

Review of the Application of
Environmental Impact Assessment
in Selected African Countries



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Acronyms

ABE (in French)	Benin Environment Agency
AfDB	African Development Bank
AMCEN	African Ministerial Conference on the Environment
ANPE (in French)	National Agency for the Protection of the Environment
ASIP	Agricultural Service Sector Improvement Programme
AU	African Union
BEEI (in French)	Environmental Assessment and Impact Studies Bureau
CBOs	Community Based Organizations
CEASSA	Capacity Building for Environmental Assessment in Sub-Saharan Africa
CEC	Committee for Environment Coordination
CEP	Country Environmental Protection
CIANEA	Community-Based Impact Assessment Network for Eastern Africa
CIDA	Canadian International Development Agency
CITET (in French)	Centre for Environmental Technologies
CLEAA	Capacity Development and Linkages for Environmental Assessment in Africa
CLEIAA	Capacity Development and Linkages for Environmental Impact Assessment in Africa
CSO	Civil Society Organizations
DEA	Department for Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism
DEMC	District Environmental Management Committee
DEO	District Environment Officer
DFID	Department for International Development (United Kingdom)
DGE (in French)	General Directorate of the Environment
DMTDP	District Medium Term Development Plans
DPR	Department of Petroleum Resources
EA	Environmental Assessment

EA&M	Environmental Assessment and Management
EA&MCBS	Environmental Assessment and Management Capacity Building Strategy
EAA	Environment Assessment and Audit
EAAIA	Eastern Africa Association for Impact Assessment
ECA	Economic Commission for Africa
ECOWAS	Economic Community of West African States
ECZ	Environment Council of Zambia
EFS	Environment Feasibility Study
EIA	Environmental Impact Assessment
EIATRC	EIA Technical Review Committee
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EMS	Environmental Management System
ENP	Equatorial Nile Project
EPA	Environmental Protection Agency
ESAP	Environment and Social Assessment Policy
EU	European Union
FEPA	The Federal Environmental Protection Agency
GPRS	Ghana Poverty Reduction Strategy
GTZ	Gesellschaft Fur Technische Zusammenarbeit
HIA	Health Impact Assessment
IAIA	International Association for Impact Assessment
IEA	Institute of Environmental Assessment
IEC	Information, Education and Communication
IEM	Integrated Environmental Management
IOAEIA	Indian Ocean Islands Association for Environmental Impact Assessment
IUCN	International Union for Conservation of Nature
JPOI	Johannesburg Plan of Implementation
MDAs	Ministries, Government Departments and Agencies

METAP	Mediterranean Environment Protection Technical Assistance Program
MINEFF	Ministry of Environment and Forest
MOE	Ministry of Land Use and Environment
MTEF	Medium Term Expenditure Framework
NCSD	National Council for Sustainable Development
NDPC	National Development Planning Commission
NDSS	Negotiation and Decision Support System
NEA	National Environment Agency
NEMA	National Environment Management Act
NEPA	National Environmental Policy Act
NGOs	Non Governmental Organizations
NORAD	Norwegian Agency for International Development
NRA	Natural Resources Accounting
NRMP	Natural Resource Management Programme
NUSAF	Northern Uganda Social Action Fund
OECD/DAC	Organization for Economic Cooperation and Development/ Development Assistance Committee
PEDA	Population, Environment, Development and Agriculture
PPPs	Policies, Plans and Programmes
RECs	Regional Economic Communities
REP	Regional Environment Plan
SAAIA	South Africa Association for Impact Assessment
SADC	Southern Africa Development Council
SAIEA	Southern African Institute for Environmental Assessment
SDD	Sustainable Development Division
SEA	Strategic Environmental Assessment
SFF	Strategic Fuel Fund
SFRA	Stream Flow Reduction Activity
SIA	Social Impact Assessment
SIDA	Swedish International Development Agency

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SLP	Structured Learning Programme
SPDC-E	Shell Petroleum Development Company-Eastern
TORs	Terms of Reference
UAIA	Uganda Association for Impact Assessment
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USAID	United States Agency for International Development
VIP	Village Infrastructure Project
WAAEA	West African Association for Environmental Assessment
WSSD	World Summit on Sustainable Development

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EXECUTIVE SUMMARY

The Economic Commission for Africa (ECA), through its Sustainable Development Division (SDD), has been involved in the promotion of a number of policy instruments and analytical tools aimed at demonstrating the linkages and enhancing the integration, of the different dimensions of sustainable development. These include the Population, Environment, Development and Agriculture (PEDA) model and Natural Resources Accounting (NRA).

In addition to these tools environmental assessment is also being promoted as a policy instrument for integrating environment and development issues at all levels and for achieving sustainable development. This is in keeping with the respective mandates given to regional Commissions at UNCED and at WSSD namely to: promote the integration of environmental concerns in regional and sub-regional development policies; and to facilitate and promote a balanced integration of the economic, social and environmental dimensions of sustainable development into their work and the work of regional, sub-regional and similar bodies.

This report on “Review of The Application of Environmental Impact Assessment (EIA) in Selected African Countries” which includes good practices and lessons learned provides an account of country experiences in the institutionalization and application of EIA as well as an overview of the status of Strategic Environmental Assessment (SEA) institutionalization and application. It draws on many inputs from partners working in the field of sustainable development in general, and environmental assessment, in particular.

The objective is to provide member States of ECA with recent documentation on the institutionalization and application of EIA in Africa as well as challenges, good practices/success stories and lessons learned. The intent is to build on the work of partners, promote knowledge networking and intensify advocacy with a view to enhancing the application and use-effectiveness of EIA as a policy tool in promoting sustainable development.

Key Findings

Institutionalization of EA at the regional and sub-regional levels:

The high level meeting of the African Ministerial Conference on the Environment (AMCEN) on Environmental Impact Assessment in Durban June 1995 was a landmark event in the development of EIA in Africa. The meeting set down an agenda for capacity building in EIA and identified, as a priority action, the promotion of EIA capacity building based

primarily on the use of African expertise and institutions. The Capacity Development and Linkages for Environmental Impact Assessment in Africa (CLEIAA) was formed in 2000 in response to this agenda.

Since its creation, CLEIAA has organized consultations on the status and challenges of EIA capacity building in Africa, and has been instrumental in the establishment of sub-regional assessment networks. One of the key initiatives undertaken by CLEIAA is the development of an Environmental Assessment and Management Capacity Building Strategy (EA&MCBS) for Africa. The vision of the strategy is that by 2015, African countries would have the capacity for, and commitment to, employing environmental assessment and management tools in the promotion of sustainable development.

The development and institutionalization of EIA in the North African sub-region is being realized within the framework of the Mediterranean Environment Protection Technical Assistance Program (METAP).

Institutionalization and application of EIA at the national level

The issues pertinent to the effective institutionalization and application of EIA in Africa are the institutional and regulatory frameworks for EIA; EIA application and trends; inter-agency collaboration and decentralization; EIA capacity issues; quality of the EIA study and review process; EIA cost and timeframe; public participation; EIA and decision-making; implementation of the Environmental Management Plan (EMP) & follow-up; and integration of the EIA system into an overall Environmental Management System (EMS).

The institutional and regulatory frameworks: Feedback obtained from some countries and a desk review of the institutional and regulatory framework for EA covering 23 African countries revealed that 18 countries have either an enabling legislation and / or specific legislation /regulations on EIA in place. Ten of these countries have explicit formal provisions for public participation. While the present study does not attempt to rank the EIA systems of countries, it observes that Ghana and Tunisia have functional and relatively robust EIA systems. Benin, Egypt, Algeria, Uganda and South Africa also have good systems in place.

EIA application and trends: A review of the application of EIA in Africa shows that some forms of environmental assessments have occasionally been carried out on major development initiatives prior to its systematic institutionalization in the region. And, more recently, there has been a steady increase in the application of EIA to development projects. The steady increase in the number of EIA applications received has been attributed to the enactment of EIA legislation, the establishment of institutions, increase in the level of economic activity and a general increase in awareness about EIA requirements. The sectoral distribution of EIA applications depends on the dominance of the sector in the economy and its potential impacts on the environment.

Inter-agency collaboration and decentralization: Cross-sectoral multidisciplinary committees assist most EIA administrative agencies in the execution of their duties. In addition to this, most sectoral government agencies have made, or are in the process of making, EIA application a policy or legislative requirement. EIA administration and regulation are mainly concentrated at the central level. However,

in some countries, there has been gradual decentralization to local levels. While it has been observed that training provided to local level administrators has increased local government capacity to effectively play their roles in the EIA process, in certain cases, the devolution of responsibilities has not been accompanied by the provision of the necessary resources, thus undermining application effectiveness at these levels.

EIA capacity issues: With the assistance of development partners, countries have implemented many capacity-building initiatives. In order to boost EIA capacity, networks are increasingly being formed at country level and EIA administrators and practitioners have become members of sub-regional, regional and international EIA associations. The number of consultants offering services in EIA has also increased steadily over the years. In recent times there have been growing partnerships between local and expatriate consultants. The above initiatives notwithstanding, available capacity still falls short of requirements, making capacity constraints one of the biggest challenges to the effective application of EIA in Africa. Training needs differ and depend on the relative levels of institutionalization and application of EIA.

Quality of the EIA: The low level of public awareness of environmental concerns, and limited expertise, experience and lack of coherent legal frameworks and guidelines have compromised EIA quality in Africa. The quality of EIA reports produced by consultants is of particular concern. Quite often, the significance of impacts is not adequately qualified, making it difficult for assessments to focus on issues, and interventions, on significant impacts. To ensure high quality of study reports, EIA administrators have defined minimum qualifications required for membership to EIA study teams. In some countries, the registration, certification and accreditation of EIA professionals are legal requirements. Financial institutions are also insisting on EIA and the quality of reports produced.

Review of the EIS: Most African countries with legal frameworks for EIA have guidelines in place for the review. However, many capacity issues affect the quality of the review. The review of the report is usually carried out by one or a combination of the following: the technical staff of the EIA administrative institution; an inter-governmental committee; a multi-stakeholder committee; and external reviewers depending on the complexity of the study and expertise available. Performance at country level is varied. For example, Cameroon's review system is grossly undermined by capacity constraints. The significant number of reports being submitted for review in Tunisia has resulted in initiatives aimed at rationalizing EIA requirements. Meanwhile, Ghana's tiered review system, based on scale and type of project, has proved to be very effective in handling the large volumes of documents received.

The cost of the EIA and timeframe: The project proponent normally funds the EIA study and, in the case of donor-supported projects, the cost is usually factored into project funds. While in some countries, the schedule of EIA fees relative to project costs is provided for in legislation, in others, it is left to the developer to decide. In reality, the cost of the EIA is subject to negotiation between the developer and the consultant. Fees charged are generally within expected limits and have not been considered a deterrent to the conduct of EIA. While the legislation of many countries provide for defined timeframe for the review, there are usually no time limits for undertaking studies or compiling reports.

Public participation: Increasingly, countries are enacting legislation that provide for engaging and involving the public throughout the EIA process including the review of the study report. There are several forms of engaging the public. In many countries, the media are instrumental in eliciting public comments on the EIA report, publicising public hearings, notifying stakeholders of decisions and informing stakeholders about the appeal process. Local communities and other interest groups routinely demand evidence of EIA on new projects in their neighbourhoods. Yet, public participation in the EIA process is, in most cases, inadequate due to many factors such as time, money, literacy, language, public presentation, education, cultural differences, gender, physical remoteness and political/ institutional culture of decision-making. Case studies on public participation in the EIA process have concluded that it is essential and can lead to substantial benefits for both the proponent and affected community. Where it is ignored, it can lead to conflicts and problems for project implementation, acceptability and sustainability.

EIA and decision-making: While the EIA process has been known to influence decisions in some countries, experiences in most others have shown that EIA does not significantly influence decisions. Developers, including government entities, are yet to fully appreciate its value. Many projects are considered to be of national, political and strategic importance and these imperatives, more often than not, override any serious consideration of any potential negative environmental or social impacts. However, the manner in which the EIS is presented, including the suggestion of alternatives, can greatly contribute to the influence the EIA process has on decision-making. For example, impacts and mitigation measures, when expressed in economic terms, have proved to have powerful influence on decision-making. Public pressure, especially from an informed and affluent public, has been effective in stopping developments with adverse social and environmental impacts. Nevertheless, the “no development option” is very difficult to consider in an underdevelopment context. In this situation, the emphasis of the assessment usually shifts away from consideration of the “no development option” to finding viable alternatives that would yield a successful outcome acceptable to all parties.

Implementation of the EMP & Follow-up: Many countries have made the implementation of the EMP, or an appropriate permit, a legal requirement. In spite of this, implementation of the EMP and follow-up are, more often than not, neglected and grossly ineffective in most countries. This is attributed to capacity constraints and the fact that resources are usually not built into projects. The format in which the mitigation measures / plan is presented is an important contributing factor to whether the plan is implemented or not. Certain private companies have realized the importance of implementing the EMP and have designed acceptable presentation formats as well as guidelines and procedures for implementation.

Integration of the EIA system into an overall Environmental Management System: Many countries with EIA systems have established other systems, including pollution control. Some have also undertaken initiatives to ensure that the two are complementary and minimize risk to the environment. An evaluation was carried out to determine which countries' national EIA systems in the METAP region exposed them to risk of serious environmental damage. All countries surveyed had some non-conformities in their EIA systems, but these were greater in the case of Algeria, as opposed to Egypt, Morocco and Tunisia that had two each. Minor non-conformities were common to all four countries. This indicated that the EIA

systems of the countries were inadequate in responding to environmental risks as stand-alone systems, and justified the need to complement them with others such as integrated pollution control.

THE APPLICATION OF SEA IN AFRICA

The present study indicates that apart from Ethiopia and Kenya, no other African country has a legal framework for SEA in place. Namibia's draft bill and South Africa's draft Integrated Environmental Management (IEM) regulations provide for SEA. Although some countries do not have explicit legislative requirements for SEA, their EIA legislation provides for environmental assessment on programmes and plans, which may be extrapolated into SEA requirements. In others, SEA is implicit in the schedule of activities for which EIA is required. In certain cases, the limitations of project-specific EIAs provided a strong justification for the introduction of systematic SEA. For example, case studies conducted on SEA practice in South Africa revealed that it is well established and on the increase. This expansion has been largely voluntary, suggesting that it must be adding some value to decision making.

CASE STUDIES OF GOOD PRACTICES / SUCCESS STORIES AND LESSONS LEARNED

Good practices showcased include the SEA of the Ghana Poverty Reduction Strategy (GPRS); the EIA of the Water Hyacinth Control Programme in Uganda and the EIA of the Strategic Fuel Fund Oil Transfer Operations in South Africa. The success story showcased from Tunisia relates to building good working relationships among different stakeholders engaged in the EIA process. Lessons learned are in the following thematic areas: Situating EIA requirements in a sustainable development framework; Devolution of responsibilities to local levels; Rationalization of EIA requirements; Conducting EIA in a holistic and integrated manner; Complying with EIA requirements in a timely manner; Developing the EMP; Linking the EIA system to the overall EMS; and Institutionalizing SEA.

Conclusions and Recommendations

To varying degrees, African countries have undertaken many actions to put in place well-functioning environmental assessment systems. Initiatives have also been undertaken to ensure coherence and coordination of EIA-related initiatives at the regional and sub-regional levels and to support actions at national level. This notwithstanding, the institutionalization of EIA has been slower in Africa than in other parts of the world and many challenges remain in relation to application effectiveness and the extent to which EIA findings influence development decisions. Capacity, in terms of human, material and financial, still remains the biggest challenge to the effective institutionalization and application of EIA in Africa. Political will and support are key to ensuring that countries overcome these challenges.

Over the years however, African countries have gained valuable experience in the application of EIA and have attained a reasonable degree of success. Some good practice cases have been recorded and, more importantly, valuable lessons have

been learned and documented. It is envisaged that the dissemination of these practices and lessons will engender knowledge networking and contribute to enhancing the application of the tool in Africa.

Based on the findings of the study, the following recommendations are pertinent to enhancing implementation effectiveness:

- Countries should develop and strengthen institutional, legislative and regulatory frameworks for EIA.
- In order to ensure the use-effectiveness of EIA and SEA as policy tools that promote sustainable development, their institutionalization and application should be within the framework of a sustainable development policy.
- CLEAA and its nodes should be supported in meeting their objective of enhancing environmental assessment and management capacity in Africa.
- Countries should develop capacity building programmes based on clearly identified needs taking into account experiences and lessons learned.
- EIA administrators should develop strategies for public participation, which take into account lessons learned, and the specific country context.
- Given the perception by some politicians and developers regarding EIA vis-a-vis development initiatives, countries should endeavour to establish credible and trusted EIA systems that take into account the developmental context to which they apply.
- Countries should have legal requirements for the effective implementation of the EMP and its follow-up.
- Countries should develop effective linkages and integrate EIA systems with other environment safeguard systems in order to provide a holistic and integrated approach to environmental protection and the assurance of social well-being.
- Countries should institutionalize SEA and ensure its integration into an overall environmental assessment framework. In so doing, it should be ensured that SEA is seen to provide benefits in order to accelerate its adoption and make it demand driven.

chapter one

INTRODUCTION

Background

The United Nations Conference on the Human Environment (Stockholm 1972), the United Nations Conference on Environment and Development (UNCED 1992), and the World Summit on Sustainable Development (WSSD 2002), set the stage, laid a solid foundation and reiterated commitment at the highest level, to integrating environment and development issues and achieving sustainable development. The institutionalization of Environmental Assessment (EA) as an instrument for integrating environment and development issues at all levels and for achieving sustainable development is an integral part of agreements and commitments at these global conferences.

Principles 13 and 14 of Stockholm 1972 espouse the need for rational and integrated planning, while the education component of the Action Plan on the human environment identifies the training of personnel in the techniques of incorporating environmental considerations into development planning. It also specifies how to identify and analyse the economic and social cost-benefit relationships of alternative approaches.

Rio Principle 17 endorses the institutionalization of Environmental Impact Assessment (EIA) at the national level as a decision-making instrument for proposed activities that are likely to have significant adverse impact on the environment. In Chapter 37 (Capacity Building) of Agenda 21 (UN, 1992), capacity building (both public and private) to evaluate the environmental impact of all development projects is underscored

Furthermore, Chapter 8 of Agenda 21 (A21) articulates the requirement for integrating environment and development at policy, planning and management levels for improved de-

cision-making. These include conducting national reviews of economic, sectoral and environmental policies, strategies and plans; strengthening institutional structures; developing or improving mechanisms to facilitate the involvement of all concerned; and establishing domestically determined procedures.

Five years after UNCED (Rio+5), the Programme for Further Implementation of Agenda21 (PFIA21), an outcome of the review of progress achieved in implementing UNCED agreements, identified yet again, environmental and social impact analysis based on participatory principles, as an important policy instrument for integrating the economic, social and environmental objectives of sustainable development (UN, 1997).

Ten years after UNCED, at the World Summit on Sustainable Development (WSSD, 2002), the Johannesburg Declaration on Sustainable Development was adopted. An important element contained in this declaration is the collective responsibility to advance and strengthen the interdependent

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and mutually-reinforcing pillars of sustainable development – economic, social and environment at all levels. In addressing the challenges of unsustainable patterns of consumption and production, the Johannesburg Plan of Implementation (JPOI) identifies the use of EIA procedures as a key action to be undertaken (UN, 2003).

Rationale

At UNCED and at WSSD respectively, regional commissions were mandated to: promote the integration of environmental concerns in regional and sub-regional development policies; and to facilitate and promote a balanced integration of the economic, social and environmental dimensions of sustainable development into their work and the work of regional, subregional and other bodies. In executing these mandates, the Economic Commission for Africa (ECA), through its Sustainable Development Division (SDD), has been involved in inter alia, promoting the integration of environment and development concerns through a number of policy instruments and analytical tools.

In 1999, the Commission began promoting the Population, Environment, Agriculture and Development (PEDA) model as an advocacy tool in addressing the nexus issues of sustainable development in its member States. The Commission is now considering upgrading PEDA as an analytical tool by further developing its analytical features. The Commission is also promoting the adoption and application of Natural Resource Accounting (NRA) in member States and has completed a study that assessed the functioning of National Councils for Sustainable Development (NCSD) in its member States.

This report on *“Review of The Application of Environmental Impact Assessment (EIA) in Selected African Countries”* which includes good practices and lessons learned is therefore produced in line with the Commission’s mandates. The report draws on many inputs from partners working in the field of sustainable development in general and EIA in particular. These include bilateral and multilateral development partners, international and regional development banks, UN agencies, international, regional, sub-regional and national institutions, Non Governmental Organizations (NGOs), academia and governments. The contributions of the Capacity Development and Linkages for Environmental Impact Assessment in Africa (CLEIAA) Secretariat and, as currently known, the Capacity Development and Linkages for Environmental Assessment in Africa (CLEAA) and its nodes, particularly the Southern African Institute for Environmental Assessment (SAIEA), have particularly been helpful.

Objectives

The objective of this report is to provide member States of the Commission with recent documentation of the institutionalization and application of EIA in Africa as well as challenges, good practices/ success stories and lessons learned. The intent is to build on the work of partners and to promote knowledge networking and intensify advocacy with a view to enhancing the application and use-effectiveness of EIA as a policy tool in promoting sustainable development.

The report briefly makes references to Social Impact Assessment (SIA), Health Impact Assessment (HIA) and Biodiversity Assessment in order to underline that these

are integral components of impact assessment. However, for the purposes of the present report, the review was largely limited to EIA and to some extent, SEA.

The report is targeted at policy makers, technical experts and researchers in government, the private sector, NGOs, Community Based Organizations (CBOs), academia, training and research institutions, in all 53 member States as well as UN agencies and bilateral and multilateral development agencies. In order to ensure that the report is widely accessible, dissemination will be done by normal post and electronically email and SDD website- www.uneca.org/sdd.

The Review Process

The review was conducted from January 2004 to March 2005 and entailed a desk review of EIA practices in Africa, and case studies of selected member States conducted in collaboration with EIA institutions in those countries. The review took stock of global developments, trends and practices in EIA, ultimately focussing on the Africa region. The following were examined and/ or identified:

- The institutionalization and level of application of environmental assessment;
- Implementation challenges; and
- Selected case studies on good practices/ success stories and lessons learned;

It presents policy recommendations to enhance implementation in member States.

The review focussed on member States selected on the basis of the following criteria:

Desk review: The desk review helped in identifying key issues in environmental assessment including institutionalization and level of application of EIA, developments, trends, interventions and implementation issues. The desk review also helped in selecting priority issues to be assessed and countries for the preparation of country reports.

Selection of countries for the case studies: The criteria for selection of countries was based on the relative level of development and application of EIA systems taking into account the principle of equitable geographical representation. Based on these criteria, Ghana, Tunisia, Uganda and Cameroon and South Africa¹ were selected for the case studies. The main administrative institution for EIA in each of these countries was contacted to collaborate in the preparation of the respective country study. National writers were identified with the assistance of the heads of these institutions.

Terms of Reference for the country reports: Terms of reference (TORs, Annex 5) were prepared to guide the preparation of the country reports. Elements contained in the TORs included process of institutionalizing EIA, trends and developments as well as implementation issues. The TORs also include the identification and documentation of success stories / good practices and lessons learned, these being the highlight of the country reports.

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Drafting and finalization of the study report: Information from the desk review and country reports were analysed and compiled in a single report. The report was subjected to internal and external peer review prior to finalization. Individual country reports are available on the SDD website (www.uneca.org/sdd).

Outline of the Report

This report comprises 6 sections and is organised as follows:

Section 2 provides an overview of EIA and SEA, their evolution and development phases. It briefly mentions other integral components of impact assessments such as SIA, HIA and Biodiversity Assessment.

Sections 3 to 5 present the findings as follows:

Section 3 looks at the institutionalization of EIA at the regional and sub-regional levels. It briefly describes the regional initiatives that were instrumental to institutionalizing EIA in Africa and presents the institutions that have been established at these levels and key activities undertaken.

Section 4 examines national level institutionalization and application of EIA and SEA. It combines findings from the desk review and those of country case studies. Issues examined are those that are pertinent to the effective institutionalization and application of EIA. These include: the institutional and regulatory frameworks for EIA and relative level of EIA institutionalization; EIA application and trends; inter-agency collaboration and decentralization; EIA capacity issues; quality of the EIA study and review process; EIA cost and timeframe; public participation; EIA and decision-making; implementation of the EMP and follow-up; and integration of the EIA system into an overall Environmental Management System (EMS). It also looks at the legal provisions for SEA in countries and presents some experiences in its application in Africa.

Section 5 presents some examples of good practices, success stories and lessons learned. It provides detailed account of specific cases that are deemed to enrich the process of experience sharing and knowledge networking.

Section 6 presents the conclusions and recommendations on the basis of the findings.

END NOTE

¹ In the case of South Africa, it was later realized that SAIEA had published a report on EIA in Southern Africa in 2003, which covered all countries of the region. This report together with other recent documentation on the application of EA in South Africa was considered adequate for the purposes of the present study. Thus, a separate study was not commissioned for that country.

chapter two

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) AND STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA): AN OVERVIEW

The integration of economic, social and environmental concerns in the development process in a balanced way is key to the attainment of sustainable development. EA is one of the policy innovations designed to contribute to such integration at or above the project level. If applied at the project level, it is termed traditional reactive environmental assessment; and SEA, if applied above the project level (Goodland et al. 1996). Annex 2 presents the purpose, objectives and principles of EIA and SEA.

Environmental Impact Assessment

Many definitions of EIA embody the following elements:

The assessment of impacts at the conceptual / planning stage to be able to influence decisions in a timely manner;

The evaluation of the environmental and social impacts as well as other relevant issues depending on the nature and scope of projects and actions;

The application of participatory and consultative principles; and

The evaluation and exploration of alternatives and mitigating measures.

The World Bank Operational Directive of 1989 states: “Environmental Assessment is a flexible procedure, which can vary in breadth, depth, and type of analysis, depending on the project (World Bank, 1989). It may be carried out at one point in time, stretched over a year to account for seasonal variations, or done in discrete stages. Further,

Box 1: Some definitions of project-level EIA

Goodland et al., 1996

The process of evaluating the direct and indirect environmental and social implications of a proposed development project. It is meant to be a flexible process and can employ a large number of evaluation methods and techniques.

U.S. Environmental Protection Agency (U.S. EPA), 1998

A decision-making process, and a document that provides a systematic, reproducible, and interdisciplinary evaluation of the potential effects of a proposed action and its practical alternatives on the physical, biological, cultural and socio-economic attributes of a particular geographical area.

International Association for Impact Assessment (IAIA) and Institute of Environmental Assessment (IEA), 1999

The process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant ef-

fects of development proposals prior to major decisions being taken and commitments made.

United Nations Environment Programme (UNEP), 2002

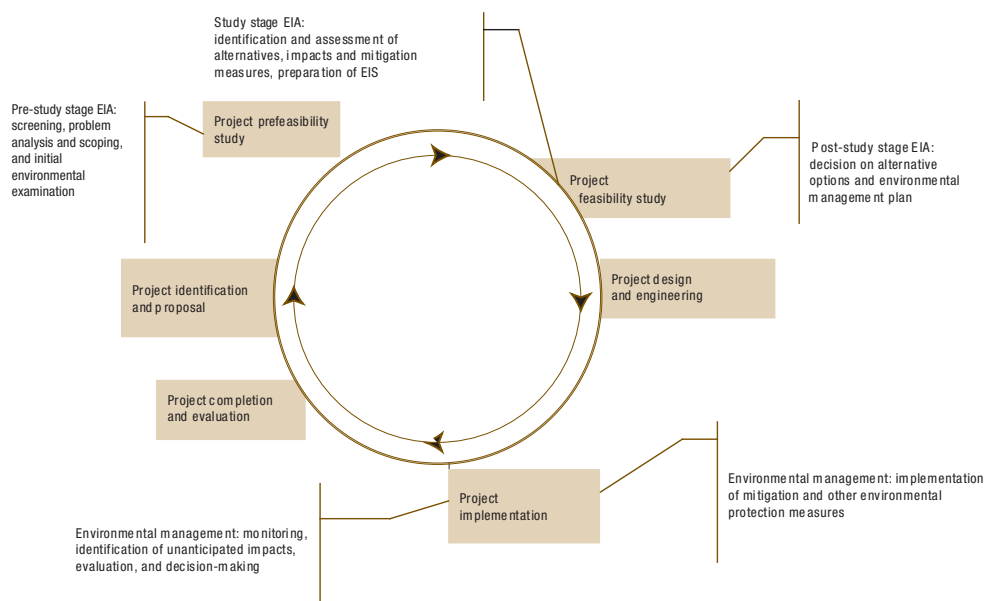
A systematic process to identify, predict and evaluate the environmental effects of proposed actions and projects. This process is applied prior to major decisions and commitments being made. A broad definition of environment is adopted. Whenever necessary, social, cultural and health effects are considered as an integral part of EIA. Particular attention is given in EIA practice to preventing, mitigating and offsetting the significant adverse effects of proposed undertakings.

Environmental Assessment also covers project impacts on health, cultural property and tribal people and the environmental impact of project- induced resettlement.

Environmental Impact Assessment and the Project Cycle

EIA identifies potential problems and opportunities and is thus an essential part of the project cycle. Apart from the results of the environmental assessment, the economic and financial analysis helps in deciding among possible options and eliminating or reducing negative environmental effects in a cost-effective manner. Difficult decisions have to be made on how to balance costs and benefits; private and public considerations. In some cases, environmental and economic analysis leads to the abandonment of a proposed project; most times, however, a compromise is possible whereby development proceeds, but in a more environmentally sound manner (Dixon et al. 1994).

Figure 1: The project cycle and environmental management



Source: Sloodweg, 2000 as adapted from the World Bank, 1995

Note that this is a generalized procedure, which may not always have to be entirely followed. EIA is always tailor-made to the characteristics of a proposed project.

Strategic Environmental Assessment (SEA)

SEA represents a proactive approach to integrating environmental considerations into the higher levels of decision making, consistent with the principles outlined in Agenda 21. Often, broader, less detailed assessments are required at these levels compared to project-level EIA (UNEP, 2002). SEA may also be used to assess the implications of policy-based lending operations (e.g., structural or sectoral adjustment), or to inform policy decision-making outside the context of lending. For example, SEA may be used as part of reviewing strategic policy options in the water sector; in the process of developing new national trade policies or legislation; or in planning decentralization of government functions (World Bank, 2002).

There is no internationally agreed definition of SEA, but the most widely quoted is the interpretation offered by Sadler and Verheem (1996):

“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”.

