integrated by 120 organisations that meet on an annual basis and international multi-stakeholder issues-based workshops. Since the establishment of the project by UNEP in November 2001, three DD Forum meetings have taken place and fours workshops dealing with key issues concerning dams' planning and management have been convened: Options Assessment, Financing Dams and Sustainable Development, Addressing existing Dams and Ensuring Compliance. A fifth workshop on Gaining Public Acceptance is planned. Discussion at global level intend to exchange views and experiences in order to clarify the

¹ This paper draws on the contents of the information prepared in support of as well as on the outcomes of the discussions reported in the proceedings of the workshop on Comprehensive Options Assessment convened by DDP on September 22-24, Geneva. The proceedings can be downloaded from the DDP website (www.unep-dams.org) or can be requested in printed format to ddpinfp@unep.org.

concepts underlying the core values and strategic priorities, discuss the roles and responsibilities of the stakeholders, analyse challenges and opportunities for their integration in the national context, identify key issues and produce recommendations that will feed into the national level debate².

2. ENVIRONMENTAL IMPACT ASSESSMENT AND OPTIONS ASSESSMENT

Environmental Impact Assessment constitutes a key and powerful tool to assess and document the effect of projects in the natural and social environment. It provides the basis for proposing mitigations measures that will feed into to the environmental management plan. With the improving of our understanding of natural phenomena, in particular ecosystems functioning, and our ability to model and predict environmental and social scenarios and behaviours, methodologies for impact assessment have become more comprehensive and reliable, capable of supporting decisions concerning the environmental and social feasibility of the project and the proposed mitigation measures. Most regulatory frameworks involving EIA request the analysis of alternatives including the no-project option. However the EIA usually comes at a stage when the project has reached an advanced level of design and commitment. The decision to implement has got enough momentum to resist relevant modifications, no to say the abandonment of the initiative in favour of more promising alternatives. Lack of credibility on the outcomes of the assessment and suspicion that there exist better ways of addressing the needs while imposing lesser burden on the community, particularly the people affected by the project, results in low levels of public acceptance, disowning of the project and social unrest. Conflict escalates and the perception of increased risks creates a negative environment for the financing of the project.

It is therefore agreed that the assessment and selection of the most convenient and appropriate response to the identified needs, should operate well upstream in the overall planning process. The rationale is that an early focus on options assessment would exclude most questionable projects and measures, and those that emerge will enjoy wider public support and legitimacy and, as a result, improved public confidence in the decision-making process will be obtained. The assessment should address the full range of policy, institutional and technical options ensuring that human, social, environmental, technical, economic and financial considerations get appropriate weight in the final decision. And should be based on an accountable, comprehensive and participatory planning and decision-making procedure. This approach is referred to as "comprehensive options assessment". It constitutes one of the strategic priorities put forward by the World Commission of Dams that has obtained a wide support from most stakeholders as a basic requisite to produce sustainable outcomes and gain the public acceptance of development projects.

Certainly comprehensive options assessment faces a number of significant challenges. Among them, those related to the context specific character of the options and the detailed data required for their assessment, rarely ready available; stakeholders identification, participation and involvement; responsibility for conducting the process; limitations of existing assessment tools, of their broad acceptance and of data availability; overcoming any bias towards individual options; long time period; financing sources. Also relevant are those involving the appropriate consideration of the various planning levels. It is considered that the options assessment process should adapt to the scope and scale of the planning level and project development stages, and that pertinent feedback links be provided between the levels to ensure a fluent adaptive planning and management process without compromising the overall objectives.

Stakeholders involved in the dams and development debate have broadly agreed that comprehensive options assessment is a necessary step and a priority early input for fully informed decision processes to achieve sustainable outcomes. They also recognized the complexity and magnitude of the task, the broad number of issues, scales and limitations involved in the exercise, the uncertainties that derive from dealing with the future, and the risk of failing to properly streamline the participatory process in an efficient and effective manner to achieve the objectives within the required time framework.

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² More information on the DDP, its activities and outcomes can be obtained in www.unep-dams.org

Against this background the DDP convened an international workshop on Comprehensive Options Assessment aiming at facilitating a multi-stakeholder arena to openly discuss this complex and broad theme and reach consensus about basic principles and key issues,

3. WORKSHOP ON COMPREHENSIVE OPTIONS ASSESSMENT

The workshop on comprehensive options assessment was convened on September 22 through 24 2003 in Geneva, Switzerland, with support from The World Bank and GTZ. The goal of the workshop was to facilitate an international multi-stakeholder debate on comprehensive options assessment with the goals of assessing the state of the art, mapping the challenges to produce criteria for implementation that are broadly accepted and articulating strategies to facilitate its incorporation into the planning process. Over 50 participants representing all stakeholder groups involved in the dams and development and a wide number of countries and regions of the World attended the meeting. Case studies presentation followed by discussions in plenary sessions and breakout groups provided the basis for the conclusions that are summarised below:

4. THE MESSAGE FROM THE MEETING

Participants concurred on the need to integrate comprehensive options assessment into the planning process at national policy, strategic/regional and project planning levels. They also supported the need to raise awareness on this issue worldwide and at country level. In this regard the participants agreed on the following statement that summarises the nature, relevant features and challenges to be addressed in pursuance of institutionalising Comprehensive Options Assessment at country level and recommended its wide dissemination³.

