

Community Participation of Strategic Environmental
Assessment: An Exploration of Process and Learning
Outcomes in Kenya

by

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A Thesis submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfilment of the requirements of the degree of

MASTER OF NATURAL RESOURCES MANAGEMENT

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ABSTRACT

Meaningful public engagement is a challenging, but promising, feature of strategic environmental assessment (SEA) in developing countries such as Kenya. SEA is an emerging tool for sustainable development, yet there is a need for greater understanding on the effectiveness of public participation to ensure sustainability outcomes. This research examined completed Kenyan SEA and compared procedures to standard practice, with particular emphasis on public participation. Two selected SEA case studies (the Kenya Coastal Development Project (KCDP) and the Tatu City Structure Plan) explored the extent of participation, learning outcomes of participation, and whether the learning outcomes lead to social action for sustainability at the community level.

Document reviews, participant observation, a focus group, and semi-structured interviews with environmental practitioners, government officials, and community members provided data for the thesis. The study revealed that public participation is variable amongst the completed SEAs and shows that the ideal conditions for learning in public participation were not completely fulfilled, resulting in a greater abundance of instrumental than communicative or transformative learning outcomes. Nonetheless, individual (e.g. planting trees and climate appropriate crops) and social (e.g. improving community relationships for collaboration in future decision-making) actions that contribute to sustainability have been taken based on the learning outcomes.

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GLOSSARY OF TERMS AND ACRONYMS

<i>Baraza</i>	Swahili - a public meeting where officials can address the public
BecA	Bioscience for eastern and central Africa
<i>Casuarina</i>	A fast growing exotic tree species used as a building material and fuel wood
CBO	Community-based Organization
DANIDA	Danish International Development Agency
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
ESMF	Environmental and Social Management Framework
GoK	Government of Kenya
IAIA	International Association for Impact Assessment
IPPF	Indigenous Peoples Planning Framework
KEFRI	Kenya Forestry Research Institute
KCDP	Kenya Coastal Development Plan
KMFRI	Kenya Marine and Fisheries Research Institute
KESSP	Kenya Education Sector Support Program
KFS	Kenya Forest Service
KWS	Kenya Wildlife Service
<i>Makuti</i>	Swahili – roofing material made of coconut palm leaves
MMUST	Masinde Muliro University of Science and Technology
NEMA	National Environmental Management Authority
NGO	Non-governmental Organization
OECD	Organization for Economic Co-operation and Development

PPP	Policy, plan, and program
PRA	Participatory Rural Appraisal
SEA	Strategic Environmental Assessment
<i>Shamba</i>	Swahili - family farm
TLT	Transformative Learning Theory
<i>Walangulo</i>	derogatory term used for the Watha by other tribes
<i>Wapana</i>	see <i>walangulo</i>

1.0 INTRODUCTION

1.1 BACKGROUND

Concern for the condition of our global environment and the ways in which we manage our natural resources is steadily increasing. There is growing international recognition of the inadequacy of conventional approaches to rural development (Janvry and Sadoulet 2005) and conservation (Kaimowitz and Sheil 2007) in developing countries. In the past, development activities have been dominated by welfare transfers to the rural poor and have often proven not to result in long term sustainability of resources in the communities involved (Janvry and Sadoulet 2005). Instead, new approaches are beginning to address the need to empower communities through participation in decision-making processes. In response to the outcomes of the United Nations Summit, the General Assembly (2010) affirms the importance of the adoption of participatory and community-led approaches in national development strategies. Environmental assessment (EA) is one such arena where public participation and consultation is brought into the decision making process.

Environmental assessment is a means by which the environmental impacts of an action are considered and mitigation strategies are developed (Hanna 2009). EA frameworks began to take shape as early as 1969 with the National Environmental Policy Act (NEPA) in the United States, and still continue to evolve and be widely applied internationally in the pursuit of sustainable development (Gibson and Hanna 2005). Strategic Environmental Assessment (SEA) is an emerging tool of sustainable development that applies the processes of environmental assessment at the level of policies, plans, and programmes (Noble and Harriman-Gunn 2005). Alshuwaikhat (2005) promotes SEA as a promising tool for sustainable development, especially in developing countries. Effective implementation of SEA in the development of policies, plans,

and programmes is thought to pro-actively avoid potential adverse impacts before specific projects are even considered (Alshuwaikhat 2005; Harrera 2007). One of the key characteristics of SEA is an emphasis on the use of participatory and consultative processes with those who are to be affected by the policy, plan, or programme (Kjorven and Lindhjem 2002; Ahmed et al. 2005). Practice in this regard is, however, just emerging and for the first time scholars are testing community-based approaches to SEA for achieving more meaningful local participation (Sinclair et al. 2009). Moreover, the utilization of SEA is emerging in developing countries such as Kenya and has been implemented in a handful of cases, including the Kenyan Forest Act of 2005. There is a need, however, to further develop the participatory elements of Kenyan SEA to make them more effective and responsive at the local level (Onyango and Schmidt 2007).

Meaningful community participation must provide a conduit for learning amongst the participants (Sinclair and Diduck 2009). The work of a number of researchers establishes that public participation in environmental assessment provides fertile ground for examining the individual learning implications of participation (Webler et al. 1995; Diduck and Mitchell 2003; Sinclair et al. 2009). Transformative learning theory states that positive social action can result when individuals critically analyze current frames of reference and enter into perspective transformations (Mezirow 1978, 1994). Transformative learning theory can be used to understand individual learning that takes place through participation in social contexts. Further, Jha-Thakur et al. (2009) provides early evidence that SEA's integration of environmental considerations at higher levels of planning allows for transformational environmental learning in individuals and communities. Meaningfully involving local people in community-based SEA may create an arena for conversation between community members and other stakeholders and has the potential to generate positive social change (Sinclair et al. 2009).

1.2 PURPOSE AND OBJECTIVES

The purpose of this research was to examine if and how participation in SEA processes in Kenya can lead to transformative learning that supports sustainable resource use at the community level. The specific objectives of my research were:

1. to examine completed SEA and compare procedures with standard SEA practice, with particular attention given to public participation;
2. to determine the extent of participation in SEA (including considering issues such as who participates, how and at which stages of the SEA process they are involved, and how their input is used);
3. to identify learning outcomes of the SEA process and discover if any are transformative;
4. to determine if the learning outcomes of participation in the SEA lead to social action on sustainability at the community level.

1.3 METHODS

Qualitative research was conducted utilizing a case study strategy of inquiry. A qualitative research design was suitable due to the emergent nature of community based SEA in resource management and the need to explore human experience to satisfy the research objectives (Creswell 2009). My belief that community empowerment can result in sustainable resource use and thus, poverty reduction, led me to choose a collaborative approach to my research.

The initial stage of the research involved an examination of completed SEA reports from the National Environment Management Authority (NEMA) in Nairobi in order to compare procedural steps with standard SEA practice and to aid in the choosing of appropriate case studies. Kenya's SEA national guidelines and other major SEA guidelines (e.g. Therivel 2010)

and evaluation criteria (e.g. IAIA 2002; OECD 2006; Retief 2007; Noble 2009) from the literature were considered standard practice and were used to guide the document reviews. The following criteria were applied in choosing case study sites: the SEA process followed government regulation; an abundance of documentation related to the specified SEA; fairly recent consultation; and the willingness of the community involved to participate in the study. Related documents were obtained from relevant government agencies and reviewed in order to gain familiarity with the specific SEA process.

Field work drew on various qualitative research tools, especially those associated with participatory rural appraisal (Bhandari 2003). Semi-structured interviews, participant observation, and a focus group were utilized. These methods were useful as qualitative field tools as they were interactive and conducive to adaptive information collection in the field (Bhandari 2003). Students at the Natural Resources Institute have successfully used these tools in considering transformative learning outcomes and I learned from their experience in designing my research instruments. Document reviews and semi-structured interviews provided data related to objective 1 and 2 and semi-structured interviews, participant observations, and a focus group provided data for objectives 3 and 4. QSR Nvivo, a qualitative data-analysis software package, effectively enhanced data analysis. Details of the research approach are discussed in chapter 3.

1.4 RESEARCH SIGNIFICANCE

The research contributes to the understanding of the linkages among public participation in decision-making processes, learning that leads to individual perspective transformation, and social action supporting sustainable resource use. SEA is an emerging tool of sustainable development in Kenya and has high potential to successfully integrate environmental factors into

higher levels of development decision-making (Onyango and Schmidt 2007). There is, however, more need for research on the effectiveness of public participation in SEA to achieve sustainability (Okello et al. 2009). My research gathered empirical data that considers the meaningfulness and sustainability outcomes of participation in Kenyan SEA. Consideration of learning through participation allowed me to approach a gap in transformative learning theory related to the link between individual learning and social action or change (Cranton 2006; Taylor 2007).

1.5 ORGANIZATION

This thesis is organized into seven chapters. Following the introductory chapter, the literature regarding public participation and learning in EA and SEA is reviewed. Chapter three provides details on the research methods used in the project. Chapter four presents results related to the review of SEA work in Kenya, while chapter five outlines the results in relation to the two case studies. Chapter six provides further discussion pertaining to learning conditions and outcomes of the case studies. Conclusions and recommendations are made in chapter seven.