Box 2: Other Definitions of SEA:

(Theriel, et al. 1992 in Goodland et al. 1996)

The formalized, systematic and comprehensive process of evaluating the environmental impacts of a policy, plan or program and its alternatives, the preparation of a written report on the findings, and the use of the findings in publicly-accountable decision-making.

UNEP, 2002

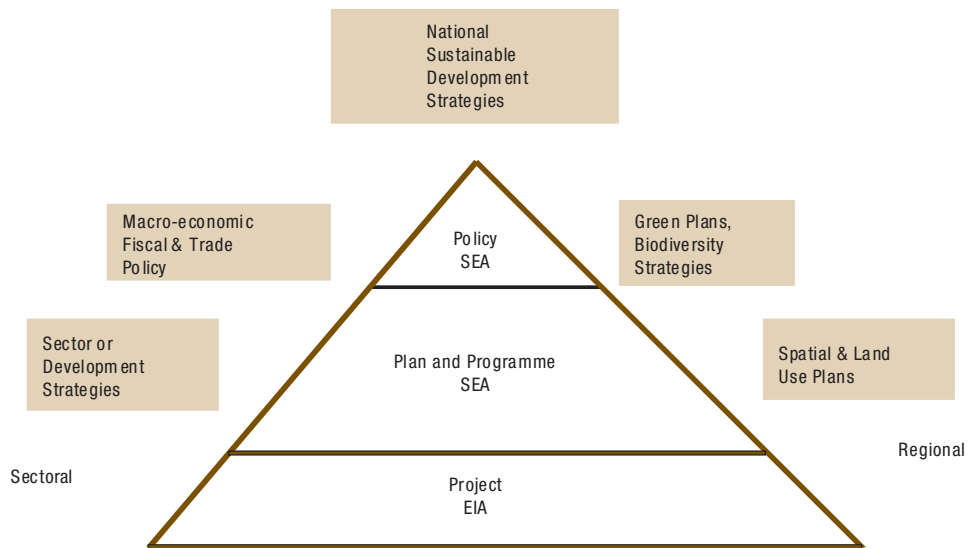
A formal process of systematic analysis of the environmental effects of development policies, plans, programmes and other proposed strategic actions. This process extends the aims and principles of EIA upstream in the decision-making process, beyond the project level and when major alternatives are still open.

World Bank, 2002

A process of integrating the environmental and social concerns in the process of developing policies, plans or programmes.

To date, only a relatively small number of countries and international organizations have made formal provision for SEA. These frameworks vary, sometimes substantially, and indicate the flexible adaptation of SEA to different levels and types of decision-making (UNEP, 2002). The World Bank's SEA strategy adopted in July 2001 stresses the importance of partnerships. The strategy recognizes SEA as an integrative process, which requires the participation of key stakeholders. The Structured Learning Programme (SLP) on SEA established by the Bank envisages the evolution of a community of interested parties to share ideas and experience, to increase awareness and capabilities and to identify and build on good practice examples (www.worldbank.org, 30-01-04).

Figure 2: SEA in relation to other decision-making processes



Source: Sadler (1994) in UNEP 2002

Opinions differ on the scope and nature of SEAs. One school of opinion holds that that SEA should focus mainly on environmental issues, another takes the view that it should focus on sustainability and cover social, economic and environmental aspects. It is also argued that SEA, at the policy level, requires a different methodological approach at the programme and plan levels. However, there is broad consensus that there can be no single “blueprint” approach to SEA, and approaches will need to be developed and tailored to suit conditions, institutional realities and political circumstances in countries (Dalal-Clayon and Sadler, 1998).

TYPES OF SEA

The different types of SEA are namely, sectoral, programmatic, regional and cumulative:

- **Sectoral** - the process of examining potential environmental and social implications of all, or most, of the potential projects proposed for the same sector (Goodland et al. 1996);
- **Programmatic** - a variant of Sectoral EA, Programmatic EA is the use of a sectoral EA to assess the impacts of a sector-wide programme, such as locust control (World Bank, 1999);
- **Regional** - the process of determining the regional, cumulative environmental and social implications of multi-sectoral developments within a defined geographic area over a certain period (Goodland et al. 1996); and
- **Cumulative** - the process of assessing the cumulative impacts of the currently proposed project added to existing developments in an area, and to the impacts of foreseeable projects in the same area, whether made more likely by the current project or not (Munn, 1994 in Goodland et al. 1996).

Table 1: EIA and SEA compared

EIA	SEA
Is usually reactive to a development proposal	Is pro-active and informs development proposals.
Assesses the effect of a proposed development on the environment.	Assesses the effect of a policy, plan or programme on the environment, or the effect of the environment on development needs and opportunities.
Addresses a specific project.	Addresses areas, regions or sectors of development.
Has a well-defined beginning and end.	Is a continuing process aimed at providing information at the right time.
Assesses direct impacts and benefits.	Assesses cumulative impacts and identifies implications and issues for sustainable development
Focuses on the mitigation of impacts.	Focuses on maintaining a chosen level of environmental quality.
Has a narrow perspective and a high level of detail.	Has a wide perspective and a low level of detail to provide a vision and overall framework.
Focuses on project-specific impacts.	Creates a framework against which impacts and benefits can be measured.

Source: Dalal-Clayton and Sadler, 1998, adapted from CSIR (1996)

The evolution of EIA and SEA

EIA was formally introduced in the United States through the National Environmental Policy Act (NEPA) of 1969. According to Goodland et al. (1996), forms of what later became known as environmental assessment had started under town planning, land use, and other policies prior to this period.

EIA regulations rapidly spread to other, mainly industrialized, countries of the world (Harrison, 1987 in Steyl, 2000). Today, they are applied in more than 100 countries, and by all development banks and most international aid agencies. However, more strategic, sustainability-based approaches (SEAs) are still at a relatively early stage of development (UNEP, 2002).

SEA can be regarded as second generation EIA. SEA picked up in developed countries in the 1990s. In 1992, the United Nations Economic Commission for Europe (UNECE) published a report on assessment of the application of environmental impact assessment principles to policies, plans and programmes. The Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) study on SEA in development cooperation commissioned in 1997 culminated in the development of practical guidance for applying SEA to country programming and sectoral / regional planning.

In 2001, UNEP published a paper on integrated assessment as a tool for achieving sustainable trade policies. The paper reviews the opportunities and challenges of promoting wider application of assessment tools and international adoption of more proactive policies to sustainable development. The paper concludes that strategic integrated assessments should be adopted and used globally for the development and formulation of international agreements and programmes, including multilateral trade agreements, multilateral environmental agreements as well as aid policies and programmes, investment and macroeconomic programmes, including structural adjustment and debt relief.

10 Review of The Application of Environmental Impact Assessment (EIA) in Selected African Countries

Table 2: Major trends in EIA process development showing four overlapping phases:

Phase	Developments
i) Introduction and early development (1970-1975)	Mandate and foundations of EIA established in the USA; then adopted by a few other countries (e.g. Australia, Canada, New Zealand); basic concept, procedure and methodology still apply.
ii) Increasing scope and sophistication (mid '70s to early '80s)	More advanced techniques (e.g. risk assessment); guidance on process implementation (e.g. screening and scoping); social impacts considered; public inquiries and reviews drive innovations in leading countries; take up of EIA still limited but includes developing countries (e.g. China, Thailand and the Philippines).
iii) Process strengthening and integration (early '80's to early '90s)	Review of EIA practice and experience; scientific and institutional frameworks of EIA updated; coordination of EIA with other processes, (e.g. project appraisal, land use planning); ecosystem-level changes and cumulative effects began to be addressed; attention given to monitoring and other follow-up mechanisms. Many more countries adopt EIA; the European Community and the World Bank respectively establish supra national and international lending requirements.
iv) Strategic and sustainability orientation (early '90s to date)	EIA aspects enshrined in international agreements marked increase in international training, capacity building and networking activities; development of guidelines for cross-border and shared ecosystems/resources, development of strategic environmental assessment (SEA) of policies and plans; inclusion of sustainability concepts and criteria in EIA and SEA practice; EIA applied in all OECD countries and large number of developing and transitional countries.

Source: UNEP, 2002 (with minor additions) as updated and amended from Sadler, 1996: The phases and timescales identified in the table do not necessarily correspond to the development of EIA in any particular country.

The adoption and application of SEA in developing countries have been very slow due to financial and human resource constraints. There is debate on the suitability of SEA in developing country contexts where there is growing evidence that EIA is not working well (Mwalyosi & Hughes, 1998). Often, the reasons are not so much technical, as they are issues of lack of political and institutional will, limited skills and capacity, bureaucratic resistance, antagonisms from vested interests, corruption, compartmentalized organizational structures and lack of clear environmental goals and objectives. These structural problems are considered to be major constraints to the introduction of SEA (Dalal-Clayton and Sadler, 1998).

Two important initiatives in SEA are the recently approved European Union Directive on SEA, which represents the first regulation of SEA by a multinational body and the South African guidelines on SEA, which stand apart as an attempt by a developing country to adapt SEA to its own specific needs and priorities (World Bank, 2002).

Table 3: Stages in SEA Development

Stage	Developments
Formative Stage	Certain legal and policy precedents for SEA were established by the introduction and early implementation of EIA. The US National Environmental Policy Act (NEPA, 1969) was intended to apply to 'legislation and other major actions'. For much of this period, however, its scope of application beyond the project level was limited, and primarily focused on programmes. In a few other countries, elements of SEA were recognizable in certain EIA processes, for example public inquiries and environmental reviews conducted in Australia and Canada. By the end of the 1980s, other countries and international organizations had begun to make some provisions for SEA
The Formalisation Stage – from 1990 to 2000	An increasing number of countries in response to Agenda 21 and other policy statements on sustainable development established SEA systems. These systems were and still are relatively diversified. Some countries made provision for SEA of policy, plans and programmes separately from EIA legislation and procedure (e.g. Canada and Denmark). Other countries have introduced SEA requirements through environmental appraisal (e.g. UK), in reforms to EIA legislation (e.g. Czech Republic, Slovakia) or as part of resource management or biodiversity conservation regimes (e.g. New Zealand, Australia). Certain lending and development programmes financed by the World Bank became subject to sectoral and regional environmental assessment (EA). In a few African countries, SEA is not explicitly provided for in legislation but is implied in the framework EIA legislation and in the schedule of activities to which EIA is applicable (for example, South Africa, Ghana, Zambia, The Gambia and Lesotho). Adoption of SEA guidelines by South Africa.
The Extension Stage – 2001 onward	Set to begin and marked by the widespread adoption and further consolidation of SEA. Key driving forces will be the transposition of the recently concluded European Directive on SEA by member States (to enter into force in 2004) and later by accession countries; and the negotiation of an SEA Protocol to the UNECE Convention on Transboundary EIA by signatory countries. These and other international legal and policy developments indicate a possible tripling of the number of countries that make provision for SEA over the next decade. SEA increasingly being applied in developing countries including Africa either voluntarily or as a result of donor conditionality, and has gradually begun appearing as explicit requirements in legislation.

Source: UNEP, 2002 (with some modifications)

Other integral components of impact assessments

When development initiatives are considered to have significant social and health impacts in communities, which in most cases, are not beneficiaries of the development initiatives, then full, stand-alone assessments of social and health impacts are carried out. SIA and HIA are formalized procedures for analysing, monitoring and managing the social and health impacts respectively, of development initiatives. Attention is now being given to biodiversity assessments in line with the requirement of the Biodiversity Convention to integrate biodiversity issues in EIA and SEA.

SOCIAL IMPACT ASSESSMENT (SIA)

SIA is a valuable tool to put into effect a key sustainable development principle i.e.: 'human beings are at the centre of development'. SIA considers the intra-generational and inter-generational equity issues.

IAIA 2003 interprets SIA as including the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programmes, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.

SIA considers four main types of social impacts:

- Demographic impacts such as changes in population numbers and characteristics (such as sex ratio, age structure, in-and-out migration rates and

resultant demand for social services, hospital beds, school places, housing etc);

- Cultural impacts including changes to shared customs, traditions and value systems (e.g. language, dress, religious beliefs and rituals) archaeological, historical and cultural artefacts and to structures and environmental features with religious or ritual significance;
- Community impacts including changes in social structures, organizations and relationships and their accompanying effect on cohesion, stability, identity and provision of services; and
- Socio-psychological impacts including changes to individual quality of life and well being, sense of security or belonging and perceptions of amenity or hazard (UNEP, 2003).

Principles specific to SIA are contained in Annex 2.

HEALTH IMPACT ASSESSMENT (HIA)

HIA should normally be integrated in the EIA process as recommended by organizations such as the World Bank and the World Health Organization (WHO). Health impacts of development initiatives can either be beneficial or adverse. For example, water infrastructure projects eradicate or drastically reduce the occurrence of cholera, diarrhoea and other gastro-intestinal diseases that are endemic in less developed countries. However, adverse health impacts can also occur as a result of development projects, either directly from changes to the biophysical environment (such as exposure to pollutants) or indirectly as a secondary result of other changes, for example, the creation of habitat conditions favourable to the spread or intensification of disease vectors, such as mosquitoes (malaria) or water snails (schistosomiasis) (UNEP, 2003).

Occupational, public health and safety issues should also be considered in HIA. These include exposure to increased traffic levels introduced by road building or to dangerous and hazardous industries, such as those involving the processing, storage and/or transportation of flammable materials or toxic gases. In these situations, a risk assessment should be undertaken as part of an EIA to determine the probability and consequences of an accident or a malfunction. (UNEP, 2003).

BIODIVERSITY ASSESSMENT

The integration of biodiversity into National Environmental Assessment Procedures is being promoted by UNEP, GEF and UNDP. Case studies conducted in Tanzania, Zambia, South Africa, Cameroon and Niger in 2001, revealed that integration of biodiversity issues in EIA and SEA is either non-existent or limited due to many factors such as absence or inadequate legislation; unclear institutional mandate; lack of coordination between institutions; limited capacity and experience in the area; ineffective conservation networks; and inadequate stakeholder consultations. A workshop convened to discuss the results of the national status reports and case studies culminated in the drafting of guiding principles for the effective integration of biodiversity concerns in impact assessment procedures.

chapter three

INSTITUTIONALIZATION OF EA AT THE REGIONAL AND SUB-REGIONAL LEVELS

The high level meeting of the African Ministerial Conference on the Environment (AMCEN) on Environmental Impact Assessment in Durban June 1995 was a landmark event in the development of EIA in Africa. The meeting coincided with the annual IAIA conference and a World Bank-sponsored workshop on EIA, which generated a communiqué that reaffirmed commitment to the institutionalization of environmental assessment in Africa and proposed policies to ensure same. The meeting set down an agenda for capacity building in EIA and identified the promotion of EIA capacity building based on the use of African expertise and institutions, as a priority action (World Bank, 1996, IUCN, 1998).

This landmark meeting was followed by a series of meetings of technical experts sponsored by the World Conservation Union (IUCN), the World Bank and the African Development Bank (AfDB) culminating in the Capacity Building for EIA in sub Saharan Africa (CEASSA) initiative. In 1998, IUCN, the World Bank and UNEP organized a stakeholder workshop on “EIA Capacity Enhancement for the Sub-Saharan Africa Region” which produced a statement on Capacity Building for EA in Sub Saharan Africa (CEASSA), and materials for the development of the capacity-building framework. (IUCN, 1998).

In 2000, a consultative meeting on Environmental Assessment Capacity Development in Africa was held in The Hague during which the *Capacity Development and Linkages for Environmental Impact Assessment in Africa* (CLEIAA) was formed. It is therefore noteworthy that the CLEIAA initiative was realized in response to a priority action identified at the AMCEN meeting. (www.cleiaa.org, 30-01-04). It has been instrumental in facilitating Africa-wide discussions and consultations on the trend, status, challenges, and way forward for EIA capacity building in Africa.

Other agencies which have been very instrumental in supporting the activities of CLEIAA, (currently abbreviated as CLEAA) and its nodes include the International Association for Impact Assessment (IAIA), the United States Agency for International Development (USAID), the AfDB, AMCEN, the United Nations Environment Programme (UNEP) and South Africa’s Council for Scientific and Industrial Research (CSIR). Support has also been provided by the Norwegian Agency for Development (NORAD), the UK Department for International Development (DFID) and the Canadian International Development Agency (CIDA).

In 1997, the Durban Ministerial Declaration on sub-regional and regional cooperation for the development and efficient utilisation of energy and mineral resources in Africa resolved to establish an efficient regulatory framework, which would, *inter alia*, ensure that environmental impact studies are conducted on all energy and mineral development projects (UNECA, 1997). The Economic Community of West African States (ECOWAS)

recently embarked on the development of EIA guidelines for electric power transmission and generation.

CLEIAA and its Sub-Regional Nodes

CLEIAA is a pan-African networking forum where Environmental Assessment and Management (EA&M) practitioners, administrators, policy makers, researchers and other key stakeholders exchange views, make linkages and pursue joint activities related to the promotion of sustainable development through EA&M in Africa. It is a virtual institution, being primarily a collection of the sub-regional nodes with the main role of facilitating networking, representing the nodes at selected continental fora, organizing annual conferences and assisting with fundraising activities (CLEIAA, 2004). In order to adequately reflect the broad scope of its interventions in the environmental assessment field, CLEIAA, at its meeting with partners which took place in Marrakech, Morocco in October 2004, changed its name to Capacity Linkages for Environmental Assessment in Africa (CLEAA).

Since the creation of the organization, several sub-regional networks have been established under it. These include the Southern African Institute for Environmental Assessment (SAIEA), the Eastern Africa Association for Impact Assessment (EAAIA), the West African Association for Environmental Assessment (WAAEA) and the Indian Ocean Islands Association for Environmental Impact Assessment (IOAEA). Attempts are being made to facilitate the establishment of a node in Central Africa (CLEIAA, 2003).

SOUTHERN AFRICAN INSTITUTE FOR ENVIRONMENTAL ASSESSMENT (SAIEA)

In 2001, the World Bank supported the establishment of SAIEA. The International Association for Impact Assessment (IAIA) and the Southern African Development Community (SADC) support the operations of the Institute. The goal of the Institute is to provide capacity for quality review of environmental assessments to support informed decision making in Southern Africa. In this connection, SAIEA provides guidance to clients in the initial stages of the EIA study, reviews EIA studies, monitors implementation, conducts strategic research and provides capacity building services (SAIEA, 2003). SAIEA is considered to be the most advanced of all nodes (CLEIAA, IUCN, 2004). The Institute has been identified by UNEP as a collaborator in disseminating and promoting the use of the second edition of the EIA Training Resource Manual in the Africa region (UNEP, 2002²). In 2003, SAIEA published a book on EIA in Southern Africa.

EASTERN AFRICA ASSOCIATION FOR IMPACT ASSESSMENT (EAAIA)

EAAIA was launched during a meeting of its interim members in December 2001 as a network of researchers, practitioners, decision makers and development partners interested in EIA in Eastern Africa. The objective of the Association is to promote, support and develop EIA capacity in Eastern Africa to enable countries fully appreciate and effectively use EIA as a continuous planning and decision making tool

for sustainable development at national and sub-national levels. Specific objectives include support to the establishment of operational and legally constituted EIA systems and institutional frameworks in Eastern Africa and to develop adequate human and technical resources and institutional capacity for EIA implementation. Main activities implemented since its establishment include the development of a work programme, implementation of EIA Professional Development (PD) fellowship programme and establishment of an EIA expertise database (CLEIAA, IUCN, 2004).

INDIAN OCEAN ISLANDS ASSOCIATION FOR ENVIRONMENTAL IMPACT ASSESSMENT (IOAEIA)

IOAEIA was established in May 2002, during a World Bank-sponsored consultative meeting organized by the Ministry of Environment of Mauritius and facilitated by CLEIAA. Its objectives are to promote the knowledge and practice of EIA; ensure sub-regional collaboration to address and or reduce the current isolation of island states in addressing EIA; share lessons and complementing efforts in EIA undertakings among countries; address sub-regional environmental management issues more effectively; and provide linkages with international and other regional EA associations/initiatives (CLEIAA, 2002). The Association is currently working on the preparation of a draft constitution and the creation of a website (CLEIAA, IUCN, 2004).

WEST AFRICAN ASSOCIATION FOR ENVIRONMENTAL ASSESSMENT (WAAEA)

The establishment of WAAEA in October 2002 was facilitated by CLEIAA during a three-day consultative meeting of EIA specialists and practitioners in Cotonou, Benin. The meeting was sponsored by the World Bank and co-organized by CLEIAA and the Benin Agency for the Environment. The objectives of WAAEA are to: contribute to the promotion of environmental assessment as a planning and decision making tool for sustainable development in the sub-region; promote capacity building and sharing of experiences, knowledge and information on environmental assessment in the sub-region; and promote the harmonisation of environmental assessment in the sub-region (www.cleiaa.org, 30-01-04). Main achievements since establishment include the adoption of a strategic action plan, expansion of membership, increased networking and development of a website. (CLEIAA, IUCN, 2004).

Some Key Activities of CLEIAA

Since the establishment of CLEIAA and its nodes, many activities have been undertaken to enhance EIA capacity in Africa. A key activity of CLEIAA in 2001 was the organization of a Pan-African Conference on “EIA Capacity Building for Sustainable Development in Africa” in Accra, Ghana. The Conference formed part of a series of key activities undertaken since the AMCEN meeting in Durban. Held back to back with the Conference was the sub-regional nodal meeting which deliberated on the following: A framework for five-year strategic plan; a communications strategy; country needs-assessment and capacity development guide; and the role of sub-regional nodes. One of the main outcomes of the meeting was a partial framework

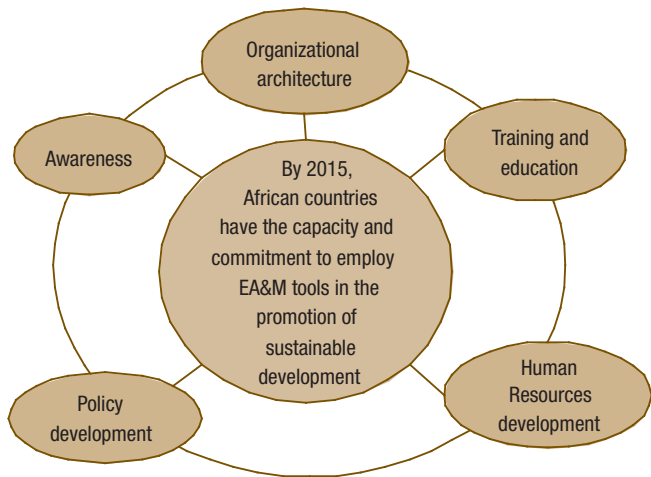
for the strategic plan comprising the vision, mission, goal, guiding principles, revised objectives and outputs; the identification of stakeholders and the organizational structure for CLEIAA (CLEIAA, 2002).

THE EA &M CAPACITY BUILDING STRATEGY FOR AFRICA

The first phase implementation completion report prepared in December 2002 called for further consultations in order to complete the strategic plan. In this regard, a brainstorming meeting was organized by CLEIAA in December 2003 to finalize the strategy. The meeting marked the beginning of the second phase of implementation. The strategy was subsequently finalized based on comments received following the meeting and was launched at a special session of the IAIA Conference held in Vancouver, Canada in May 2004. (CLEIAA, IUCN, 2004).

The vision of the strategy is that by 2015, African countries would have the capacity for, and commitment to, employing environmental assessment and management tools in the promotion of sustainable development. It is divided into five main programme themes namely: Organizational Architecture; Training and Education; Human Resource Development; Policy Development; and Awareness (CLEIAA, 2003). Figure 3 is a pictorial representation of the vision and programmatic themes and Table 4 presents the objectives of the different programmatic themes.

Figure 3: Vision and programmatic themes of the EA&M capacity building strategy for Africa



Source: CLEIAA, 2003

Table 4: Programmatic Themes of the Strategic Framework For EA&M Development In Africa

Programme	Programme Objective
1. EA&M Organizational Architecture Building the network for implementation and practice	To strengthen the existing networks of EA&M organizations and practitioners to implement the development framework and strengthen EA&M capacity and practice
2. Training and Education Building knowledge	To provide instruction in EA&M theory and the tools and techniques of EA&M practice
3. Human Resource Development Building skills	To enhance the skills and experience of EA&M practitioners and administrators
4. Policy Development Building processes	To support the development of more effective national systems capable of assuming EA&M review functions
5. Awareness & Constituency Building Building demand	To enhance national commitments to employing EA&M in achieving environmentally sustainable development

Source: CLEIAA, WAAEA, EAAIA and SAIEA, 2003

CLEAA EIA PROFESSIONAL FELLOWSHIP PROGRAMME

As an integral part of its capacity building programme, the CLEAA EIA Professional Fellowship programme was initiated in 2001 as a Pan African initiative to support African EIA professional capacity building through learning by participating and doing practical EIA work, and to strengthen professional EIA networks. The programme has the following elements:

- Fellows attached to ongoing programmes with a professional EIA team for a period of 3 to 6 months to gain practical EIA experience;
- Fellows participate in an applied tailored training for a period of 3 to 6 months
- Fellows participate or linked with the activities of the regional EIA professional associations; and
- Fellows are provided with support for three years' membership in the IAIA, subscription to the IAIA journal, and support for participation in at least one annual meeting of the IAIA.

Six fellows were selected and trained in the pilot phase during 2001/2002 with a high degree of success. The programme is expected to support 8 fellows during 2004/2005. Following the success and lessons learned from the programme, a multi-year programme has been developed to train about 200 African EIA practitioners during a five-year period. This should help in making available the critical mass to support EIA practice and strengthen the networks in Africa. CLEAA is seeking partnership from development partners in supporting implementation of this multi-year programme.

The sustainability of CLEIAA and its nodes is crucial if the vision of the organization is to be realized. Presently, the activities of the associations are mainly supported by donor agencies. Some funds are generated through membership fees, but this is not enough to ensure effective functioning. Building awareness on the importance of environmental issues and the role of environmental assessment in

achieving sustainable development objectives is key to engendering actions that would create the necessary demand and commitment to increasing the application of environmental assessments. This is important for the sustainability of the association and the enhancement of capacity for environmental assessment at all levels.

Institutionalization of EIA in North African Countries

The development and institutionalization of EIA in the North African sub-region is being realized within the framework of the Mediterranean Environment Protection Technical Assistance Programme (METAP). METAP was established in 1990 to control environmental deterioration in the Mediterranean region. In 1996, the programme entered a new phase, granting priority to the definition of sustainable development indicators for the region, useful in assessing the impact of policies, programmes, and projects on the state of the environment, and reinforcing the technical capabilities and resources of public and private institutions.

One of METAP's most important objectives is the strengthening of environmental planning and management capacities of the Mediterranean countries through analysis of national EIA systems; training in EIA; facilitating information and knowledge exchange; and provision of information on the expertise available.

METAP's regional EIA capacity building project began in 1999 with sponsorship from the World Bank, in association with UNDP, the European Commission and the European Investment Bank. The project, whose first phase was managed by Manchester University's EIA Centre, was entrusted to the Tunis International Centre for Environmental Technologies (CITET) in the same year. The project involves all the developing and transitional countries of North Africa, the Middle East and Southern Europe, which have access to the Mediterranean, with the association of two of their Middle Eastern neighbours, Iran and Yemen.

The project began with the development and application of a methodology for evaluating the status of national EIA systems, and a series of regional and national EIA workshops. With a grant from the World Bank, the regional Centre has since provided specialized training to more than 250 participants from 14 countries. With assistance from Manchester University's EIA Centre, the Centre has also prepared a detailed country-by-country report on their EIA systems, comparing the system with guidelines from the European Community and the World Bank, and including a plan for conforming to such guidelines. In addition, it has developed a network of all EIA directors to help them exchange experiences in the area of EIA and discuss conformance plans. Furthermore, an EIA database was in the process of being developed (CITET-METAP, 2003).

Given the activities of CITET, relative to EIA development, in the Mediterranean region, the Institute is considered to be well placed to fulfil the role of a CLEIAA node in relation to North African countries.

chapter four

INSTITUTIONALIZATION AND APPLICATION OF EIA AND SEA AT NATIONAL LEVEL

The degree of institutionalization and application of EIA, including the extent to which it influences development decision-making, could be used as a measure of sustainability. However if EIA is to be an effective sustainability assessment tool, it must consider the interrelationships of social, economic and environmental issues in an integrated manner. The EIA process should also embody participatory and precautionary principles.

Ghana's definition of EIA exemplifies an embodiment of the integrative principle:

"The process for the orderly and systematic identification, prediction and evaluation of the likely environmental, socio-economic cultural and health effects of an undertaking and the mitigation and management of those effects".

Cameroon's definition of EIA makes reference to impacts on the standard and quality of life of populations and the environment in general, which can be extrapolated to cover a broad range of issues impacting on livelihoods and well-being. Tunisia's definition of EIA focuses on environmental impacts. However, the law also provides for the study of impacts on the quality of life, hygiene and public health. In Uganda, the practice of EIA considers environmental, social and economic impacts as demonstrated in its good practice case described in a subsequent section.

The EIA guiding principles of these countries, whether derived from national legislation or international agreements, to which they are a party, include among others, precautionary and participatory principles.

Institutional and regulatory frameworks for EIA

Well functioning institutions and appropriate regulatory frameworks and procedures are important prerequisites to the effective application of EIA. Feedback obtained from some countries and a desk review of the institutional and regulatory frameworks for EIA in 23 African countries (Annex 2 and Tables 5 & 6) conducted in the course of this study, showed that all countries have established administrative bodies for EIA. The majority of countries (18 out of 23) have an enabling legislation and / or specific legislation /regulations on EIA in place. Even though the Namibia EIA bill is still in draft, the country's Mining and Petroleum Acts of 1992 and 1991 respectively, require Proponents to conduct EIAs. Ten of these countries have explicit formal provisions for public participation.

Table 5: Institutional and regulatory frameworks for EIA in some African countries

Note: The Table does not take account of developments that have taken place in the different countries since information was sourced (see information source).

