

# **THE DEVELOPMENT AND PRACTICE OF STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) IN KENYA**

***Frida Nyiva Mutui, PhD Candidate***

College of Environmental Science and Engineering,  
Institute of Environment for Sustainable Development (IESD),  
Tongji University, Shanghai, P. R. China

***Bao Cun-kuan, Prof.***

Department of Environmental Sciences and Engineering,  
Fudan University, Shanghai, P. R. China

***Vincent Onyango, Lecturer, PhD***

Department of Town and Regional Planning, School of Environment,  
University of Dundee, Scotland, UK

***Victor Muhandiki, Prof.***

Department of Civil Engineering, Graduate School of Engineering,  
Nagoya University, Nagoya, Japan

***Francis Mwaura, Senior Lecturer***

Department of Geography and Environmental Studies,  
University of Nairobi, Nairobi, Kenya

---

## **Abstract**

This paper provides an analytical description of the emerging Kenyan Strategic Environmental assessment (SEA) system as an example from Sub-Saharan Africa, focusing on its form, purposes and implementation. Three features are of particular interest: first, the extent to which the Kenyan SEA operates within a formally recognized regulatory framework of protected rights; second, the policies and institutions which act as agencies of the SEA system; and third, the procedural and substantive requirements of the Kenyan SEA process. It is concluded that the current political and decision-making context, following the new constitution, has created a well-protected and enforceable regulatory system for SEA. However, the successful development of SEA in Kenya will likely depend on 1) internalization and subsequent innovative application of the existing framework; 2) the effective integration of SEA at both the national and regional levels; 3) the level of commitment SEA will get from the emerging political and decision-making

cultures; and 4) continuous use of empirical and evaluatory feedback to evolve the system.

---

**Keywords:** Strategic Environmental Assessment, SEA Practice, SEA Development, Kenya SEA

## 1. Introduction

The establishment of Strategic Environmental Assessment (SEA) in Kenya was ostensibly in recognition of the fact that the existing Environmental Impact Assessment (EIA) tool was unable to respond to environmental integration needs at strategic levels of decision-making (NEMA, 2012). This genesis of SEA predates the Kenyan incident (Lee and Walsh, 1992, Sadler and Verheem, 1996 , Therivel et al. , 1996, Wood and Dejeddour, 1992). Currently, Kenya has no legislation requiring SEA, but luckily it is provided for in the Environmental Impact Assessment/Environmental Audit (EIA/EA) Regulations, 2003, made under the Environmental Management and Coordination Act (EMCA, 1999), where Regulation 42 (1) and (3) requires lead agencies in consultation with the National Environment Management Authority (NEMA) to subject all public Policies, Plans and Programs, (PPPs) to SEA. The latter also commits government and all lead agencies to incorporate principles of SEA in the development of sector or national policy.

Since the inception of SEA in the early 1990s, it has globally received adoption for environmental assessment of strategic decisions - PPPs, (Dalal-Clayton and Sadler, 2005, Fischer, 2007, Schmidt et al. , 2005). To date, a pool of literature has been internationally generated representing various SEA systems often distinguishable by the emphasis in purpose, form and application in various contexts (Bina et al. , 2011, CEC, 2001, Dalal-Clayton and Sadler, 2005, Eales and Sheate, 2011, Fischer, 2007, Jackson and Illsley, 2007). However, not all regions have been represented as evidenced from a recent global survey of publications from three main SEA journals covering the past two decades (Fischer and Onyango, 2012). The survey revealed relative under-representation from Sub-Saharan Africa, with the exception of South Africa.

This paper therefore, reflects on the emerging SEA system in Kenya by focusing on its form, purposes and implementation. This is at a time when the ‘traditional’ centralized Kenyan planning system is evolving and introducing new competences and practices at the regional level, as a result of new constitutional arrangements. To provide an overview of the state of the art of SEA in Kenya, three features are of particular interest: first, the extent to which the SEA system operates within a formally recognized regulatory framework of protected rights, second, is the institutional and

administrative frameworks which act as agencies of the SEA system; and the third, is the procedural and substantive requirements of the SEA process. The Paper probes if, and to what extent, the SEA framework and its enforcement are geared towards recognising and integrating the potential impacts, constraints and opportunities, of the environment, during decision-making for developmental purposes in Kenya. Therefore, this paper shall provide an analytical description of the emerging SEA system in Kenya, as an example from Sub-Saharan Africa (SSA). Beyond addition to the existing body of literature, it provides a basis for information sharing, comparative analysis and learning from each other. The first part introduces the political and decision-making context in Kenya. According to Ostrom (2006), this gives insight into value systems and preference sets that are deeply embedded in the political and institutional fabrics of a jurisdiction. The second provides an overview of the regulatory and institutional frameworks for SEA. The third presents the implementation in terms administrative, procedural and substantive requirements. The fourth is a discussion on the future outlook and on aspects of potential challenges to the further development of SEA in Kenya. The paper is based on a review of the key documents for SEA in Kenya covering the regulatory, policy and administrative frameworks.