2.0 PUBLIC PARTICIPATION AND LEARNING IN STRATEGIC ENVIRONMENTAL ASSESSMENT

2.1 STRATEGIC ENVIRONMENTAL ASSESSMENT

2.1.1 Definition and Purpose

Environmental assessment (EA) was formally introduced by the US National Environmental Policy Act (NEPA) in 1969 as a means to assess and mitigate the environmental impacts of development projects (Hanna 2009). Project level environmental impact assessment (EIA) has conventionally been the dominant form of environmental assessment utilized by practitioners and required by governments, but is increasingly criticized for its reactive nature and inability to account for the cumulative impacts of individual developments (Haq 2004; Alshuwaikhat 2005; João 2005; Jones et al. 2005). Haq (2004) identifies three main evolutionary trends in the development of EA since its conception, including the broader acceptance of EA practice at the global scale, the adoption of EA principles at higher levels of decision making, and the development of more integrative EA approaches to include socio-economic in addition to environmental dimensions.

Strategic Environmental Assessment (SEA) is an emerging tool intended to allow for the effective integration of environmental sustainability considerations into high level decision making processes (Dalal-Clayton and Sadler 2005; Fischer 2007; Wallington et al. 2007; Noble and Harriman-Gunn 2009; Therivel 2010). Although there is no one agreed upon definition of SEA, it has often been described as “a systematic process for evaluating the environmental consequences of proposed policy, plan or programme (PPP) 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 (Sadler and Verheem 1996).”

SEA has become more widely established both as a response to the weaknesses of project level EA and as a promising tool for the promotion of sustainable development (Haq 2004; Noble and Harriman-Gunn 2009). SEA takes place early on during the PPP decision making process and has the ability to proactively influence the types of projects that are developed, whereas the late timing of EIA in the development process typically allows for only minor modifications to predetermined projects (Dalal-Clayton and Sadler 2005). Consequently, through the early consideration of a full range of PPP alternatives, EA at the strategic level allows development projects to be set within a broader sustainability framework (Jones et al. 2005; Noble and Harriman-Gunn 2009).

For sustainability goals to be reached, environmental, economic, and social aspects must be integrated into decision-making processes (Fischer 2007). Ahmed and Sánchez-Triana (2007) suggest that SEA can lead to enhanced transparency and accountability in decision-making processes, while simultaneously fostering in policy makers a more complete understanding of the linkages between environmental concerns, economic growth, and social issues, including poverty alleviation in developing countries. However, there is currently debate over the extent to which these diverse dimensions should be integrated into SEA processes (Sadler 2005; Fischer 2007). Although there are many perceived benefits and generally strong support for such an integrated approach (IAIA 2002), there is some concern that the core purpose of SEA, namely environmental sustainability, may be downplayed should social and economic aspects be equally weighted in SEA practice (Wallington et al. 2007).

2.1.2 Characteristics

Noble (2000) and Noble and Harriman-Gunn (2009) suggest that good-quality SEA can be characterized as strategically and broadly focused, future oriented, alternatives focused,

proactive, tiered, and integrated. A strategically focused approach is one that defines specific objectives and then analyzes and chooses amongst alternative courses of action that will achieve the desired outcome (Therivel 2010). SEA, then, is a process that aids in the development of a strategic action at the PPP level and aims to not only analyze the PPP, but also to subsequently improve it through the consideration of its alternatives (João 2005). Effective improvements can be made at the strategic level because of the wide range of alternatives available, allowing the most positive alternative to be chosen early in the decision-making process, thus proactively reducing negative future outcomes (Noble 2000). The focus on alternatives at the PPP level means that SEA is also generally broader in scope, less technical, and more qualitative than EIA, and usually becomes more so as it is applied upstream from programmes, to plans, to policies.

SEA is ideally set within a tiered planning framework, where SEA or EIA at lower levels are informed by SEA at preceding levels of the program, plan, and policy hierarchy (Fischer 2007; João 2005; Noble and Harriman-Gunn 2009). EIA at the project level may also inform the future development of new, or modification of existing, PPPs. Completing SEA at higher tiers should streamline the decision-making process by negating the need to revisit certain EA aspects at subsequent levels. Removing such duplication will likely result in increased time and cost efficiencies throughout the decision-making process (João 2005). Moreover, SEA at higher tiers will set the context for lower level PPPs and projects, potentially preventing costly future mistakes (Fischer 2007).

Integration, as a characteristic of SEA, has a variety of meanings. As mentioned in the previous section, the integration of environmental, social, and economic considerations is often desired in the SEA process as means of approaching sustainability goals (Ahmed and Sánchez-Triana 2007; Fischer 2007). Noble and Harriman-Gunn (2009) recognize this type of integration

as a significant characteristic of SEA, but also advocate for the integration of diverse sets of knowledge, objectives, and interests by taking an interdisciplinary and participatory approach to the SEA process. Such incorporation will better address the complex issues that are grappled with at strategic levels of decision making. Finally, integration refers to the intimate link SEA must have to the PPP making process. SEA should be carried out simultaneously with PPP development, iteratively informing and influencing all stages of the decision making process (João 2005). Sustainability issues will more likely be integrated into the PPP if the SEA is initiated at the same time the problem is first addressed.

2.1.3 Experience in Developing Countries

In the past, SEA activity has largely been limited to developed countries, but is now increasingly expanding across a variety of countries and economic sectors, in both developed and developing countries alike (Alshuwaikhat 2005). Key events, such as the World Summit on Sustainable Development (WSSD), have further promoted the integration of environmental sustainability considerations into PPP decision making at the international level (United Nations 2002; Retief 2007). In developing countries, the promotion of capacity development for SEA has also been stimulated by bilateral or multilateral development agencies such as the Canadian International Development Agency (CIDA), the Organization for Economic Co-operation and Development (OECD), and the World Bank (Dalal-Clayton and Sadler 2005). Such organizations are showing a tendency to shift lending and investment programmes away from individual projects towards broader level funding that will better support international development strategies such as the Millennium Development Goals. SEA is thought to be an ideal method for use by these development agencies to assess and evaluate alternate options for proposed capacity-building programmes and policy and sector reform proposals in developing

nations (OECD 2006). With the shift towards higher level development programming has come a growing interest in SEA, an increasing demand for SEA training in developing countries, and an apparent need for the application of SEA to be set within a specific national context (Dalal-Clayton and Sadler 2005; Retief 2007).

Retief et al. (2008) argue that SEA should be integrated into decision-making processes in developing countries because large segments of the population rely heavily on primary sector activities, such as agriculture, fishing, and mining, for their livelihoods. Often, the most vulnerable portions of societies are the most severely affected by environmental degradation and also have the least influence in deciding how natural resources are managed and allocated. Therefore, incorporating sustainability principles and participatory approaches, through the use of SEA, into the strategic management of a nation's natural resources has a direct impact on the well-being of its citizens and has the potential to be a key player in poverty reduction (Kende-Robb and Van Wicklin 2007; Retief et al. 2008). The OECD (2006) also agrees that meaningfully engaging the public through SEA fosters good governance in developing countries by promoting accountability and transparency, integrating various types of knowledge and a wide array of opinions and values, and reducing the possibility of negative unintended outcomes.

SEA, however, is a newly emerging tool in developing countries, and has yet to overcome certain barriers that hinder its wide adoption and overall effectiveness (Kjorven and Lindjhem 2002; Sinclair et al. 2009). Some of these barriers include: a lack of training and available funding; an unwillingness of government agencies to take responsibility for the process; inadequate social and environmental baseline data; an unawareness of the benefits of SEA; inadequate discussion of PPP alternatives; a lack of integration with the decision making process; the absence of meaningful public participation; and difficulties in engaging the public in

high level issues that are generally quite abstract in nature (Kjorven and Lindhjem 2002; Alshuwaikhat 2005; Goodland 2005; Sinclair et al. 2009).

Community based approaches may aid in overcoming numerous difficulties associated with the implementation of SEA, at least at the programme level in developing countries (Sinclair et al. 2009). In a test case of participatory community-based strategic environmental assessment (CBSEA) in Costa Rica, Sinclair et al. (2009) found that local participants were able to effectively assess potential impacts and program alternatives, express preferred options, and suggest mitigation measures that, in the end, led to a strengthened regional watershed management program. Additional benefits, such as individual and social learning outcomes, proponent satisfaction with the SEA process, and evidence of a potential shift towards sustainability, were also observed. Further testing of CBSEA approaches in the developing world will contribute to understanding how the devolution of power to communities can occur and accrue benefits in environmental decision-making.

2.1.4 Experience in Kenya

Kenya was the first East African country to legally uphold SEA practice (Onyango and Schmidt 2007). The Kenyan SEA framework has been evolving since the implementation of the 1999 Environmental Management and Coordination Act (EMCA), which promotes the “integration of environmental considerations into development policies, plans, programmes, and projects (GoK 1999).” According to Onyango and Namango (2005), the EMCA focuses more heavily on project level EIA and makes inadequate provisions for SEA. The legislation does, however, provide every Kenyan citizen with the right to a clean and healthy environment and makes provisions for “public participation in the development of policies, plans, and processes for the management of the environment (GoK 1999).”

The Environmental Impact Assessment and Auditing Regulation (EIAAR) of 2003 produced more comprehensive parameters for Kenyan SEA practice, including definitions and objectives of SEA, “triggers” of SEA, and content necessary in SEA reports (Onyango and Schmidt 2007). National SEA guidelines, produced in 2006 and revised in 2011 by the National Environment Management Authority (NEMA), integrate best practice guidelines formed by international agencies such as the OECD (NEMA 2011). The guidelines include an overview of SEA, a substantive list of steps necessary to undertake SEA, and indicate the roles of various stakeholders, including the stages at which public participation is required.