NORTH AFRICA					
	Sudan	Egypt	Algeria	Morocco	Tunisia
Enabling legislation	In draft	Yes, 1994	Yes, 1983	In draft	Yes, 1988
Specific legislation /regulations	No	Yes, 1995	Yes, 1990	In draft	Yes, 1991
General and specific guidelines		Yes, 1995	Yes, 1990	draft law	Yes
Formal provisions for public participation	No	Yes (through guidelines)	Yes (Decree of 1990)	draft law & EIA decree	No
Main administrative body/bodies	Higher Council for Environment and Natural Resources, 1992	Egyptian Environmental Affairs Agency, 1994	Ministry of Land Use & Environment and the General Directorate of the Environment (DGE),	Department of the Environment	National Environmental Protection Agency, 1988
Information source	Mohamed-Ali, O.M., 2003	CITET-METAP, 2003	CITET-METAP, 2003	CITET-METAP, 2003	Elloumi, Marie-Jose, 2004

WEST AFRICA					
	Nigeria	Benin	Ghana	The Gambia	Niger
Enabling legislation	Yes, 1992	Yes, 1999	Yes, 1994	Yes, 1994	Yes, 1998
Specific legislation /regulations	Yes, 1992	Yes, 2001	Yes, 1999	Final draft	Yes, 1997
General and specific guidelines	Yes, 1995	Yes, 1997 and 2000	Yes, 1995 and 1999	Yes, 1999	Yes, 1997
Formal provisions for public participation	No	Yes (through guidelines)	Yes, 1999	Yes, 1994, 1999	Under draft
Main administrative body/bodies	The Federal Environmental Protection Agency (FEPA), 1988	Benin Environment Agency (BEA), 1995	Ghana Environmental Protection Agency, 1994	The Gambia National Environment Agency, 1994	Environmental Assessment and Impact Studies Bureau, 1997; Ministry of Environment and Desertification
Information Source	Echefu N. and Akpofure E. 2003; Akpofure, E.A. and Ojile, M., 2003	BEA Official source, January 2005	EPA, March, 2004	NEA, March 2004	UNDP/UNEP/GEF, 2001; Almeida, K., 2001

CENTRAL AFRICA			
	Cameroon	Congo	Gabon
Enabling legislation	Yes, 1996	Yes, 1991, Rev. 1997	Yes, 1979
Specific legislation /regulations	Draft	Yes, 1986	Yes, 1979
General and specific guidelines	No	Under draft	
Formal provisions for public participation	No	Included in draft procedures	
Main administrative body/bodies	The Ministry of Environment and Forestry	General Directorate of the Environment under the Ministry of Industry, Mining and the Environment. The National Agency for Environmental Protection is under creation.	General Directorate of the Environment under the Ministry of Environment and Nature Protection, 1985
Information source	Bitondo, D., 2000 Tekeu, J-C., 2004	D'Almeida, K., 2001	D'Almeida, K., 2001

EASTERN AFRICA					
	Tanzania	Ethiopia	Uganda	Kenya	Burundi
Enabling legislation	No	Yes, 1995*	Yes, 1995	Yes, 1999	No
Specific legislation /regulations	No	Yes, 2002	Yes, 1998	Yes, 2003	No
General and specific guidelines	In draft	Yes, 2000	Yes, 1995	In draft	
Formal provisions for public participation		Yes, 2002	Yes, 1995		
Main administrative body/bodies	National Environment Management Council, 1983	Environmental Protection Agency, 1995	National Environment Management Agency (NEMA), 1995	National Environment Management Authority (NEMA)	Ministry of National and Regional Development and the Environment
Information Source	Katima, J.H.Y., 2003 Kibassa, J., 2003	IUCN, 2001, *Tekelemichael, Y., 2003 EPA, March, 2004	NEMA, 2004	NEMA, 2004	D'Almeida, K., 2001

22 Review of The Application of Environmental Impact Assessment (EIA) in Selected African Countries

SOUTHERN AFRICA					
	Mozambique	Namibia	South Africa	Zambia	Lesotho
Enabling legislation	Yes, 1997	In draft	Yes, 1989	Yes, 1990	Yes, 2001 (to be gazetted)
Specific legislation /regulations	Yes, 1998	No	Yes, 1997	Yes, 1997	Yes, 2003 (to be gazetted)
General and specific guidelines	Under draft	Yes	Yes, 1997	Yes, general in 1997. Specific, , yet to be adopted, 2000/2001	Yes, under the 2001 Act
Formal provisions for public participation	Yes (EIA regulations)	Draft bill	Implied under review clause	Yes (EIA regulations)	Under draft
Main administrative body/ bodies	Ministerio para a Coordenacao da Accao Ambienta	Directorate of Environmental Affairs	Department of Environmental Affairs and Tourism	Environment Council of Zambia (ECZ)	National Environment Secretariat
Information Source	SAIEA, 2003	DEA, March, 2004	SAIEA, 2003	NECZ, March, 2004	SAIEA, 2003

Table 6: A quick glance at the Institutional and Regulatory Frameworks for EIA in selected member States

Country	Enabling legislation	Specific legislation/ Regulation	Guidelines	Formal provision for public participation	Main administrative body
Algeria	✓	✓	✓	✓	✓
Egypt	✓	✓	✓	✓	✓
Morocco	✓	✓	✓	✓	✓
Sudan	✓	X	X	X	✓
Tunisia	✓	✓	✓	X	✓
Benin	✓		✓	✓	✓
Gambia	✓	✓	✓	✓	✓
Ghana	✓	✓	✓	✓	✓
Niger	✓	✓	✓	✓	✓
Nigeria	✓	✓	✓		✓
Cameroon	✓	✓	X	X	✓
Congo	✓	✓	✓	✓	✓
Gabon	✓	✓			✓
Burundi	X	X	X	X	✓
Ethiopia	✓	✓	✓	✓	✓
Kenya	✓	✓	✓	✓	✓
Tanzania	X	X	✓	X	✓
Uganda	✓	✓	✓	✓	✓
Lesotho	✓	✓	✓	✓	✓
Mozambique	✓	✓	✓	✓	✓
Namibia	✓	X	✓	✓	✓
South Africa	✓	✓	✓	✓	✓
Zambia	✓	✓	✓	✓	✓
In draft	3 (13%)	3 (13%)	5 (22%)	5 (22%)	-
Already established	18 (78%)	15 (65%)	14 (61%)	10 (22%)	23 (100%)
Not established	2 (9%)	4 (18%)	3 (13%)	5 (22%)	-
No information	-	1 (4%)	1 (4%)	3 (13%)	-
Total	23	23	23	23	23

 **in draft**
 **not established**
 **already established**

Relative Levels of EIA institutionalization in Countries

In connection with its objective to enhance and harmonize EIA capacity development efforts on the African continent, CLEIAA carried out an inventory of activities in countries and on a sub-regional scale with a view to classifying them into different categories depending on their level of EIA institutionalization. On the basis of information received from various countries, Francophone Secretariat of IAIA (IAIA- AIEI) and EIA Commission in the Netherlands, CLEIAA categorised 34 African countries. From the sample of 34 countries surveyed, no country was in the “advanced” category because EIA was yet to be adequately mainstreamed in any of them (Table 7).

Table 7: Description of EIA Categories

Category	Description	Countries
Advanced	Robust and functional EIA systems that are generally mainstreamed	
Category 1A	Functional and relatively robust EIA systems in place: institutional arrangements, administrative directive, framework law, regulations in place; practicing for 10 years or more	Ghana, South Africa, Tunisia
Category 1B	Functional and relatively robust EIA systems in place: institutional arrangements, administrative directive, framework law, regulations in place; practicing for less than 10 years but well recognized	Benin, Egypt, and Seychelles
Category 2	Functional EIA, institutional and regulatory framework which are recent and fragile	The Gambia, Namibia, Nigeria, Malawi, Mauritius, Mozambique, Uganda and Zambia.
Category 3	Incomplete regulatory and institutional framework	Burkina Faso, Congo, Comoros, Cote D'Ivoire, Djibouti, Ethiopia, Gabon, Guinea, Kenya, Niger, Madagascar, Mali, Morocco, Senegal, Tanzania, Togo, Zimbabwe.
Category 4	Non-existent legislative framework and no institutional framework	Burundi, Cape Verde and Guinea Bissau.

Source: CLEIAA, 2002

While the present study does not attempt to rank the EIA systems of countries, the desk study and country reports reveal that Ghana and Tunisia have functional and relatively robust EIA systems. Benin, Egypt, Algeria, Uganda and South Africa also have good systems in place. Improvements are however required in all cases. The case of Namibia is rather unique. Even though the legal framework is not yet in place, EIA has systematically been conducted in the country since its independence in 1990. On the other extreme, CLEIAA ranked Cape Verde, Burundi and Guinea Bissau as starters. Regarding the last two, this can be explained by prolonged unrest and conflicts, which prevented the countries from effectively pursuing their sustainable development agenda.

EIA Application and Trends

A review of the application of EIA in Africa has shown that some forms of environmental assessments have occasionally been carried out on major development initiatives prior to its systematic institutionalization in the region. For example, a history of EIA in Sudan shows that the report of the Equatorial Nile Project (ENP) of 1954 is probably the first ever EIA carried out in the developing world (Moghraby, 1997 in Mohammed-Ali, 2003).

South Africa has a history of EIA application dating back to the 1970s. The EIA Committee of the Council of the Environment set up in 1983, published a document on Integrated Environmental Management (IEM). Based on practical experience in applying IEM, guidelines were subsequently published and these formed the basis for several hundred voluntary EIAs (SAIEA, 2003).

In Lesotho, EIA reports on major development projects date to 1980. However, the concept of EIA was only formally introduced in the country in 1988 during an International Conference on Environment and Development supported by the World Bank (Mokhehle, L. and Diab R., 2001). The first 'formal' EIA process in Tanzania was undertaken for the Stiegle's Gorge Power and Flood Control Project in 1980 (Rubada, 1980 in UNDP/UNEP/GEF, 2001).

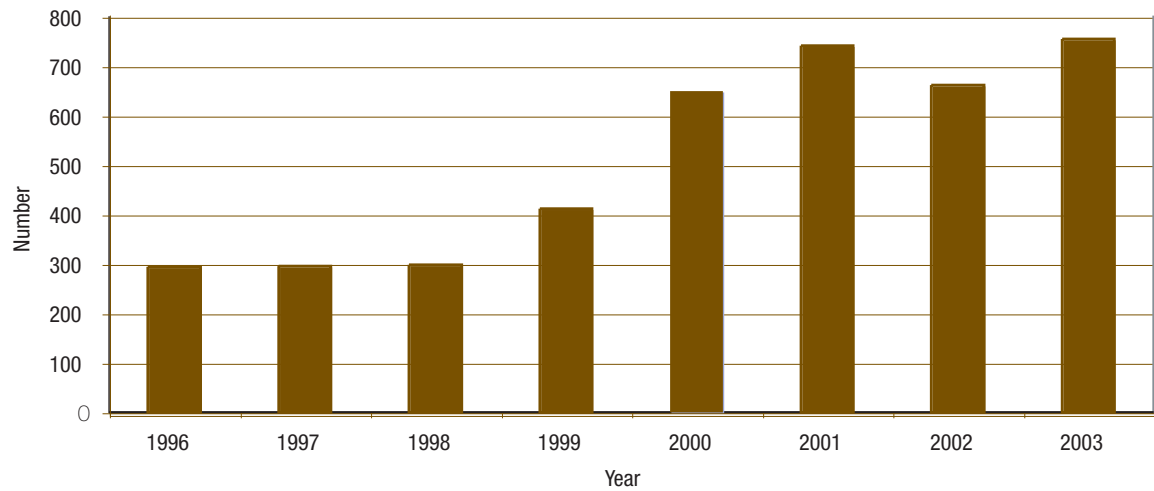
More recently, there has been a steady increase in the application of EIA to development projects. This observation corresponds to the findings of the desk review and information contained in EIA country reports of Ghana, Tunisia and Uganda, where systematic application of EIA began in 1996, 1991 and 1996 respectively.

TRENDS

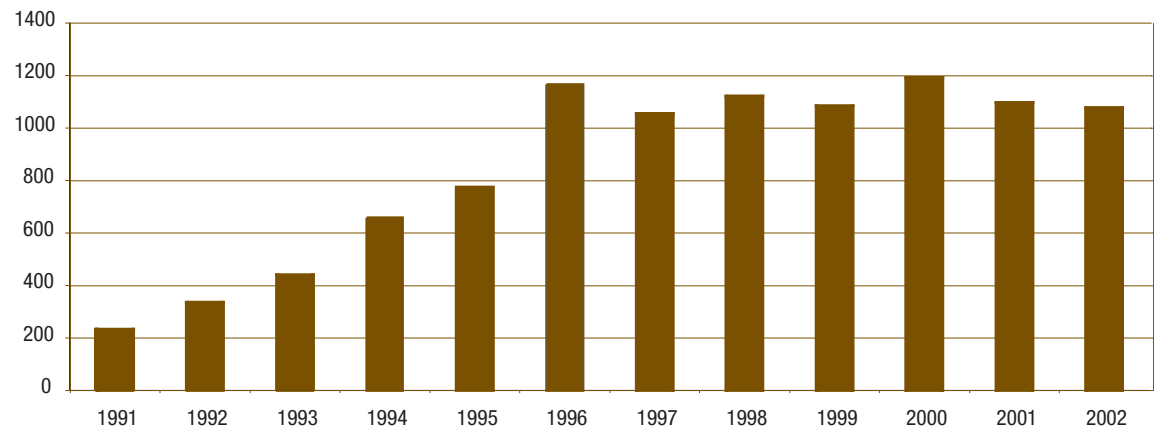
In Ghana, the number of environmental assessment applications registered increased from 294 in 1996 to 755 in 2003 (Ebenezer, S., 2004). This represents an average of over 500 applications per year. Similarly the number of Environmental Impact Statements (EIS) received has shown a steady increase since 2000 and, on the average, over 40 EISs are handled annually. A similar trend was observed in Tunisia where the number of EIA applications received increased from 230 in 1991 and have stabilized to between 1000 and 1200 per year since 1996 (Elloumi, M.J., 2004).

The number of EIA applications received by six South African provinces since the promulgation of the EIA regulations range from 450 to 1278. The provinces with the highest number of applications i.e. Gauteng, KwaZulu Natal and the Western Cape reflect the areas with highest economic activity in South Africa. However, most applications received are exempted during scoping, as they do not fall within the scope of those activities requiring full EIAs (SAIEA, 2003).

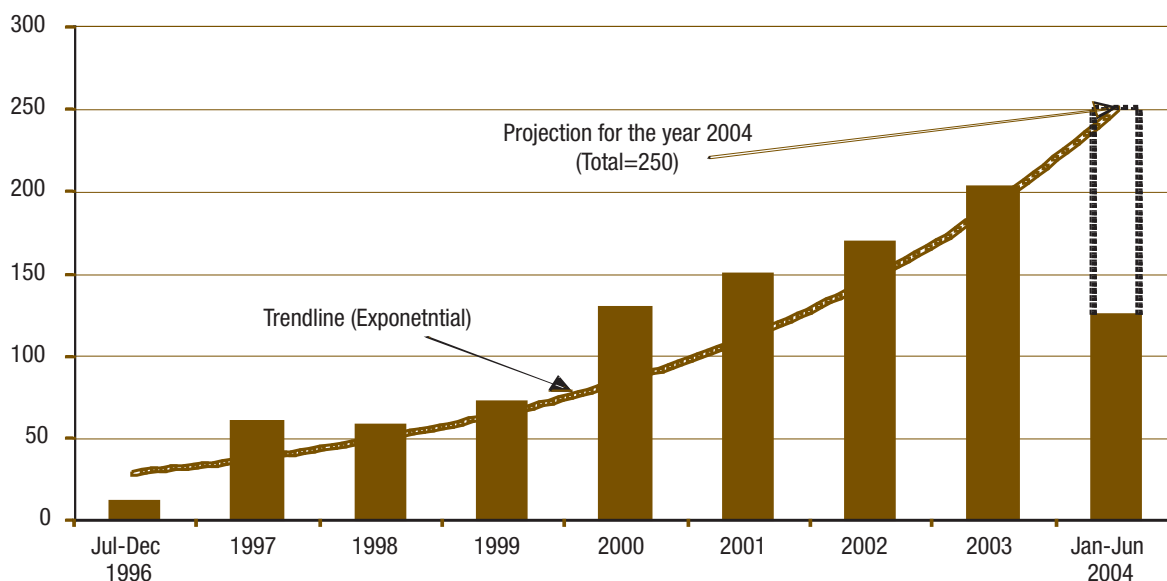
Although the number of EIA applications received in Uganda was not provided, it was indicated that over 950 projects have been subjected to EIA, out of which about 800 have been approved for implementation while up to 20 have not been approved (Ecaat, J., 2004). Figures 4, 5, and 6, show the trend in EIA applications in Ghana and Tunisia, and projects reviewed in Uganda respectively. In the case of Cameroon, about 50 environmental assessments have been carried out since the enactment of the enabling legislation in 1996, most of which were commissioned by Government. These include 42 project-level EIAs.

Figure 4.: Environmental assessment applications received by EPA, Ghana (1996-2003)

Source: Sampong, E., 2004

Figure 5: EIA applications received by ANPE, Tunisia (1991 to 2002)

Source: Elloumi M. J., 2004

Figure 6: Total number of projects reviewed by NEMA, Uganda (July 1996 to June 2004)

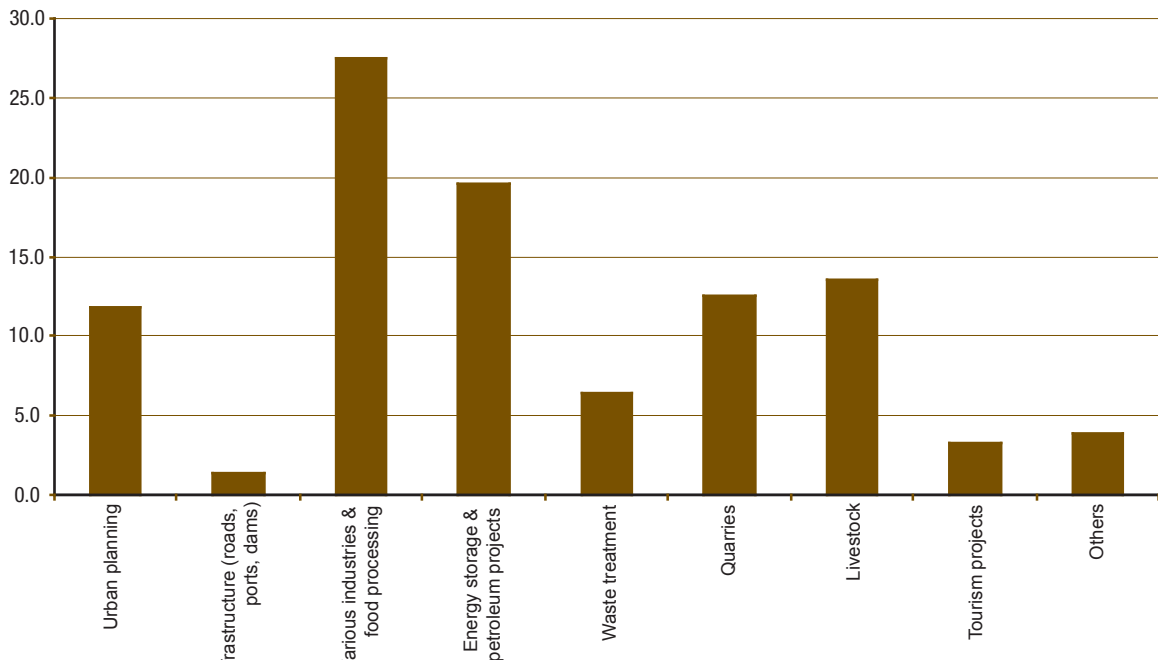
Source: Ecaat, J., 2004
Projection including July to December 2004

The steady increase in the number of EIA applications received by EPA Ghana was attributed to the general increase in awareness about EIA requirements, the enactment of the Environmental Assessment Regulations of 1999, the implementation of the pilot phase of the Environmental Assessment capacity development programme and increasing collaboration among regulatory institutions. Increased awareness of EIA requirements was singled out as contributing to the increased use and application of EIA in Uganda since 1996. The level of economic activity is also a factor that influences the number of EIA applications received as observed in the different provinces of South Africa.

APPLICATIONS BY SECTOR

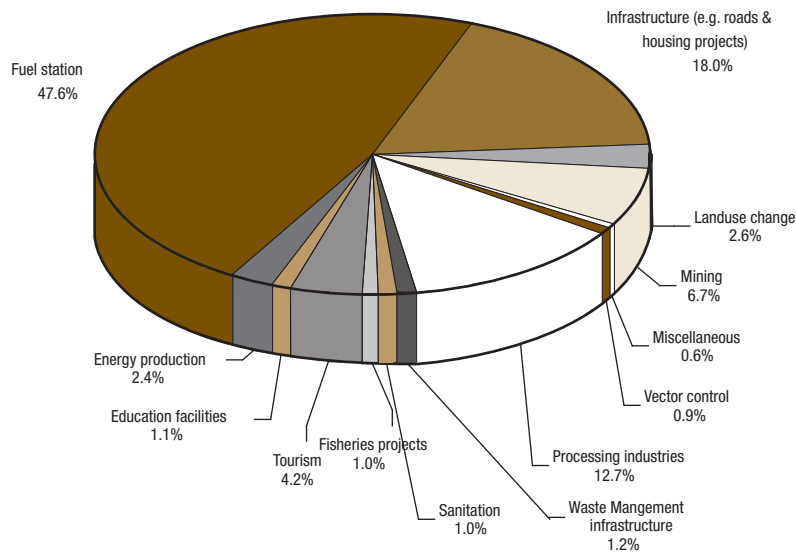
Analysis of EIA applications received by scale and sector revealed that in Ghana, 87% of all applications were for small and medium-scale projects reflecting the dominance of these activities in the country's national economy (Sampong, E., 2004). In Uganda, fuel stations constitute the bulk (47%) of projects reviewed, followed by roads and housing projects (18%); processing industries (12.7%) and others as shown in Figure 8, (Ecaat, J., 2004).

In 2002, the distribution of EIA applications received in Tunisia showed a dominance of the industrial and energy sectors followed by livestock, urban planning and quarry sectors. The waste management sector (essentially recycling and purification stations) represented 6% of applications. It was predicted that applications in this sector would increase in the coming years in view of the recycling and recovery schemes being promoted by ANPE. The distribution of applications across sectors fluctuates from year to year and is a function of the economic and political climate at global, regional and national level. The tourism sector is especially vulnerable to such fluctuations (Elloumi, M. J., 2004).

Figure 7: EIA applications per sector received by ANPE, Tunisia (2002)

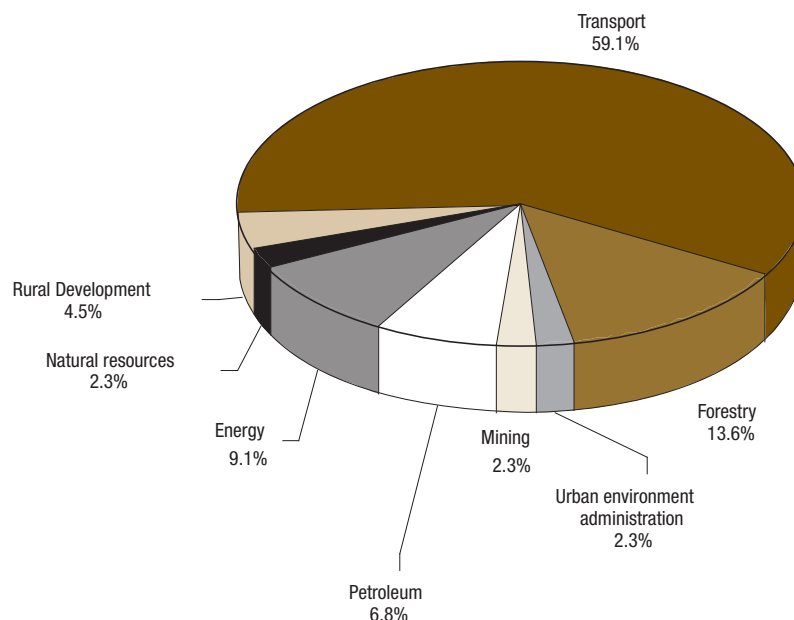
Source: Elloumi, M. J., 2004

The sectoral distribution of EIAs carried out in Cameroon between 1996 and September 2004 are: The Transport sector (29); Forest exploitation (4); Petroleum sector (5); and Energy sector (2). Other studies, soon to be undertaken, include a hydroelectric dam project and a Cobalt-Nickel exploitation project (Figure 9) (Tekeu, J-C, 2004).

Figure 8: Percent distribution by category of projects reviewed by NEMA, Uganda (June 1996 to June 2004)

Source: Ecaat, J., 2004

Figure 9: Sectoral distribution of environmental assessments undertaken in Cameroon from 1996 to September 2004



Source: Adapted from Tekeu, J-C, 2004

Inter-Agency Coordination/Collaboration and Decentralization

INTER-AGENCY COORDINATION & COLLABORATION

Inter-agency or cross-sectoral multidisciplinary committees assist most EIA administrative agencies in the execution of their duties. While those of Ghana and Uganda are relatively well established, the Inter-Ministerial Committee on the Environment of Cameroon was only created in 2002 and modalities governing its operations are yet to be put in place (Tekeu, J-C, 2004). The Committee for Environmental Coordination (CEC) in South Africa coordinates environmental management in the country, but suffers from a high turnover of staff representing the provincial governments (SAIEA, 2003).

In addition, most government institutions have institutionalized or are in the process of institutionalizing EIA by making its application in their sectoral activities a policy or legislative requirement. Since EIA became a legal requirement in Uganda in 1995, policies and legislation revised after this date have incorporated EIA requirements. For example, the conduct of EIA prior to the implementation of new projects is embedded in the Investment Code, the Water Act, the Forest and Tree Planting Act of 2003, the Petroleum Supply Act of 2003 and the Wetlands Policy, among others. Additionally, a number of sectoral agencies have initiated the preparation of sectoral EIA guidelines and are being assisted by NEMA in this respect. These include, Uganda Wildlife Authority, Forestry Department, Directorate of Water Development, Ministry of Works, Housing and Communication and Ministry of Local

Government. NEMA has also provided support to the energy, mining, and fisheries sectors in preparing their sectoral guidelines.

As far back as 1985, the Ghana Investment Code required the Ghana Investment Centre (now Ghana Investment Promotion Centre) to integrate environmental concerns in its activities. Other legislation with EIA requirements include the Energy Commission's Act of 1997 and the Water Resources Commission Act of 1999. Increasingly, investments and resource promoters and regulatory bodies such as the Ghana Investment Promotion Centre, Ghana Free Zones Board, Ghana Tourist Board, Town and Country Planning Department, Minerals Commission, Forestry Commission, Ghana Wildlife Department rely extensively on EIA as an aid to planning and decision-making. Development/building permits are granted only after an environmental permit is obtained from the EPA.

The requirement to conduct EIA and obtain approval from a competent authority is also provided for in sectoral legislation of Tunisia and Cameroon. In Tunisia, these applies to the exploitation of quarries; land use and urban planning; waste management and hydrocarbons. In Cameroon, legislation relates to mining, petroleum, public works, water resources, fertilizer sectors as well as industries classified as dangerous, unhealthy or a nuisance.

DECENTRALIZATION

EIA administration and regulation are mainly concentrated at the central level. However, in some countries, there has been a gradual decentralization to local levels. The National Environment Act of Uganda creates the office of the District Environment Officer (DEO), which acts as a liaison office between NEMA and the district and carries out coordination of EIA activities at the district level.

The Environmental Assessment and Audit (EAA) Department of Ghana EPA, works through ten EPA regional offices and two district (zonal) offices. The regional and zonal staff provides scientific and technical advice and support for the general management of the environment in the regions. They work through such bodies as the regional networks, district assemblies, government departments, NGOs, opinion leaders, chiefs and the public. They are responsible for registering and screening environmental assessment applications and also serve as field operators of the Agency.

Training provided to DEOs in Uganda and to District Environmental Management Committees (DEMCs) in Ghana has increased local government capacity to play their respective roles in the EIA process in these two countries. However, in Ghana, the capacity of district assemblies in developing and implementing environmental management plans remains limited hence, the implementation of additional capacity enhancement schemes (Sampong, E., 2004).

In South Africa, the approval of EIAs for development proposals has been devolved to the provinces, which have been empowered to authorise development activities by virtue of the EIA regulations. The provinces may, in turn, devolve this responsibility to their local authorities. However, no additional funding has been provided to help the provinces with this added responsibility. Provincial authorities are inadequately staffed to handle the volume of EIAs submitted for review (SAIEA, 2003).

EIA capacity issues

In addition to the establishment of viable institutional and regulatory frameworks, it is important that all stakeholders involved in the EIA process have the necessary capacity and expertise to effectively administer and apply the tool. In view of this necessity, countries, with the assistance of development partners, have implemented many capacity-building initiatives including in-country and overseas training aimed at enhancing the application of EIA.

EIA TRAINING

These capacity building initiatives are mainly in the form of specialized training and overseas exposure to best practices in EIA. In-country training is delivered through workshops organized by EIA administrative bodies and by universities and other institutions. Sensitization and training activities have been targeted at different stakeholders including staff of EIA administrative and lead agencies, staff of municipalities and other local authorities, media practitioners, ministers of State, parliamentarians, the judiciary, policy makers at various levels, the private sector including consultants and staff of financial institutions (Sampong, E., 2004, Elloumi, M.J., 2004, Ecaat, J., 2004 and Tekeu, J-C, 2004).

Some tertiary institutions in Ghana, Tunisia, Uganda and Cameroon also provide training on EIA, which is run as part of various environment-related courses. In addition to the opportunities offered by formal institutions, professional associations, such as the Ghana Association of Consultants, Institute of Architects, Institution of Engineers and Surveyors, have served as collaborators with EPA in organizing training courses and seminars for its members. The Ghana Institute of Architects has incorporated EIA in its professional practice examinations held on a yearly basis (Sampong E., 2004).

In Tunisia, CITET regularly provides training related to regulatory, administrative and technical aspects of environmental management and EIA. Furthermore, there is now a tendency for higher institutions of learning to offer environment-related courses. For example, the National Institute of Agronomy also offers courses in the field of environment and development (Elloumi, M.J., 2004).

CAPACITY CONSTRAINTS

In spite of the many initiatives, which have greatly contributed to increasing capacity in EIA among the different stakeholders, available capacity still falls short of requirements. Therefore, capacity constraints remain one of the biggest challenges to the effective application of EIA in Africa. The capacity issues were broken down by CLEIAA, 2004 as: capacity to administer, guide and review EIA reports; and capacity to monitor and follow up on the implementation of Environmental Management Plans (EMPs). The capacity gaps are compounded by the ever-increasing demands placed upon authorities by new development initiatives especially in areas of great economic activity, various donor and development agency requirements, more complex environmental issues and an increasingly articulate civil society body.