### **1.1 Kenya's political and decision-making context**

Generally, opinions on Kenya's political and decision-making culture acknowledge an environment that was 'overly politicized' and centrally controlled at national government (Mazrui, 2008, Sikod, 2008). The country's developmental activities were decided at the highest levels of government then implemented by technocrats and government apparatchiks who needed no input from the public (Cohen and Hook, 1987, Okumu, 2009). Until recently, this led to at least three key results (Okumu, 2009, UNCRD, 2003). One, a government that was largely run by an overly powerful executive arm; democratic deficit within decision-making; and an overall dissatisfactory delivery of developmental activities and public services as evidenced in various internationally recognized governance and developmental indices (APRM, 2006). In terms of environmental considerations with PPP-making, (M'mella and Masinde, 2002) reported that even though a National Environment Secretariat was established in 1974 as a lead agency to coordinate, promote and oversee environmental activities, little was achieved. Thus, it can be acknowledged that the formal and systematic integration of environmental considerations into Kenya's decision-making for developmental activities was generally low, if not altogether absent. After much agitation from the public, Kenya's political and governance structures are set to alter significantly with the landmark new constitution that took effect in 2013. The constitution changes the

almost 50-year old political and governance landscape from a centrally to a regionally governed one; from where a new decision-making culture is expected to emerge.

### **1.2 Incorporating the “environment” into decision-making**

Until the late 1990s, decision-making within PPPs very much perceived environmental issues as obstacles to development. Over time, the government’s recognition of the environment changed and its first key intervention was through the formulation of National Environmental Action Plans. These plans were aimed at enhancing the integration of environment considerations into development planning; but were poorly implemented hence trivial results. Although biophysical environment, economic and social planning should have been at per as early as 1996, this started only recently. Some SEA-type or partial-SEA exercises were occasionally applied in Kenya on *ad hoc* basis, but were not guided by formal regulations (Onyango and Namango, 2005).

The first formal requirement for the systematic integration of environmental considerations into PPPs occurred following the enactment of the statutory umbrella legislation Environmental Management and Coordination Act No. 8 of 1999 (EMCA, 1999). EMCA explicitly required environmental assessments to be done for all government sponsored PPPs and it provided obligations for various actors; set standards for compliance and procedures for legal recompense as well as litigation in relation to the environment (GoK, 2003).

### **2 Regulatory and policy framework for SEA in Kenya**

The regulatory framework for SEA in Kenya is an elaborate and hierarchical structure with SEA Guidelines at the bottom. The requirements for SEA is found in Section 42 of the supplementary law to EMCA, the Legal Notice No. 101, The Environmental (Impact Assessment and Audit) Regulations, 2003 (hereinafter ER2003); which took effect in 2007. EMCA also created institutions for SEA, providing definitions of relevant terminologies, and a list of sectoral PPPs that must undergo an SEA sanction. These are outlined in the Guidelines which are published by NEMA and were developed by November 2011 and a revised in February 2012 (NEMA, 2012). The Guidelines was developed by a taskforce which relied on lessons emerging from SEA practice in South Africa; IAIA’s and OECD’s Development Assistance Committee (DAC) guidances for SEA good practice; and the EU SEA Directive (NEMA, 2012).

Significantly, EMCA acknowledged the government’s duty to protect the environment as well as to control development within confines of environmental limits and sustainability. For the first time in Kenya, through

EMCA, a legal standing that made the requirement for environmental considerations within decision-making legally enforceable was established. More importantly, Kenya's new constitution raised the legal bar by recognizing the environment as a key element of the country's decision-making and sustainable development agenda (Articles. 19, 42 and 69). As a supreme legal instrument of governance, the constitution enshrined the right to a clean and healthy environment for every person in Kenya; and obligated the government to provide those rights. It also provided for the automatic adoption and domestication into Kenyan law of all internationally recognized environmental agreements and treaties. Significantly, and more relevant to this paper, Article 69(f) of the constitution explicitly requires the state to establish systems of environmental impact assessment, audit and monitoring (GoK, 2010). Hence it became clear that the incorporation of environmental considerations into decision-making has a strong legal foundation currently than any other time in the history of the country.

The national SEA Guidelines are aimed at a broad readership including all actors and stakeholders in an SEA; designed to apply common approaches for SEA both at national and sector levels. Their coverage of the Guidelines is comprehensive ranging from SEA procedures to SEA evaluation and effectiveness. They are substantive in scope in terms of providing a list of success factors, together with a table of elements of SEA good practice. They are also ambitious because they read like a perfect shopping bag of what an ideal SEA should deliver, as opposed to focusing on showing 'how to deliver' on the requirements of the Kenyan SEA. Many of these 'deliverables' are essentially aspirational and lack any specific 'how to' measures for their delivery in an SEA exercise. For example, areas where 'cost-effectiveness' can be achieved are mentioned in relation to tiering, (NEMA, 2012), and further elaboration may be necessary at the more practical sector level.

### **3 Implementation and SEA process in Kenya**

#### **3.1 SEA aims purposes, objectives and scope of application**

ER2003 defines SEA as "the process of subjecting public PPPs to tests for compliance with sound environmental management". It outlines the aim as that of safeguarding the environment; the purpose being "to determine which PPP options are the most environmentally friendly and cost effective when implemented individually or with others. Whilst the foregoing conveys an SEA that is reactive and defensive, the Guidelines state the objective of SEA as being to systematically integrate environmental considerations into PPP-making; and improving decision-making by strengthening and streamlining project specific to EIA, through:

- i) Addressing a wider range of alternatives than is normally possible in project EIA;
- ii) Considering cumulative effects and relatively large-scale environmental changes;
- iii) Exploring the opportunities for and constraints to development posed by the environment.