Experience with SEA in practice is still quite limited in Kenya, with only 11 cases being completed to date. One example is the SEA of the Forests Act of 2005, which was carried out as part of the World Bank’s SEA pilot program. The Forests Act introduced numerous novel reforms to forest policy in Kenya; most significantly, the devolution of forest resource management and the promotion of local community engagement. The purpose of the SEA, completed in 2007, was to influence the implementation of the Act and to stimulate positive dialogue about sustainable forest use through the production of action steps using a participatory process (World Bank 2011). In the screening and scoping phase, stakeholders and relevant environmental and social considerations were identified. Following that, a baseline account of governance, institutional, economic, social, and environmental conditions was compiled, and environmental policy priorities were identified in stakeholder workshops.

The World Bank (2011) identified numerous positive outcomes of the SEA process, including increased accountability of government and community stakeholders to the implementation of the Act, meaningfully engaging local community members and NGOs, and individual learning outcomes. However, the late timing of the SEA, the lack of Kenyan

ownership of the process, and the absence of follow-up activities hinder the overall success of the endeavor.

The Kenyan SEA framework has become much more comprehensive over the past decade. There is, however, a need to more closely align practice with policy in domestically executed SEA, especially in the area of public participation (Onyango and Schmidt 2007). Okello et al. (2009) note a need for additional research to evaluate the effectiveness of public participation in Kenyan SEA and whether the mechanisms for participation outlined in regulations and guidelines are complied with in practice (Onyango and Schmidt 2007; Okello et al. 2009).

2.2 PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISION MAKING

2.2.1 Overview

In addition to the recognition of the importance of integrating ecological, social, and economic factors into environmental decision making, Hunsberger et al. (2005: 613) notes that “a sustainable approach is also one that acknowledges the importance of locally relevant decision making, informed by public involvement.” The practice of meaningfully engaging the public is now widely acknowledged as a foundation of the EA process (Petts 1999; IAIA 2002; OECD 2006; Heiland 2007; Sinclair and Diduck 2009). There remain, however, numerous challenges associated with public participation in environmental assessment (EA), including much deliberation over how the public may be effectively involved in the process (Rauchmeyer and Risse 2005). In the past, adequate community participation in sub-Saharan Africa has largely been neglected, but is gradually being strengthened and becoming more common (Spaling 2003).

“Participation” is any form of active involvement within the EA process, while “meaningful public participation” refers to an ongoing process of information exchange,

deliberation, and learning amongst all those involved (Sinclair and Diduck 2009). According to Arnstein (1969), there are eight levels on the ladder of public participation. The bottom rungs of the ladder are defined by non-participation, with the proponent merely persuading the public to accept a proposed action. The middle rungs are characterized as forms of tokenism where the process involves a great deal of “information out” with no, or limited, opportunity for the public to express concerns or influence the decision making process. At these levels, the goal is often to simply address legal requirements, rather than to commit to meaningful public engagement. Partnership, delegated power, and citizen control allow for an increasing amount of public power over decision making. At the these top rungs of participation, the public and planning agencies are considered equal partners and jointly determine solutions to identified problems (Arnstein 1969). Arnstein (1969) notes that for participation to be meaningful, there must be to some extent a redistribution of power to the marginalized sectors of society. Such collaboration, with the integration of public involvement from the beginning of the decision making process, is a necessary contribution in the pursuit of environmental sustainability (Doelle and Sinclair 2006).

2.2.2 Benefits

There are many benefits of meaningfully engaging the public in environmental decision making, and more specifically, in SEA. First and foremost, participation affirms democratic principles by allowing the public to have a voice in decision making processes (Arnstein 1969; Webler et al. 1995; Fitzpatrick and Sinclair 2003; Sinclair and Diduck 2009). Participatory democracy allows for the empowerment of individuals and communities (Sinclair and Diduck 2009), by giving the poor and marginalized the opportunity to express concerns, voice opinions, and influence decision outcomes (World Bank 1996; Kende-Robb and Van Wicklen 2007). Kende-Robb and Van Wicklen (2007) note it is often the most vulnerable segments of society

that have the least influence over high level decisions, such as policy formulation, and yet may be among those most affected by the decisions. In the context of environmental decision making, they classify the vulnerable as those who heavily rely on the environment to maintain their livelihoods or those who are disproportionately affected by environmental degradation. Involving the public, including the marginalized, in the decision making process is thought to enhance the quality of decisions and increase public awareness of environmental issues (Okello et al. 2009).

Another major advantage of public participation in environmental decision making is the potential for individual and social learning that promotes sustainability outcomes (Webler et al. 1995; Fitzpatrick and Sinclair 2003; Rauchmeyer and Risse 2005; Sinclair and Diduck 2009). Collaboration exposes involved parties to a diversity of types of knowledge and perspectives, increases mutual understanding of those viewpoints, allows individuals to critically reflect on their current understandings, and may result in perspective transformations within stakeholders (Webler et al. 1995; Rauchmeyer and Risse 2005; Jha-Thakur et al. 2009; Sinclair and Diduck 2009; Sinclair et al. 2009). Transformative learning in environmental decision-making will be discussed at length in a later section.

The literature also indicates that meaningful public involvement in environmental assessment processes:

- broadens the range of perspectives and potential solutions in the decision making process (Sinclair and Diduck 2009), thus reducing possible negative unintended outcomes (Kende-Robb and Van Wicklen 2007);
- ensures the outcomes of the process better meets the needs of the public (Fitzpatrick and Sinclair 2003; Kende-Robb and Van Wicklen 2005; Heiland 2007; Sinclair and Diduck 2009);

- increases the legitimacy of decision making outcomes (Dietz and Stern 2008; Sinclair and Diduck 2009);
- raises the level of certainty for planning agencies about the choice of final decisions (Rauchmeyer and Risse 2005; Heiland 2007)
- creates a space for conflict resolution (Fitzpatrick and Sinclair 2003) and, especially in SEA, allows parties to deal with conflicts in early stages of planning (Heiland 2007);
- provides a forum for the development of relationships between all parties involved (ie. governments, private sector, NGOs, and local communities) (Kende-Robb and VanWicklen 2005; Dietz and Stern 2008);
- increases the accountability for decisions and the subsequent implementation of those decisions (Kende-Robb and Van Wicklen 2005; Sinclair and Diduck 2009);
- allows for access to and integration of multiple forms of knowledge, including traditional knowledge (Fitzpatrick and Sinclair 2003; Hunsberger et al. 2005; Sinclair and Diduck 2009); and
- increases public acceptance of the action (Kende-Robb and VanWicklen 2005) and therefore, avoids costly and time consuming conflict resolution in the future (Rauchmeyer and Risse 2005; Sinclair and Diduck 2009).

While the preceding list makes apparent the many benefits of integrating meaningful participation into the EA process, there are also numerous challenges and weaknesses that must be overcome in order to ensure wide-spread and effective participation. However, the literature is optimistic that public engagement in environmental decision making is improving and can result in more effective and democratic decision outcomes.

2.2.3 Challenges and Requirements

The benefits of public participation in environmental decision making are only realized if conditions are conducive for effective engagement and if governments and other proponents are committed to the participatory process. If requirements for effective participation are not met, the process may be counterproductive, causing a costly and time consuming situation with little improvement in the quality of the decision outcomes (Dietz and Stern 2008).

Numerous challenges of public involvement in EA, including SEA, have been identified in the literature. For example, lack of participation at strategic levels of planning has resulted in public cynicism, leading to a belief that, especially at the project level, decisions are foregone conclusions (Diduck and Sinclair 2002; Sinclair and Diduck 2009). When given the opportunity to participate in the EIA process for a proposed hog processing facility on Ontario, members of the public wanted, but were not able to discuss normative issues, such as whether or not such a facility should even be constructed. They were only asked to comment on operational details of the project, giving the impression that they did not have any real influence in the decision making process. Therefore, the increased use of SEA at the normative stages of development may aid in reducing such disillusionment. However, Heiland (2007) cautions about the ‘participation paradox’ of strategic level involvement. In SEA, there is greater opportunity to influence PPPs, but often the public are less willing to participate because ideas at high levels of decision making are generally quite abstract. The effects of the decisions on everyday life may be unclear, especially as the process moves upstream from programmes, to plans, to policies.

Another major reason for ineffectiveness of participation in SEA is the lack of political will to implement such a process (Rauchmeyer and Risse 2005). Planning agencies may be hesitant to engage the public in SEA processes for reasons of confidentiality, complexity, or fear

that control over the process will be lost. In addition, proponents may be concerned that the integration of public involvement in EA will result in much higher costs, more effort, and delays in the planning process (Rauchmeyer and Risse 2005; Heiland 2007). Rauchmeyer and Risse (2005) argue that these limitations may be overcome by emphasizing that integrating meaningful participation fosters good governance and builds the trust of the public.

Inaccessibility to information and communication deficiencies may also impede the effectiveness of public participation in EA (Diduck and Sinclair 2002, Sinclair and Diduck 2009). The public may not be given sufficient notice, reports may be written in overly technical language, the window for participation may be inadequate, insufficient financial resources may be provided, or the public may be entirely unaware of the EA. In developing countries, illiteracy, the powerlessness of marginalized groups, and participation requirements imposed by international donors that are insensitive to traditional decision making processes may also inhibit meaningful participation in EA (Spaling 2003).