A review of the EIA status and capacity issues in Kenya, Tanzania Mainland, Zanzibar, Uganda and Ethiopia revealed that EIA was in various stages of development in these countries and the main capacity issues identified included: inadequate legal and insti-

tutional frameworks; inadequate capacity (technical, managerial etc.) and networking; inadequate private sector involvement; and inadequate funding (IUCN, 2001).

Most countries have indicated that inadequate staff in numbers and expertise hampers the effective application of the EIA system. It is difficult to attract and retain experienced staff because the private sector offers more attractive salary packages than government. However, governments are not the only entities facing capacity problems in terms of staffing. The private sector, NGOs and Community Based Organizations (CBOs) also face similar problems. Within the private sector, there is a high dependence on foreign expertise to compensate for the areas of expertise lacking in the local market. The problem is even more acute in the NGO and CBO communities, which have lamented the lack of resources and capacity to act as effective monitors of the EIA process (SAIEA, 2003).

The recent adoption of the EA&M Capacity Building Strategy for Africa is, therefore, quite timely. It is also encouraging to note that in a discussion paper presented at an IAIA Conference in 2004, it was recommended that the World Bank's focus should be on: improving capacity to effectively manage EA systems by governments, sub-regional and regional institutions; improving private, public sector and civil society understanding and capacity for EA; and improving the quality of EA documents (Boyle, J., 2004).

EIA NETWORKS, CONSULTANCY SERVICES AND TRAINING NEEDS

Networks

In order to boost EIA capacity, networks are increasingly being formed at country level while EIA administrators and practitioners have become members of sub-regional, regional and international EIA associations. For example the local affiliate of the International Association for Impact Assessment in Ghana (IAIA-Ghana) established in May 1999, provides opportunities for its members to build capacity through seminars and training programmes. The IAIA-Ghana, which has a paid-up membership of about 70, is an important focal point for EIA networking. This association intends to complement the efforts of the EPA in environmental assessment capacity building as well as regulating the conduct of its members. Seminars and meetings organized by this association provide members with the opportunity to share and learn from each other's experience. The Ghana EPA is a member of WAAEA and hosted CLEIAA for two years during its interim phase.

The Cameroon Association for Impact Assessment (CAIA) and the South Africa Association for Impact Assessment (SAAIA) are already members of IAIA (Tekeu, J-C, 2004; www.iaia.za.org, 20-09-04). The Uganda Association for Impact Assessment (UAIA) is closely associated with the EAAIA and plans are underway to affiliate UAIA with IAIA (Ecaat, J., 2004). CITET, within the framework of METAP, provides regular platforms for networking among the 16 Mediterranean countries, including Tunisia. These include meetings among Directors responsible for EIA, and the publication of a bulletin which is readily available on the CITET website. Nevertheless, the capacity problems experienced at country level also affect the functioning of these associations. Without capacity at country level, memberships to these associations are affected in terms of numbers and quality.

Consultants

The number of consultants offering services in EIA has also increased steadily over the years. In the early years of EIA application in Uganda, it was difficult to access local EIA consultants and Proponents often sought advice from NEMA on the availability of EIA expertise. Currently, there is a proliferation of consultants, which has resulted in a considerable lowering of EIA cost (Ecaat, J., 2004). To date, over 90% of EIAs undertaken in Ghana have relied on local consultants with exceptions in the mining sector where expatriate consultants dominate. This may be due to the level of local expertise and the preference that investors in this sector have for expatriate consultants. However, in recent times there have been growing partnerships between local and expatriate consultants particularly in the mining, road and energy sectors (GEOPLAN 1998 in Sampong, E., 2004).

The situation in Cameroon is not as encouraging. Of 44 environmental assessments undertaken in the country, 34 were done by external consultants, seven by national consultants and three by external consultants in partnership with nationals. This is however understandable as EIA capacity in Cameroon is not as developed as in the other study countries.

Training needs

Ghana, Tunisia and Uganda have identified among other training needs, the assessment of transboundary and cumulative effects in the EIA process and have singled out training in SEA techniques as a very important and urgent requirement. The need for more targeted formal training on EIA and standardization of training curricula has also been expressed. It was also observed that the continuous emergence and “shifting” of target groups for EIA awareness creation and training is enough justification for the establishment of solid and sustainable training programmes.

EIA capacity is lacking in Cameroon, hence the technical and institutional capacity constraints experienced at all levels including, public administrators, project developers, NGOs, consultants and the public in general. Accordingly, the following capacity needs were identified for Cameroon:

- Technical capacity to produce, analyse and appropriately disseminate baseline data and information on the environment as well as different technologies for project implementation; and
- Administrative capacity to ensure coordination, implementation and monitoring of environmental assessment studies as well as to ensure public participation and development of legislative and regulatory frameworks.

Quality of the EIA

The quality of the Environmental Impact Statement (EIS) and the integrity of the information it contains, are often used as an indicator of the effectiveness of EIA application (Morrison-Saunders et. al, 2001). The terms of reference defined for the study is an important factor that can influence the quality of the EIS. A scoping exercise must be conducted where a project requires a full EIA to ensure that all pertinent issues are taken into account during the study.

In the Gambia, should a full EIA be required, the EIA working group and the developer determine the elements of the terms of reference and approval is given by the National Environment Agency (NEA) (NEA, 1999). A similar arrangement obtains in Ghana. In Cameroon, the terms of reference prepared by the developer are scrutinized by the Inter-Ministerial Committee on the Environment which advises the Ministry of Environment and Forest (MINEFF) on its approval or otherwise. In Tunisia, as in the case of Cameroon, the project proponent is also responsible for preparing the terms of reference. However, this is done with the guidance of a set of sectoral terms of reference prepared by ANPE. The Environment Agency/ Ministry gives approval for the terms of reference in the case of all these countries.

SOME EXPERIENCES

In most African countries, particularly in those lacking EIA legislation, EIA is usually carried out as donor conditionality (Mohamed- Ali, 2003 and Katima, 2003). Public pressure can also be a driving force to the conduct of EIA in those countries with a critical mass of informed public. However, low level of public awareness; low appreciation of environmental concerns; limitations in expertise and lack of coherent legal framework and guidelines have contributed to the tendency for EIA studies to be carried out in a way that is tailor-made to suit the requirements of the commissioning body. As a result, most of the EIA studies carried out in some countries are commissioned after the projects have been designed thus making them differ greatly in terms of content and quality (Kibassa, 2003).

In Uganda, although legislation requires that EIA should be conducted before project implementation, practical application of EIA by developers present three scenarios:

- i. Application of EIA as part and parcel of the project planning and design process;
- ii. Application of EIA after finalization of project design, but before actual implementation; and
- iii. Application of EIA after project development has commenced through site preparation or actual construction and in most cases as a consequence of the project having been halted by regulatory authorities.

From the above, it can be seen that only scenario (i) represents a correct application of the EIA requirements. Scenarios (ii) and (iii) continue to present huge challenges to the EIA system in Uganda. Some EIAs done at stages (ii) and (iii), seek to use the tool to justify mistakes that have already been made. Under these circumstances, the EIA process does not have the opportunity to address some of the impacts that would have been avoided if it had been done before commencement of project implementation. This risks associating EIA with such mistakes, thus casting doubt on its value (Ecaat, J., 2004).

The quality of EIA reports produced by consultants is also a concern in Uganda. This mainly arises from the fact that whereas NEMA's primary focus was initially in encouraging as many individuals as possible to participate in carrying out EIAs, the increased number has also brought with it inexperienced practitioners whose quality of work leaves a lot to be desired. A review of EIA study reports reveals that

the identification and analysis of impacts during assessments are not done satisfactorily. Quite often, impacts are not adequately qualified in terms of significance. This has therefore not made it possible for assessments to focus on issues, and interventions on significant impacts (Ecaat, J., 2004). This observation supports the conclusions by George (2000b) in Mokhehle, L. and Diab, R., (2001) to the effect that developing countries are weak particularly in impact prediction and assessment of significance due to lack of experience and expertise. EIA reports are characteristically voluminous and descriptive and the assessment of significance is often reliant on professional judgement as there are few criteria, such as environmental standards, against which it can be judged.

A review of EIAs conducted for 17 major development projects from 1980 to 1999 in Lesotho revealed that only seven projects had undergone any form of environmental assessment, while systematic EIA was conducted on only two. Formal scoping was seldom followed, and public participation was lacking. Evaluation, mitigation measures and monitoring requirements were also inadequately addressed by most of the EIAs (Mokhehle, L. and Diab R., 2001).

Tekeu J-C, 2004, classified EIA quality in Cameroon into three categories, mainly on the basis of directives followed:

1. Studies carried out as a donor requirement following precise directives and generally conducted by international experts whether in association with local experts or not. These studies are generally of good quality.
2. Studies carried out in the petroleum sector using internationally accepted norms and generally conducted by international experts. These studies are also of good quality.
3. Studies carried out in conformity with the framework law on the environment, which lacks directives, particularly technical. This category of studies is conducted without a system of reference and generally in the absence of scientific data on the receiving media and on the ecosystem in general. These studies are of mediocre quality characterised by weak and erroneous assessments of impacts.

Although Tekeu referred to the EIA of the Chad-Cameroon oil and pipeline project as a best practice because it complied with World Bank directives, which included extensive public participation and an effective implementation of the EMP, an independent assessment came up with the following: The justification given for the project was inadequate and biased; the public was misinformed about the project benefits and hopes for a better future rendered public participation ineffective; and the World Bank directives which guided the process, did not take into account national realities.(Bitondo, D., 2000). Furthermore, the Ministry of Environment and Forestry (MINEF), which approved the EIS, was only weakly involved in the EIA process (Tekeu, J.C., 2004). In the Cameroon country report, Tekeu confirmed the point expressed by Bitondo that the EIA directives of the World Bank and that of the European Investment Bank do not take into account local preoccupations. Nevertheless, the creation of two national parks to compensate for the reduction in biodiversity as well as the setting up of an environment and development trust fund in Cameroon by the project are good examples worth emulating. In addition, indigenous people were compensated for losses to their livelihoods, and a development

plan elaborated for the region. With regard to labour force, priority was accorded to the affected people (Tekeu, J. C., 2004).

The EIA conducted on the Mokong dam, which was proposed as a measure to alleviate water problems in the area, further demonstrates the issues pertaining to EIA quality in Cameroon. The scoping and drafting of the terms of reference were the responsibility of the team conducting the EIA; clear reference was not made to review by the public or to any other form of external review; EIA was sponsored by IUCN and not by the promoter; the formal review of the EIA was made by IUCN and not by MINEFF; and the decision was taken by the MINEFF! This situation was attributed to the absence of a formal national EIA procedure and insufficient practice of EIA in Cameroon (Bitondo, D., 2000). However, subsequent information obtained from Tekeu indicates that MINEFF does not have any record of this particular study. Prior to the establishment of the Inter-Ministerial Committee on the Environment in Cameroon, approval for the EIA used to be granted by the donor (World Bank, African Development Bank etc.), sectoral agency or MINEFF, depending on the particular case (Tekeu, J-C, 2004).

RESPONSES

The need to ensure a high quality of study reports has prompted EIA administrators to define minimum qualifications required for membership of EIA study teams. The Mozambican EIA legislation makes provisions for the accreditation of EIA professionals and South Africa and Uganda have put in place regulations for the certification and registration of EIA practitioners. The Uganda regulations of 2003 set minimum standards and criteria for qualification as an EIA Practitioner. The Regulations also establish an independent Committee of Environmental Practitioners whose roles are, among others, to regulate the certification, registration, practice and conduct of all environmental impact assessors and environmental auditors. The Committee also has powers to take disciplinary action as it finds necessary to ensure the maintenance of high professional standards, ethics and integrity of environmental practitioners in the conduct of EIA and Environmental Audits (SAIEA, 2003; Ecaat, J., 2004).

Targeted training of EIA consultants can help improve the quality of the study. A marked improvement in EIA reports was observed soon after the completion of training workshops for consultants in Ghana in 1995. Sixteen out of 18 EIS received by the Agency during the second half of 1995 were prepared mainly by the trained local consultants. By the end of 1995, 13 of the EISs had been approved, 60% of which had only minor queries. Today, local consultants prepare about 98% of EIA reports (Sampong, E., 2004).

Environmental concerns are now central in financing development programmes by banking and lending institutions. Lending and acquisition of loans is now largely conditional upon fulfilling EIA requirements (Ecaat, J., 2004). The inclusion of environmental risk within the management process of financiers can help enhance the quality of EIAs. For example, the environmental appraisal of all funded projects and programmes is an important management objective of the Development Bank of South Africa (DBSA). The Bank is involved as an Interested and Affected Party (I&AP) in the process of conducting impact assessments of projects funded by it. In this way, the Bank ensures that environmental risks and liabilities are addressed in

an acceptable manner. Additionally, the Bank always reserves the right to require an impact assessment to be conducted, even if it is not required by law (Heydenreich, C.R., 2004).

Box 3: Case study on the quality of Ghana's EIA Studies

A review of the quality of EISs submitted to the Agency between 1994-1999 was conducted in September 2001 as part of the implementation of the Ghana Environmental Assessment Capacity Development Programme using a list of 15 performance indicators including:

- Quality of Terms of Reference;
- Statement clarity, and quality of impact prediction;
- Evaluation of significance of impacts;
- Assessment of alternative options;
- Quality of mitigation proposed;
- Quality of monitoring proposed;
- Involvement of local people;
- Non-technical summary;
- Baseline study;
- Assessment of socio-economic and health issues;
- Inclusion of environmental management plan (EMP); and
- Length of reports.

The review made the following conclusions:

- Generally the EISs could be ranked as satisfactory, perhaps due to Ghana's experience with the EIA process, which dates back to 1990/91;
- Most (over 70%) of the reports were graded between C and D. The low grading resulted from weaknesses in the following areas and the lack of necessary skills, information and data;
- Terms of Reference;
- Health issues;
- Public Participation;
- Environmental Management Plans ;
- Decommissioning Plans;
- EISs produced by foreign consultants seem to be of a higher quality than the local ones. This could be as a result of their training and experience;
- Assessment of alternatives was generally weak; and
- Some progress appeared to have been made as far as public consultations in the EIA process is concerned in Ghana.

This situation has been greatly enhanced since 2001 with the implementation of the pilot phase of a 5-year comprehensive capacity development programme.

Source: Sampong, E., 2004

Review of the EIS

The establishment of clear guidelines and procedures with the necessary legal backing is a key factor for an effective review. Most African countries with the legal framework for EIA have guidelines in place for the review. However, all the capacity issues identified above as affecting the quality of the EIA, also affect the quality of the review.

TYPES OF REVIEW SYSTEMS

The review of the report is usually carried out by one or a combination of the following: the technical staff of the EIA administrative institution; an inter-governmental committee; a multistakeholder committee; and external reviewers, depending on the complexity of the study and expertise available.

In Zambia, the Environmental Council (ECZ) reviews all EIAs carried out in the country and the EIA regulations provide for the payment of EIA review fees (Official sources, ECZ, 2004). In Morocco, an inter-ministerial committee was established to review and advise the Minister of Environment on matters pertaining to the adoption of the EIS (Official sources, Ministry of Agriculture and Rural Development, 2004). Cameroon has the same arrangement. In the Gambia, a multi-stakeholder working group (the EIA working group) comprising government agencies, parastatals, private sector and NGO representatives, as well as affected and interested parties review the EIS (NEA, 1999). A similar scenario obtains in Uganda (Ecaat, J., 2004).

The different review systems have their advantages and disadvantages. For example, a single agency review system is not effective in taking into account the views and concerns of other stakeholders while a very broad based review systems can cause a lot of delay in the decision-making process as a result of varied and conflicting views and interests. There cannot be one-size fits all, but the system (even within one country) should be adjusted taking into account the different degrees of complexities and peculiarities of proposed undertakings.

FOCUS ON THE REVIEW SYSTEMS OF CAMEROON, TUNISIA AND GHANA

Cameroon's review system is grossly undermined by capacity constraints. The Inter-Ministerial Committee on the Environment, whose opinion and advice on the EIS is a legal requirement, is composed of representatives from diverse ministerial departments, thus representation is not on the basis of individual competence, expertise or experience on the subject (Tekeu, J-C, 2004). Further, due to lack of capacity, the concerned department in MINEFF is weakly involved in the review process. Its role is limited to transmitting in a passive manner, the advice of the Committee to the Minister. However, the Committee from time to time resorts to national expertise in very technical areas such as public health and toxicology, which helps greatly improve the quality of the review particularly those pertaining to complex environmental assessment studies.

Tunisia's ANPE is responsible for the review of the EIS, which is carried out in three stages. The first stage is an assessment of the conformity of the EIS to the elements identified in the terms of reference, and in the manner specified. The

second stage entails an in-depth verification of the quality of the EIS, particularly in terms of reliability, detail of information used, reference data, the relevance of studies conducted and their integrity as well as the relevance and validity of results and analyses. During the third stage, the conformity of the project to national and global requirements for environmental protection is evaluated. Assessment at this level entails a technical and scientific examination of the EIS and is done in consultation with different technical experts. For certain sensitive projects with significant impacts on the environment, ANPE has instituted two sectoral Commissions drawn from experts in different divisions of the Agency and which can be enlarged to include other government departments concerned with the project. ANPE may also call upon experts and scientists to assist in the evaluation of specific aspects of the project requiring specialized technical assessments.

Ghana employs a tiered review system. In addition to the EIA Technical Review Committee (EIA, TRC), two other review committees have been set up specifically to process and review small and medium-scale as well as mining projects. The latter has representations from the Mines Department, Minerals and Water Resources Commission among others, while the former comprises entirely of representatives from EPA departments and regional offices.

The rationale for setting up these committees is to reduce the load on the national review committee; facilitate quick decision-making on small and medium-scale activities; and provide specialized and specific attention to mining sector operations in view of the specific requirements of the sector, and the gravity of environmental issues involved. The review committees are mandated to co-opt relevant officials as and when necessary. In certain instances the support of international EIA institutions such as the Netherlands EIA Commission are solicited in the review of some major or controversial projects where there is limited national expertise. To further boost review capacity country wide, ten regional EIA technical review committees have been proposed. Currently, four are operational on a pilot basis (Sampong, E., 2004).

RATIONALIZATION

In Tunisia, the significant number of EISs being reviewed at ANPE calls for an increase in the number of dedicated staff. In addition to this, under the EIA law of 2001, small-scale projects will only be subject to requirements of “terms and conditions of operation” and not to the whole EIA process (see section on lessons learned). In this way, staff of the review department would be able to dedicate quality time to the review of projects with significant environmental impacts. This is somewhat similar to the tiered review system implemented in Ghana. In Egypt, the increase in the number of studies and the limited duration allowed for the review increased the strain on an already overstretched staff. This drew attention to the need to build the capacity of internal employees with a view to building a sustainable and trusted review system (Abul-Azm, A.G and Hassanein M., 2004).

EIA COST AND TIMEFRAME

The availability of adequate time and financial resources to conduct the study, particularly during the early stages of the process as well as the level of science that the EIS document contains, are also factors identified as having a bearing on

the quality of the EIA (Morrison-Saunders et. al., 2001). The project proponent normally provides funds for the study and in the case of donor supported projects; this is usually factored into project funds. EIA regulatory agencies usually charge for administration of the EIA process.

PROCESSING FEES

In Ghana, the proponent is required to pay processing and permitting fees prior to collecting the permit. The fees are determined based on the Environmental Assessment Fees Regulations of 2002. The level of fees is dependent on the scale of activity and the sector within which it falls. For example, large scale undertakings with total development cost exceeding US\$10 million are charged 0.1% of the total development cost, but in any case, not exceeding the cedi equivalent of US\$50 thousand. Twenty-five percent of this amount is paid for processing of the application as overhead costs, e.g. for site visits, review processes, advertisements, public hearings, post EIA monitoring, etc. (Sampong E., 2004). In Uganda, the EIA regulations provide for a schedule of EIA fees ranging from 0.1% to 0.5%, depending on the total value of the project. In Cameroon on the other hand, the developer pays a fixed sum to help sustain the activities of the Inter-Ministerial Committee. This sum has no bearing on the complexity or level of expertise that the study requires (Ecaat, J.C., 2004).

RELATIVE COST OF CONDUCTING EIA

The cost of EIA studies in Cameroon is left to the developer to decide (Tekeu, J.C., 2004). In Uganda, the price charged for conducting EIAs is largely variable and depends on the experience of the consultants and their negotiating skills. However, local consultants are generally paid about one tenth of what international consultants receive. One of the positive outcomes of the increase in the number of local EIA practitioners in Uganda is that the cost of carrying out EIAs has now dropped due to the inherent competition among the practitioners. The cost of EIA in Uganda cannot therefore be considered as a hindrance to development (Ecaat, J., 2004). To date, there has not been any study to estimate the cost of EIAs in Ghana (Sampong, E., 2004).

Sixty-nine percent of EIAs in Zambia have been commissioned by government, and are usually funded by donor organizations. Private developers constitute only 30% of all EIAs commissioned in Zambia. A survey of the expenditure on EIA of 107 companies in South Africa established the following: Twenty-five percent of these companies spent less than one per cent towards EIA in respect of the cost of establishing new activities; 13 percent spent between 2-4% on EIAs; and 69 percent were unsure about the percentage of costs attributed to EIA. In Namibia, the cost of the EIA as a percentage of the project cost range from 0.08 (water supply sector) to 5.2 percent (mining sector) (Tarr, P., 1999 in SAIEA, 2003)

TIMEFRAME

In the Gambia, Ghana, Uganda, and Cameroon, a mandatory EIA undertaking is legally required to take not more than 85, 90, 91 and 120 working days, respectively. However, in the Gambia and Ghana, where a public hearing is organized as part of the review process, this time limit may be exceeded. The review period excluding

public hearing in the Gambia is 30 days and 50 days in Ghana. In Uganda, the review period by lead agencies is 21 days and where a public hearing is required, an additional 28 days is allocated. The minimum time for the project brief review in Zambia is 77 working days, while an additional minimum of 122 working days is required for the EIA review. The review period in Morocco and Egypt is 68 and 60 days respectively.

In some cases, no time limits are set for undertaking studies or compiling reports and this is left to the Proponent to determine in consultation with the study team. A rigid time frame may not allow for much flexibility in accelerating the processing of urgent developments. This emphasises the importance of submitting the proposal for EIA consideration during the concept or design stage. An inquiry conducted in Ghana in 1998 revealed that there is a six-month interval between project registration and issuance of environmental permits. This period includes the time taken by consultants to prepare scoping and environmental impact statements and the review of the reports (GEOPLAN, 1998 in Sampong E., 2004). In Nigeria, project planners in the petroleum sector are reportedly adjusting to the reality of allowing for 18 – 24 months for the EIA studies, from initiation to the final approval by Federal Environmental Protection Agency (FEPA) and issuance of the EIS. (www.deh.gov.au/assessments/eianet/eastudy/casestudies/studies/cs85.html, 18-02-04).

Public participation

The legislation of many countries provide for engaging and involving the public throughout the EIA process, including the review of the study report. (Annex 3 and Tables 5 & 6). In those countries where public participation is not explicitly provided for in legislation, this is usually integrated into the process by virtue of a policy requirement or through other related legislation (Tunisia).

ENGAGING THE PUBLIC IN THE EIA PROCESS

In Ghana, the proponent is expected to make available copies of the scoping report for inspection by the general public in the locality of the proposed undertaking. During the implementation of the study, the proponent is required to initiate public information programme for the area likely to be affected by the undertaking (EPA, 2004). In the Gambia, upon the request of the NEA, the developer submits copies of the EIS to libraries, area councils and specific offices. Advertisements are then made for the public to review the report from these points and forward written comments to the NEA. Further, the public is encouraged to participate in auditing by reporting to NEA, any found or suspected activities that led or may lead to environmental mishaps (Official sources, NEA, 2004).

In Zambia, the media are instrumental in eliciting public comments on the EIA report, publicising public hearings, notifying stakeholders of decisions and informing them about the appeal process. In this connection, most developers conducting EIAs in Zambia invite the media to public meetings, and the issues are always well covered (SAIEA, 2003). Instruments of public participation in Ghana include mass media notices and advertisements of EIA publications (Sampong E., 2004).

There have been increasing demands by local communities and other interest groups for evidence of EIA having been conducted on new projects in their neigh-

bourhoods. Civil society pressures, especially through NGO advocacy for EIA on projects perceived to likely cause negative environmental impacts, has of recent become a prominent element of the Uganda EIA system. This pressure has meant that the rights of affected communities on matters such as compensation and re-settlement, are now on the forefront of discussions through the EIA process (Ecaat, J., 2004).

EFFECTIVENESS OF PUBLIC PARTICIPATION AND CONTRIBUTING FACTORS

Public participation in the EIA process is, in most cases, inadequate due to many factors. Time and money, literacy, language and public presentation, education, cultural differences, gender, physical remoteness, political and institutional culture of decision-making (Huges, 1998).

Mwalyosi and Huges (1998) reviewed over 30 EIA processes in Tanzania and found that only two incorporated a structured approach to public involvement as part of the EIA study and, in both cases, the level of involvement was “consultative” rather than “participatory. A further eight EIAs included some component of interaction between the practitioners and local people, but most of these interactions consisted of ad hoc discussions between practitioners and those local inhabitants that happened to be present when the EIA practitioners visited the project area. The remainder included only a cursory or highly unsatisfactory level of public involvement, or none at all.

An Africa-wide review by the World Bank of 26 EIAs conducted between 1992 and 1994 found that in 12 of 14 cases the EIA team merely informed the affected groups of what they were going to do (Mutemba, 1995 in Huges 1998). An earlier study of 35 World Bank-supported projects in Africa, found that only 10 had included some measure of public involvement, and only four of these met with the Bank’s operational requirements (Cook and Donnelly-Roark, 1992 in Huges 1998).

Apart from the EIA of the Chad-Cameroon pipeline, which involved a high degree of public participation by Cameroonian standards, public participation in the country is very weak due to weak administrative capacities and the absence of regulations and procedures including, inter alia, public participation governing EIA (Tekeu, J.C., 2004). Public participation in the EIA process in Nigeria is hampered by the absence of the necessary provision under the EIA legislation, and illiterate and poor communities who are vulnerable to monetary inducements (Echefu and Akpofure, 2003). In Ghana, the non-translation of EISs into local languages during public hearings affects the level of participation (Sampong, E., 2004).

In Zambia, it is observed that although women attend public meetings, decisions are still largely taken by men. Inadequate public participation in Lesotho has been attributed to a lack of appreciation of the role of EIA in development and insufficient information about proposed development projects, stemming from limited public debate on development issues. Conflicts between stakeholders have been experienced during public participation. The causes identified for these conflicts in Mozambique were, inadequate definition of the intent of public participation, the absence of clearly defined roles, responsibilities and duties of the various stakeholders, or the lack of minimum performance standards (SAIEA, 2003).

Another shortcoming in the public participation process is the method and mode of soliciting views from communities. Quite often, communities most likely to be affected by a project, either negatively or positively are not mobilized enough to champion their own cause. In some instances, projects which actually gain the support of communities in Uganda, are portrayed by “those who claim to speak on behalf of communities” as not welcomed. This sends distorted messages simply because the affected community is disadvantaged and does not have access to the appropriate forum to express their views. Another problem relating to public participation in Uganda is the absence of post-decision communication to the public, and how it relates to views expressed by the public during the consultation process. This shortcoming is attributed to administrative constraints related to inadequate human resources (Ecaat, J., 2004). Table 8 provides a summary of an assessment of public participation at various stages of the EIA process based on Uganda’s experience.

Table 8: Effectiveness of public participation at different stages of the EIA process in Uganda

Stage of involvement	Nature of Involvement	Remarks	Evaluation of effectiveness
Public involvement during the project conceptual and planning stages and before actual conduct of EIA	Informing/notifying the public about a proposed project and seeking their views	Most developers do not seem to appreciate the value and need of seeking any public opinion about their “private” developments and most often even communities near the project site will not know about an impending development not until planning is in very advanced stages.	Public involvement at this stage is very minimal and hardly sought for by developers.
Public involvement during the conduct of the EIA	Participation in scoping exercises Participation in open public meetings and public hearings on project	Where a project being subjected to EIA is of a highly technical nature, the scope of public involvement is often undermined by limited public knowledge of issues involved. Developers sometimes do not see the need to consult the public because they perceive the issues to be beyond the understanding of such public. This too limits the extent to which public involvement is deemed necessary.	The choice of the most “critical” public to consult has often been a limitation to involvement at this stage. While public participation is provided for, passive attitude by the public has meant that only a few vocal NGOs and interested member of the public actually do participate.
Public participation during EIA review	Participation through providing written or verbal comments on EIA reports Making relevant EIA documents available to any interested members of the public in specified places Participation in public hearings	Some EIAs are written in a highly technical language difficult for the general public to comprehend. To-date forums that have given opportunity to the public to participate in public debates on EIAs have attracted the same faces. This implies that while we seek to interest the rest of the public, public participation seems to zero down on individual interest on the subject under discussion rather than necessarily the availability of the opportunity.	The means of making EIA documents available for public scrutiny is not adequate given that places of safe display are not necessarily readily available. Attempting full public disclosure among an uninterested public may make EIA review more expensive for no added value. It remains a challenge to generate interest of the public to participate and to find the best method to make them participate
Public participation during and after decision making	Communicating the outcome of EIA decisions to the public	In order to inform the public on the nature of decisions taken on EIAs, and especially after their participation at earlier stages of the EIA process, participation at this stage would minimise public suspicion on the decisions taken.	There is limited disclosure of decisions to the public. The administrative demands of disclosure and public involvement at this stage are constrained by man-power demands on the often ill-staffed EIA sections.

Source: Ecaat, J., 2004

IMPORTANCE OF PUBLIC PARTICIPATION IN THE EIA PROCESS

According to the findings of a case study in the oil and gas industry in Nigeria, the conflict in the Niger Delta is, among other causes, due to non integration of social concerns in the impact assessment process thus prompting the call for an integrated impact assessment that would also address conflict issues. On the other hand, a similar case study conducted in Casanare, Columbia revealed that communities are consulted during the impact assessment process and social investment is targeted at those that are most affected by the operations, thus averting potential conflicts (Egbeleke, A.A., 2004).

Effective community participation in the impact assessment process can be assured through the conduct of SIA. In Nigeria, SIA is implicitly provided for under the EIA Decree and guidelines which makes reference to “the assessment of socio-economic / ecological status of the project area and the production of a report”. Guidelines have however not been established for SIA. Individual industries, therefore, prescribe their own format with no uniform and systematic methodology or approach. This can explain the poor integration of social concerns in the oil and gas industry in the country (Akpofure and Ojile, 2003).