The scope of application of SEA in Kenya is across all government and public PPPs, although the relevant minister has the power to require an SEA of any private activity. Whilst the Second Schedule lists projects to undergo environmental impact assessment, unlike the EU SEA Directive and UK SEA regulations, it does not exclude certain activities e.g. those for military defense or civic emergencies. ER2003 Sec 44 provides for SEA within a transboundary context, where appropriate, taking into account any existing treaties and agreements between Kenya and the other country. It is emphasized that transboundary SEA should be undertaken where impacts are expected to spill over the regions in Kenya. This is rather confusing because the term transboundary is defined by ER2003 in reference to impacts beyond the Kenyan borders; not within Kenya's regions.

### **3.2 SEA process and institutional framework**

It is the duty of the government institution proposing a PPP to submit it to NEMA for screening and determine whether an SEA will be required, thus triggering the SEA process. If SEA is required, NEMA advises the proponent on the selection of a licensed SEA expert(s), although it is not stated on what basis NEMA makes this selection from the list of registered SEA practitioners<sup>16</sup>. A scoping is then undertaken by the SEA expert(s) and the scoping report submitted to NEMA for review and advice on whether more information is required or not; whereupon the full SEA study will begin after the proponent pays NEMA's prescribed fees. Once NEMA receives the draft SEA study report, it circulates it to the stakeholders for comments to be received within 45 days from the date of dispatch for plans and programmes; and three months for policy or such extended period as NEMA may specify. Then the draft report is published for two successive weeks in both the Kenya Gazette and a newspaper with a nationwide circulation for comments to be received. It is the responsibility of the proponent to engage the stakeholders in reviewing the SEA draft report under the coordination of NEMA. To review the draft report, NEMA may constitute a Technical Advisory Committee (TAC) to provide independent

---

<sup>16</sup> Interestingly, it is only recently (2010) that the EC's Committee for the Regions has recommended that they establish a register for SEA experts, as a proposal to improve SEA practice within the EU Correia Jm. Opinion of the Committee of the Regions on improving the EIA and SEA Directives. Committee of the regions, EU, Brussels. 2010.

comments for consideration in case of plans and programmes; and Inter-Ministerial Committee of Environment (IMCE) in case of policies. The final SEA report is prepared, incorporating the comments from all stakeholders and TAC or IMCE; and submitted to NEMA for review (Fig. 1).

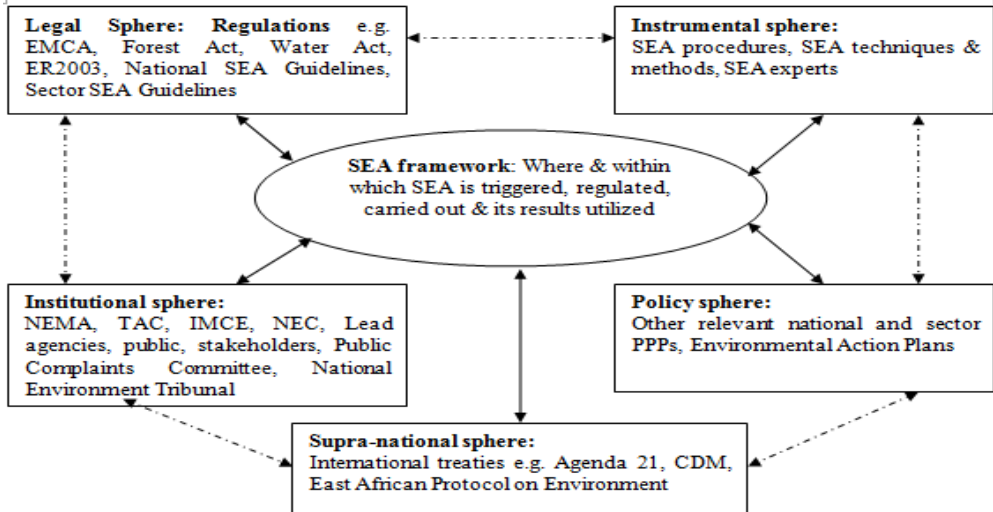


Figure 1: Interconnectedness between the spheres constituting the SEA framework.

**KEY:** **Direct link**  
**Indirect link**

(Source: Onyango and Schmit, 2007)

At this point, the SEA process follows a two-track model, depending on whether the proposed PPP is a plan, program or policy. The final decision for plans and programmes will be determined by NEMA through issuance of approval with conditions, to which the proponent shall consent prior to implementation. For proposed policy, the final decision will be determined by the National Environment Council (NEC), aided by a concise briefing note from NEMA informing the decision-makers of the key environmental issues linked to the policy. This should contain recommended alternatives, their ranking and their likely impacts if the NEC fails to reach a decision. Once NEC reaches a decision, the Minister of Environment informs the Minister responsible for the proposed policy on the decision outcome. The responsible minister then tables the policy proposal (cabinet paper) to the cabinet for approval.

The PPP proponent is responsible for monitoring and evaluation of the PPP, coordinated between NEMA and the PPP proponent, against both the sustainability-led objectives and the baseline (NEMA, 2012). Although NEMA states that an SEA evaluation can be limited to determining whether the SEA led to more sustainable alternatives (NEMA, 2012) (p34), it is not clear why the focus of evaluation is much less on the environmental aspects,

and more on the sustainability aspects. This is especially striking because NEMA states that SEA is tasked with testing for “environmental compliance”.