To overcome some of the aforementioned constraints in EA, certain conditions for meaningful participation must be met. Firstly, the benefits of participation that emerge often depend on the policy and legislation that apply. Definitions of ‘the public’, adequate duration and means of providing notice, requirements for public engagement, and available participant funding programs often determine the effectiveness of participation (Sinclair and Diduck 2009). Sound policy is important because ineffectual laws and regulations regarding public participation often translate into weak participatory provisions.

According to Heiland (2007), participation must take place early in the process when no irreversible decisions have been made and be of adequate duration to allow the public to become familiar with, and formulate opinions about, the strategic issue. Participation should not only

occur at the beginning, but be an ongoing occurrence throughout the process and iteratively feedback into each successive planning phase (Kende-Robb and Van Wicklen 2005). In a community based strategic environmental assessment (CBSEA) in Costa Rica, local communities were involved in scoping and assessing a proposed watershed management program, identifying program alternatives, identifying positive and negative impacts of the program, developing strategies to mitigate the negative impacts, and sharing results of the discussions with the proponents (Sinclair et al. 2009). Continuous involvement allows the needs and opinions of the public to be considered at each stage, reducing the potential for conflict in the future. Doelle and Sinclair (2006) argue that ensuring community engagement in identification of alternatives and preferred options is vital in the transition to sustainability.

After completion of the participatory planning process, the proponent must ensure appropriate follow-up and dissemination of the results (Heiland 2007). This includes making EA reports available and accessible to those involved, using a variety of dissemination techniques so all stakeholders have access and clarity in how their input affected the final decision. The indication that the public had real influence in the decision will encourage increased participation in the future.

2.2.4 Public Participation in Environmental Assessment in Kenya

Over the last two decades, public participation has gained increased attention in environmental decision making processes in Kenya, but its full potential has yet to be realized (Onyango and Namango 2005; Okello et al. 2009). Recent legislation, such as the Water Act of 2002 and the Forest Act of 2005, has emphasized the need to devolve power to local communities for resource management (GoK 2005; K' Akamu 2008). Moreover, the provisions for public participation in EIA and SEA frameworks have been regarded as fairly strong (Okello

et al. 2009). There is recognition, however, that such provisions may be simple rhetoric, with inadequate local participation occurring in practice (Onyango and Namango 2005; K'Akamu 2008; Okello et al. 2009). Okello et al. (2009) report that in EA practice participation usually remains at the level of consultation, but does not often reach the higher rungs of citizen empowerment.

The framework for public participation in Kenyan SEA is guided by the Environmental Management Coordination Act (EMCA), the Environmental Impact Assessment and Audit Regulations (EIAAR), and the national guidelines for strategic environmental assessment. The EMCA does not explicitly mention SEA, but does make reference of the need for public participation in PPP decision making (Okello et al. 2009). Moreover, the EIAAR requires participation during the scoping and impact assessment phases of EA and also during the review of the EA report. The national guidelines for SEA are more substantial in regards to public participation, but are not legally binding. The guidelines define stakeholders in the SEA process as “those who may be interested in, potentially affected by, or influence the implementation of a PPP” and “may include the government, donor agencies, local communities, NGOs, and civil society (NEMA 2011: iv).” Best practice also includes the identification and inclusion of those who are most vulnerable to environmental degradation and those who are not usually included in decision making, including women and youth (NEMA 2011). The SEA process should include an educational component so that the members of the public who are not accustomed to being involved in strategic decision making are aware of the purpose and benefits of the SEA process. The guidelines also recommend that participation should be initiated during the scoping stage and continue throughout the entire SEA, including in the review of the draft report.

Numerous barriers to effective participation in Kenyan EA have been observed. These include inadequate access to information (Montes 2008; Okello et al. 2009), insufficient enforcement of participation regulations (Okello et al. 2009), unbalanced power structures (Spaling 2003; Montes 2008; Spaling et al. 2011), and limited financial resources (Montes 2008). Illiteracy may create an obstacle to the public receiving information, especially because EA notice and reports, if publicly provided, are often printed in newspapers or posted on the internet (Okello et al. 2009). This is also problematic because rural communities often have little access to internet or national newspapers. In a community based EA case study, Montes (2008) notes participant frustration because of long delays or complete lack of dissemination of final EA reports to the involved communities. The same case study mentions a power imbalance in the EA process, with mainly only the elite members of the communities being involved. Women were sometimes present, but had little influence over the final decisions, and youth were often overlooked entirely. Despite these barriers, a participant cited feelings of empowerment and decreased community dependence on donors following the participatory EA process.

In NEMA's 2010-2013 strategic plan, the value of local participation and the abundance of indigenous knowledge for environmental management are recognized. However, the integration of such knowledge must improve in practice. Local participation may be enhanced by distributing information in easily accessible ways (ex. local radio) and in indigenous languages (Okello et al. 2009). Participation may also improve by providing participant incentives, holding meetings in convenient locations, ensuring the inclusion of the most vulnerable members of communities, and using participatory approaches and techniques. Okello et al. (2009) cite the need for additional research on the effectiveness of EIA and SEA public participation in practice, as it is still quite limited in Kenya.

2.2.5 Participatory Rural Appraisal

Chambers (1994: 1437) describes participatory rural appraisal (PRA) as a “family of approaches and methods to enable local people to share, enhance and analyze their knowledge of life and conditions, to plan and to act.” PRA is meant to nurture the sharing and ownership of knowledge, encourage critical reflection, and facilitate analysis by local people. The overriding objective of PRA is to empower communities to take sustainable actions for development at the local level. The introduction and evolution of PRA marks a departure from conventional development strategies that are characterized by top-down approaches, non-participation, and ignorance of the value of traditional knowledge (Chambers 1994; Narayanasamy 2009).

Some academics and practitioners, however, caution that participation should not be considered a panacea and argue that participatory processes can actually tyrannically entrench existing systems of oppression and injustice (Cooke and Kothari 2001). According to the authors, facilitators of participatory decision-making can intentionally or naively subjugate functional pre-existing decision-making processes, reinforce the interests of those already in positions of power, or neglect other advantageous forms of decision-making.

Nonetheless, in the mainstream development context, participatory approaches continue to be generally upheld in multiple levels of government and organization. Development projects in rural Africa often rely on the surrounding natural resources to meet basic human needs; therefore, the environmental sustainability of such projects must be ensured if continued benefits for local communities are to be realized (Spaling 2003). Community-based EA and SEA, utilizing PRA techniques, have proven successful in involving local people in the assessment process and in building capacity for sustainable development decision making (Spaling 2003; Spaling and Vroom 2007; Sinclair et al. 2009). Traditional technocratic EA methods, developed

in the West, do not transfer well to the context of rural communities in developing countries; as such, PRA offers a visual, interactive, and time- and cost-effective process that is context specific and inclusive of local traditional knowledge (Spaling 2003). Specific PRA techniques commonly used in community EA include semi-structured interviews, focus groups, participant observation, transects, diagrams, resource mapping, time analysis, and matrix ranking and scoring.

2.3 PUBLIC PARTICIPATION AND THE ROLE OF LEARNING

There has been wide acknowledgement that meaningful public participation in environmental decision making can result in positive individual and social learning outcomes that facilitates the transition to sustainability and promotes good governance (Webler et al. 1995; Fitzpatrick and Sinclair 2003; Sinclair et al. 2008; Sims and Sinclair 2008; Jha-Thakur et al. 2009). Participatory approaches to EA and SEA provide a forum for learning and collaboration, potential shifts in values, attitudes, and perceptions, and individual actions and social mobilization that support sustainable resource use (Jha-Thakur et al. 2009). For example, Sims and Sinclair (2008) note that ongoing learning processes in agricultural communities in Costa Rica have resulted in positive environmental, economic, and social changes at the community level, thus promoting an overall shift towards more sustainable practices and perceptions. Shifting away from unsustainable patterns of resource use requires profound personal and social transformation (Diduck et al. 2011). It is for this reason that transformative learning theory is thought to have great potential for understanding the linkages amongst public participation, individual learning, social action, and transitions towards sustainability in natural resource management.

2.3.1 Transformative Learning Theory

Transformative learning is a popular adult education theory used to describe the process of adult learning (Taylor 2007; Sims 2011). According to Mezirow (2000: 8), the theory focuses on “how we learn to negotiate and act on our own purposes, values, feelings, and meanings rather than those we have uncritically assimilated from others – to gain greater control over our lives as socially responsible, clear-thinking decision makers.” Transformative learning involves critical reflection on underlying assumptions, beliefs, values, and perspectives, thereby facilitating the development of more functional frames of reference to guide actions and inform decisions (Mezirow 2000, 2003). Mezirow (2000) defines a ‘frame of reference’ as the set of assumptions and expectations that forms the way in which we look at the world. Frames of reference are comprised of habits of mind, or general predispositions through which we interpret experience, and points of view, which are specific beliefs, feelings, and attitudes that are direct expressions of our habits of mind.

Transformative learning theory distinguishes between instrumental and communicative domains of learning, both through which deeper transformations may be facilitated (Mezirow 2000, 2003; Cranton 2006; Sims 2011). Instrumental learning refers to performance improvement through learning how to control and manipulate environmental variables (Mezirow 2000). It involves obtaining new skills and information, determining cause-effect relationships, or task-oriented problem solving (Sims and Sinclair 2008). Communicative learning entails developing an understanding of what others mean when they communicate with us (Mezirow 2000). It involves reflecting on the intentions, qualifications, and the validity of the assumptions and perspectives of the other. A transformation towards a more dependable frame of reference

may occur when individuals critically reflect on newly acquired instrumental or communicative knowledge.