Workshop Conclusions

Defining Comprehensive Options Assessment and Identifying Challenges and Opportunities

Why should decision-makers perform comprehensive options assessments?

Decision-makers would benefit from performing comprehensive options assessments because these processes:

- improve development outcomes and ensure that these outcomes are responsive to needs;
- achieve wider legitimacy for selected options and reduce controversy; and
- create a sense of ownership by the stakeholders and facilitate their buy-in to the results.

Why did the DDP Forum decide to convene the workshop?

Achieving these development outcomes requires closing the gap between aspiration and reality in the present-day implementation of options assessment. The DDP provided a unique opportunity at a global level to bring stakeholders from diverse backgrounds together with a common aim of building on the direction provided by the WCDs strategic priority and developing guidance for those involved in dams and development issues at national, sub-national and local levels.

³ DDP has published an information sheet on Comprehensive Options Assessment that can be downloaded from www.unep-dams.org or requested to dddpinfo@unep.org

What is an options assessment?

An options assessment is part of a decision-making process that works towards identifying the most appropriate options to satisfy defined needs. These processes are conducted at policy, strategic planning and project levels

What are the characteristics of comprehensive options assessments?

Comprehensive options assessments:

- are driven by a needs assessment that reflects local, sub-national and national goals and is influenced by international commitments.
- are transparent; they are built on explicit assumptions and result in documented decisions.
- include the full range of alternatives relevant to the articulated need, such as demand-side and supply- side measures; structural and non-structural alternatives; and conventional and non-conventional options.
- are participatory involving, among others, project-affected groups at local levels; and representatives of interest groups at the strategic planning and policy levels.
- recognize and address limitations of knowledge base and available resources.
- are iterative processes with time-bound outcomes designed to meet both short- and long-term needs.
- integrate consideration of environmental and social factors together with technical, economic and financial factors.

Who is responsible for conducting comprehensive options assessments?

At policy and strategic planning levels, options assessment is a government-led, decision-making process. At the project level, the project proponent is responsible for conducting the options assessment and government provides the enabling environment.

What are the implications of comprehensive options assessments?

- Comprehensive options assessments provide an instrument for more inclusive consideration of all alternatives earlier in the planning cycle.
- Comprehensive options assessment requires an enabling planning, environment, particularly at policy and strategic planning levels. To be implemented, there is a need for capacity building, including more information on alternatives, inter-sectoral co-operation, participatory processes, and ranking and screening tools.
- The implications for funding and budgets are that comprehensive options assessments increase up-front costs in order to reduce longer term costs associated with delays and conflict; that smallscale, dispersed options require access to micro-credit for implementation; and that public resources will need to be devoted to options assessments at planning levels within and across each sector.
- The comprehensive options assessment process will also need to be formalized in legal and regulatory frameworks.

Challenges and Opportunities

The following key issues, which may be both obstacles for OA implementation and triggering factors need to be addressed:

- governance systems, in terms of transparency and accountability;
- extent that country legal systems enable effective consultation procedures;
- influence of donor policies and access to funding;
- regulatory structures and reforms as regards the participation of private sector;
- NGOs as regards their ability to analyse and contribute to OA, facilitate debate and promote community options;
- the physical context that can limit some options but trigger other creative initiatives;
- compartmentalized knowledge that reduces understanding of options, introduces bias and impairs transparency of process;
- the needs and problems of indigenous communities acting as options promoters.
- lack of information or incomplete information on one option compared to others;
- influence of models that are either overly complex or too simple to convince stakeholders to accept their results;
- cost and time required for data collection; and
- assessment tools, such as models, that can facilitate better and deeper understanding of the
 comprehensive options assessment process and pave the way to incorporate and disseminate the
 methodology or, because of lack of familiarity with models and tools, and of willingness to apply
 them, generate the reverse reaction.

Other considerations relevant to comprehensive options assessments

<u>Linkages between levels</u>: it is recognized that there are many interactions between the policy, strategic planning and project levels.

<u>Data needs</u>: A knowledge base is required as a reference tool to raise awareness on what each of the various options can deliver, including the opportunities they present and their limitations.

<u>Funding requirements</u>: Financial assistance may be required at an early stage to improve the knowledge base on traditional initiatives. Where external support is required, the importance of strategic options assessment needs to be reflected in country assistance programmes.

<u>Timeframes and short-term needs</u>: The needs assessment process should be recognised as a discrete step in the process. Planning processes are dynamic and there should be a recognition that policies and strategies are updated periodically along different timeframes to strategic and project planning processes. Projects that satisfy agreed immediate short term needs can be implemented in parallel to longer-term strategy development.

<u>The need for institutional and capacity building</u>: To remove any bias created by imbalances in political and financial influence, there need to level playing field by creating a transparent process where all stakeholders have an equal opportunity to influence the decision. This may require:

- Building the capacity of weaker stakeholders so that they are empowered to participate in the process.
- Reducing the institutional disincentives for government officials to engage in cross-sectoral exchanges.
- Enabling multi-stakeholder participation upstream in the decision-making process, and bringing policy-making closer to grass roots level.

Moving from a single sector approach to planning to an options assessment process that reflects cross-sectoral realities will require new approaches and institutional capacity. As part of this learning process, research and feedback on traditional and new options needs to be enhanced.