### **3.3 Administration and institutions**

In terms of institutions, the lead authority that regulates and oversees SEA, and to whom SEA reports are submitted to, is NEMA (Onyango and Schmidt, 2007), with regional representation at County levels. EMCA establishes several bodies relevant to SEA administration, as follows:

- National Environment Council (NEC), responsible for policy formulation, setting national goals and objectives and determining priorities for the protection of the environment.
- Environmental Impact Assessment Technical Advisory Committee, which establishes an ad hoc committee to review some environmental assessment reports received by NEMA.
- Public Complaints Committee, to investigate allegations against any person, institution or NEMA in relation to the condition of the environment.
- National Environment Tribunal, to review administrative decisions made by NEMA, if challenged.
- Compliance and Enforcement Department, which identifies PPPs for which SEAs must be conducted.

### **3.4 Decision-making context: consultation and public participation**

Whilst the terms ‘consultation’ and ‘public participation’ appear in most requirements for SEA in Kenya, only the term ‘stakeholders’ is defined. Nevertheless, consultation must occur before the adoption of the PPP; and comments on the SEA reports must be requested mainly from other government authorities. SEA Guidelines indicate that various ministries or lead agencies should be consulted during an SEA. Public participation is open to all interested individuals and organizations at various stages of the SEA process. Indeed, the constitution recognizes public participation as a key pillar of decision-making, and EMCA further elaborates that it is a fundamental pillar of governance for sustainable development. NEMA must take the comments into account in delivering a decision on the SEA report and PPP, although the authority does not have to state how the environmental report, opinions and statements have been taken into account. In other international systems, for example in Scotland, the requirement to explicitly demonstrate how comments have been accounted for is more stringent. For example, the Scotland’s SEA post-adoption statements offer a robust mechanism to demonstrate the exact influence of an SEA exercise and its output on decision-making and the PPP itself (Phillips and Sheate, 2010).



### 3.5 The SEA review process

The National SEA Guidelines are seemingly concerned with delivering quality SEA and provides four review stages for undertaking an SEA review, as follows (Table 1):

**Table 1: Stages for Undertaking an SEA Review, Kenya**

<b>Review Stages</b>	<b>Description</b>
Administrative Review	Conducted within 14 days of the receipt of the Draft SEA Report to ensure that the report is sufficiently adequate to enter the stakeholder-review process. NEMA then distributes the Draft SEA Report to stakeholders for comments.
Stakeholder Review	The draft SEA report is dispatched to relevant lead agencies and other stakeholders for comments.
Public Review	Notice regarding the draft SEA is published for two successive weeks in both the Kenya Gazette and a newspaper with a nationwide circulation. The public has 30 working days to submit comments on a Plan or Program.
Committee Review	NEMA constitutes a Technical Advisory Committee (TAC) to review and provide independent technical comments on a Plan- or Program-level SEA. In case of SEAs having trans-boundary impacts an Independent Expert Commission (IEC) is setup to review the report within a period of 60 days.

Before the Final SEA Report is submitted, the SEA expert(s) incorporates the stakeholder’s comments into the Draft SEA Report and then submits this corrected version to NEMA within 60 days. In coordination with NEMA, the PPP proponent will hold a workshop to engage the stakeholders in reviewing and validating the corrected SEA report. NEMA then coordinates the additional corrections stemming from the validation workshop to produce a final SEA report, which the proponents eventually submit to NEMA.

### 3.6 Generic SEA Principles and Process Elements

The ER2003 and the National SEA Guidelines advise that SEA should be guided by six key principles and that the application of an SEA is underpinned by a set of eight key elements (Table 2):

**Table 2: Basic Principles and Elements for SEA in Kenya.**

<b>Principles</b>	<b>Elements</b>
<ul style="list-style-type: none"> <li>• The sustainable use of natural resources</li> <li>• The enhanced protection and conservation of biodiversity</li> <li>• Links between human settlements and cultural issues.</li> <li>• Integration of socio-economic and environmental factors</li> <li>• The protection and conservation of natural physical surroundings of scenic beauty and built environment of historic or cultural significance</li> <li>• Public and stakeholder engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Proactive and informs development proposals                             <ul style="list-style-type: none"> <li>• Assesses the effect of the environment on development needs and opportunities</li> </ul> </li> <li>• Addresses areas, regions or sectors of development                             <ul style="list-style-type: none"> <li>• Is a counting process aimed at providing information at the right time</li> <li>• Assesses cumulative impacts and identifies implications and issues for sustainable development</li> <li>• Focuses on maintaining a chosen level of environmental quality</li> <li>• Wide perspective and a low level of detail to provide a vision and overall framework</li> <li>• Creates a framework against which impacts and benefits can be measured.</li> </ul> </li> </ul>

### **3.7 SEA practice to date**

As of December 2012, 23 SEAs had been initiated in Kenya; applied to a majority of PPPs which were relatively less spatial in nature. Table 3 shows Kenyan SEA reports that have been initiated to date and what stages they have reached.