The learning process may be sudden or gradual, but often begins with a ‘disorienting dilemma’ where an individual encounters a perspective that is misaligned with their current frame of reference (Cranton 2006). The individual then engages in critical self-reflection to identify unfounded assumptions, beliefs, or perspectives underlying the problem (Cranton 2006; Diduck et al. 2011). According to Mezirow (2000), seeking alternative viewpoints and engaging in critical discourse is essential for the justification of new assumptions and aids in the development of more functional frames of reference. The transformative learning process is complete when the individual takes actions based on the newly developed perspectives (Diduck et al. 2011). Although transformative learning theory primarily addresses individual learning, a growing literature suggests links between individual perspective transformations and social action (Diduck and Mitchell 2003; Sims and Sinclair 2008; Sims 2011).

Mezirow (2000) identifies a set of ideal conditions that ensure meaningful participation and create highly effective learning environments. To meet these conditions, participants must have:

- accurate and complete information;
- freedom from coercion and distorting self-deception;
- openness to alternative points of view;
- the ability to weigh evidence and assess arguments objectively;
- equal opportunity to participate in discourse; and

- willingness to seek understanding and agreement and to accept a resulting best judgment as a test of validity until new perspectives, evidence, or arguments are encountered and validated through discourse (Mezirow 2000: 13).

Facilitating perspective transformations by striving to meet the ideal conditions of learning can lead to participant empowerment (Sims and Sinclair 2008). Such learning can increase the confidence and ability of communities to be involved in and influence decisions that affect them (Sinclair et al. 2008), and can even liberate them from oppressive social situations (Sinclair and Diduck 2001).

2.3.2 Transformative Learning in Environmental Assessment

Numerous studies have explored the potential of EA, including SEA, to facilitate participant learning that fosters individual and social action on sustainability (Sinclair and Diduck 2001; Diduck and Mitchell 2003; Fitzpatrick and Sinclair 2003; Jha-Thakur et al. 2009; Sims 2011). An abundance of instrumental and communicative learning outcomes have been observed in empirical EA research; however, examples of transformative learning are more uncommon (Sinclair et al. 2008; Diduck et al. 2011). Examples of instrumental learning outcomes include information acquisition about environmental issues such as soil erosion and tree planting, skills that promote sustainable development such as water pipe maintenance (Montes 2008), an increased concern for environmental and health impacts on local communities, and greater knowledge about the EA process and the value of effective public participation (Diduck and Mitchell 2003). Communicative learning outcomes in EA may include gaining insights into one's interests and the interests of other stakeholders, developing understandings of communication strategies and methods, and increasing awareness of the necessities for social mobilization (Diduck and Mitchell 2003).

A lack of transformative outcomes may be due to the fact that participation is often not integrated in the EA process to its full potential or that the ideal conditions of learning are not met (Sinclair et al. 2008). However, participatory community-based EA practice may enhance learning outcomes. In a recent CBSEA case study, examples of instrumental, communicative, and transformative learning are apparent (Sims 2011). Transformative learning emerged as participants engaged in deliberative activities and critically reflected on the underlying assumptions that dictated the methods and strategies used in farming practices. As they gained greater awareness of their impact on the local watershed, their mindsets became more sustainability oriented and individual and collective actions were taken to integrate more sustainable farm practices. Jha-Thakur et al. (2009) and Sims (2011) note that more research is needed to better understand the potential of learning in SEA to achieve sustainability goals.

The presence of the ideal conditions of learning is significant in encouraging meaningful participation and transitions to sustainability (Sinclair and Diduck 2001; Diduck and Mitchell 2003). To assess the learning outcomes in multiple cases of EA, Sinclair and Diduck (2001) provide operationalized definitions of Mezirow's ideal conditions of learning and compare them to the conditions present in Canadian EA practice. While numerous cases show strengths in providing adequate conditions, multiple deficiencies in other cases impose significant barriers to meaningful public participation and mutual learning. The comparisons allow the authors to make recommendations in regards to more effective implementation strategies for meaningful public involvement in EA processes.

2.3.3 Gaps in Transformative Learning Theory

Two identified gaps in transformative learning theory are significant to this research. Firstly, the extent to which individual transformation, the focus of transformative learning

theory, may lead to social action and change is still debated (Sims and Sinclair 2008; Taylor 2007; Sims 2011). Sims and Sinclair (2008) and Sims (2011) provide evidence that individual perspective transformations result in individual and collective action. Social action was observed when EA participants shared learning experiences with neighbors and made decisions to actively engage in collaborative community sustainable development projects. However, there is a need for further empirical research to enhance the understandings of the linkages among public participation, individual learning, and social action.

Secondly, transformative learning theory was developed in the USA and little research has been done on the cross-cultural applicability of the theory, as well as its utility outside of the classroom setting (Taylor 2007; Sims and Sinclair 2008). While Sims and Sinclair (2008) affirm the relevance of transformative learning in a Latin-American context within a CBSEA case study, Taylor (2007) identifies the need for further studies to examine the role of culture and differences in nationality in relation to transformative learning theory.

2.4 SUMMARY

Strategic environmental assessment is being promoted worldwide as a tool for sustainable development and its use is especially growing in developing countries like Kenya. Public participation is essential to SEA as it affirms democratic principles by empowering local people, including the marginalized, to have a voice in environmental decision making processes. Moreover, participation can encourage critical self-reflection and communal dialogue that may result in transformative learning and subsequent action outcomes that facilitate a transition towards sustainability. Kenya has a defined SEA process and has actually carried out a handful of these assessments, providing an opportunity to further explore these linkages amongst participation, learning, and social action for sustainability.

3.0 METHODS

3.1 QUALITATIVE RESEARCH

I carried out qualitative research utilizing a case study strategy of inquiry and drawing on a variety of data collection methods. A qualitative research design was selected because it allows for the in-depth exploration of a human or social problem and the meanings that have been constructed by those involved (Creswell 2009). According to Creswell (2007: 40), qualitative research is used “when we want to empower individuals to share their stories, hear their voices, and minimize power relationships that often exist between a researcher and the participants in a study.” A qualitative research study provides a holistic and detailed account of a topic, studies an individual, group, or phenomenon in its natural setting, uses multiple sources of data, and involves the researcher as an active learner in order to fully understand the viewpoints or meanings the participants hold about an issue (Creswell 2007).

The emergent nature of community based strategic environmental assessment (CBSEA) in resource management paired with the need to engage in a detailed exploration of human experience in its specific and natural setting in order to understand the learning outcomes of public participation justified the use of a qualitative design in this research. Moreover, the literature shows that qualitative research designs are utilized in the majority of empirical transformative learning studies (Taylor 2007).

3.2 CASE STUDY APPROACH

A commonly cited definition of a case study is “an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident and in which multiple sources of evidence are used (Yin 1994).” In other words, case studies may be utilized in order to study a situation or

phenomenon in its natural setting because of its inextricable linkages to its specific context.

Choosing a case study strategy of inquiry allows the researcher to explore and analyze a specific phenomenon or situation in an in-depth and holistic manner (Merriam 1998).

Merriam (1998) argues that the most important characteristic of a case is that it is a bounded system and must be defined by both time and place; these boundaries distinguish case studies from other strategies of qualitative research. This research consisted of two selected case studies involving two communities of participants framed in time by those communities' specific instances of involvement in a completed strategic environmental assessment (SEA).

Communities, in this research, do not necessarily refer to a group of people who live in the same physical village or locality, but to a group who share the common characteristic of participation in consultations carried out during the selected SEA processes. The participants were scattered throughout a number of neighboring villages and locations throughout the areas likely to be affected by the PPPs that the specific SEAs examined. Due to the apparent variability in approach and participation amongst Kenyan SEAs, as outlined in the following chapter, this research conducted two case studies in varying depths in order to get a broader representation of participation and, subsequently, learning and action outcomes resulting from participation.

The case study locations were determined by reviewing 9 of 11 completed and approved SEA report documents (two were inaccessible to the researcher) at the National Environmental Management Authority (NEMA) office in Nairobi and by having follow-up meetings with environmental assessment practitioners involved in promising cases. The following criteria were applied in choosing the two case studies:

- the SEA process complied with government regulation;
- ideally, followed national best practice guidelines;
- available documentation related to the specified SEA;

- evidence of public participation in the SEA, especially involving participants at the community level;
- relatively recent assessments (completed after 2009); and
- willingness of the community and proponents to participate in the study.

The two selected case studies examined the SEAs completed for the Kenya Coastal Development Project (KCDP) and for the Tatu City Structure Plan. The KCDP SEA case study was chosen because the SEA documents provided evidence that public consultation was quite recent and extensive, it was approved by NEMA to align with SEA standards, and initial meetings with concerned practitioners and community members proved the availability of willing participants for this research. The Tatu City SEA was primarily chosen as a case study because of its compliance with national regulation and best practice guidelines, its relatively recent completion, and the diversity of stakeholders involved and methods used in consultations. The KCDP case study was the main in-depth focus of the research and the Tatu City case was completed in less depth for the purpose of confirming and contrasting findings.