In spite of the shortcomings in the application of SIA in Nigeria, it was found that since its introduction in project development, some developers have come to appreciate that SIA, when properly executed, could be a strong and powerful public relations strategy for soft entry / landing into project sites (Akpofure and Ojile, 2003). This is supported by the conclusions of a case study on public participation in the EIA process in Ghana to the effect that public participation in environmental assessment review is essential, and can lead to substantial benefits for both the proponent and affected community. Where it is ignored, it can lead to conflicts and problems for project implementation, acceptability and sustainability (Appah-Sampong, 2003).

EXAMPLES OF COMMUNITY AND PUBLIC PARTICIPATION INITIATIVES

An important initiative launched in Eastern Africa is the Community- based Impact Assessment Network for Eastern Africa (CIANEA) aimed at building capacity of communities in environmental assessment and sound design for small-scale activities. The Network presently enjoys membership of 40 organizations from seven countries in the sub-region and has developed a website for the promotion of awareness and sensitization of community-based EIA (Kodiaga, T.J, 2004).

Further, SAIEA is currently managing a project called “Calabash” which seeks to improve the ability of civil society to participate in EIAs in the SADC region. Under the project, a detailed analysis of six case studies of EIAs, where public participation was used effectively in the SADC region will be conducted. This will form the basis for the preparation of a procedural handbook and for use in training activities (Official Sources, SAIEA, 2004).

EIA and decision-making

EIA is both a planning and a decision making tool and helps to avert costly impacts of development projects to the environment and communities. EIA has led to the adoption of more economically viable development projects. In Uganda, over 950 projects have so far been subjected to EIA. Out of this, no less than 800 have been approved for implementation; while up to 20 have not been approved as their evaluations confirmed that they would have had detrimental impacts to the environment if implemented in the proposed location or form (Ecaat, J., 2004).

In Tunisia, it is a legislative requirement to seek the views of ANPE on all projects subjected to EIA, prior to their realisation. An EIA approval is a necessary condition for the granting of an operating authorization. In practice, once ANPE submits an unfavourable view of a project (on average, 3% of applications are viewed unfavourably), the proponent cannot obtain the authorization to implement the project. Furthermore, if the conditions of the EIA permit are not respected, the operating authorization can even be revoked (Elloumi, M.J., 2004).

In Ghana, EIA has been known to influence institutional decision-making. A needs-assessment survey carried out in 2001 revealed that most of the institutions (76.2%) surveyed depended on EIA for decision-making. A good proportion (66.7%) indicated that the EIA laws and procedures affect their normal operations. Apart from influencing institutional decision-making, EIA has greatly influenced project siting, design and implementation in Ghana. Notably, the EIA of the Takoradi thermal power project led to significant design modifications particularly in the kind of cooling system adopted which helped to save an important fish spawning ground in the Western Region of the country (Sampong E., 2004).

However, experiences with EIA in many other countries have shown that it does not significantly influence decisions. It acts largely as a mitigation exercise because the option of stopping projects is hardly considered. Many developers, including government entities, are yet to fully appreciate the value of EIA, which they consider as stumbling block to economic development (IUCN, 2001). This is due to the fact that many projects are considered to be of national, political and strategic importance and these imperatives override any serious consideration of any potential negative environmental or social impacts (SAIEA, 2003). A case study on a proposed shrimp farm in Tanzania demonstrates that economic gains continue to override fundamental sustainable development issues. Despite being rejected for social and environmental reasons, the project was approved by government. The conclusions of the case study were that an effective and sustainable EIA regime is dependent, among other factors, on political will, effective environmental legislation, institutional support, proper development objectives and trained personnel (Katima, 2003).

PUBLIC PRESSURE AND DECISION-MAKING

Public pressure, especially from an informed and affluent public, has proved to be effective in stopping developments with adverse social and environmental impacts. The construction by Shell Company of two new filling stations on each side of a highway in a residential area in South Africa would have proceeded in spite of a number of irregularities, had it not been for intense public pressure. The proposed

siting of the two stations contravened the legal criteria set for the siting of petrol stations and the requirements for public participation. The matter reached the national television stations and would have culminated in a presentation at WSSD, had Shell Company not withdrawn its applications on time. In this instance, the public was well informed and had adequate resources to address and take on a big company. The outcome could have been different if the applications were made in a less affluent area (Friend, J.F.C., 2004).

Similarly, in Uganda, pressure from communities regarding environmental problems associated with poor location of projects led planning authorities to take action against developers. Civil society pressure has also influenced decisions regarding developments that encroach on sensitive ecosystems such as forests and wetlands. An example is the Kalangala Oil palm project, which was proposed to be implemented in a gazetted forest reserve. The proposed development could not go ahead partly due to civil society pressure. It was not until land was acquired out of the forest reserve that the project took off (Ecaat, J., 2004).

PRESENTATION OF THE EIS AND SUGGESTION OF ALTERNATIVES - IMPACT ON DECISIONS

The manner in which the EIS is presented can greatly contribute to the influence the EIA process has on decision-making. In Cameroon, an EIA study on the construction of the Mokong dam to solve water problems in one part of the country concluded that the high cost of mitigation and monitoring measures did not render the project sustainable. The EIS recommended that a study of alternatives for better management of natural resources be conducted and presented to decision makers. It was therefore recognized that the solution to the water problem in this part of the country was not necessarily through the construction of a dam. The complexity of environmental interactions existing in water-related issues in the region called for an encompassing approach that would lead to integrated management plans and sustainable use of the available resources (Bitondo, D, 2000).

Two factors played a decisive role in the case of the Mokong dam: public participation; and the manner in which the results were presented. The public and key stakeholders were involved in the study from the beginning and the report was therefore a collective product. Further, impacts and mitigation measures were expressed in economic terms and this was crucial for decision-making. In effect, although the economic analysis was simple, it gave concrete value to the proposals (Bitondo, D., 2000). Tekeu, J-C, 2004, noted that the absence of monetary value for environmental resources with ecological, cultural and archaeological significance is a major difficulty in ensuring their optimal utilization. Thus the observation by Ecaat, J., 2004 to the effect that skills in environmental economics and valuation of natural resources should be developed, and its application promoted in the EIA process cannot be more valid.

Nevertheless, the “no development option” is very difficult to consider in an under-development context. An example is an EIA for a proposed power line to an eco-tourism development zone in KwaZulu-Natal, South Africa. The proposed power line route passed through a sensitive, and in parts, pristine environmental area, and there was opposition from environmental action groups. However, there were also urgent and basic human needs to be met. The power line would improve the

living conditions of the local rural community, thus making this the overriding factor in reaching a final decision on the construction of the power line. The emphasis of the assessment therefore shifted away from consideration of the “no development option” versus the development option, to the selection of an optimum route for the power line and the recommendation of environmental management strategies to mitigate negative environmental impacts (Diab, R.D. et al, 1999). Careful route selection and a comprehensive EMP became the central features of the assessment process and were pivotal in a successful outcome acceptable to all parties.

In 1997, NEMA of Uganda reached a decision not to allow the use of herbicides for the control of water hyacinth in Uganda’s water bodies due to its likely ecological, economic and social implications. These were in the form of the likely resulting ecological imbalance, loss of revenue from fish exports and direct health impacts to communities, should harmful chemicals enter the food chain. Other alternative control options such as mechanical and biological weed control were however permitted. (Ecaat, J., 2004).

Implementation of the EMP & follow-up

Another critical issue in the EIA system is the implementation of the EMP to ensure that the conditions of the EIA Permit/ License are adhered to. EIA follow-up by the regulatory authority is normally done through monitoring, auditing and evaluation. Follow-up can ensure that the expected benefits of EIA forecast during the pre-decision stages of the process are achieved during project implementation and management. Furthermore, it enables the lessons learned from experience to improve future practice of EIA. Without follow-up, EIA may be little more than a paper-based exercise to obtain project approval (Morrison-Saunders, A., et al., 2001).

LEGAL PROVISIONS FOR EMP AND FOLLOW-UP

In view of the importance of follow-up, many countries have legislated for, or have put in place, procedures to guide the implementation of the EMP or conditions of the permit and for monitoring compliance with these conditions. For example:

An important element of the Ugandan EIA process is the requirement to define the framework for post EIA monitoring. All developers whose projects have been subjected to EIA are required to ensure that mitigation measures and actions as approved through the EIA process are adopted and implemented. The developer is required to conduct self-monitoring, self record-keeping and self-reporting. The information gathered through monitoring is stored and made available during inspection. The developer is also required to take all reasonable measures to mitigate any undesirable environmental impacts not contemplated in the EIS, and accordingly, report on those measures to the lead agency and to the Authority. The responsible lead agencies, in consultation with NEMA, are also required to monitor compliance with implementation of activities to ensure that the design criteria, mitigation measures, and monitoring requirements, as recommended through EIA, are implemented.

Ghana’s EPA requires operators to submit EMPs within 18 months of commencement of operations and thereafter, every 3 years. The Agency has the responsibility

to determine the form in which the plan shall be presented and the adequacy of the plan through an intersectoral review process and the conduct of verification visits to ensure compliance. Operators are also required to submit monitoring reports at a certain agreed frequency. Furthermore, operators are required by law to submit annual environmental reports, which are reviewed by the Agency. Following the issuance of an environmental permit, operators are required by law to obtain environmental certificate from the Agency within 24 months of commencement of operations. This certificate will only be issued upon confirmation of the actual commencement of operations, acquisition of other permits and approvals, compliance with stipulated conditions, and submission to the Agency of its first annual environmental report.

In Tunisia, once ANPE submits a favourable rating of the EIS, the lead agency issues the authorization, which includes mitigation measures required to minimise negative environmental impacts at each stage of project implementation. Compliance monitoring is the responsibility of ANPE and the lead agency (Elloumi, M. J., 2004).

In spite of this, implementation of the EMP and follow-up is more often than not neglected, and grossly ineffective in most countries. This is attributed to capacity constraints and the fact that resources for its implementation are usually not built into the project.

EFFECTIVENESS AND CONTRIBUTING FACTORS

In Uganda, during inspections conducted by NEMA, it is not uncommon to find that some developers and project managers do not even know where the EIA reports are. In certain instances, the developers take advantage of the weak enforcement capacity of NEMA and omit some of the critical recommendations of the EIA permit (Ecaat, J., 2004). Similarly, in Tunisia due to human resource constraints, monitoring is not done on a systematic basis. Isolated control checks are carried out on those facilities with automated control systems such as electricity generation and cement factories. Thus, due to weak follow-up, acceptable implementation of the conditions of the authorization cannot be guaranteed. It is for this reason that ANPE is studying the possibility of including in the contents of the EIA study, a mitigation and monitoring plan that the developer should adhere to, and that employs the principle of self inspection (Elloumi, M. J., 2004). Effective follow-up in Ghana is also hindered by the lack of adequate resources. (Sampong, E., 2004).

The situation is worse in Cameroon where acute shortage of human and material resources and the absence of a follow-up and evaluation strategy result in the total non involvement of the EIA administrative authority in the follow-up and evaluation of the effectiveness of measures taken to mitigate impacts, and environmental monitoring in general. Thus, the conduct of environmental assessments in Cameroon would appear to be merely a legislative or regulatory formality (Tekeu, J-C, 2004). Follow-up on the implementation of the EMP for the Chad-Cameroon pipeline may be cited as an exception. A monitoring team comprising government agencies, NGOs and an international consultative group was established to ensure the implementation of compensation and mitigation measures. A monitoring and evaluation plan was drawn up for this purpose, and related programmes are being implemented (ibid).

In Zambia, the lack of staff at the regional level is cited as the main reason for not implementing post-assessment environmental audits. In South Africa, there is no provision in the legislation and no initiatives to monitor, collect, record and review the implementation of EIAs. There are also no systematic processes at national and provincial government level to record, collect, document and review the performance of EIA administration and practice. In the six provinces of South Africa, the professional staffs spend all their time reviewing and processing applications with no time left for monitoring and enforcing conditions of the approval (SAIEA, 2003).

The format in which the mitigation measures / plan is presented is an important contributing factor as to whether the plan is implemented or not. A review of EIA study reports in Uganda revealed that most mitigation measures are presented in a manner that does not commit the project developers to implementing them, but are mostly presented in recommendation form. For example, most EIAs would present mitigation measures as follows: “Special attention will be paid to the presence of habitat species” or “The developer will leave small patches of natural vegetation” or “The tree/plant species that are important for butterfly conservation will be protected from pesticides/herbicides”. Thus the developer sees these as mere proposals and not measures that must be implemented (Ecaat, J., 2004).

A review of 30 projects with EIA approvals executed by Shell Petroleum Development Company- Eastern Division (SPDC-E), Nigeria, between 1997 and 2002 revealed that only three implemented the EMP as stipulated in EIA approvals obtained for the projects. Further investigation showed that the practice among project teams was to “forget” the EIA report on the shelf as soon as the approval for project development was obtained. The condition for the approval, one of which is the implementation of the EMP, is also “forgotten” along with the report (Dada, O.J. and Akpandara, O., 2004).

This situation was attributed to the following: poor handing over from the project implementation team to the asset operation team – provisions attached to the EIA were not highlighted in the course of handing over; the size of the EIA report was usually a put-off and was not read by the asset team; EMPs were generic and lacked details on how it is to be monitored; and lack of prior knowledge of the cost implications of monitoring the EMP. These findings prompted changes to EMP content and presentation with a view to making them user-friendlier and enhancing implementation effectiveness.

Integration of the EIA System into an overall Environmental Management System

The robustness of an EIA system is directly correlated with the country's ability to avert environmental damage. However, an EIA system alone, cannot guarantee a risk free environment. Many countries with EIA systems have also established pollution control and other environmental protection systems. It is important to ensure that these systems complement each other with a view to minimizing risk to environmental damage. In this regard, it is encouraging to note that some countries are taking steps to promote this complementarity.

To complement and support the EIA process in Ethiopia, the Environmental Pollution Control Proclamation was passed in 2002. The proclamation provides for industrial control regulations, emissions and ambient standards. Ten guidelines on industry related matters were also prepared. These instruments were scheduled to be presented to the Council of Ministers for endorsement (Official sources, EPA, 2004). Similarly in Ghana, guidelines for environmental quality and discharges support the implementation of the environmental assessment system.

An evaluation was carried out to determine which countries' national EIA systems in the METAP region expose them to risk of serious environmental damage. This applied both to major projects in the World Bank's Category A, and to smaller ones in Category B, for which EMP play a key role. The classification of shortcomings as major or minor, and the evaluation of risk, were based on subjective judgements. Nonetheless, it was opined that the results were a fair reflection of the comparative status of the countries' EIA systems and the work that still needed to be done to make EIA systems efficient and effective. Table 9 shows a summary of the results for the North African countries of METAP.

All countries had major non-conformities in their EIA system, but these were greater in the case of Algeria, as opposed to Egypt, Morocco and Tunisia. Minor non-conformities were common to all four countries. This indicated that the EIA systems of the countries were inadequate to respond to environmental risks as stand alone systems, and justified the need to complement them with others such as integrated pollution control (CITET-METAP, 2003).

Overview of the institutionalization and application of SEA in Africa

SEA is a useful policy instrument that integrates environmental and social concerns at policy, plan and programme levels. It is good at anticipating and addressing cumulative impacts over time and space, and in identifying alternatives. The institutionalization of SEA to complement EIA within an overall sustainable development framework is crucial to ensuring that environment and social well being are adequately safeguarded.

LEGAL PROVISIONS FOR STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) IN AFRICA

Apart from Ethiopia and Kenya, no other African country has a legal framework for SEA in place. Ethiopia's EIA Proclamation of 2002 provides for the assessment of policies, strategies, programmes, laws and international agreements, while part IV of Kenya's Environmental (Impact Assessment and Audit) Regulations of 2003, provides for SEA. Ethiopia was yet to prepare procedures and guidelines on SEA. It is noted that Namibia's draft environmental bill also provides for SEA (Official sources,

Table 9: Indicative evaluation of country risks - North Africa

Significance	EIA System Characteristic	Algeria	Egypt	Morocco	Tunisia
*	Enabling legislation for EIA				
	Detailed legislation for EIA			1	
*	Guidelines	2	2		2
	Consultation with other government bodies			2	2
	Pollution norms	2	2	2	2
*	Screening categories	1		2	
*	Screening method	1		2	
*	Scoping method	1		2	
	Content of EIA report	2	2	2	2
	Non-technical summary	2		2	2
	Alternatives	2		2	2
*	Environmental Management Plans	1	1	1	1
	Transboundary Impacts	2	2	2	2
	Global Impacts	2	2	2	2
*	Review process	2			
*	Public participation	1	2		2
*	Access to EIA reports		1		1
	Decision-making responsibilities	2			
*	Follow-up	1	2		
*	Expertise for conducting EIA	2			
	Number of major non-conformances	6	2	2	2
	Number of minor non-conformances	10	7	10	9

Source: Adapted from CITET-METAP, 2003

*Essential characteristics; 1-major shortcoming; 2 – minor shortcoming

NB: The results are indicative only. They apply at the time the assessment was carried out and do not reflect subsequent improvements.

Department for Environmental Affairs (DEA), 2004) and South Africa's new draft IEM regulations make provision for screening, monitoring, auditing and environmental management systems. If implemented, these regulations will also apply to policies, plans and programmes (SAIEA, 2003). The provision for SEA in recently enacted / drafted legislation is a demonstration of countries' appreciation of the importance of this policy tool.

In some countries even though SEA is not an explicit legislative requirement, it is implied in provisions, which require that environmental assessments be carried out on policies, plans and programmes. For example, the National Environmental Management Act (NEMA) of South Africa makes provision for the development of assessment procedures that aim to ensure that the environmental consequences of policies, plans and programmes are considered Department for Environmental Affairs and Tourism (DEAT), 2000. Zambia's EIA regulations also require that an environmental assessment be carried out on programmes and plans which may be extrapolated into an SEA requirement (Official Sources, ECZ, 2004), while Ghana's environmental assessment regulations covers plans and programmes in its definition of undertakings to be subject to EIA (Sampong E., 2004).

In other countries, SEA is implicit in the schedule of activities for which EIA is required. Such is the case for the EIA legislation of the Gambia and Lesotho. In both countries, the schedule on types of activities for which EIA is required include: major

changes in land use; designation of new townships, villages and residential areas; re-zoning; declaration of development areas; formulation or modification of forest management policies; formulation or modification of water catchments management policies; and policies for management of ecosystems, especially by use of fire. The case of Mozambique is similar. The annexure to the legislation containing the list of identified activities include both programmes and projects.

Some SEA Experiences

In spite of the absence of explicit SEA legislation in almost all African countries, SEA is carried out either voluntarily or because of donor conditionality. In general, donor agencies have not introduced formal, systematic procedures for SEA, but rather chosen to require the use of SEA on a case-by-case basis depending on the needs of the specific programme or project. A 1997 OECD/DAC review found that 19 of the 23 donors/lenders investigated had undertaken SEA in some form (World Bank, 2002).

The application of SEA in developing countries has been questioned given the problems that countries are experiencing in institutionalizing EIA at project level. It is feared that many countries in Africa will consider SEA as yet another potentially constraining and resource demanding burden on their economic growth and industrialization process. In North Africa, considerations for establishing SEA systems are greatly influenced by progress made in regard to the establishment of a functional EIA system. Some countries in North Africa, e.g. Tunisia, have already made considerable progress in the establishment of an EIA system while others, like Morocco, are still in the early stages. For the first set of countries, the introduction of SEA was among the issues identified for improving the EIA system while countries in the second category recognize the importance of SEA, but felt that they needed to overcome the daunting task of putting in place an effective EIA system before considering the introduction of SEA (CITET-METAP, 2003).

The limitations of project level EIA could be a driving force in the institutionalization of SEA in Africa. In Mauritius, an EIA conducted on a proposed dam (midlands dam project) demonstrated that project level EIA is not adequate in dealing with broader environmental management issues. The use of SEA and the introduction of Regional Environmental Plans (REP) were recommended to address the cumulative and inter-temporal nature of impacts (Jogoo, 2003).

Similarly, in South Africa, the limitations of project specific EIAs provided a strong justification for the introduction of systematic SEA in the country thus resulting in many SEAs being conducted on proposed plans, policies and programmes. These included: SEA on Stream Flow Reduction Activity (SFRA) in 1997, which resulted in the development of the Negotiation and Decision Support System (NDSS) for the sustainable development of SFRA that acknowledges other water uses (Steyl, 1997); SEA on Durban South Basin to resolve the conflict between industrial and local community needs culminating in the preparation of a strategic plan for the area; and SEA of the Northern Metropolitan Local Council to ensure that environmentally-sensitive and appreciated areas are protected in the future, and areas that are unsuitable for development identified.

Based on the practical experience in conducting SEA in South Africa, generic principles as well as SEA guidelines were developed. The guidelines are aimed at promoting a common understanding of SEA and assist in the development of best

practice in SEA (DEAT, 2000). The guidelines are considered a self-regulatory tool; that is, no particular authority would have legal responsibility for undertaking or approving SEAs.

Case studies conducted on SEA practice in South Africa revealed that SEA practice is well established and on the increase. This expansion of SEA practice has been largely voluntary, which suggests that it must be adding some value to decision making (Retief et.al., 2004). Thus, the observation that initiation of SEAs would arise from the benefits they provide to decision-makers cannot be more valid.

In Ghana, although there is no explicit provision in the EA regulations for SEA, there has been no apparent difficulty in applying the tool. SEAs that have so far been conducted include: Village Infrastructure Project (VIP); Agricultural Service Sector Improvement Programme (ASIP); Natural Resource Management Programme (NRMP); National Trunk Roads Maintenance Programme; Ghana Poverty Reduction Strategy (GPRS); Regional Water Supply Programmes; and the Tema Export Processing Zone – Industrial Park Enclave. The SEA conducted on the Ghana Poverty Reduction Strategy (GPRS) provided a major opportunity in building the capacity of 110 District Assemblies in sustainability appraisal methods and over 100 officials of 25 ministries, government departments and Agencies in SEA principles and methodologies at the regional and national level (Sampong, E., 2004). This is discussed under the section on success stories/good practices below.

Box 4: South Africa's Substantive and Procedural SEA principles:

Substantive SEA principles:

- SEA is underpinned by sustainability
- SEA identifies the opportunities and constraints, which the environment places on the development of plans and programmes
- SEA sets the criteria for levels of environmental quality or limits of acceptable change
- SEA is based on the principles of precaution and improvement

Procedural SEA principles:

- SEA is a flexible process, which is adaptable to the planning and sectoral development process
- SEA is a strategic process, which begins with the conceptualisation of the plan or programme
- SEA is part of a tiered approach to EA and management
- The scope of SEA is defined within the wider context of environmental processes
- SEA is a participatory process
- SEA is set within the context of alternative scenarios

Source: DEAT, 2000

The application of SEA to Ghana's GPRS is expected to dramatically influence its application at the national, sectoral and district levels as well as engender capacity development in this area. Given this positive trend, it is felt that SEA does not need to be made a legal requirement in Ghana. Rather, efforts should be directed at developing practical guidelines and building capacity (Sampong, E., 2004).

In Uganda, there is limited capacity and experience within NEMA as regards the application of SEA. Nonetheless, the integration of environmental assessment within the broader framework of development has recently been initiated on a number of government programmes. These include the Plan of Modernization of Agriculture and the Northern Uganda Social Action Fund (NUSAF), among others. It is expected that lessons learned from these initiatives would be invaluable to the development of SEA in the country (Ecaat, J., 2004).

Since 1996 when the enabling legislation for EIA was enacted in Cameroon, to September 2004, five SEAs have been undertaken in the country. The Government commissioned all 5 with the assistance of development partners. While three were exclusively conducted by international experts, the other two were conducted in partnership with local experts. Three, namely; transport sector programme and road maintenance programme (I) and (II) were in the transportation sector, while two, namely; national programme for participatory development and forest- environment sectoral programme, were in the rural development sector.

Table 10: Examples of SEAs conducted in other African countries

Country	Description of SEA	Outcome	Source
Zambia	Developments around Victoria Falls in 1995	Provided information and recommendations, which were used to prepare a skeleton management plan for the area as a contribution to the overall master plan for the area.	Sadler, 1996
Morocco	Large-scale irrigation sector	Provided an analysis of legal, regulatory and institutional aspects of environmental impacts in the irrigation sector including recommendations addressing environmental protection and public health sector enhancement.	World Bank, 1993
Ethiopia	Small Scale Irrigation (SSI) sector	Recommendations for the design of environmental improvements into these activities, thereby avoiding the need to mitigate or compensate for adverse impacts.	USAID/CRS, 1999
Ethiopia	Road Sector Development Programme (RSDP) 1997-2007	Production of a report containing detailed recommendations to avoid and mitigate against potential environmental impacts of road sector projects and to inform the planning and design process of future road projects. Projects with significant benefits or adverse impacts will be identified and necessary alterations made.	World Bank 2002
Burkina Faso	The third Poverty Reduction Support Credit (PRSC-3)	Recommendations for the preparation of a monitoring and technical assistance plan. This plan will allow the Ministry of Environment to help the project implementation units of the sectoral investment projects in the implementation, monitoring, and supervision of their respective EMPs.	World Bank, 2003
Guinea	Programmatic environmental assessment of co-management of reserved forests in Guinea	Facilitated the identification and understanding of environmental issues early in the planning cycle for co-management in these and future target forests; designed environmental improvements into these activities thereby avoiding the need for mitigative or compensatory measures related to adverse impacts.	USAID, 2001

chapter five

CASE STUDIES ON EA: GOOD PRACTICES/SUCCESS STORIES AND LESSONS LEARNED

The experiences documented throughout the report and in particular, section 4, provide examples of good practices, successes registered and lessons learned in the process of institutionalizing and implementing EIA in Africa. The following provide more detailed information on selected cases aimed at enriching experience sharing and knowledge networking. More case studies are available in individual country reports posted on the SDD website (www.uneca.org/sdd).

Good Practices and Success Stories

The good practice cases presented below provide experiences of countries in conducting environmental assessments that adhere to EA requirements, including guidelines and procedures in the given country, or that are deemed to satisfy environment and social objectives in the general sense. The good practices could be reflected in the whole study or part of the study for example, public participation, the review process, decision making and follow-up. Another consideration could be the innovativeness represented by the study or part of it.

SEA of the Ghana Poverty Reduction Strategy (Sampong, E., 2004)

Context

The Ghana Poverty Reduction Strategy (GPRS) was first published in February 2002 and updated in February 2003 with the aim:

“To create wealth by transforming the nature of the economy to achieve growth, accelerate poverty reduction and protection of the vulnerable and excluded within a decentralised democratic environment”.

The strategy is organised around five main themes as follows:

- The macro-economy;
- Production and gainful employment;
- Human resource development & basic services;
- Vulnerability and the excluded; and
- Governance.

Ministries, Government Departments and Agencies (MDA's) have developed their respective policies and programme outlines under each theme. District Assemblies have prepared Medium Term Development Plans based on the GPRS

Ghana Poverty Reduction Strategy (GPRS) & the Environment

The GPRS acknowledges the causal link between the state of the environment and poverty. Environmental degradation is referred to as a contributory cause to poverty particularly because the poor depend largely on natural resources for their livelihoods and health needs. The poor are also most vulnerable to the effects of environmental disasters such as floods, droughts, epidemics etc.

References are also made to the need for EIA and audits to be carried out, to ensure that growth arising from the GPRS is environmentally sustainable. Overall however, the GPRS treated the environment as a sectoral or “add on” issue rather than a cross cutting one. Consequently, the environmental impacts of the policies and strategies for delivering growth and poverty reduction presented in the GPRS were not adequately addressed.

In light of the above, the Environmental Protection Agency (EPA) of the Ministry of Environment and Science proposed that an SEA of the GPRS should be undertaken in collaboration with the National Development Planning Commission (NDPC) in order to:

- Assess the environmental risks and opportunities presented by the implementation of the policies of MDAs (including the Districts) and other stakeholders as indicated in the GPRS.
- Identify appropriate mechanisms to ensure that sound environmental management contributes to sustainable economic growth and lasting poverty reduction in Ghana.

The EPA and the National Development Planning Commission initiated the SEA as a good practice. The assessment received further backing when Ghana's development partners made it a conditionality for donor support and the HIPC programme. It was executed within a collaborative framework involving many stakeholders with support from the Royal Netherlands Government and technical advice from local and international consultants.

Nature and Scope of the SEA

The SEA of the GPRS was organized in three phases. The process began with a scoping phase conducted in June 2002 with the assistance of the Netherlands EIA Commission. The main recommendations of the scoping phase were guidance notes to be applied in a Pilot SEA (Phase 1).

Phase 1 covered the period January – March 2003 and represented the start-up phase designed to consult, inform and draw in key actors (especially Ministries and Districts Agencies), define priorities, and develop a strategic framework and work plan for the implementation of SEA in the Ghanaian context. During this phase, poverty reduction policies of selected MDAs were assessed for environmental opportunities and risks using basic tools such as checklists and matrices. At this stage some of the policies of the MDAs were revised and improved to make them more sustainable. This phase culminated in a workshop attended by all the key stakeholders. The main recommendation of the workshop was that the SEA should proceed immediately in order to let the results influence the budget processes of June 2003 and the GPRS review in March 2004.

Phase 2 was carried out between May 2003 and May 2004 and broadened the scope of application of the SEA and ensured greater participation by the key actors involved in development planning. During this phase, the SEA was applied at National, Regional and District levels.

Phase 3 was yet to be implemented and is intended to continue to develop and refine GPRS policies, but is expected to be focused on more detailed and specific interventions (e.g. full pilots of district appraisals, and sector SEAs of water catchment management, waste management, etc. together with a series of case studies).

The SEA Process

Methodology for assessing the GPRS

The methodology for assessing the GPRS was influenced by the need to:

1. Involve all actors and sectoral agencies in the complex field of poverty reduction and environment in order to build up mutual understanding and ownership of the results; and
2. Provide timely results of the SEA in order to influence decision-making processes within the GPRS.

The stages in the assessment of GPRS policies were:

1. Review of the GPRS;
2. Screening the GPRS;
3. Scoping the GPRS;
4. Sectoral and thematic reviews of policies; and
5. Analysing and prioritising policies from the standpoint of poverty-environmental linkages.

Stage 1 Review of the 2003 GPRS

The review of the 2003 GPRS involved a reappraisal of earlier work to evaluate the extent to which the environment had been considered in the GPRS discussions, analysis and policy formulation. Five steps were involved:

1. Identification of key words bearing on poverty-environment;
2. Scrutiny of the statements containing key words;
3. Analysis and classification of the statements;
4. Assessment of environmental risks and opportunities; and
5. Identification of relevant MDAs to be targeted in sector studies.