**Table 3: List of SEAs initiated and carried out in Kenya by December, 2012.**

<b>Name of SEA Report &amp; year/ category</b>	<b>Proponent</b>	<b>Scale</b>	<b>Sector/Tier</b>	<b>Status</b>
Environmental & Social Management plan for Ewaso Ngiro North Natural Resources Conservation (2005), Ex-ante	Ewaso Ngiro North Development Authority, Isiolo	Ewaso Ngiro North. (Regional)	Water, Plan	Approved
Strategic Environment & social Assessment scoping report for Kenya Education Support Programme (2005), Ex-ante	Department of International Development, British High Commission	Country-wide	Education, Programme	Approved for submission, proponent to submit final SEA report.
SEA for the proposed Bioscience for Eastern and Central Africa in Kenya (2005), Ex-ante	ILRI, Nairobi	Nairobi (Regional)	Bio-technology, Plan	Not approved, issues raised by NEMA not yet addressed by proponent
SEA for the proposed AMREF European Union Funded Water Sanitation & Hygiene Programme (2007), Ex-ante	AMREF	5 seslected districts (Multi-Regional)	Water, Programme	NEMA to constitute a TAC to review SEA report
SEA for Kenya Forest Act, (2007), Ex-post	Ministry of the Environment and Natural resources	Country-wide	Forestry, Policy	Not approved, issues raised by NEMA not yet addressed by proponent
Strategic Environment & social Assessment for Kenya Education Sector Support Programme (2008), Ex-ante	Ministry of Education, Nairobi	39 selected districts (Multi-Regional)	Education, Programme	Approved
SEA report of Masinde Muliro University of science and Technology Infrastructure Development (2010), Ex-ante	Masinde Muliro University of Science and Technology	Kakamega (Regional)	Education, Plan	Approved

Strategic Environment Assessment and Social Management framework and Indigenous peoples planning framework for Kenya Coastal Development Project (KCDP), (2010), Ex-ante	Kenya Marine & Fisheries Institute, Mombasa	Mombasa (Regional)	Commerce and Industry, Plan	Approved
SEA for the proposed expansion of development of Taveta Township (2010), Ex-ante	Taveta Township	Taveta (Regional)	Urban, Plan	Not approved, issues raised by NEMA not yet addressed by proponent
SEA for a programme of activities of the efficient cook stove programme (2010), Ex-ante	CO2 Balance, Nairobi	Country-wide	Energy, Programme	Approved for submission of final SEA report
SEA for reforestation sustainable development and carbon sequestration project in Kenya degraded lands (2010), Ex-ante	Ministry of Finance, Nairobi	Arid lands of Kenya (Multi-regional)	Forestry, Plan	Approved
SEA for the proposed Tatu City Structure Plan (2010), Ex-ante	Tatu City, Nairobi	Kiambu (Regional)	Urban, Plan	Approved
SEA for the proposed Konza Technology City (2011), Ex-ante	Ministry of Information Technology Nairobi	Nairobi (Regional)	Urban, Plan	Under Review
SEA for the proposed pact Kenya Natural Resource facility programme for non-state Actors (NSA-NRM) (2011), Ex-ante	Pact Kenya	Country-wide	Natural Resources Management, Programme	NEMA awaiting proponent's evidence of public advertisement before review of SEA report
SEA for the feasibility study and detailed design of the high grand falls multipurpose dam development (2011), Ex-ante	Ministry of Regional Development Authority, Nairobi	Tana River, (Regional)	Water, Programme	NEMA is awaiting submission of scoping SEA report for review

SEA Scoping report for the proposed Upper Tana Natural Resources Management project (2012), Ex-ante	International Fund for Agricultural Development (IFAD)	Mt. Kenya region (Regional)	Natural Resources Management, Programme	Under review
SEA scoping report for the solar LED lamp programme Kenya (2012), Ex-ante	Toughstuff International	Country-wide	Energy, Programme	Approved for CDM project applications.
SEA for the proposed Coast Disease free zoning vision 2030 flagship programme (2012), Ex-ante	Ministry of livestock Development	Coast, Regional	commerce & Industry, Programme	Approved for CDM project applications.
SEA report for the proposed Nuru lighting programme (2012), Ex-ante	Nuru East Africa Ltd	Country wide,	Energy, Programme	Approved for CDM project applications.
SEA scoping report for the proposed SIMGAS Biogas programme (2012), Ex-ante	SIMGAS BV	Country wide	Energy, Programme	Approved, NEMA awaiting final SEA report
SEA of the National Sugar Adaptation Strategy (NSAS) for Kenya (2012), Ex-post	Kenya Sugar Board	Country wide	Commerce and Industry, Plan	Awaiting review
Draft TORs SEA for KENGEN geothermal power expansion plant at Ol karia geothermal area (2012), Ex-ante	KENGEN	Nakuru County (Regional)	Energy, Programme	To submit SEA scoping report
SEA for KENGEN geothermal power expansion plant at Eburru geothermal area (2012), Ex-ante	KENGEN	Nakuru County (Regional)	Energy, Programme	To submit SEA scoping report

By the time of writing this paper, of the 23 SEAs initiated, only 12 (52.2%) had been completed and approved, against 3 (13%) which was completed but not approved. About 50% of the SEAs were initiated by the end of 2010, out of which only 36% had been completed, indicating that the current SEA process is taking relatively long. Of the 23 SEAs only three (13%) were undertaken using the Kenya SEA Guidelines and by December 2012, only 63% had been sanctioned to go into full SEA study, the rest still awaiting the approval of the SEA Scoping reports. This raises a fundamental question: if the SEAs have not been approved, have the PPPs themselves been approved or are they still on hold? What are the implications for such dragged-out SEA exercises on the final PPPs? Apparently, some of the SEAs have outstanding issues which the proponents have not yet addressed, so there is little NEMA can do apart from waiting. In terms of scale and coverage 8 (34.8%) of the PPPs were country-wide, 11 (47.8%) were region-wide and 4 (17.4%) covered several regions. In terms of sectors of application most SEAs were in the energy 6 (26.1%), urban 3 (13%) and water 3 (13%) (Table 4). Only one of the 23 SEAs was on a proposed policy, the rest being largely on programmes. Only two SEAs were done in-house, the rest being by external consultants.