Both SEAs were large undertakings and, especially the KCDP, covered a very extensive physical area. For this reason, it was necessary to choose sub-sets of the participating population to be involved in this research. Two professionals involved in the KCDP SEA process indicated that four exceptional consultations occurred in the Malindi district of the coastal province involving the Watha community (an indigenous peoples group living in the area) and members of the dominant Giriama tribe. The ‘best’ consultations were desirable due to the goal of assessing the linkages amongst participation, learning, and action for sustainability. The Watha participants became the main focus of the case study because of indications that they had been largely excluded from environmental decision making in the past and because of key contacts within the community. Six of the 21 participants were members of the Giriama community.

For the Tatu City case study, two groups at the community level were chosen to participate in this research. During the SEA, a consultation was held for the neighbors of Tatu Estate and consisted of the managers of nearby coffee estates and business firms. They were identified through participant lists appended to the SEA report. Coffee workers on Tatu Estate were invited to another consultation and individual participants for this research were identified through contact with the estate manager.

3.3 DATA COLLECTION METHODS

Theme for Evaluation	Data Collection Methods	Evaluation Guided by
SEA Process	SEA document reviews Semi-structured interviews with: <ul style="list-style-type: none"> Government officials SEA practitioners 	National SEA guidelines SEA literature – SEA evaluation criteria
Effectiveness of Public Participation/ Learning Conditions	SEA document reviews Semi-structured interviews with: <ul style="list-style-type: none"> Government officials SEA practitioners Involved NGOs/CBOs Community members Focus Group	Sinclair and Diduck (2001) – Ideal learning conditions with operational definitions adjusted to SEA and Kenyan context
Learning Outcomes	Semi-structured interviews with: <ul style="list-style-type: none"> Involved NGOs/CBOs Community members Participant observation Focus Group	Constructs from the transformative learning literature – instrumental/communicative/transformative
Individual/Social Action Outcomes	Semi-structured interviews with: <ul style="list-style-type: none"> Involved NGOs/CBOs Community members Participant observation Focus Group	Transformative learning literature

Table 1. Themes for evaluation, corresponding data collection methods, and guiding publications.

Document reviews, semi-structured interviews, participant observation, and a focus group discussion were the data collection methods used to address the research objectives. Table 1 shows the issues that were addressed, the specific methods that were used to address each issue,

and publications that guided the data collection and analysis. This research borrows from participatory rural appraisal (PRA) techniques and focused on the importance of community participation and empowerment.

3.3.1 Document Reviews

The initial stage of my research in Kenya consisted of a series of document reviews, utilizing the reports of 9 of the 11 completed SEAs and additional available documentation, such as public notices and public meeting reports. In addition to giving insight into the case study selection process, the reviews allowed me to collect data related to research objectives 1 and 2. In regards to objective 1, an analysis of the completed reports helped determine the extent to which the SEAs followed the stages of SEA standard practice. The process outlined in Kenya's national SEA guidelines (NEMA 2011), presented in appendix 1, was considered standard practice, as major phases and reporting structure are consistent with well-known SEA literature, such as Therivel (2010). In addition, the document reviews were also guided by SEA evaluation criteria as described in the literature (e.g. IAIA 2002; OECD 2006; Retief 2007; Noble 2009).

The SEA documents also provided information related to objective 2, including indications of who participated in the SEAs, how and at which stages of the process they were involved, and how their input was used. This information allows for the triangulation of data emerging from other collection methods, such as semi-structured interviews. Lastly, the reports helped to identify key participants, organizations, and proponents involved in the SEAs, and thus provided me with a starting point for identifying and contacting interview participants.

3.3.2 Semi-Structured Interviews

Semi-structured interviews served as a primary method for this research and were utilized to collect data related to all four research objectives. This type of interview is ideal for exploring

a topic in depth and allowing for the elicitation of participants' experiences and perspectives in their own words (Merriam 1998; Esterberg 2002). Semi-structured interview questions are open-ended and flexible, with the interviewer showing attentiveness to the responses of the interviewee and following up on emerging ideas and information (Merriam 1998).

In this research, environmental assessment practitioners, government officials, and community members were interviewed in order to gain a more in-depth understanding of the process and learning outcomes of the chosen SEA case studies. Two distinct groups were identified to ensure adequate coverage of all research objectives. The first group consisted of government officials and SEA practitioners from NEMA, other government agencies, and environmental consulting firms who were interviewed about the SEA process, especially in reference to the opportunities for public participation (Table 2). Initial interviewees were identified through reviews of the SEA reports and the snowball method was used to identify additional interviewees. This involved six in-depth interviews with government representatives and professionals that lasted an average of 50 minutes. All were audio recorded.

The second group was comprised of locally based community members, including active members of local CBOs, who participated in the two selected SEAs (Table 2). They were interviewed about the opportunities for participation and learning outcomes of the SEA process. For the KCDP case study, I talked to 21 SEA participants, identifying them through a snowball sampling approach starting with community leaders identified in SEA reports and practitioner meetings. The majority of interviews took place in one sitting on the participants' family homestead and lasted between one and three hours. One interview took place at a restaurant near another interviewee's place of work, while two others were conducted at a meeting place outside of local primary school near the participants' homes. Individual Tatu City SEA community

Government and Practitioner Interviews		Community Interviews		
			KCDP	Tatu City
NEMA	1	Men	12	5
Other Government Agencies	3	Women	8	1
Independent Consulting Firms	2	Youth	1	0

Table 2: Distribution of semi-structured interviews.

participants were more difficult to access and only six were interviewed; therefore, a focus group was conducted in order to collect the viewpoints of a broader portion of participants. Two participants were managers of neighboring coffee estates and were interviewed at their offices, while the remaining interviews with Tatu coffee workers took place under a shelter at Tatu Estate. The interviews lasted between 45 and 60 minutes. Hand written interview notes were taken for the majority of interviews with community members, as the use of an audio recorder seemed to create a barrier and many participants declined its use.

Two members of the local community, both fluent in all languages used in the area, assisted with translation for the majority of the community interviews. Communication through a third party poses potential problems, such the increased chance of misinterpretation of meanings, the possible introduction of translator bias into the dialogue, and the reduction of dialogue into summarized translations. I attempted to mitigate these issues by providing a clear explanation of my purpose and performance expectations and went over the interview schedules in detail to ensure mutual understanding prior to conducting interviews, but without revealing the sorts of answers that I anticipated participants might offer or the sorts of data I was hoping to obtain. I also tried to schedule interviews around the availability of the translator who seemed to have the best rapport within the community and who was more attentive to detail. Before starting the

interviews, I asked participants to pause frequently to allow for translation to ensure that I received a clear ‘word for word’ version of their comments.

The development of interview questions for the first group of participants, outlined in Appendix 2, was guided by SEA literature and by the operational definitions of Mezirow’s ideal learning conditions as outlined in the research completed by Sinclair and Diduck (2001). These operational definitions were adjusted to fit within the Kenyan SEA context. Through these interviews, I gained a better understanding of the Kenyan SEA process, specifically in regards to the details of the chosen case studies. Special attention was given to the effectiveness of public participation and learning conditions facilitated within the identified case studies.

The interview schedules developed to guide the interviews for the second group can also be viewed in Appendix 2. The themes are related to how these individuals were involved, what they learned (instrumental, communicative, and transformative learning outcomes), and what individual and social actions have been taken in response to those learning outcomes. The interview schedules were developed with guidance from transformative learning literature and the operational definitions of the ideal conditions of learning (Sinclair and Diduck 2001). Once in the field, the schedules were adjusted to more closely reflect the details of the chosen case studies.

3.3.3 Participant Observation

Narayanasamy (2009: 301) defines observation as “a systematic viewing of specific phenomenon in its proper setting for the specific purpose of gathering data for a particular study.” Participant observation involves becoming immersed in the culture or setting in which the research takes place (Bernard 2006). It involves experiencing life with and learning from the communities or groups of people in whom you are interested in order to learn the nuances of the

culture or phenomenon that might otherwise go unnoticed. Spending a significant amount of time within a community, observing and participating in local life, allows the researcher to effectively build relationships with the participants and creates opportunities to gain valuable data.

Moreover, trust and increased comfort in the presence of the researcher will encourage the participants to go about their business as usual, thus increasing the validity of research results.

In this research, I acted as a participating observer, which Bernard (2006) defines as an outsider who participates in community life as well as observes and records activity related to the research topic. This method was valuable in collecting data related to research objectives 3 and 4, as I was afforded the opportunity to develop a greater understanding of the patterns of resource use within the area that will be affected by the KCDP. Time spent with members of the Watha community, an indigenous peoples group consulted for the SEA, allowed the observation of cultural practices and traditional knowledge that demonstrates an enduring link to the forest. For example, I had the honor to learn about harvesting sap from a native tree that acts as a mosquito repellent when burned and about edibles still harvested from the native forest. Participant observation also served as a means of triangulation to confirm what I learned through the semi-structured interviews regarding the learning and action outcomes of community participation in the SEA process, such as action pertaining to tree planting on the *shamba*. Experiences and observations were jotted in notebooks and later recorded in electronic documents.

3.3.4 Focus Group

Focus groups create a social context where the data is generated through participant interaction (Finch and Lewis 2003; Perecman and Curran 2006). This method provides a natural setting for information elicitation by lessening researcher influence and allowing dialogue

amongst the participants to construct and shape meanings, as generally occurs on a day-to-day basis (Finch and Lewis 2003). Such dialogue allows participants to express opinions, hear the opinions of others, question and probe one another, reflect on similarities and differences in viewpoints, and causes individuals to critically examine their own presuppositions.