Stage 2 Screening

The screening confirmed the coverage of the SEA process and screened out potential areas of investigation that were beyond the terms of reference of the SEA.

Stage 3 Scoping

The scoping process had three main objectives:

1. Identify GPRS policies that had environmental risk and opportunities;
2. Identify MDAs that needed to be consulted during the sector studies; and
3. Identify MDAs that would propose new initiatives in the GPRS.

The scoping process entailed scrutinizing the GPRS and appraisal of policies through the use of matrices and checklists. A series of meetings, workshops and working sessions were held to engage the key actors in some selected Ministries, Departments and Agencies (MDAs), NGOs and Civil Society Organizations (CSOs). In all, about 27 MDAs and over 100 NGO and CSO representatives were part of the studies.

It was decided that all policies in the GPRS should be examined in order to determine their relative importance and priority.

Stage 4 Sectoral and thematic reviews of policies

This stage of the SEA involved the engagement of MDAs, Civil Society Organizations and academia in discussions about the specific policies, plans and programmes (PPPs) under each of the thematic areas of the GPRS. These discussions were organized through a series of workshops and working sessions. This provided participants with the opportunity to complete matrices, debate the issues and make recommendations for refining PPPs in the GPRS

Stage 5 Analysing and prioritizing policies

Representatives of 27 MDAs participated in the analysis and prioritization of policies, based on assessment of the level of opportunities for environmental enhancement and the level of environmental risk posed. The analysis of policies in the GPRS had the following objectives:

1. To evaluate the overall GPRS thematic presentations from the standpoint of poverty and environment;
2. To determine the extent to which the environment has been incorporated in discussions leading to policy formulation;
3. To assess the policies in terms of the risks and opportunities related to environment and poverty.;
4. To identify and strengthen priority policy actions that benefits the rural and urban poor and the environment;
5. To increase understanding about the spatial dimension of policies and their effects at international, national, regional and district levels;
6. To analyse the effectiveness of policies in terms of ease of implementation, timescale and costs and their ability to bring rapid benefits to the poor and the environment; and
7. To recommend alternatives and improvements to policies with potential adverse effects.

The main approach adopted for the analysis was group discussions supported by the use of matrices to record individual performance against a range of criteria developed and tested in the pilot stage of the SEA and the District Sustainability Appraisals. The full list is referred to as the Poverty-Environment Criteria and is provided below.

Poverty-Environment Criteria:

Effects on Livelihood of the Poor	Access to water, Access to land, Access to timber resources, Access to wildlife, Access to wildlife, Access to non-timber forest products
Effects on Health of the Poor	Water quality & quantity, Sanitation, Air quality, Non timber forest products/ Medicinal plants
Vulnerability of the Poor	Drought, bushfires, floods, land degradation, crises and conflicts, epidemics
Institutional Support	Adherence to democratic principles, Human Rights, Access to information
Natural Resources	Protected areas safeguarded, raw materials used wisely, pollution minimized, sustainable energy source
Socio-Cultural	Local communities protected, women empowered, costs and benefits distributed equitably
Local Economy	Encourages growth, uses local goods and services, Promotes local investment

In addition to the Poverty/Environment criteria, other factors were used in the assessment of policies and these included:

The *Spatial Dimension* in which the policy is designed to operate (international, national, regional or district level);

The intended *Target* of the policy (Is it aimed directly at people, or at natural resource management, or at institutional reform?);

The *Link* between the policy and the poor (Does the policy have a direct impact by providing funds or otherwise altering the lives of the poor – or is the impact more indirect? – by changing, for example, institutional frameworks, opinions and attitudes?);

The *Timescale* in which the policy is expected to have effect; and

The order of *Cost* of implementing the policy

Simple scoring was used to assess the performance of individual policies against these criteria. Having scored each policy, ranking was used to identify those policies that perform best against particular criteria.

Sustainability analysis of District Medium Term Development Plans

The SEA process was *also* used to review and improve the sustainability of District Medium Term Development Plans (DMTDPs), which are prepared by District Assemblies in accordance with guidelines issued by the National Development Planning Commission (NDPC). *A key output from this SEA* was a set of revised DMTDPs, which built on the experience of undertaking the SEA, and incorporated environmental considerations as a core element of the development planning process. The SEA has caused the NDPC to revise the *district planning preparation guidelines* to incorporate SEA principles. The SEA at the district level was undertaken through a number of regional and district workshops.

The workshops introduced District Assemblies to the tools and principles of SEA to enable them get a deeper understanding of the process. As an output, district task force teams were formed, and were educated on their roles and responsibilities. The key stakeholders at the district level were members of the Plan Preparation Task Force- the DPCU. Among other things, the Task Force members:

- Assessed the environmental opportunities and risks associated with the implementation of the DMTDP as well as incorporated sound environmental management into their plans;
- Helped disseminate SEA principles at the district level i.e. NGO's/CSO's etc.; and
- Helped ensure that this very important national assignment succeeded.

Each district assembly prepared a short report summarizing the outputs of its sustainability appraisal. These described the work done and indicated the relative sustainability of the different PPPs as well as the measures to be taken in refining those PPPs and making them more sustainable.

The results of each of the district plan appraisals were compared at the regional response meetings. This enabled the districts share their experiences in the conduct of the appraisal process. It also enabled the regional coordinators get a deeper understanding of the process in order to enhance the harmonization of development plans at the regional level.

A total of 108 district assemblies participated in the process. Some six hundred and sixty (660) key district personnel were exposed to SEA methodology and its applications in the planning process.

Stakeholders' contributions to the review of the GPRS

There were contributions from various groups from round table meetings, workshops and working sessions during the period from October 2003 to April 2004, which were taken into consideration in the findings and recommendations of the SEA.

Key outputs of the SEA process

There were a number of specific outputs from the SEA in relation to the GPRS and Ghana's planning processes. These included:

1. Creation of an evaluation framework for reviewing the GPRS;
2. Development of methods for assessing policies, plans and programmes, (Matrices and Checklists);
3. Production of handbooks, training manuals, guidelines and reports, (district sustainability appraisal handbook, sector plan preparation guidelines based on SEA principles, 108 district sustainability reports etc);
4. Articulation of planning concepts and frameworks to assist in policy, plan and programme preparation and subsequent implementation and monitoring; and
5. Capacity building using training sessions, workshops and meetings.

Over 100 officials of key sector ministries, government departments and agencies and *over 440 district planning and budget officers* were introduced to SEA principles and techniques. This should result in significant revisions to PPPs in the GPRS that will stimulate growth that benefit the poor without prejudice to the environment. It should also help to refine development plans at district level and help to set up the framework for revising the Medium Term Expenditure Framework (MTEF) Planning guidelines.

Achievements

1. The SEA of the GPRS has broken new ground because it is the first such process to be applied to the issue of poverty reduction. Other evaluation and appraisal techniques have been used elsewhere in the world, but their focus has been directed largely to biophysical or social aspects of poverty reduction strategies. By comparison, the SEA of the GPRS gives equal weight to environmental, social and economic issues raised in the GPRS.
2. The participatory nature of the SEA of the GPRS has helped to change people's attitude towards environmental issues. This is important for effective environmental management in Ghana.

3. The SEA provided a clear analysis of the potential for improvement in government policy processes. It demonstrated that environmental issues were not adequately addressed in the poverty reduction strategy. It also helped to highlight wider issues in policy processes such as the integration of GPRS with other policies and coordination between GPRS, the MTEF process and donor funding.
4. The SEA helped demonstrate the benefits of integrating environmental and social impacts in policy-making processes.
5. The SEA process also provided important and useful information such as mapping the consistency of the GPRS policy statements and plans; identifying priority environmental issues; demonstrating poverty-environment linkages; and providing spatial maps of environmental issues at the district level.
6. The stakeholder consultations provided the basis and platform for discussing cross-sectoral policies and issues, and for developing a framework for institutionalizing SEA in Ghana.

EIA of the Water Hyacinth Control Programme in Uganda (Ecaat, J., 2004)

Context

In 1997, the Government of Uganda was confronted with a huge problem of water hyacinth (*Eichhornia crassipes*) infestation in Uganda's water bodies. The problem reached such alarming proportions that water transport, hydropower installations, power production, and the fisheries sector were threatened. In order to deal with the problem, the Government proposed three control options, namely biological, physical (mechanical and manual) and chemical control, using glyphosate of 2,4-dichlorophenoxyacetic acid (2,4-D) and diquat. The proposal to use chemicals sparked off such a controversy to the extent that the public demanded a comprehensive EIA to evaluate the three control options.

The EIA process

The EIA of the water hyacinth control options went through the following key stages:

- 1. Scoping:** As with other EIAs, the scoping process was carried out involving many key stakeholders and an expanded committee was formed to define the scope of the EIA. A scoping report was produced and agreed upon as the blue print upon which the EIA would be based. A team of high-level experts drawn from academia and research institutions was put in place to conduct the EIA and carry out efficacy tests on the chemical control option.
- 2. Study Protocol:** After completion of the scoping exercise, the EIA study protocol was developed which included description of the procedures that would be used for public consultations and for evaluating the various chemicals, in terms of:

- Efficacy;
- Toxicity to aquatic organisms such as fish;
- Persistence in the environment (aquatic system); and
- Safety to humans.

3. Chemical Efficacy Tests: The EIA study involved wide consultations with all stakeholders including local authorities in the riparian areas of the lakes. The EIA also entailed the conduct of chemical efficacy tests that included the following:

- Laboratory tests on the three herbicides conducted at Kituza Agricultural Research Station Mukono;
- Pond trials conducted at Kajansi to simulate lake-type environment; and
- In-lake herbicide trials conducted in a closed bay at Wazimenya in Lake Victoria.

EIA Review process

When the EIA was concluded, the Ministry responsible submitted the final report to NEMA for review. As required by law, the report was widely circulated to different stakeholders, including:

- (a) Lead agencies: For review over a 21-day period, at the end of which NEMA had received diverse comments on the various control options.
- (b) The General Public: The EIS was deposited in some strategic public libraries to allow for public access over a 28-day period. Some of them were:
 - NEMA Library;
 - Makerere University Main Library;
 - Makerere University Institute of Environment and Natural Resources Library;
 - Kampala Public Library;
 - Kampala City Council Library;
 - Offices of the District Environment Officers in the Lake Victoria Catchment ; and
 - Uganda Wildlife Society Offices (an NGO).

In addition to these, information was availed to the public through radio programmes. A summary of the water hyacinth control elements was prepared by the Ministry of Agriculture, Animal Industry and Fisheries and posted as inserts in daily newspapers to broaden dissemination of information to as many members of the public as possible. The public was invited to submit written comments in addition to participating in the public hearing.

A public hearing was, thereafter, convened on 30th July 1997 to which all stakeholders, including Government agencies, the general public, riparian district authorities, donor agencies and NGOs were invited.

During the public hearing, the Ministry of Agriculture presented the EIS and the public was given another opportunity to present their views. Altogether a total of 460 people turned up for the public hearing, which lasted over *eight hours*. In addition, there were hundreds of written responses and opinions from the public, which were incorporated as part of the feedback during the review process. Of the 460 people, *only four* presented views in support of the use of herbicides for water hyacinth control. The full report of the public hearing is available in the NEMA library for public reference.

- (c) The EIA Technical Committee: Held a series of independent review meetings and produced a technical advice to NEMA on various aspects of the proposed water hyacinth control options.

Decision-making

At the end of the review process, NEMA collated all the public and lead agency views as well as the EIA Technical Committee input. On the basis of the feedback, NEMA arrived at a decision on the 11th September 1997 to allow two water hyacinth control options namely the physical control (mechanical and manual) and biological control options to go ahead, while the chemical control was not permitted. The wide objection to chemical control was due to its likely adverse impacts to public health, fish exports and non-target biodiversity resources.

Achievements

- The involvement of the public and stakeholders, and the wide publicity of the EIA process increased general awareness that all projects including those conceived by Government should be subjected to the legal requirements of EIA.
- Public opinion and input during the EIA process influenced and contributed to the nature of the decision that was eventually taken.
- This particular EIA gave some credibility to the process because it showed that NEMA, as the approving government authority for EIA, did succeed in taking an independent decision without Government interference which, through its Ministry of Agriculture, Animal Industry and Fisheries, had vested interest in the various water hyacinth control options evaluated.
- The Uganda EIA process integrated ecological, social, health as well as economic dimensions.

Strategic fuel fund oil transfer operations (SAIEA, 2003)

Context

The Strategic Fuel Fund (SFF) is an organization responsible for the procurement, storage and supply of strategic crude oil stocks for South Africa's domestic refining industry. Since the oil storage capacity at the SFF's Saldanha facility exceeded the country's minimum requirements, the company in 1997, proposed to make its excess storage capacity available to a Middle East oil-producing country. This was to increase the number of crude oil carriers entering the port of Saldanha.

EIA process

The EIA was undertaken in four phases:

1. *Development of an acceptable EIA process*: The EIA process involved extensive consultation with interested and affected parties;
2. *Scoping*: Scoping exercise generated two documents, namely a "Scoping Report" and an "Issues Trail";
3. *Specialist studies*: Fourteen specialist studies were commissioned and submitted for independent peer review; and
4. *Integration and assessment*: An EIA report was produced, presenting a summary of the project proposal and a synthesis of the results of the specialist studies.

Key issues

The key issues included:

- The effects of dredging on mariculture;
- The effects of oil spills on mariculture;
- The effects of oil spills on the neighbouring Ramsar wetland and national park;
- Groundwater contamination by oil leaking from the storage facility;
- A cost-benefit analysis of the proposed changes to the oil terminal to ensure that it posed the minimum risk to the environment; and
- An assessment of the increased environmental risk consequent on the increase in traffic of oil tankers handled by the port.

Public participation

An independent public participation consultant facilitated interaction with all interested and affected parties, and ensured a free flow of information. Communication with these parties was through a background information document, press releases, a telephone hotline, and the Issues Trail.

EIA review process

A key element of the EIA review process was the appointment of an independent EIA Review Panel. Panel members, who were nominated by interested and affected parties, included eminent academics, lawyers, a government official and a representative from private industry. The Panel chairperson was an advocate, whose skills were used to draw up a civil law contract to *bind the project proponent to the Panel's recommendation*. The SFF committed itself to accept and implement the Panel's recommendations.

The decision-making process

The EIA Review Panel was the ultimate decision-making body. As mentioned above, the Project Proponent signed a contract agreeing to abide by the Panel's recommendations.

Implementation and monitoring

Because the project proponent agreed to be legally bound by the findings of the EIA Review Panel, the recommendations and mitigation measures were implemented. The Proponent also developed an environmental management plan to manage and monitor the impacts of activities.

Achievements

- The use of an EIA Review Panel nominated by interested and affected parties and the binding of the project proponent to implement the Panel's recommendation, ensured that the proponent developed an EMP to manage and monitor the impacts of activities.
- Ensuring integration throughout the EIA process instead of merely at the report - writing stage, by for example, developing a process of specialist interaction which guaranteed the effective provision of information and public participation.
- The presentation of the results to decision makers through modelling (i.e. impact probability contouring), risk assessment (i.e. quantitative risk assessment using statistical return periods), and a cost-benefit analysis (i.e. independently auditing the Proponent's economic analysis) helped influence an informed decision.

A SUCCESS STORY FROM TUNISIA (ELLOUMI, M.J., 2004)

Building good working relationships among different stakeholders engaged in the EIA process

An important factor in the application effectiveness of EIA is the working relationship established among the different stakeholders. In this regard, Tunisia has, over the years, forged good working relationships among stakeholders to building a credible and trusted EIA system.

The EIA team members of ANPE possess many years of experience and a deep knowledge of the respective sectors to which they have been assigned. They have benefited, and continue to benefit, from general and specialized training, which allow them to excel in their work and gain credibility and respect in the eyes of other stakeholders.

In the same vein, ANPE gives particular attention to strengthening the capacities of various stakeholders involved in one way or the other, in the EIA process. These include consultants, experts of other agencies, project Proponents and developers as well as others implicated in different stages of the assessment. Further, economic operators are sensitized about EIA requirements at the time when new investments likely to affect the environment are proposed.

Results

The harmonization of competencies and skills of different stakeholders and the establishment of working meetings throughout the process of development and evaluation of EIAs has, over the years, improved the convergence of views, better understanding of expectations and constraints faced by all. For example, whereas in the past, requests made by ANPE for the improvement of EIA studies were often perceived by developers and some consultants as an unnecessary requirement, all parties now understand that ANPE's concern of obtaining improvements in the analyses allows for a better evaluation of the impacts, and by the same token, a better definition of measures for mitigation and/ or elimination of these impacts for the protection of the environment. EIA is now appreciated in many sectors and its application has now become common practice

Examples:

The quarrying sector: ANPE began receiving EIA study reports of quarry operation projects as at the time of the coming into force of the related law. After the publication of the 1991 decree, the number of studies received from this sector increased from 76 in 1992 to an annual average of 150, forming approximately 15% of the total number of reports received. At the end of ten years of experience, it was concluded that the application of EIA in this sector has contributed effectively to safeguarding the environment and in particular, important natural sites, against the harmful effects of quarrying operations. The situation regarding new quarrying operations has also improved due to the obligations imposed on quarries to use rational mining methods (limiting height of mining fronts, rational use of the explosives etc.), respecting environmental protection measures (eg. limits of dust releases), preserving landscapes and natural resources and rehabilitating quarrying sites at the end of mining operations.

The oil sector: The application of EIA in this field made it possible to sensitize oil companies on their obligation to prevent possible pollution generated by their activities and to improve the situation at the level of new exploration and development projects. This has been achieved through the imposition of obligations to undertake mitigation measures and integrate these into activities early in the design stage. As a result, new projects now provide for the treatment of potential

contaminants prior to their discharge into appropriate receiving bodies; the protection of underground water through the installation of appropriate provisions; and the treatment of sites and their rehabilitation at the end of project implementation.

Lessons Learned

The lessons presented below represent the experiences of countries regarding the manner in which processes and activities were conceived and implemented and the lessons learned from these experiences that called for a reorientation in the way of doing things.

SITUATING EIA REQUIREMENTS IN A SUSTAINABLE DEVELOPMENT FRAMEWORK (ROSSOUW N., WISEMAN K., 2004)

Issue Statement

In South Africa, while environmental policy and legislation embody sound democratic principles; implementation, compliance and enforcement are lagging. A key weakness in the implementation of environmental policies is the lack of a logical sequencing of the policy process. An example is the way in which the regulation and administration of EIA in South Africa preceded the national environmental policy process.

The EIA regulations were promulgated in 1997 and enforced before the national environmental law, the National Environment Management Act (NEMA), which was enacted in 1998. Consequently, the EIA system is driven by administrative needs and not by the principles of sustainable development, which emerged in NEMA. In some cases, the Department of Environmental Affairs and Tourism (DEAT) has withdrawn from the integrated approach contained in the national legislation, preferring not to insist on the full integration of social, economic and environmental issues in EIA.

Lesson Learned

EIA requirements should be premised within a legal and strategic framework that embodies sustainable development principles. This will ensure that in the conduct of environmental assessments, the environmental, economic and social dimensions of sustainable development are treated in an integrated manner thus minimizing disputes and engendering credibility and trust in EIA systems.

DEVOLVING RESPONSIBILITIES TO LOCAL LEVELS (ROS-SOUW N., WISEMAN K., 2004).

Issue Statement

The Municipal Planning and Performance Management Regulations promulgated in 2001 under the Municipal Systems Act in South Africa, state that the Integrated Development Plan (IDP) prepared by municipalities must contain a strategic assessment of the environmental impact of the spatial development framework. The White Paper on Spatial Planning and Land Use Management requires each municipality to compile a spatial development framework including an SEA. Those requirements were legally introduced without the participation of affected parties, including local government.

These policies and statutory requirements create a special role for local government in environmental management and require that environmental sustainability issues be integrated into municipal planning. In practice, this is unlikely to be achieved as only the largest municipalities have any environmental management expertise, and even in these, staff is overloaded. For this reason, few SEA studies have been completed within the framework of these local planning requirements.

Lesson Learned

The devolution of responsibilities / mandates for implementation of EIA systems from central to local authorities should be done in a consultative and participatory manner and should be accompanied by a capacity building package including the provision of resources.

RATIONALIZING EIA REQUIREMENTS (ELLOUMI, M.J., 2004)

Issue Statement

The Tunisian Environment Decree of 1991 covers a very broad range of project types based primarily on sectoral classification and in most cases, without consideration to their size, real risks of pollution or degradation of the environment. Thus among the thousands of applications that ANPE receives annually, are many small and medium-sized projects in the agriculture, industry and urban development sectors.

The environmental impacts of such projects are generally either negligible, or easily identifiable and the mitigation methods are well known and generally well standardized. Among these are small-sized urban housing estates, which fall under the urban development category, and certain clothing industries which do not have significant environmental impacts, but which happen to fall under the industrial textiles category.

By virtue of their sectoral classification, these cases fall under Annex 1 of the EIA Category, thus making a full-scale EIA mandatory for them. Subjecting these types of projects to full scale EIA has cost implications with regard to the time spent in treating them in the same way as much more complex projects in terms of size, sit-

ing, and polluting potential. Proponents of such projects find it hard to understand the stipulated requirements particularly the three months timeframe required for processing their applications.

Response

In light of the above, article 5 of the law that created ANPE was replaced by “terms and conditions of operations” which mandate the project Proponents to commit themselves to undertaking all necessary measures to prevent and / or mitigate possible negative environmental impacts. The provision for the simplification of administrative procedures stipulates thus: “The implementation of industrial, agricultural and commercial projects is subjected, either to prior approval by ANPE following a study of the possible negative environmental impacts, or to a commitment on the part of the project proponent to apply the requirements of the “conditions of operations”. The approval is given by the Minister in charge of the environment, taking into account the type of project, its nature and the risks it presents to the environment”.

This measure serves to restrict EIA requirements to a limited number of projects that will be defined in the new decree. Other project types will be subjected to the requirement of “conditions of operations” mentioned above and to relevant sectoral legislation. ANPE has already established a schedule of “conditions of operations” for the sectors concerned in accordance with standard criteria and which should be formalized through the publication of the new decree.

Lesson Learned

It is important to clarify rules governing submissions for EIA studies and adopt a tiered system regarding EIA requirements. In so doing, Proponents of small scale and low polluting projects can be exonerated from undertaking full scale EIA, thereby limiting EIA to big scale projects or those with high polluting potential, thus speeding up the process.

CONDUCTING EIA IN A HOLISTIC AND INTEGRATED MANNER (GILHAM, S.W. AND ARCHER, L.D., 2004).

Issue Statement

A major shortfall during the considerations of the environmental issues of a water project in South Africa was the treatment of the scheme as a number of separate components. A separate EIA was conducted for each of the three scheme components and submitted separately to the EIA regulation authorities.

This proved to be a mistake as there were linkages among the components that needed to be considered and it was not possible for the EIAs to be appraised in isolation of each other. Consequently, the EIA regulation authorities waited for all three EIAs to be submitted before reviewing them. The delay in the approval had a ripple effect on the entire implementation programme. Initial construction was only possible in the dry winter months, thus a short delay of a few months translated into the loss of an entire season.

Lesson Learned

Irrespective of the technical divisions of the project components, the EIA should be conducted in a holistic and integrated manner taking into account all project components at the same time.

COMPLIANCE WITH EIA REQUIREMENTS IN A TIMELY MANNER (ECAAT, J., 2004)

Issue Statement

Although, large-scale project developers are, to a large extent, complying with EIA requirements in Uganda, there remains a big problem in the case of small-scale developers. Where EIA stipulations are ignored, Project Proponents usually suffer huge financial loss. A typical example involves a small-scale project, which processed blood for supply to poultry feed producers in the outskirts of Kampala, Uganda. This project was sited in a residential area and its activities had serious environmental consequences, thus resulting in public outcry. Residents demanded immediate intervention by NEMA. Inspection of the project site revealed the following:

- (i) Processing of blood was carried out in the open and run-off after rains flowed into the neighbourhood, polluting a stream and causing a health hazard for water users downstream;
- (ii) Use of tyres as a source of fuel generated potentially harmful smoke, thus exposing the workers and local residents to dangerous combustion fumes and the risk of respiratory ailments and other health problems;
- (iii) Exposure of workers to occupational health hazards as they were not provided with protective gear;
- (iv) Poor waste and sanitation management in the form of a channel dug for discharging untreated effluent into the adjacent stream/wetland;
- (v) Foul smell generated by the process constituted a nuisance to the neighbouring community.

This project had to be closed when the developer failed to put in place sound environment management practices and also failed to find an alternative fuel source on account that other alternatives were expensive.

Other Examples:

- Kampala Parents School which had constructed a multi-story classroom block below a 132 KV hydro-electric power transmission line had to be relocated at a cost of *several hundred million Uganda shillings*;
- A fish factory project at the shores of Lake Victoria, which was to be constructed very close to the shores of the lake, was abandoned because it was in violation of the regulations pertaining to the management of lakeshores.

The developer had to demolish a perimeter wall worth *millions of Uganda shillings* and shift the factory outside the regulated zone.

- An abattoir at Kajansi, which was constructed in a wetland at a cost of *26 million Uganda shillings* but has not been allowed to operate. The developer had been informed in time through preliminary assessment that it was illegal to construct an abattoir in a wetland.
- A petrol station situated at a dangerous road bend along Kampala- Entebbe highway whose operation had to be disallowed, as it would have increased risk of road accidents. The developer had been advised early enough not to proceed with the project, but the advice was ignored. However, no sooner had the petrol station started operating, than the Government Agency in charge of road safety sealed it off in order to inhibit access. The project had to be abandoned with resultant heavy loss of investment capital.

Lesson Learned

Compliance with EIA requirements in a timely manner ensures that appropriate sites are selected and projects are implemented in an environmentally sound manner. Furthermore, heavy financial losses could be avoided.

DEVELOPING THE EMP

(a) Water Project, Kwazulu Natal, South Africa, (*Gilham, S.W. and Archer, L.D., 2004*)

Issue Statement

The EMP developed for a water project had the following shortcomings. First, the project developers failed to identify *the roles and responsibilities with set time-frames*. Second, they *failed to secure property ownership on time* even with the knowledge that the acquisition of land and compensation matters is regulated through different pieces of legislation, and is very time consuming. Third, the rehabilitation plan (an integral part of the EMP) was developed *without specialist input* and gave little consideration to how the opportunity could be used to enhance the property. The above shortcomings resulted in delays to project activities.

Lesson Learned

The development of the EMP should allow for a focussed reassessment of project impacts and for the identification of liabilities and allocation of responsibilities for addressing project impacts. Specialist input to the rehabilitation plan should ensure that the final product is aesthetically pleasing, environmentally sound and has added value for the surrounding community

(b) Shell Petroleum Development Company- Eastern Division (SPDC-E), Nigeria, (*Dada, O.J. and Akpandara, O., 2004*)

Issue Statement

SPDC- E obtained regulatory approval for EIA on 30 projects between 1997 and 2002. Of the 30 EIAs, only three have records of EMP implementation and even these commenced late in the construction phase. A few of the factors hindering the effective implementation of the EMPs are poorly developed plans, a lack of understanding of the EMP, insufficient commitment on the part of project executors, absence of a framework for EMP implementation on a project and weak internal and external supervision of implementation.

Lesson Learned

In order to close the gap between development and implementation of the EMP, an EIA process manual has been put in place. The manual stipulates the following: For effective implementation of the EMP, documents should be prepared as concise stand-alone documents once approval is obtained for the EIA. The EMP should usually contain the adverse impacts, the mitigation measures, parameters to be monitored and frequency of monitoring. The cost implications of the implementation of the EMP should be spelt out, roles and responsibilities of various actors should be clear and a project specific emergency response plan developed. Provision should also be made for the documentation of changes made to any monitoring regime, and hand-over of the project to the operators of the asset, should be formalized and well documented.

LINKING THE EIA SYSTEM TO THE OVERALL ENVIRONMENTAL MANAGEMENT SYSTEM (EMS), (*ECAAT, J., 2004*)

Issue Statement

A major challenge in the use and application of EIA arises from the common misconception /misunderstanding that EIA is a “magic tool” which settles all problems, even when other options for decision-making are available. EIA has not been understood as one of many environmental management tools that complement other instruments such as laws, policies, standards and regulations. Quite often there have been development issues for which decisions could have been taken within the framework of other sectoral laws and policies, but which end up being referred for EIA even with the knowledge that the findings would not justify the proposed activities.

An example from Uganda is a project proposal that involved cutting forest vegetation in a gazetted Forest Reserve to plant cadamon crop, thus openly violating all forest management principles. The then Forest Department could have taken a decision to reject the project proposal based on the rules and regulations governing activities in Forest Reserves. Instead, the Department advised the developer to carry out EIA. Indeed after the EIA was done, the Forest Department, indicated that

the developer should implement the project outside the Forest reserve.

Likewise, there have been infrastructure projects proposed in gazetted green spaces in urban centers and which urban authorities could have been rejected outright because they violated planning provisions for such areas. But, these too were referred for EIA with the knowledge that EIA could not justify the establishment of such projects in gazetted green spaces. Quite often this tends to generate a dislike for EIA among the affected, as it is perceived to have been the cause of non-approval of their projects.

Lesson Learned

EIA needs to be perceived within an overall environmental management system that clearly shows the linkages not only among the various Departments / Divisions of NEMA, but among other sectoral Departments as well. Further, it demonstrates the need to sensitise sectoral Departments and developers on this matter as well as to introduce specific regulations that allow the use of EIA in an overall environment management system, thus preventing its misuse and the burden of treating unnecessary applications.

INSTITUTIONALIZING STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) (ELLOUMI, M.J., 2004)

Issue Statement

With more than 10 years experience in the administration of EIA in Tunisia, ANPE has identified certain limitations in the established system particularly as it relates to the need to carry out environmental assessment further upstream. It has been realized that EIA enables decisions to be made on the implementation of a project, but does not permit a constructive discussion on the justification or choice of developments that take place further upstream. For example:

- (a) **National highway network projects responding to a projected increase in traffic:** EIA does not allow for a comparison of this alternative and its potential impacts (on land, the natural environments etc.) with others such as strengthening the existing road network or the development of other means of transportation. This kind of project proposal is already considered sealed by the time it is received by ANPE, as it is always too late to address the question of alternatives.
- (b) **Other cases relate to assessing cumulative impacts** such as the effects of several dam projects proposed in the same catchment area; and projects relating to the development of a pre-determined number of hotel units. An environmental assessment of a global programme at the level of a catchment would provide a more realistic appreciation of the impacts, than conducting separate EIAs for each individual project.