Table 4: SEA practice in Kenya and their status

Status	sectors								Total
	Energy	Water	Educ	Biotech	Forestry	Industry	Urban	NR	
Approved	4	1	3	-	1	2	1	-	12
Under review	-	1	-	-	-	-	1	1	3
Awaiting review	2	1	-	-	-	1	-	1	5
Not approved	-	-	-	1	1	-	1	-	3
<b>Total</b>	<b>6</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>23</b>

#### 4 Discussion: Key characteristics of Kenya's SEA

Kenya's SEA is evidently well rooted within formal, legal and regulatory frameworks, often with clear provisions for enforcement and legal recourse. Kenya's constitutional provision for environmental impact assessments and the requirement for integrating environmental considerations into developmental decisions is a distinguishing aspect with relatively few global comparisons. This fundamental rarity anchors Kenya's SEA-like activities at the very highest legal platforms. While Kenya's concept of SEA is EIA-led, it has a very wide and expansive scope of application, wherein, a wide range of substantive issues and themes can be addressed. It also advocates for SEA tiering with EIA in order to promote time-efficient and cost-effective decision-making, thus, avoiding the need to reassess issues at project level when they have been effectively dealt with at

an earlier strategic level (NEMA, 2012). From the works of various authors who have listed requisite elements to be established in a fully-developed and comprehensive SEA system (Elling, 1997, Seht, 1999), the following are largely defined and present in the Kenyan SEA system:

- Clear requirements (legal, administrative and policy);
- Public participation and stakeholder consultation;
- Well-established SEA processes including main procedural steps;
- Independent oversight and guidelines for practice;
- Support from government and private sector.

However, the last bullet point is yet to flourish within the new governance and constitutional provisions from 2013. A way in which to gauge the development of Kenyan's SEA system is to compare it against the SEA's global evolution following three main chronological phases (Dalal-Clayton and Sadler, 2005).

- The formative stage (1970-1989), when legal and policy frameworks were established, but followed by limited application of SEA-like procedures;
- The formalisation phase (1990-2001), when different forms of SEA were instituted by different countries and international organisations;
- The evolution stage (2001 onwards), when legal and policy frameworks for promoting SEA have been widely promulgated.

A fourth phase called "Theory building" (2002 onwards) has now been added, focused on examining SEA theory and practice (Caratti et al. , 2004, Kørnøv and Thissen, 2000, Pischke and Cashmore, 2006). Kenya is most likely in the formalisation stage, having recently put in place regulatory frameworks which have yet to produce significant experience. Its third and fourth stages will await targeted evaluations and empirical input within the Kenyan-specific contexts. In terms of SEA conceptualisation, Bina (2003) lists three key development trends:

- Shift from assessment of draft Plans and Programmes to encompassing the view of the policy process and of its political and decision-making dimensions;
- Focus towards the promotion of sustainable development as opposed to mere environmental protection and integration;
- Reduced emphasis on the positivist dimension of impact assessment within the overall SEA process, and the increased attention to the formulating stages of strategic PPP-making and to its systematic application.

Yet again Kenya's SEA is at the moment best paced at the first stage, with most of its application largely on programmes (1 Policy (4.4%); 9 Plans

(39.1%); 13 Programmes (56.5%)). Some scholars, (Devuyst et al. , 2000, Vicentea and Partidáriob, 2006), have described stand-alone versus iterative forms of SEA that are systematically integrated into PPP-making processes; of which the Kenyan model is the latter. Furthermore, various forms of SEA have been described, for example, EIA-based SEA models, Policy-appraisal model or objectives-led models, and integrated model or ad hoc model, whereby SEA is in effect an element or part of the policy- and plan-making process (Sadler and Verheem, 1996 , Sheate et al. , 2003). In this case, Kenya's SEA is integrative (NEMA, 2012).

Kenya's SEA system was legislated into existence at about the same time as its EIA. Although Kenya's SEA Guidelines indicate that the SEA was introduced in response to EIA shortcomings, there is no evidence that this has arisen from Kenya's experiences with EIA. Although various forms of SEA approaches have been described in the literature (Bina, 2008, Gazzola, 2006, Sadler and Verheem, 1996 , Sheate, Dagg, 2003) it is not clear why the EIA-type SEA was preferred in Kenya. The Kenyan system has not experienced any legal challenges on the existing SEAs or have cases referred to the National Environment Tribunal or Public Complaints Committee.

It is noteworthy that while NEMA has to provide reasons for its decisions, it need not explain exactly how it dealt with the environmental report and comments from stakeholders. This is a less stringent requirement of the Kenyan SEA system compared to EU SEA Directive-based ones. Another key feature is the lack of designated consultees who are fairly removed from the government's influence, in the Kenyan SEA. If the old tradition of decision-making in Kenya is anything to go by, then this may not bode well for the integrity and accountability of the Kenyan system. The more the SEA process is insulated from undue political interests and opened up to effective and meaningful stakeholder engagement, the greater the probability of SEA to deliver on its remit for Kenyans.