In this research, a focus group discussion was held with a group of 15 coffee workers, all women, who were involved in the Tatu City SEA process. We discussed themes pertaining to the opportunities they had to participate, the extent to which they were actively involved in the consultations, and whether there were any learning and action outcomes resulting from the involvement. The focus group provided a means to verify data collected by interviews with other coffee workers and to maximize the input gathered in the relatively short time frame of the second case study. The discussion was conducted in Swahili with a translator aiding in facilitation and hand-written notes were taken.

3.4 VALIDITY AND RELIABILITY CONSIDERATIONS

The researcher is the main instrument of data collection in qualitative case study research and thus inevitably brings certain assumptions, values, and biases to the field. In addition, the effect of the researcher's presence on the behavior of the participants may also be considered a form of bias (Darke et al. 1998). In order to establish rigor in the research, these biases must be considered throughout the planning, data collection, data analysis, and the writing and presentation phases of the research. Careful attention to the establishment of validity and reliability is vital in producing high quality case study research (Merriam 1998; Gibbert et al. 2008).

Internal validity ensures the conclusions made by the researcher reflect reality. Gibbert et al. (2008) suggest this can be accomplished by establishing a clear research framework, by

comparing results to other previous studies, and by ensuring the acknowledgement of the various theories and perspectives surrounding the topic of study. I demonstrated internal validity in my own research by completing a comprehensive literature review in order to gain an in-depth understanding of how my research topic fits into the broader research context.

Construct validity ensures that observations in the field reflect the reality of the case of interest (Gibbert et al. 2008). To demonstrate construct validity, I attempted to construct a clear ‘chain of evidence’ showing the logical linkages between my research purpose, objectives, data collection methods, analysis procedures, and final conclusions. As previously stated, I also triangulated findings by utilizing multiple data collection methods as a way to confirm emerging patterns. Finally, findings were disseminated to the participating communities for verification.

Reliability is the ability for the study to be replicated and is enhanced through transparency in revealing the steps taken throughout the research process (Gibbert et al. 2008). I maintained reliability by documenting my research procedures through thorough field notes. Considering all forms of validity and reliability throughout the case study process is key in establishing rigorous publishable research (Darke et al. 1998).

3.5 DATA ANALYSIS

While in the field, I was deliberate in taking comprehensive field notes to document data emerging from interviews, etc. To streamline the data analysis process, transcribed interviews and field notes were coded into thematic categories using a qualitative data analysis software package NVivo. I developed my own coding scheme, starting with major themes such as SEA process, public participation, learning outcomes, individual action, and social action. Sub-categories were identified as new themes emerged during the data collection and analysis phases of the research. Analysis was guided by the conceptual framework outlined in Table 1. An

evaluation of the Kenyan SEA process was aided by the Kenyan national SEA guidelines and international SEA literature, while the case study examination of learning and action outcomes was guided by the transformative learning literature. For example, it aided in the identification of instrumental, communicative, and transformative learning outcomes.

4.0 EVALUATION OF SEA PROCESS AND PARTICIPATION IN KENYA

4.1 SEA PROCESS

The initial stage of this research consisted of a series of SEA document reviews accessed through the National Environment Management Authority (NEMA) office in Nairobi Kenya. The information obtained through the document reviews were triangulated with interview data from six SEA practitioners from independent consulting firms and government officials at NEMA, the Kenya Marine and Fisheries Research Institute (KMFRI), and the Kenya Forestry Research Institute (KEFRI). The information gathered through these sources address the first and second objectives of this research.

The document reviews confirmed that 11 SEAs have been completed in Kenya (Table 3) with indications that several more are currently underway. A NEMA staff member reported the existence of the completed SEA documents for Ewaso Ng'iro North Natural Resources Conservation, the Kenya Forest Act, and the Efficient Cook Stove Programme; however, the three reports were inaccessible for unknown reasons. Part of the SEA for the Kenya Forest Act is available online through the World Bank website and was utilized during the document review stage.

4.1.1 Evolution of SEA in Kenya

SEA is still a new tool in the Kenyan environmental assessment realm. It was initially introduced to Kenyan legislation through the Environmental Management and Coordination Act of 1999, and although explicit mention of SEA is absent, the Act promotes the “integration of environmental considerations into development policies, plans, programmes, and projects (GoK 1999).” Since that time, according to EA practitioners and government officials, the SEA tool

Name of SEA	Proponent	Year Completed	Sector
Environmental and Social Management Plan for Ewaso Ngiro North Natural Resources Conservation	Unknown	2005	Water Resources
Proposed Bioscience for Eastern and Central Africa in Kenya (BecA)	International Livestock Research Institute	2005	Infrastructure
Strategic and Environmental and Social Impact Assessment on the Kenya Education Sector Support Program (KESSP)	Ministry of Education, Science, and Technology	2005	Education
SEA of the Kenya Forest Act	The World Bank	2007	Forestry
SEA Report of Masinde Muliro University of Science and Technology Infrastructure Development (MMUST)	Masinde Muliro University of Science and Technology	2010	Infrastructure
SEA Report of Environmental and Socio Management Framework and Indigenous Peoples Planning Framework for the Kenya Coastal Development Project (KCDP)	Kenya Marine and Fisheries Institute	2010	Commerce and Industry
Proposed Expansion of Development for Taveta Township	Taveta Township	2010	Infrastructure
SEA for Activities of the Efficient Cook Stove Programme	CO ₂ Balance Kenya	2010	Energy
SEA for Reforestation, Sustainable Development, and Carbon Sequestration Project in Kenyan Degraded Forests	Ministry of Finance and Treasury	2010	Economic Stimulus Programme
Proposed Tatu City Structure Plan	Tatu City Limited	2011	Human Settlement
Strategic Environmental and Social Assessment for the Proposed Konza Technology City	Ministry of Information and Technology	2011	Information and Technology

Table 3: List of completed Kenyan SEA.

continues to evolve within the Kenyan context and is gradually becoming strengthened due to capacity building efforts and the development of national SEA guidelines.

Why SEA is regarded as a valuable tool

All of the participants in the first stage of this research recognized the benefits of integrating environmental assessment into high level decision making in Kenya. For example, numerous interviewees mentioned value in the ability to identify the cumulative impacts of individual developments at the strategic level, which is a commonly cited failure of conventional EIA.

“Doing so many small isolated EIA and without linking those EIAs into a national framework or a regional framework, perhaps that does not add quality to environmental assessment. But I think the SEA process is able to hold the threads of so many activities together. The way it is now, if I’m doing an EIA along this creek and I want to put a jetty here, I do an EIA here. Next year someone on the other wants to do another jetty does his own EIA. There’s no linkage, there’s no synergy, but if we approach it from the strategic perspective – the strategic document looks at the bigger scope and can therefore can see the future requirements for the smaller activities and start building in the linkages and the threads that will tie them together (Environmental professional, interview 22).”

Furthermore, SEA in Kenya was introduced not only because addressing cumulative effects is intrinsically valuable in itself, but because external donor agencies have a growing interest in funding high level development activities and addressing broad scale cumulative impacts of such projects.

“The [EIA] tool is used mainly at the project end level where you have more details on the designs of projects and the impacts that you’re going to have on a local situation. What we have seen increasingly, especially in the past 2 to 3 years, is that we are going for broad assessment. The EIA tool was not as effective as understanding the cumulative impacts of different projects in a region. So what happened is that most of the donor agencies started getting into programs where they wanted to see whether we can assess cumulative environmental impacts either in a catchment area, in a region, or several sub-

project in a localized area. So then the country introduced SEA (Environmental professional, interview 6).”

Other practitioners mentioned that the consideration of environmental impacts at strategic levels of decision making is beneficial because the broader scope allows for the integration of a wider range of stakeholder inputs and opinions. This can result in greater acceptance and less conflict during the implementation phase of the PPP.

The evolution of Kenyan SEA guidelines

Both the 1999 EMCA and the 2003 EIA and Audit Regulations made provisions for environmental assessment of PPPs, but neither give clear indication about how SEA differs from EIA nor guidelines on how to carry out the SEA process in the Kenyan context. In February 2011, NEMA released the final draft of the *National Guidelines for SEA in Kenya*. Interviewees commented on the challenges associated with the preparation of SEA reports prior to the existence of the guidelines and on how the SEA process has improved since their development.

“[Before the guidelines] some did SEA, but did not go through the screening process well. They may have even done SEA even when an EIA could have sufficed. That guidance didn’t come out well. That was a problem (NEMA staff, interview 33).”

“It’s fairly different in the context that when the first [SEA] was done, there were no specific guidelines that were local in nature, and then we had to learn from other outside practices or tools. So we spent so much time and resources to be able to come up with the SEA report that will be acceptable by NEMA (Environmental professional, interview 23).”

“When this study was being undertaken, there was no framework, so we were relying more on the expertise of the World Bank and the international frameworks that exist (Environmental professional, interview 22).”

Guidelines from the World Bank, European Union Directive, Canadian International Development Agency (CIDA), African World Development Bank, and Organization for Economic Co-operation and Development (OECD) were among those utilized by Kenyan EA

practitioners to direct SEA studies before the national guidelines were developed and released. This variability has apparently made synergy amongst SEA processes and practitioners within the country difficult. Kenyan national guidelines were also strongly influenced by external sources, such as those established by the Government of South Africa and OECD SEA guidelines, and participants hoped that this compilation will result in greater consistency within SEA practice in Kenya while still allowing for flexibility in the process. Thus far, only the two most recently completed SEAs, in addition to those currently underway, have been able to rely on the national guidelines for direction.