Lesson Learned

Taking into account the limitations of project level EIA and the advantages of SEA, it is considered pertinent to widen the application of environmental assessment to policies, plans, strategies and programmes.

chapter six

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

African countries, to varying degrees, have undertaken many actions to put in place well-functioning environmental assessment systems. Initiatives have also been undertaken to ensure coherence and coordination of EIA related initiatives at the regional and sub-regional levels and to support actions at national level. Multilateral, regional and bilateral development agencies and banks as well as UN Agencies have supported initiatives and actions at regional, sub-regional and national levels.

Initiatives and actions undertaken include the formulation of policies, enactment of legislation, and establishment of institutional frameworks for EIA. Further, a number of African countries have adopted country-specific regulations, procedures and sectoral guidelines for key sectors of the economy. Some degree of awareness and capacity has been built and the process is gradually becoming more integrative and inclusive.

Notwithstanding, the institutionalization of EIA has been slower in Africa than in other parts of the world and varies from country to country. Many challenges remain in relation to application effectiveness and the extent to which EIA findings influence development decisions. Human and financial capacity still remains the biggest challenge to the effective institutionalization and application of EIA in Africa. Political will and support are key to ensuring that countries overcome these challenges.

However, over the years, African countries have gained valuable experience in the application of EIA and have attained a reasonable degree of success in this regard. Some good practice cases have been recorded and, more importantly, valuable lessons have been learned and documented. It is envisaged that the dissemination of these practices and lessons will engender knowledge networking and contribute to enhancing the application of this important policy tool in Africa.

Recommendations

Based on the findings of the study, which have clearly documented the many challenges faced by African countries in the institutionalisation and application of environmental assessment, the following recommendations are presented:

- Many countries in the region are yet to fully develop the institutional and regulatory frameworks for EIA. Indeed this is non-existent or quite rudimentary in some countries. In view of this, countries should ensure that appropriate and adequate frameworks, including procedures and guidelines, are developed / strengthened as a matter of priority as they are important prerequisites to the establishment of viable EIA systems.
- In order to ensure the use effectiveness of EIA and SEA as policy tools that promote sustainable development, their institutionalization and application should be done within the framework of a sustainable development policy that integrates environmental, social and economic issues in a balanced manner.
- Consistency in the institutionalization and application of environmental assessment at the level of the continent should be encouraged. In this regard, close cooperation and coordination of activities between CLEAA and EIA structures that serve North Africa should be encouraged. The proposal for CITET to serve as a CLEAA node in North Africa should be pursued. Further, initiatives already underway to establish a CLEAA node in Central Africa should be intensified as this sub-region is behind all others in establishing EIA systems. Ways should be explored to involve countries in Central Africa in CLEAA activities by, for example, facilitating links between these countries and existing nodes in sub-regions with which they have close ties.
- The initiatives undertaken by CLEAA and its nodes are indeed laudable and are key to promoting environmental assessment effectiveness in the region. The sustainability of these bodies is important and they should be supported in meeting their objective of enhancing environmental assessment and management capacity in Africa. Presently, most of the support for CLEAA and its nodes come from development partners. CLEAA is a pan-African entity and in this regard, it is recommended that African regional and sub-regional organizations and in particular, Regional Economic Communities (RECS), the African Union (AU) and UN agencies operating at these levels, particularly UNEP's, Regional Office for Africa and the ECA should collaborate and provide support to this body. This can be done through advocacy at important gatherings of Africa's policy makers; undertaking collaborative studies and providing financial resources.
- Enhancing capacity in EIA application is key. In this regard, countries should develop capacity building programmes based on clearly identified needs, taking into account experiences and lessons learned. The environmental assessment and management capacity building programme developed by CLEAA provides a holistic framework for capacity enhancement in EIA in Africa and can be adapted to specific country needs. However, interventions of partners relating to capacity building in environmental assessment at the regional and sub-regional levels should be done within the framework of this strategy and its related action plan. Capacity enhancement initiatives should also take into account skills available on the continent and the cost effectiveness of promoting bilateral cooperation between countries with relatively well established and those with less established EIA systems.

Countries should also develop viable financing mechanisms to support the capacity enhancement needs of EIA administrators and practitioners.

- Since countries are at different stages in the development of EIA systems, assistance should be targeted to meet the specific needs of countries. While priority should be accorded to those countries with non-existent or rudimentary systems, the need to improve the EIA application effectiveness of countries with relatively well established systems should also be taken into account.
- A learning group forum and information-clearing house on EIA should be established to provide experience sharing and learning platforms. To further enhance knowledge networking, countries should establish national associations for environmental assessments and facilitate their affiliation with sub- regional, regional and international environmental assessment bodies such as CLEAA and its nodes as well as IAIA.
- The non-regulation of private EIA practitioners can greatly undermine the quality of EIA study. In this regard, in addition to capacity enhancement initiatives, countries should set minimum standards and criteria for the operation of private practitioners. Furthermore, lending and financial institutions should be sensitized on the need to not only make EIA a lending requirement, but also to insist on the quality of the EIS.
- Given the steady increase in EIA applications received by EIA administrative authorities and the capacity constraints experienced by these authorities, the rationalization of EIA including review systems to take into account the size, location and polluting potential of projects is pertinent. The proposed system in Tunisia and Ghana's tiered review system are examples worth emulating.
- The cost of the EIA and the time associated with the study are important factors that can, to a great extent, influence the appreciation and acceptance of the EIA process on the part of developers. In this regard, it should be ensured that the cost of the study is not prohibitive, relative to the cost of the project. In order to come up with good results, enough time should be allocated to the study. However, tradeoffs should be made between the objective of coming up with a good study and the time considerations of project Proponents.
- Public participation is key to integrating social concerns in development policies, plans, programmes and projects in an effective manner. In view of the importance of public participation in the EIA process, it is recommended that EIA administrators should develop strategies for public participation at all stages of the EIA process, which take into account lessons learned, and the specific country context. It is recommended that the public participation procedural handbook to be prepared by SAIEA for the SADC region be extended to other sub-regions of Africa in collaboration with the respective sub-regional nodes of CLEAA and RECs.

- Given the perception by some politicians and developers regarding EIA vis-a- vis development initiatives, countries should establish credible and trusted EIA systems that take into account the developmental context to which they apply. This will ensure that EIA, rather than being seen as a development-retarding tool, will become one of the widely applied tools that promote a balanced development. Continuous sensitization and the use of relevant analytical instruments, such as modelling, environmental economics and natural resource valuation, to support EIA findings are important. A greater appreciation of the importance of EIA will increase the demand for its use, thus generating the necessary resources and creating a demand-driven market.
- If an EIA system does not assure the implementation of the EMP as well as its systematic and effective follow-up, then it is highly deficient and all efforts that went to the production of the EIS can be considered wasted. In this regard, it is pertinent that the implementation of the EMP and follow-up are made legal requirements and appropriate procedures and mechanisms put in place to ensure implementation effectiveness. It is also pertinent that the EMP is presented in a manner that renders it implementable.
- EIA systems should be seen as an integral part of the overall environmental management system established in a given country. In this regard, effective linkages and integration with other environment safeguard systems should be ensured, in order to provide a holistic and integrated approach to environmental protection and the assurance of social well-being.
- The importance of SEA in integrating environmental and social concerns in the development process upstream justifies its adoption by countries and its integration into an environmental assessment framework designed in the context of sustainable development. In so doing, it should be ensured that SEA is seen to provide benefits in order to accelerate its adoption and make it demand-driven.

REFERENCES

Abul-Azm, A.G., 2004: Development of Regional EIA Networking. A paper presented at a meeting of CLEIAA and Partners, Accra, Ghana, 26-28 July 2004.

Abul-Azm, A.G., and Hassanein, M., 2004. EIA in the Tourism Sector in Egypt. A paper prepared for the IAIA Annual Conference in Vancouver, Canada – April 2004.

African Development Bank, 1995. Environment and Social Policy Working Paper Series: ESP – 07: Country Environmental Profile, The Gambia.

African Development Bank, 2001. Environmental And Social Assessment Procedures For African Development Bank's Public Sector Operations.

Akpofure, E.A. and Ojile, M., 2003. Social Impact Assessment: An Interactive and Participatory Approach. In UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Appah-Sampong, E., 2003. Public Hearing within the Environmental Impact Assessment Review Process in UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Arts, J. et al., 2001. Environmental Impact Assessment Follow-up: good practice and future directions – findings from a workshop at the IAIA 2000 conference. Impact Assessment and Project Appraisal, volume 19, number 3, September 2001, pp. 175 – 185.

Bitondo, D. 2000. Environmental Assessment in Cameroon: State of the Art. Impact Assessment and Project Appraisal, volume 18, number 1, March 2000, pp. 33-42.

Boyle, J., 2004. Possible Directions for World Bank Support to EA Development in Sub-Saharan Africa, 2004- 2007. A Discussion Paper prepared for the IAIA Annual Conference in Vancouver, Canada – April 2004.

CITET-METAP, 2003. Working Together to Manage The Environment- Strengthening EIA Systems in the Mediterranean Region. Edited by Rachid Nafti and Clive George.

CLEIAA, 2002. Capacity Development Linkages for EIA in Africa: Implementation Completion Report.

CLEIAA, 2003. Proceedings of the Workshop to Develop an Environmental Assessment and Management Capacity Building Strategy for Africa: 2-3 December, Nairobi, Kenya.

CLEIAA, IUCN, 2004. Proceedings report of the CLEIAA nodes meeting, Mensvic Hotel, Accra, Ghana, 26-28 July 2004. Compiled and edited by Peter Tarr.

CLEIAA, WAEA, EAAIA and SAIEA, 2003. Environmental Assessment and Management Capacity Building Strategy for Africa.

D'Almeida, K., 2001. Cadre institutionnel législatif et réglementaire de l'évaluation environnementale dans les pays francophones d'Afrique et de l'Océan Indien : Les indicateurs de fonctionnalité, les écarts fondamentaux et les besoins prioritaires - Essai de typologie.

Dada, O.J, and Okubokimi, A., 2004. Moving the EMP from the Shelf to the Field in Shell Petroleum Development Company, Nigeria. A paper prepared for the IAIA Annual Conference in Vancouver, Canada – April 2004.

Dalal-Clayton B. and Sadler, B., 1999. Strategic Environmental Assessment: A Rapidly Evolving Approach. Environmental Planning Issues No. 18, 1999.

Department of Environmental Affairs and Tourism (DEAT), 2000: Strategic Environmental Assessment in South Africa – Guideline Document.

Diab, R.D. et al., 1999. The No Development Option Versus the Development Option in an Underdeveloped Area. Impact Assessment and Project Appraisal, volume 17, number 3, September 1999, pp. 243-252.

Ecaat, J., 2004. A Review of the Application of Environmental Impact Assessment (EIA) in Uganda. A Report prepared for the United Nations Economic Commission for Africa in October, 2004.

Echefu N. and Akpofure E., 2003. Environmental Impact Assessment in Nigeria: Regulatory Background and Procedural Framework in UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Egbeleke, A. A., 2004. Impact Assessment and Corporate Social Responsibility: A Comparative Case Study Review of Oil and Gas Industry in Casanare, Colombia and Niger Delta, Nigeria. A paper prepared for the IAIA Annual Conference in Vancouver, Canada – April 2004.

Elloumi M.J., 2004. Examen de l'Application de l'Evaluation d'Impact Environnemental (EIE), Cas de la Tunisie. Rapport préparé pour la Commission Economique pour l'Afrique de Nations Unies en juin 2004.

Fossouw N. and Wiseman, K., 2004. Learning from the Implementation of Environmental Public Policy Instruments after the First Ten Years of Democracy in South Africa. *Impact Assessment and Project Appraisal: Journal of the International Association for Impact Assessment*, Volume 22(2) June 2004; pp.131-140.

Friend, J.F.C., 2004. Practical Implementation of Environmental Legislation in a First/ Third World Country. A paper prepared for the IAIA Annual Conference in Vancouver, Canada – April 2004.

Gilham, S.W., and Archer, L.D., 2004. Lessons learned in addressing environmental issues of new water resource projects – A case study in Kwazulu – Natal, South Africa. A paper prepared for the IAIA Annual Conference in Vancouver, Canada – April, 2004.

Goodland R.; Mercier J-R (1996). Environmental Assessment (EA) in Africa: A World Bank Commitment: Proceedings of the Durban, World Bank Workshop, June 25, 1995.

Heydenreich, C. R., and Barlow-Weilbach, D., 2004. Using IA as an Environmental Risk Management Tool in the Development Bank of Southern Africa. A paper prepared for the IAIA Annual Conference in Vancouver, Canada – April 2004.

Huges, R., 1998. Environmental Impact Assessment and Stakeholder Involvement: *International Institute for Environment and Development; Environmental Planning Issues* No. 11, 1998.

IAIA and IEA, 1999. Principles of Environmental Impact Assessment Best Practice

IAIA, 2003: Social Impact Assessment: International Principles: Special Publications Series No. 2.

Issa, A.S., 2004. Africa's Environmental Assessment and Management Capacity Building Strategy: An Overview. A paper presented at a meeting of CLEIAA and Partners, Accra, Ghana, 26-28 July 2004.

IUCN; UNEP; and WWF, 1991. *Caring for the Earth: A Strategy for Sustainable Living*

Jogoo, V.K., 2003. EIA of the proposed midlands dam project: Mauritius in UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Katima, J.H.Y., 2003. Environmental Impact Assessment: For Whose Needs? In UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Kibbassa, J., 2003. Towards "Sustainable Development" in the Southern African Development Community (SADC) in UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Kodiaga, T.J., 2004. Community- Based Impact Assessment Network for Eastern Africa (CIANET): Building Capacity of Communities in Environmental Assessment

and Sound Design for Small Scale Activities. A paper presented at a meeting of CLEIAA and Partners, Accra, Ghana, 26-28 July 2004.

Mohamed Ali, O.M., 2003. Environmental Impact Assessment from a Sudanese Perspective. In UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Mokhehle, L. and Diab, R., 2001. Evolution of Environmental Impact Assessment in a Small Developing Country: A Review of Lesotho Case Studies from 1980 to 1999. *Impact Assessment and Project Appraisal*, volume 19, number 1, March 2001, pp. 9-18.

Morrison-Saunders, A. et al., 2001. Practioner Perspectives on What Influences EIA Quality. *Impact Assessment and Project Appraisal*, volume 19, number 4, December 2001, pp. 321-325.

Morrison-Saunders, A. et al., 2001. Roles and stakes in Environmental Impact Assessment Follow-up. *Impact Assessment and Project Appraisal*, volume 19, number 4, December 2001, pp. 289-296.

Mwalyaos, R., 2004. Capacity Enhancement for Environmental Impact Assessment in Eastern Africa: Strengthening EIA Capacity and Practice through Networking and Exchange. A paper presented at a meeting of CLEIAA and Partners, Accra, Ghana, 26-28 July 2004.

Nafti, R., 2004. Tunis International Centre for Environmental Technologies (CITET). A paper presented at a meeting of CLEIAA and Partners, Accra, Ghana, 26-28 July 2004.

OECD/DAC, 1997: Strategic Environmental Assessment (SEA) in Development Co-operation: State of the Art Review.

Republic of The Gambia, 1999. EIA Guidelines.

Republic of The Gambia, 1999. EIA Procedures.

Sadler, B., 1996. International Study of the Effectiveness of Environmental Assessment: Final Report- Environmental assessment in a Changing World: Evaluating Practice to Improve Performance.

Sampong, E., 2004. A Review of the Application of Environmental Impact Assessment (EIA) in Ghana. A Report prepared for the United Nations Economic Commission for Africa in December, 2004.

Southern African Institute for Environmental Assessment, 2003. Environmental Impact Assessment in Southern Africa. Windhoek: Southern African Institute for Environmental Assessment. 352pp.

Steyl, I., 1997. Strategic Enviromental Assessment for Stream Flow Reduction Activities in South Africa: A Way of Enhancing Decision-Making.

Tarr, P., 2004. Southern African Institute for Environmental Assessment (SAIEA). A paper presented at a meeting of CLEIAA and Partners, Accra, Ghana, 26-28 July 2004.

Tekelmichael, Y., 2003. Current Status of the Environmental Impact Assessment System in Ethiopia. In UNEP EIA Training Resource Manual: Case Studies from Developing Countries.

Tekeu, J-C, 2004. Rapport sur la Pratique des Etudes d'Impact Environnemental (EIE) au Cameroun. Préparé pour la Commission Economique pour l'Afrique de Nations Unies en Décembre 2004.

The Government of The Gambia, 1994. National Environment Management Act (NEMA) 1994.

The University of Manchester, 2000. Evaluation and future development of the EIA System in Egypt: A report prepared under the METAP EIA Institutional Strengthening Project.

UNDP/ UNEP, GEF/ 2001. A Review of Experiences and Methods: Integrating Biodiversity With National Environmental Assessment Processes.

UNDP/UNEP/GEF, 2001: The Integration of Biodiversity into National Environmental Assessment Procedures National Case Studies.

UNECA, 1997. The Durban Declaration on the Sub-regional and Regional Cooperation for the Development and Efficient Utilisation of Energy and Mineral Resources in Africa.

UNEP and African Centre for Technology Studies (ACTS), 2001. The Making of a Framework Environmental Law in Kenya. Ed. Charles Odidi Okidi and Patricia Kameri-Mbote.

UNEP, 1993. Environmental Impact Assessment Where to From Here? Environmental – Discussion Paper at the UNEP Consultative Meeting “The Future of EIA in Developing Countries – October 1993- Economics Series Paper No. 6.

UNEP, 2001. Integrated Assessment as a Tool for Achieving Sustainable Trade Policies.

UNEP, 2002. EIA Training Resource Manual, Second Edition.

UNEP, 2002². UNEP's Environmental Impact Assessment Training Resource Manual – Second Edition: UNEP Briefs on Economics, Trade and Sustainable Development: Information and Policy Tools from the United Nations Environment Programme.

United Nations (1992): Earth Summit: Agenda 21; Rio Declaration; Statement of Forest Principles: The final text of agreements negotiated by Governments at the United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil.

United Nations (1997). Nineteenth Special Session – Agenda item 8: Programme for the Further Implementation of Agenda 21.

United Nations (2003). Johannesburg Summit: Political Declaration and Plan of Implementation.

United Nations Environment Programme (UNEP); Environment and Economics Unit (EEU) (1993). Consultative Expert Group meeting on Environmental Impact Assessment – Report of the Meeting. Environmental Economics Series Paper No. 7.

United Nations, ECE, 1992. Application of Environmental Impact Assessment Principles to Policies, Plans and Programmes: Report prepared by the task force, with the United States of America as lead country, on the application of environmental impact assessment principles to policies, plans and programmes.

United States Environmental Protection Agency, 1998. Principles of Environmental Impact Assessment.

USAID / CRS, 1999. Programmatic Environmental Assessment of Small-Scale Irrigation in Ethiopia

USAID, 2001. Programmatic Environmental Assessment of Co-Management of Reserved Forests in Guinea

World Bank 1993¹. Environmental Assessment Sourcebook Update: The World Bank and Environmental Assessment: An Overview.

World Bank, (1993²). Environmental Assessment Sourcebook Update: Sectoral Environmental Assessment.

World Bank, 1989. Environmental Assessment Sourcebook: Volume I; Policies, Procedures, and Cross-Sectoral Issues.

World Bank, 1996. Environmental Assessment Sourcebook Update: Regional Environmental Assessment.

World Bank, 2002. Strategic Environmental Assessment in World Bank Operations: Experience to Date – Future Potential: Background Paper Prepared for the Environment Strategy.

World Bank, 2003. Environmental And Social Analysis Of The Burkina Faso PRSC III.

Websites

www.sdnf.undp.org/rc/forums (30-01-04): INFOTERRA: African Journal of Environmental Assessment: Volume 1 Number 2.

www.cleiaa.org (30-01-04): West Africa Association for Environmental Assessment.

www.saiea.com (30-01-04 Southern African Institute for Environmental Assessment (SAIEA)

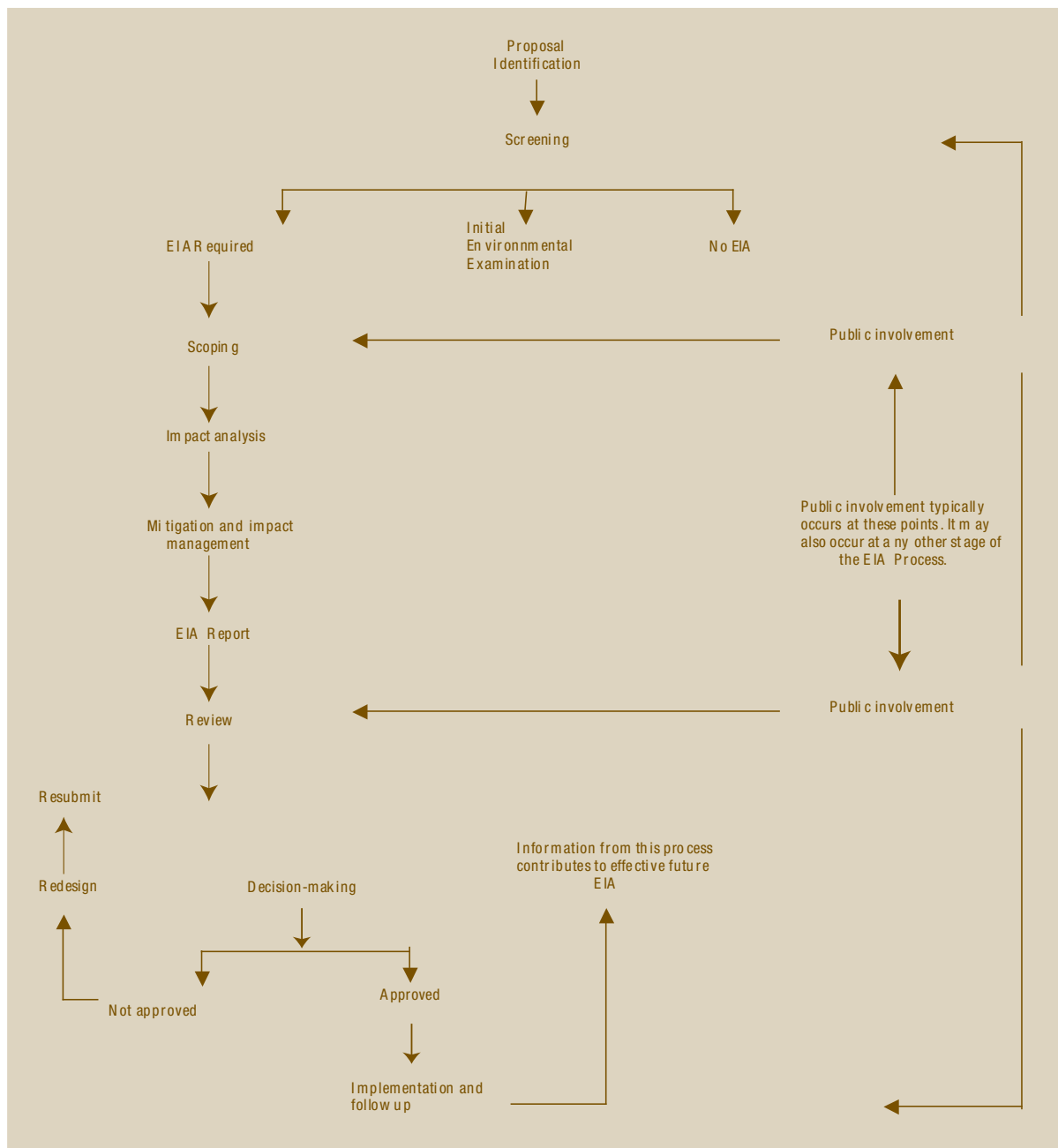
www.iaia.org (30-01-04) About IAIA

www.worldbank.org/afr (30-01-04) African Region Project and Portfolio Environmental Assessment and Review (PEAR) Group.

www.iucn.org/places/earo (30-01-04) IUCN Eastern Africa Regional Programme

ANNEXES

Annex 1: Generalized EIA process flowchart



Source: UNEP, 2002

Annex 2: Purpose & objectives, principles & definitions of EIA, SEA & SIA

(A) EIA

Purpose and objectives of EIA

Purposes of EIA (UNEP, 2002)

- Provide information for decision-making on the environmental consequences of proposed actions; and
- Promote environmentally sound and sustainable development through the identification of appropriate enhancement and mitigation measures.

This submission dovetails with that of the World Bank, 1989 but which places emphasis on the early recognition of environmental consequences to ensure that these are taken into account in project design.

The objectives of EIA (IAIA and IEA, 1999):

- To ensure that environmental considerations are explicitly addressed and incorporated into the development decision-making process;
- To anticipate and avoid, minimize or offset the adverse significant biophysical, social and other relevant effects of development proposals;
- To protect the productivity and capacity of natural systems and the ecological processes which maintain their functions; and
- To promote development that is sustainable and optimises resource use and management opportunities.

Principles of EIA

The principles of EIA: *Basic and Operating* (IAIA and IEA, 1999)

“*Basic Principles*” apply to all stages of EIA; they also apply to Strategic Environmental Assessment (SEA) of policies, plans and programmes. The list of Basic Principles should be applied as a single package, recognizing that the Principles included are interdependent and, in some cases, may conflict (e.g., rigor and efficiency). A balanced approach is critical when applying the Principles to ensure that environmental impact assessment fulfills its purpose and is carried out to internationally accepted standards. EIA thus produces both complete analyses and the means of reconciling apparently conflicting principles.

“*Operating Principles*” describe how the Basic Principles should be applied to the main steps and specific activities of the environmental impact assessment process; e.g., screening; scoping; identification of impacts; assessment of alternatives. It is also envisaged that subsequent tiers of Principles could evolve, e.g., “activity-specific,” “state-of-the-art” and “next generation” of impact assessment principles. However their development would constitute a separate effort, building on and extending the Basic and Operating Principles presented below.

Basic Principles:

Environmental Impact Assessment should be:

Purposeful - the process should inform decision-making and result in appropriate levels of environmental protection and community well being.

Rigorous - the process should apply “best practicable” science, employing methodologies and techniques appropriate to address the problems being investigated.

Practical - the process should result in information and outputs, which assist with problem solving and are acceptable to and able to be implemented by Proponents.

Relevant - the process should provide sufficient, reliable and usable information for development planning and decision-making.

Cost-effective - the process should achieve the objectives of EIA within the limits of available information, time, resources and methodology.

Efficient - the process should impose the minimum cost burdens in terms of time and finance on Proponents and participants consistent with meeting accepted requirements and objectives of EIA.

Focused - the process should concentrate on significant environmental effects and key issues; i.e., the matters that need to be taken into account in making decisions.

Adaptive - the process should be adjusted to the realities, issues and circumstances of the proposals under review without compromising the integrity of the process, and be iterative, incorporating lessons learned throughout the proposal's life cycle.

Participative - the process should provide appropriate opportunities to inform and involve the interested and affected publics, and their inputs and concerns should be addressed explicitly in the documentation and decision-making.

Interdisciplinary - the process should ensure that the appropriate techniques and experts in the relevant biophysical and socio-economic disciplines are employed, including use of traditional knowledge as relevant. *Credible* - the process should be carried out with professionalism, rigor, fairness, objectivity, impartiality and balance, and be subject to independent checks and verification.

Integrated - the process should address the interrelationships of social, economic and biophysical aspects.

Transparent - the process should have clear, easily understood requirements for EIA content; ensure public access to information; identify the factors that are to be taken into account in decision making; and acknowledge limitations and difficulties.

Systematic - the process should result in full consideration of all relevant information on the affected environment, of proposed alternatives and their impacts, and of the measures necessary to monitor and investigate residual effects.

Source: IAIA and IEA, 1999

Operating Principles

The EIA process should be applied:

- As early as possible in decision making and throughout the life cycle of the proposed activity;
- To all development proposals that may cause potentially significant effects;
- To biophysical impacts and relevant socio-economic factors, including health, culture, gender, lifestyle, age, and cumulative effects consistent with the concept and principles of sustainable development;
- To provide for the involvement and input of communities and industries affected by a proposal, as well as the interested public; and
- In accordance with internationally agreed measures and activities.

Specific Operating Principles

Specifically the EIA process should provide for:

Screening - to determine whether or not a proposal should be subject to EIA and, if so, at what level of detail.

Scoping - to identify the issues and impacts that are likely to be important and to establish terms of reference for EIA.

Examination of alternatives - to establish the preferred or most environmentally sound and benign option for achieving proposal objectives.

Impact analysis - to identify and predict the likely environmental, social and other related effects of the proposal.

Mitigation and impact management - to establish the measures that are necessary to avoid, minimize or offset predicted adverse impacts and, where appropriate, to incorporate these into an environmental management plan or system.

Evaluation of significance - to determine the relative importance and acceptability of residual impacts (i.e., impacts that cannot be mitigated).

Preparation of environmental impact statement (EIS) or report - to document clearly and impartially impacts of the proposal, the proposed measures for mitigation, the significance of effects, and the concerns of the interested public and the communities affected by the proposal.

Review of the EIS - to determine whether the report meets its terms of reference, provides a satisfactory assessment of the proposal(s) and contains the information required for decision-making.

Decision making - to approve or reject the proposal and to establish the terms and conditions for its implementation.

Follow up - to ensure that the terms and condition of approval are met; to monitor the impacts of development and the effectiveness of mitigation measures; to strengthen future EIA applications and mitigation measures; and, where required, to undertake environmental audit and process evaluation to optimise environmental management. *

* It is desirable, whenever possible, if monitoring, evaluation and management plan indicators are designed so they also contribute to local, national and global monitoring of the state of the environment and sustainable development.

Source: IAIA and IEA, 1999

(B) SEA

Purpose and objectives of SEA

The common purpose of SEAs is to take account of environmental concerns in policy and planning decision-making, thereby contributing to sustainable development (UNEP, 2002).

Aims and objectives of SEA

To support informed and integrated decision-making by:

- Identifying environmental effects of proposed actions;
- Considering alternatives, including the best practicable environmental option; and
- Specifying appropriate mitigation measures.

To contribute to environmentally sustainable development by:

- Anticipating and preventing environmental impacts at source;
- Early warning of cumulative effects and global risks; and
- Establishing safeguards based on principles of sustainable development.

To reinforce project EIA by:

- Prior identification of scope of potential impacts and information needs;
- Addressing strategic issues and considerations related to justification of proposals; and
- Reducing the time and effort necessary to conduct individual reviews.