As the lead institution on SEA, NEMA's function as a repository and gateway for information on SEA has a lot of room for improvement. NEMA's SEA internet portal has no SEA reports available and with little else on ongoing SEAs. If the SEA system in Kenya is to be built upon transparent governance and public engagement as is stated in the Guidelines, then more effort at availing SEA reports is needed. This internet platform should inform the public on key issues relevant to SEA and make it easier for researchers to access SEA data in Kenya. The easy access to the scientific community can significantly contribute to the evolution of SEA in Kenya and should therefore not be overlooked. This can go a long way in reversing the under-representation of Sub-Saharan Africa SEA in the international literature.



## 4.2 Outlook and conclusion

SEA is still a learning process in Kenya because it is relatively new. While there is no clear rationale as to why an EIA- type of SEA was chosen over a policy-led one, the future now remains in seeing how the current approach in Kenya shall deliver and evolve, from at least two points of departure. One, to move from its eclectic borrowed roots as idealized in the Guidelines, to a system attuned shaped by the new constitutional, political and decision-making context in Kenya. Two, to a system re-shaped by empirical and evaluatory lessons from Kenyan's own SEA experience and context. Both must be given ample time and perhaps be underpinned by creative and reflective application, to accommodate issues unlike those from where SEA originated. For example, how will SEA address seasonal nomadic communities and and large-sized migratory species, within future climate change scenarios, across much of Kenya where future development activities will impact upon?

Since 15 (65.2%) of the SEAs covered either one or more regions, it would be prudent for legal reasons and for procedural clarity: to 1) re-define trans-boundary impacts in the regulations in order to include cross-regional impacts; and 2) add a new provision for material “duty of collaboration between the regions” during an SEA that covers several regions. The latter requirement has the potential of recognizing regional interdependencies and enhancing joint-thinking in addressing strategic decisions; the former appreciates the need to reduce disjointed-thinking especially where it can save resources and optimize service delivery.

In addition, the evaluation of the SEA focused on sustainability-led objectives, seems rather odd for a tool positioned to address environmental protection. Although the Guidelines focus on sustainability, one wonders if this will dilute the environmental aspect. Also, studies are needed to explore why the current SEA processes are taking rather long from initiation to determination. This raises a fundamental question: if the SEAs have not been approved, have the PPPs themselves been approved or are they still on hold? What are the implications for such dragged-out SEA exercises on the final PPPs?

In terms of outlook, there is an urgent need to re-examine the role of SEA in decision-making in Kenya. By the time of writing this paper, NEMA did not have a full-fledged SEA department but only an SEA desk under the Compliance and Enforcement Department, headed by the section head of EIA. It was staffed with 10 Masters-level officers trained on SEA through an external consultant under Natural Resource Management Program. Other NEMA officers were scheduled for further SEA training in Sweden by April 2013. A lack of adequately resourced and trained SEA capacity will significantly hinder the achievement of intended SEA outcomes. Already,

the initial implementation of SEA in Kenya was delayed due to inadequate expertise in the country (NEMA, 2012). Currently, there are no licensed SEA experts in Kenya although NEMA will register them once the regulation is amended. EIA experts have therefore been involved in conducting SEAs in the country.

In conclusion, this paper has described and analyzed the development and characteristics of the emerging SEA in Kenya. It revealed that the current political and decision-making context, following the new constitution, has created a significant framework for SEA within a well protected and enforceable regulatory system. The institutional frameworks with procedural and substantive requirements for SEA are firmly in place. At this stage of SEA practice in Kenya, and in the absence of any targeted comprehensive evaluation studies, it is unhelpful to prioritize any recommendations. However, it seems that the successful development of SEA in Kenya will likely depend on three things. Firstly, the internalisation and subsequent implementation of the ideals and provisions of existing SEA framework. Secondly, how effectively the national and regional SEAs are tiered; and finally, the level of commitment SEA will get from the emerging political and decision-making cultures. Since countries like England and South Africa have got Sustainability appraisals as a tool alongside SEA, will Kenya's SEA system also find the need for a Sustainability Appraisal?

### **Acknowledgement**

The authors would like to express their gratitude towards all the people who have contributed directly and indirectly to this paper, particularly Prof. Lu and Mr. Reagan Owino, (NEMA) for their invaluable input.

### **References:**

- APRM. Country Review Report and Programme of Action of the Republic of Kenya' (APRM Country Review Report no. 3), South Africa, APRM Secretariat. 2006.
- Bina O. Re-conceptualising Strategic Environmental Assessment: Theoretical Overview and Case Study from Chile. Unpublished PhD Thesis, Geography Department, University of Cambridge, Cambridge. 2003.
- Bina O. Context and Systems: Thinking More Broadly About Effectiveness in Strategic Environmental Assessment in China. *Environ Manage.* 2008;42:717-33.
- Bina O, Jing W, Brown L, Partidário MR. An inquiry into the concept of SEA effectiveness: Towards criteria for Chinese practice. *Environ Impact Assess Rev.* 2011;31:572-81.
- Caratti P, Dalkmann H, Jiliberto R. *Analysing Strategic Environmental Assessment.* Edward Elgar, Cheltenham. 2004.

- CEC. Communication from the commission on the impact of enlargement on regions ordering candidate countries, Brussels. 2001.
- Cohen JM, Hook RM. Decentralized planning in Kenya. *Public Admin Dev.* 1987;7:77-93.
- Correia Jm. Opinion of the Committee of the Regions on improving the EIA and SEA Directives. Committee of the regions, EU, Brussels. 2010.
- Dalal-Clayton B, Sadler B. *Strategic Environmental Assessment, a Sourcebook and Reference Guide to International Experience.* Earthscan, London. 2005.
- Devuyst D, Wijngaarden TV, Hens L. Implementation of SEA in Flanders: Attitudes of key stakeholders and a user-friendly methodology. 2000.
- Eales RP, Sheate WR. Effectiveness of Policy Level Environmental and Sustainability Assessment: Challenges and Lessons from Recent Practice. *J Env Assmt Pol Mgmt.* 2011;13 39–65.
- Elling B. Strategic environmental assessment of national policies: the Danish experience of a full concept assessment. *Project Appraisal.* 1997;12:161-72.
- EMCA. An Act of Parliament to provide for the establishment of an appropriate legal and institutional framework for the management of the environment and for the matters connected therewith and incidental thereto. 1999.
- Fischer TB. Theory and practice of Strategic Environmental Assessment - towards a more systematic approach. Earthscan, London. 2007.
- Fischer TB, Onyango V. Strategic environmental assessment-related research projects and journal articles : An overview of the past 20 years. *Impact Assess Proj Apprais.* 2012;30:253-63.
- Gazzola P. Adapting Strategic Environmental Assessment for Integration in Different Planning Systems, Ph.D thesis, University of Liverpool. Gazzola, P and M Caramaschi (2005). *Implementing SEA in Italy — The case of the Emilia.* 2006.
- GoK. The Environmental (Impact Assessment and Audit) Regulations. Legal Notice No 101. Government Printer, Nairobi. 2003.
- GoK. The Constitution of Kenya, revised edition 2010, Government printer Nairobi. 2010.
- Jackson T, Illsley B. An analysis of the theoretical rationale for using strategic environmental assessment to deliver environmental justice in the light of the Scottish Environmental Assessment Act. *Environ Impact Assess Rev.* 2007;27:607-23.
- Kørnø L, Thissen WAH. Rationality in decision- and policy-making: implications for strategic environmental assessment. *Impact Assess Proj Apprais.* 2000;18:191-200.
- Lee N, Walsh F. Strategic environmental assessment: an overview. *Project Appraisal.* 1992;7:126-36.

- M'mella T, Masinde J. Environmental issues in Kenya Environment Information Circulation and Monitoring System on the Internet. In Regional Workshop for African English Speaking Countries, Accra Ghana. 2002.
- Mazrui A. The Roots of African Conflicts: The Causes and Costs: In The Roots of African Conflicts: The Causes and Costs (Alfred Nhema, Paul Tiyambe Zeleza) 1st edition. Ohio University Press. 2008:36-50.
- NEMA. National guidelines for strategic environmental assessment (sea) in Kenya: An Outline of the Concept, Principles, Basic Steps and Expected Outputs and Outcomes of the SEA Process. 2012.
- Okumu W. Why Kenya is a failing state', The African.org, Issue 3 October/November. 2009.
- Onyango V, Namango S. The need for SEA in kenya: In Implementing strategic environmental assessment (eds, Michael Schmidt, Elsa Joao, Eike Albrecht). 2005:291-303.
- Onyango V, Schmidt M. Towards a strategic environment assessment framework in Kenya: Highlighting areas for further scrutiny. Manag Environ Qual Int J. 2007;18:309 - 28.
- Ostrom E. Governing the Commons: the Evolution of Institutions for Collective Action. Cambridge, Cambridge Oxford Press. 2006.
- Phillips P, Sheate WR. Reflecting on Strategic Environmental Assessment in Scotland. The Environmentalist. 2010;104.
- Pischke F, Cashmore M. Decision-oriented environmental assessment: An empirical study of its theory and methods. Environ Impact Assess Rev. 2006;26:643-62.
- Sadler B, Verheem R. Strategic Environmental Assessment. Status, challenges and future directions. Ministry of Housing, Spatial Planning and the Environment of The Netherlands. EIA Commission. 1996
- Schmidt M, Joao E, Albrecht E. Implementing Strategic Environmental Assessment, Springer, Berlin, ISBN 3 540 20562 4. 2005.
- Seht Hv. Requirements of a comprehensive strategic environmental assessment system. SEA. 1999;45:1-14.
- Sheate WR, Dagg S, Richardson J, Aschemann R, Palerm J, Steen U. Integrating the environment into strategic decision-making: conceptualizing policy SEA. Eur Env. 2003;13:1-18.
- Sikod F. Conflicts and Implications for Poverty and Food Security Policies in Africa." In The Roots of African Conflicts. Edited by A. Nhema, and Paul Tiyambe Zeleza. Oxford: James Currey, Ltd. 2008.
- Therivel R, Partidario MR, (eds). The Practice of Strategic Environmental Assessment", Earthscan, London. . 1996:ISBN 1 85383 373 8.
- UNCRD. Nyandarua District Regional Development Plan, 2001-2030: An Integrated Plan for Sustainable Regional Development. Physical Planning Dept, Ministry of Lands and Settlement : Rural Planning Dept, Ministry of

Planning and National Development : United Nations Centre for Regional Development, Africa Office : Dept of Urban and Regional Planning, University of Nairobi, Nairobi, Kenya. 2003:177-8.

Vicentea G, Partidáriob MR. SEA – Enhancing communication for better environmental decisions. Environ Impact Assess Rev. 2006;26:696–706.

Wood C, Dejeddour M. Strategic Environmental Assessment: Ea of Policies, Plans and Programmes. Impact Assessment. 1992;10:3-22.