Source: UNEP 2002, as amended from Sadler and Brook, 1998.

Some wider potential policy and institutional benefits from use of SEA

- Mainstreaming environmental objectives
- Incorporating sustainability principles into policy-making
- Meeting obligations under international environmental agreements
- 'Sustainability assurance' for development proposals and options
- Instituting environmental accountability in sector-specific agencies
- Greater transparency and openness in decision-making

Source: UNEP, 2002

Some principles of SEA

(A) General: An SEA process should:

- Fit the purpose and be customised for application at the policy level or at the level of plans and programmes;
- Have integrity, so that it is applied in accordance with the objectives and provisions established for it; and be effective in meeting those objectives;
- Be focused on delivering information necessary to the decisions to be made, and address the significant and key issues;
- Be driven by sustainable development principles (taking into account environmental, social and economic considerations); and therefore
- Be integrated with parallel analyses of economic and social dimensions and issues, and with other planning and assessment instruments and processes;
- Relate to project EIA where appropriate - perhaps through tiering mechanisms;
- Be transparent and open;
- Be practical, easy to implement, oriented to problem-solving, and cost -effective;
- Introduce new perspectives and creativity (it should provide bonuses, not be a burden); and
- Be a learning process (thus it is essential to start doing SEA to gain experience).

(B) SEA Steps: An SEA process should entail:

- Screening: responsible agencies carry out an appropriate assessment of all strategic decisions with significant environmental consequences;

- Timing: results of the assessment are available sufficiently early for use in the preparation of the strategic decision;
- Environmental *scoping*: all relevant information is provided to judge whether: (i) an initiative should proceed; and (ii) objectives could be achieved in a more environmentally friendly way (i.e. through alternative initiatives or approaches);
- Other *factors*: sufficient information is available on other factors, including socio-economic considerations, either parallel to or integrated in the assessment;
- Review: the quality of the process and information is safeguarded by an effective review mechanism;
- Participation: sufficient information on the views of all legitimate stakeholders (including the public affected) is available early enough to be used effectively in the preparation of the strategic decision;
- Documentation : results are identifiable, understandable and available to all parties affected by the decision;
- Decision-making and accountability: it is clear to all stakeholders and all parties affected how the results were taken into account in decision-making;
- Post-decision: sufficient information on the actual impacts of implementing the decision is gained to judge whether the decision should be amended.

Source: Dalal-Clayton and Sadler as adapted from Sadler (1998b) and Tonk & Verheem (1998).

Definitions of different types of SEA

Sectoral EA is the process of examining potential environmental and social implications of all or most of the potential projects proposed for the same sector (Goodland et al. 1996). Sectoral EA also assesses the cumulative impacts and complements project-specific EAs in development planning. Where project EAs focus on the impacts of specific investments and often treat sector strategic planning as a given, Sectoral EA offers an opportunity for sector-wide environmental analysis before investment priorities have been determined. It also supports integration of environmental concerns into long-term development and investment planning. Sectoral EA is most commonly applied in the context of sector investment programs involving multiple sub-projects. (World Bank, 1993²).

Programmatic EA is a variant of Sectoral EA. Programmatic EA is the use of a sectoral EA to assess the impacts of a sector-wide program, such as locust control. These are programs that will be replicated at a variety of locations, and for which the impacts are more or less the same at any location. A programmatic EA may include among its outputs guidelines for conduct of the activity and site-specific questions, which must be answered before initiating the activity. Programmatic EA there helps establish guidelines, criteria and standards to assess “same type” projects in a specific sector (World Bank, 1999)

Regional EA is the process of determining the regional, cumulative environmental and social implications of multi-sectoral developments within a defined geographic area over a certain period (Goodland et al. 1996). Regional EA therefore helps development planners design investment strategies, programmes and projects that are environmentally sustainable for a region as a whole. Regional EAs take into account the opportunities and limitations represented by the environment of a region and assesses on-going and planned activities from a regional perspective (World Bank, 1996).

Cumulative EA is the process of assessing the cumulative impacts of the currently proposed project added to existing developments in an area, and to the impacts of foreseeable projects in the same area, whether made more likely by the current project or not (Munn, 1994 in Goodland et al. 1996). Cumulative EIA is applied in well-conducted environmental assessments (project level or above project level) to systematically address cumulative impacts. It is therefore a tool that enhances the prediction of impacts in all levels of environmental assessments.

(C) PRINCIPLES SPECIFIC TO SIA PRACTICE

1. Equity considerations should be a fundamental element of impact assessment and of development planning.
2. Many of the social impacts of planned interventions can be predicted.
3. Planned interventions can be modified to reduce their negative social impacts and enhance their positive impacts.
4. SIA should be an integral part of the development process, involved in all stages from inception to follow-up audit.
5. There should be a focus on socially sustainable development, with SIA contributing to the determination of best development alternative(s) – SIA (and EIA) have more to offer than just being an arbiter between economic benefit and social cost.
6. In all planned interventions and their assessments, avenues should be developed to build the social and human capital of local communities and to strengthen democratic processes.
7. In all planned interventions, but especially where there are unavoidable impacts, ways to turn impacted peoples into beneficiaries should be investigated.
8. The SIA must give due consideration to the alternatives of any planned intervention, but especially in cases when there are likely to be unavoidable impacts.
9. Full consideration should be given to the potential mitigation measures of social and environmental impacts, even where impacted communities may approve the planned intervention and where they may be regarded as beneficiaries.
10. Local knowledge and experience and acknowledgment of different local cultural values should be incorporated in any assessment.

11. There should be no use of violence, harassment, intimidation or undue force in connection with the assessment or implementation of a planned intervention.
12. Developmental processes that infringe the human rights of any section of society should not be accepted.

Source: IAIA, 2003

Annex 3: Institutional and regulatory frameworks for EA in selected African countries

Nigeria: Echefu N. and Akpofure E. 2003; Akpofure, E.A. and Ojile, M., 2003

The Federal Environmental Protection Agency (FEPA) was established by Decree 58 of 1988 of the same name and amended by Decree 59 of 1992. FEPA was given responsibility for control over the environment and for the development of processes and policies to achieve same. Separate EIA legislation, the *EIA Decree 86 of 1992* was promulgated establishing FEPA as the apex regulator, making EIA mandatory for all developmental purposes (with some exceptions e.g. Petroleum industry). Under it, FEPA has published various sectoral EIA procedures together with EIA procedural guidelines in 1995. Another institution with an EIA mandate is the Department of Petroleum Resources (DPR), which administers environmental guidelines and standards for the petroleum industries in Nigeria. The guidelines and standards established in 1991 provide detailed statutory requirements to which the oil and gas industry is supposed to adhere.

Benin: d'Almeida, K., 2001 and BEA Official Sources, 2005

The main administrative body for EIA in Benin are the Ministry of Environment, Human Settlements and Urban Planning established by a Decree of 1992 and the Benin Environment Agency (BEA) established by a Decree of 1995. The framework legislation on the environment was passed in 1999 and procedures for EIA have also been established. General guidelines including procedures for public participation were issued in 1997. Many sectoral guidelines were elaborated for various sectors in 1997. Those pertaining to service stations were subsequently elaborated in 2000. There is no provision for SEA.

Ghana: Sampong, E., 2004

The Environmental Protection Agency (EPA) Act of 1994 mandates the EPA to ensure compliance in planning and execution of all development activities with the EIA procedures in order to promote environmentally sound and sustainable development in Ghana. General EIA procedures were adopted in 1995 and specific sector guidelines for forest and wood industries as well as for environment and mining were adopted in 1999 and 1986 respectively. Specific guidelines for eight other sectors are currently under preparation. Environmental Assessment regulations adopted in 1999 provide for public participation at all stages of the EIA process. There is no specific legislation for SEA. However, the environmental assessment regulations cover plans and programmes in its definition of undertakings to be subject to EIA.

The Gambia: NEA, 1999 and Official Sources, 2004

The National Environment Management Act (NEMA), 1994 of the Gambia provides the legal basis for EIA in the country. The National Environment Agency (NEA) established by the same Act is the main administrative body for the implementation of the Act. The draft EIA regulations drawn under the Act in 1999 are about to be

reviewed and finalized for adoption. Under these regulations, EIA procedures and guidelines were issued in the same year. Handbooks for Citizen's Guide, Developers and Civil Servants were also prepared in the same year. Public participation is explicitly provided for under the Act and EIA Procedures. SEA is not explicitly provided for but is implicit under the schedule of activities for which EIA is required.

Niger: UNDP/UNEP/GEF, 2001 and Almeida, K., 2001

In Niger, the main administrative institutions for EIA are the National Council for Environment and Development, the Ministry of Environment and Desertification and the Environmental Assessment and Impact Studies Bureau (BEEI). The environmental assessment system was officially established in 1997 by virtue of the 1997 order on institutionalization of impact studies on the environment. Decrees on attributions, organization and functions of the BEEI and administrative assessment and examinations procedures on environmental impact assessment were passed in the same year. A framework law on the environment was subsequently passed in 1998 and procedures for public participation are under consideration.

Sudan: Mohamed- Ali, O.M., 2003

Sudan does not have EIA legislation. EIA is therefore not mandatory but is being conducted on a voluntary basis and mostly to meet donor conditionality. The Environmental Protection Policy Act has however been promulgated and is awaiting the signature of the President. The Act provides for an Environment Feasibility Study (EFS) to be undertaken for any large development project, which construction might negatively impact the quality of the environment.

Egypt: Manchester University EIA Centre, 2000, CITET-METAP, 2003

In Egypt, the Law on Protection of the Environment of 1994 established the legal basis for EIA in the country. The law is implemented through its executive regulations, issued by a Prime Ministerial Decree of 1995. The law and decree entered into force in 1998. The Egyptian Environmental Affairs Agency (EEAA) oversees / supervises the application of the law. Sectoral ministries and governing bodies are the competent administrative authorities for EIA in Egypt, as they possess the executive powers in relation to development authorization. Guidelines and procedures for EIA were developed in 1995. Sector specific guidelines have subsequently been developed. The guidelines request public consultation during the study. There are no formal provisions for SEA.

Algeria: CITET – METAP, 2003

In Algeria, the main administrative body for EIA is the General Direction of the Environment (DGE) under the Ministry of Land Use and Environment (MOE). The framework environmental law of 1983 makes reference to EIA. The detailed EIA legislation was issued by a Decree of 1990 and under which guidelines for carrying out EIA have been prepared. Public participation (public survey) is a requirement under article 5 of the Decree. There are no formal provisions for SEA.

Morocco: CITET-METAP, 2003

In Morocco, the main administrative body for EIA is the Department of the Environment supported by the National EIA Committee that deliberates on the decision for consideration by the Minister of Environment. The framework law on the protection of the environment was passed in 2003 but the EIA law is still in draft. The draft law and EIA decree make requirement for public participation in the EIA process. In spite of the absence of EIA legislation, some projects are subjected to EIA. There are no formal provisions for SEA.

Tunisia: Elloumi, Marie-Jose, 2004

In Tunisia, the law that established the National Environmental Protection Agency (ANPE in French) in 1988 also established for the first time, a comprehensive EIA system. The contents of EIAs, procedures, and approval processes as well as the classification of the projects they deal with are defined by regulations established in 1991. A law passed in 2001 introduces amendments to EIA administrative procedures and relaxes the EIA requirements for projects that are less polluting or of small magnitude. Regulations to facilitate the operationalization of these amendments are in the process of being prepared. A handbook specifying standard terms of reference for individual types of project has also been issued. Public participation is not a requirement under the EIA law and there are no formal provisions for SEA. Prior to the introduction of a comprehensive regime on EIA, many sectoral legislation dating from the 1960's had implicit provisions on EIA. The Forestry law of 1988 explicitly provides for EIA.

Cameroon: UNDP/UNEP/GEF, 2001, Bitondo, Dieudonne, 2000, Tekeu, J-C, 2004

In Cameroon, EIA is explicitly mentioned in decree no 84-797 of 17 July 1984 organizing the Ministry of Planning and Territorial Administration. The Sub-Department of Human Settlements and Environment was assigned the duty of drawing up the state of the environment throughout the territory and conducting EIA for development projects. However, this law did not prescribe a list of projects to be subjected to EIA nor the legal conditions and procedures under which they should be undertaken (Bitondo, D., 2000). The Law 94/01 of 20 January 1994 concerning the regime of Forests, Wildlife and Fishing law of 1994 introduced the concept of regulations on environmental impact assessment. The law stipulates (article 16), in effect, that every development project likely to bring about perturbations to forests and wetlands should have submitted a previous study on the environment (UNDP/UNEP/GEF, 2001). However, the framework law on the Environment of 1996 is the core legislation on EIA. EIA regulations are still in draft but environmental directives on road maintenance works have been prepared. The main administrative body for EIA is the Ministry of Environment and Forestry, which was established in 1992 (Tekeu, J-C, 2004).

Congo: D'Almeida, K., 2001

The Ministry of Industry, Mining and the Environment, the General Directorate of the Environment are the main administrative institutions for EIA in Congo. The

National Agency for Environmental Protection (ANPE- under creation) will also be a key EIA institution. EIA is established by a Decree of 1986 and the framework environmental law was passed in 1991 and revised in 1997. Procedures for EIA, which will include guidelines for public participation, are currently being drafted.

Gabon: D'Almeida, K, 2001

The General Directorate of the Environment under the Ministry of Environment and Nature Protection is the main administrative institution for EIA in Gabon. The Arrêté Signé of 1979 makes EIA a legal requirement. The mandate and organization of the Ministry of Environment and Nature Protection were established by a Decree of 1985 and the environmental code was established by law in 1993.

Burundi: D'Almeida, K, 2001

Burundi has a framework law on the Environment but does not have a legislative requirement for EIA. The main administrative bodies for environmental matters are the Ministry of National and Regional Development and the Environment and the General Directorate for National and Regional Development.

Tanzania: Katima, J.H.Y., 2003; Kibassa, J., 2003

There is no legal requirement for EIA in Tanzania and no framework environmental law. There is however, a National Environmental Management Council (NEMC) which advises the Government on environmental issues and the Division of Environment under the Vice President's Office, which looks after policy issues. Although NEMC is established by an Act of 1983, the Act does not provide for regulatory and supervisory powers on EIA and the functions of NEMC are essentially advisory. The NEMC has developed EIA guidelines (Katima, 2003) but these guidelines are still in draft. The draft guidelines envisage the formulation of an EIA law (IUCN, 2001). (Kibassa, 2003).

Ethiopia: EPA, March, 2004

The Environmental Protection Authority (EPA) of Ethiopia established by a proclamation of 1995 is the main administrative body for EIA in Ethiopia. The enabling legislation for EIA in the country is the EIA proclamation of 2002. EIA procedures and framework guidelines were finalized in 2000 and sectoral guidelines in nine sectors are at various stages of development. Some are about to be presented to the Environmental Protection Council of Ministers for endorsement. The EIA proclamation provides for public participation. The proclamation also provides for SEA under part 4, which contains a requirement for "EIA of public instrument". The proclamation defines public instrument as a policy, strategy, programme, law or international agreement. However, procedures and guidelines on SEA are yet to be prepared.

Uganda: NEMA, 2004

Uganda's National Environment Act of 1995 is the enabling legislation for EIA in the country. The Act established the National Environment Management Agency (NEMA) which is the main administrative body for EIA in Uganda. The Act also

provides for the establishment of a Technical Committee on EIA to provide advisory services to NEMA on critical aspects of EIA implementation. This body has been in place since 1996. NEMA prepared guidelines for EIA in 1997; and in 1998, the EIA regulations were adopted. The regulations provide a detailed elaboration of the Act and present the details of the EIA process and the roles of various stakeholders. The National Environment (Conduct and Certification of Environment Practitioners) Regulations of 2003 provide for a uniform system of certification and registration of EIA practitioners and set minimum standards and criteria for qualification as an EIA practitioner. The Act provides for public participation and it is a central policy of the Uganda EIA process that opportunity is provided for public involvement and participation. There are no formal requirements for SEA.

Kenya: NEMA, 2004

The main administrative body for EIA in Kenya is the National Environment Management Authority (NEMA). The Environmental Management and Coordination Act (EMCA) of 1997 provide the legal framework for EIA in the country, and specific regulations on EIA were adopted in 2003. EIA procedures and guidelines for many sectors have been prepared but are in draft form. SEA is provided for in Part IV, Section 43 of the Environmental (Impact Assessment and Audit) Regulations of 2003.

Mozambique: SAIEA, 2003

The Framework Environmental Act (1997) provides the legal framework for the use and correct management of the environment and its components and to assure the sustainable development of Mozambique. Chapter 4 of the Act refers to the Prevention of Environmental Damage. Under this clause, licensing of activities that are liable to cause significant environmental impacts is required. The issuance of an environmental licence is dependent on an appropriate level of EIA being completed and accepted by Ministério para a Coordenação da Acção Ambiental (MICOA). EIA regulations were established by a Decree of 1998 drawn under the Act. Public participation is provided for under these regulations. The drafting of sectoral guidelines began since 1991 and it was envisaged that these guidelines would have been approved by 2003.

Namibia: DEA, March, 2004; SAIEA, 2003

In Namibia, the Directorate of Environmental Affairs is the main administrative body for EIA. The EIA legislation is still in draft but is going through the process of enactment. There are no regulations for EIA either. However, there exist three sets of sectoral guidelines in the mining, agriculture, water & infrastructure sectors. Public participation and SEA are provided for in the proposed bill. Namibia does not have formal provisions for SEA. However, the Mining and Petroleum Acts of Namibia of 1992 and 1991 respectively require Proponents to conduct EIAs.

South Africa: SAIEA, 2003

The Department of Environmental Affairs and Tourism is the main administrative body for EIA in South Africa. The Environment Conservation Act of South Africa (1989) makes provision for EIA and for the promulgation of regulations setting out

the procedures to be followed in undertaking an EIA and regulations were promulgated under the Act in 1997. The National Environmental Management Act (NEMA) of 1998 repealed most of the Environment Conservation Act of 1989. Although provision is made for EIA in the new National Environmental Management Act, the sections pertaining to EIA in the Environment Conservation Act have not yet been repealed. Although NEMA specifies that mechanisms for independent review be implemented, the current EIA regulations do not require peer review. Instead, they state that the EIA report be reviewed by the relevant authority, with the assistance of other authorities, specialists, and interested and affected parties. The draft IEA regulations provide for SEA. Noteworthy is the fact that the EIA regulations exclude mining. The environmental impact of mining is dealt with under the Minerals Act of 1991, which is executed, by the Department of Minerals and Energy.

Zambia: Official Sources, ECZ, March, 2004

The Environment Council of Zambia established in 1992 is the main administrative body for EIA in the country. The Environmental Protection and Pollution Control Act of 1990, provides the enabling framework for EIA in Zambia. EIA regulations of 1997 specifically provides for the procedural requirements of the EIA process. General procedural guidelines were developed in 1999 and specific guidelines in four sectors have been drafted but are yet to be adopted. The EIA regulations provide for public participation. There are no specific legislative provisions for SEA; however, the EIA regulations require that environmental assessment be carried out for programmes and plans.

Lesotho: SAIEA, 2003

In Lesotho, the Environment Act of 2001 makes provisions for EIA but the commencement date of the Act was yet to be gazetted (as at 2003). Regulations (due to have been gazetted sometime in 2003) have been made under the Act. The Act also makes provisions for EIA guidelines, which are already in use. The National Environment Secretariat under the Ministry of Tourism, Environment and Culture is the main administrative body for EIA. The 2001 Act however proposes the establishment of the National Environment Management Council and the Lesotho Environment Authority. The latter, once established will take over from the National Environment Secretariat as the main administrative body for EIA. In 2003, Lesotho began to draw guidelines on public participation.. The Mines and Mineral Act of 1996 also makes EIA a prerequisite for obtaining mining rights.

Annex 4: Selected agencies active in the promotion of EA in Africa

In 1989, the *World Bank* introduced a new policy that mandated an environmental assessment for all projects that may have significant impacts on the environment and the Bank's environmental assessment sourcebook was first published in 1991. (WB 1993 ¹) The directive introduced generic guidance on Regional and Sectoral Environmental Assessments and the sourcebook provided more detailed advice on these assessment methods that made it possible for their introduction in project preparation. (WB, 1993 ², and 1996). The Bank issues regular updates of the Sourcebook and in 1999 the second edition was published. Prior to the 1989 Directive, the Bank had issued the Operational Manual Statement 2.36: "Environmental Aspects of Bank Work," in May 1984, requiring that environmental considerations be introduced at the time of project identification and preparation, and recognizing that modification could also occur at the time of appraisal, negotiations, and implementation (WB 1993 ¹). But the Bank began environmental assessment of big infrastructure projects on a selective basis in the early 1970's (Goodland et al, 1996).

The *African Development Bank* (AfDB), in a bid to integrate environmental concerns into its overall lending programme, issued its Environmental Policy Paper in 1990 and Environmental Assessment Guidelines in 1991. The guideless specifically stress the need to develop environmental profiles for all Regional Member Countries (RMCs). In this connection, Country Environmental Profiles (CEP) were developed for its RMCs to build the environmental knowledge base of the Bank as well as to support Bank staff and the RMC officials by providing updated environmental background information. In 2001, the Bank issued its revised and updated procedures on environmental and social assessment (AfDB, 2001). The revised procedures replaced the procedural guidelines contained in the 1992 Environmental Assessment Guidelines. The revised Environmental and Social Assessment Procedures (ESAP) reflect the more integrated approach addressing all crosscutting themes as well as the new organizational structure. The ESAP incorporates sectoral and regional environmental assessments. The Bank has over the years provided EIA training for its staff and Government officials of member States.

The Programme of work of the *United Nations Environment Programme* (UNEP) included EIA related issues prior to UNCED. This work was however primarily confined to providing general guidelines and publications, methodological overviews, emerging techniques etc. UNEP's pre-UNCED EIA publications include: "The Economics of Survival: The Role of Cost-Benefit Analysis in Environmental Decision-Making" (1981) (UNEP, 1993). However, since UNCED, UNEP has been involved in many capacity building/-enhancing activities related to EIA. For example, UNEP produced the first edition of the Training and Resource Manual in EIA in 1996. A second edition was published in 2002 to take into account developments in the field since the publication of the first edition.

The *International Association for Impact Assessment* (IAIA) was organized in 1980 to bring together researchers, practitioners, and users of various types of impact assessment from all parts of the world (www.iaia.org, 30-01-04). IAIA activities seek to: develop approaches and practices for comprehensive and integrated impact assessment; improve assessment procedures and methods for practical

application; promote training of impact assessment and public understanding of the field; provide professional quality assurance by peer review and other means; and share information and networks, timely publications and professional meetings (ibid).

IUCN, *The World Conservation Union* founded in 1948 brings together States, government agencies and a diverse range of non-governmental organizations in a worldwide partnership. IUCN activities in environmental assessment seek to support capacity development and use of EA tools to influence, encourage and promote conservation, integrity and diversity of nature while ensuring that any use of natural resources is equitable and ecologically sustainable.

Other Agencies active in the promotion and EIA capacity enhancement in Africa include bilateral and multilateral development partners namely: The *UK Department for International Development* (DFID), *Royal Netherlands Government*, *Royal Danish Government*, *Norwegian Agency for International Development* (NORAD), *United States Agency for International Development* (USAID), *European Union* (EU), *Gesellschaft Fur Technische Zusammenarbeit* (GTZ), *United Nations Development Programme* (UNDP), *La Francophonie*, *Canadian International Development Agency* (CIDA) and the *Swedish International Cooperation Agency* (SIDA) (Uganda, Tunisia, Ghana and Cameroon Country Reports, 2004).

Annex 5: Terms of Reference for the Country Studies

REVIEW OF THE APPLICATION OF ENVIRONMENTAL IMPACT ASSESSMENT (EIA) IN SELECTED MEMBER STATES:

I. Background

The Sustainable Development Division (SDD) of the United Nations Economic Commission for Africa (UNECA) has commenced the implementation of its work programme for the biennium 2004 – 2005. An integral part of the activities being conducted during the biennium is a review of the application of Environmental Impact Assessment (EIA) in selected member States and the identification of best practices including lessons learned. The review will culminate in the publication and dissemination of a report by December 2004.

The review is being conducted as part of a series of activities undertaken by the Commission to promote the integration of environmental concerns in development policies and to promote a balanced integration of the economic, social and environmental dimensions of sustainable development. This mandate was given to the Regional Commissions at the United Nations Conference on Environment and Development (UNCED) in 1992 and at the World Summit on Sustainable Development (WSSD), 2002. Other policy instruments being promoted by the Commission in member States include the Population, Environment, Agriculture and Development (PEDA) model as an advocacy tool in addressing the nexus issues of sustainable development and Natural Resource Accounting (NRA).

It is expected that the findings of the review would contribute to providing information that is relevant to enhancing the application of environmental assessments in member States especially as they embark on implementing the Johannesburg Plan of Implementation (JPOI) adopted at the WSSD.

In connection with the above, a task brief was prepared to guide the preparation of the report. An important activity identified in the task brief is the preparation of country reports on EIA application in selected member States. The criteria for selection of member States for the preparation of the country reports are based on the relative level of development and application of EA policies, legislation, procedures and guidelines. Another important criterion is adherence to the principle of equitable geographical representation. Based on these criteria one country in each sub-region of Africa was selected for the study. These are: Ghana; Tunisia; Cameroon; Uganda; and South Africa¹.

It has been agreed that institutions in member States that have the main administrative responsibility for EIA process (National EIA Institutions) are best placed to assist the Commission in effectively preparing the country reports. In this regard, with the assistance of the Head of the EIA Institution, a national writer will be identified to prepare the country reports in the countries selected.

II. Objective of the Country Report

The objective of the country report is to assess the development, institutionalization and systematic application of environmental assessment in member States and, in particular, to share success stories, best practices and lessons learned. For the purpose of the country reports, Environmental Assessment (EA) is interpreted as including environmental assessment at the individual project level (EIA) and at the plan, policy and programme levels (Strategic Environmental Assessment – SEA).

III. Description of tasks to be carried out by the National Writer

In order to meet the above objective, the national writer is required to prepare a country report to include but not limited to the following elements taking into account the specific country situation.

The National Writer will describe, examine and analyse:

The National Context

- The national context (socio-economic and environmental and issues; national implementation of the global sustainable development agenda etc.);

Legislative and Institutional Framework

- The legal and regulatory framework (including a description of essential provisions relevant to the EA process) and institutional framework for EA (including at decentralised levels). Are the policies, legislation and institutional framework adequate? Does the legislation provide for Social Impact Assessment (SIA) and Health Impact Assessment (HIA) or are these provided for under separate regulations? Does the legislation provide for public participation in the EIA and review processes as well as dispute settlement mechanisms? Supporting administrative procedures and guidelines and the manner /process of development: Are these adapted from guidelines of other agencies/ institutions or developed from scratch?; and
- Guiding values and principles for environmental assessment.

Implementation issues

- Institutionalization and application of environmental assessment policies, legislation and supporting administrative procedures and guidelines including development and trends.
- Constraints, challenges and opportunities in the practical application of environmental assessment. Success stories, best practices and lessons learned will be treated under a separate section (see below for details).
- Management and functioning of the Environmental Assessment Process particularly with regard to:
 - The EA study and Review process: the quality of the EA study including its adherence to country (or recognised Agency) procedures and guidelines; the quality of the review process, expertise and adherence to country (or recognised agency) procedures and guidelines; effective-

ness of the environmental assessment in integrating the social, economic and environmental dimensions of sustainable development and / or in ensuring efficient trade offs among the three including the extent to which the EA study integrates Social Impact Assessment (SIA) and Health Impact Assessment (HIA); Instances when SIA and HIA are conducted as stand-alone processes?

- Public participation and its effectiveness (at different stages of the EA process);
- The use of Information, Education and Communication (IEC) strategies including the media to promote understanding and appreciation of the importance of EA and public participation in the process
- The relationship of environmental assessment to decision making. How effective is environmental assessment in influencing decisions? What is the demonstrated political will in implementing the decisions and recommendations of EA study reports? To what extent is EA applied in balancing the tradeoffs between development imperatives and environmental and social concerns?
- Dispute Settlement Mechanisms/ Procedures and their effectiveness;
- Implementation of the Environmental Management Plan (EMP) including monitoring and evaluation;
- Funding of the EA study and review process
- Cost and time implications of the EA study and review process; proportion of EA cost to total project cost (with examples)
- Agencies / firms / groups and individuals normally involved in the EA study and review process; use of local and international expertise, working arrangements between local and international firms/ experts.

Capacity Issues, Networking and Cooperation

- Capacity Issues – What are the main capacity issues in the application / institutionalization of environmental assessments. Adequacy of trained personnel (government, private sector and NGOs - in quantity and quality)? Adequacy (in quantity and quality) of National Institutions offering training in EA? What initiatives have been or are being undertaken either by the EA Institution or by other institutions and partners to build and enhance capacity in environmental assessment.
- Environmental Assessment networks (sub-regional, regional and international) to which the EIA Institution and/ or other relevant institutions are members or are associated with
- Development Cooperation – Development partners (multilateral, regional, bilateral) active in the area of environmental assessment in your country and activities supported. How can development cooperation be made more effective in enhancing environmental assessment capacity in your country?

Identification and description of Cases of Success Stories/ Best Practices and Lessons learned

The description of cases of Success Stories/ Best Practices and Lessons learned is the highlight of the case study. A description of cases of success stories and best practices in any of the implementation issues identified above as well as any others deemed showcasing. These could feature environmental assessments conducted in different sectors of the economy and could include project level EIA and SEAs of plans, policies and programmes. Also to be included in this section of the report are lessons learned based on experiences in the establishment and application of the EA system. What was done in a certain way that should have been done differently or that could have been done better when given a second chance?

IV. Conclusions and Recommendations

Make concluding remarks and recommend ways to enhance the application of environmental assessment in the country under review.

V. Time Frame

The country report should be submitted to SDD, UNECA by 31 May 2004 at the latest.

VI. Deliverables

The national writer is expected to provide to UNECA, one electronic and one hard copy of the report to include but not limited to elements identified in section III (Description of Tasks) above, using the outline provided in appendix 1. The report should include photos (electronic and hard) depicting catchy scenes relevant to the application of environmental assessment in your country.

Endnote

¹ In the case of South Africa, it was later discovered that SAIEA had published a report on EIA in Southern Africa, which covered all countries of the region. This report together with other recent documentation on the application of EA in South Africa was considered adequate for the purposes of the present study. Thus, a separate study was not commissioned for South Africa.



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