Interviewees indicated that the development of the guidelines not only simplified procedures for conducting SEA in the Kenyan context, but also streamlined the review process at NEMA.

“Right now, I think it is much easier that the tools and guidelines that have been set up by NEMA, they are very clear and straight forward. It is a question of a checklist in terms of what you’re doing complies with what NEMA requires. It also brings different aspects of cultural diversity, indigenous people, local settings in terms of the institutional arrangements which were not there before (Environmental professional, interview 23).”

“The process is a little bit faster now because NEMA follows criteria that guides them to objectively assess the processes that they have set up. Before, it was not easy even for them to assess. They had to rely on third parties and borrow knowledge from somewhere else to determine whether this qualifies or does not qualify (Environmental professional, interview 6).”

Additionally, a NEMA staff member suggested that the existence of the guidelines has begun to improve the quality of SEAs that pass through the office. When asked whether there has been a noticeable change in report quality, he replied:

“Yes, actually quite big. Some of the earlier reports we were receiving were even like project reports. Sometimes they do just a planning framework and they call it SEA. There was quite a big attempt in the latest [SEA] to follow the process from scoping to draft submission to the final draft submission to the stakeholder engagement processes. It has

shown a lot of things. With time and if we disseminate the guidelines well, it will reach the standard that is required (interview 33).”

Despite the noted improvements since the document development, participants remarked that the guidelines are still a work in progress, open to modification and fine tuning as experience increases and capacity improves. In the opinion of one participant, certain elements of the guidelines, such as requirements for public participation, are still somewhat weak and in need of improvement. Feedback on how the guidelines can be further enhanced is currently being sought from bilateral agencies with greater SEA experience.

Capacity Building

A document review of a recent SEA technical assistance workshop and an interview with a NEMA staff member provided evidence that the agency is putting serious effort into building SEA capacity within the country. The technical assistance workshop (July 2011), led by a consultant with the Danish International Development Agency (DANIDA), trained staff on conducting and reviewing SEA and assisted with the development of a trainers and reviewers manual. The workshop consisted of four full day workshops, each involving either NEMA headquarters staff, provincial directors of the environment, district environmental officers, or environmental practitioners from lead agencies. According to the Deputy Director for Compliance at NEMA, ten members of the agency’s staff were also involved in a five day intensive training session for the purpose of becoming ‘Master Trainers.’ These master trainers now act as an in-country resource for further training of SEA reviewers and practitioners. The DANIDA consultant notes in the technical assistance report that those who attended the workshops displayed a significant increase in knowledge about SEA, but additional capacity building is still needed.

Additionally, NEMA has opened its SEA process guidelines to Finnish and Japanese development agencies for the purpose of critique and gaining feedback on how to improve domestic practice. As one EA practitioner noted, a Japanese agency criticized the Kenyan SEA process for being too onerous and suggests that it should be simplified, leaving finer details to be explored during subsequent EIA studies. The extent to which this feedback will influence Kenyan SEA practice is still unclear, but two interviewees state that there is willingness to learn from international experience.

Overall, there have been significant developments in Kenyan SEA process and practice over the last decade. With the recent focus on strengthening the national guidelines and improving practitioner and reviewer capacity, there will surely continue to be visible progress in the future.

4.1.2 SEA Comparison to Standard Practice

SEA literature differentiates between institution-centered and impact-based SEA and advocates their use at policy and plan/program level, respectively (OECD 2006; Ahmed and Sanchez-Triana 2007). The institution-centered approach is a highly consultative tool that sets environmental priorities at the policy level with an emphasis on improved governance and institutional reform (OECD 2006). The Forest Act SEA, funded and conducted by the World Bank, was the only policy level assessment in Kenya and the only to take an institution-centered approach. In accordance with the literature, the SEA followed the steps of screening and scoping (including stakeholder analysis and assessment of the political economy), conducting environmental, social, economic, and political situation assessments, setting environmental priorities, and developing alternative action strategies. The main output of the SEA was a policy

action matrix, consisting of the priorities identified during the study and the actions necessary to achieve the objectives of the forest sector reforms.

The 10 remaining completed Kenyan SEAs were conducted at the plan or program level and all utilized the impact-based approach. This approach was developed through the up streaming of project-level EIA to the strategic level, and therefore, shares many the major steps of project level EIA and focuses on mitigating negative impacts and enhancing positive impacts of plans and programs (Fischer 2007). The current Kenyan national SEA guidelines, consistent with recognized SEA literature such as Therivel (2010), identify screening, scoping, baseline data collection, evaluation of alternative PPPs, identification and evaluation of positive and negative impacts, determination of enhancement and mitigation strategies, and monitoring and evaluation as the key components of the SEA process (Appendix 1). The following analysis was underpinned by a combination of information available in the Kenyan national guidelines and in international literature. Of the eight completed impact-based SEA documents examined in this research, all addressed each of the aforementioned key components. There was, however, significant variation in how these elements were conducted and reported.

Scoping

Scoping in Kenyan SEA is used to set the context and boundaries for the SEA and includes aspects such as identification of the objectives of the SEA, description of the contextual legislative and regulatory framework, preliminary exploration of PPP alternatives, stakeholder analyses, and setting spatial, temporal, and institutional boundaries. The majority of the examined documents did not include a separate scoping report in the project folder, but worked most components into the main SEA report with varying levels of detail. For example, the Kenya Coastal Development Project (KCDP) and Tatu City Structure Plan SEA reports were very

thorough in describing the regulatory framework in which the PPP is situated and how each regulation is relevant to it. Others, such as the Reforestation, Sustainable Development, and Carbon Sequestration Project, listed relevant regulations, but did not describe them or their relevance to the PPP. Some reports were very deliberate in setting the spatial, temporal, and institutional boundaries of the SEA while in other cases, boundaries were not explicitly stated, but only implied.

Baseline Information

Describing the current environmental status within PPP boundaries is significant in providing information about issues that the strategic action needs to address and indicators against which impacts of the PPP can be later monitored (Therivel 2010). The Reforestation, Sustainable Development, and Carbon Sequestration Project SEA report was the only one of the eight that did not devote a specific section to a discussion of baseline conditions, but embedded a brief overview of the current state of Kenyan lands and forests into the introduction. The others took a more integrated approach and included socio-economic baseline data in addition to environmental information. Some SEAs, such as the KCDP and the Taveta Town Expansion, relied solely on secondary data sources to compile baseline data, while others collected primary data from the field sites. For example, Tatu City consultants conducted detailed household questionnaires and hydrological, geological, and ecological surveys within the proposed development area to contribute to the compilation of socio-economic and environmental baseline data. In addition, primary socio-economic baseline information was collected through household surveys and focus groups during the Masinde Muliro University of Science and Technology (MMUST) and Kenya Education Sector Support Program (KESSP) assessments, respectively.

Identification of PPP Alternatives and Best Options

The identification of PPP alternatives is a significant component of SEA as it pro-actively assesses means of achieving the objectives of the strategic action with greater sustainability outcomes (Therivel 2010). In almost every case, SEA in Kenya seems to enter the decision-making process late, thus limiting the ability to identify and assess viable PPP alternatives. For example, the Tatu City SEA report states:

“[The consultant] was contracted to undertake the SEA for the Tatu City Structure Plan after the decision to put up the city had already been made. Therefore, the client did not provide alternative land uses apart from the city, neither were alternative structure plans for the city provided for the purpose of comparison. The only alternatives available for review are the designs for the various infrastructures to be put up for the city (GIBB Africa Ltd. 2011).”

For instance, the SEA lists alternatives for the source of city water supply, such as tapping into existing infrastructure, treating water from a nearby river, borehole supply, and rainwater harvesting. However, it was too late to consider normative issues such as city need and project location. Similarly, the SEAs for the MMUST, Reforestation Project, and Taveta Expansion suggest alternatives late in the process after the impacts of the proposed PPP have been predicted and mitigation measures formulated. For example, the Reforestation Project provides alternatives for specific details of PPP components, such as fish pond aeration techniques, but fails to consider normative issues. Therefore, the suggested alternatives were likely for the purpose of satisfying requirements rather than genuine attempts to look at meaningful strategic alternatives. The late analysis allowed for only the consideration of alternatives for specific infrastructure or lower level components of the PPPs. The Konza Technology City SEA raised two PPP alternatives (the ‘no project’ option and the proposed development in a different location), but these were discussed after the impact assessment and mitigation formulation for the proposed development, perhaps also indicating that their inclusion was simply for the purpose of process criteria fulfillment.

The Bioscience for eastern and central Africa (BecA) and KESSP reports discussed potential PPP alternatives during initial stages of the SEA process, gave a brief justification for the chosen option and, subsequently, followed with the impact and mitigation identification for that option. Overall, however, consideration of PPP alternatives in Kenyan SEA seems generally inadequate because of either late entry of the SEA into the decision-making process or because of the frequently late consideration of alternatives within the SEA process.

Impact Prediction and Evaluation

Predicting and evaluating potential impacts of a PPP is central to the SEA process as it allows decision makers to determine the acceptability of decisions and formulate mitigation and enhancement measures in order to generate more sustainable results from the strategic action (NEMA 2011). All completed SEAs in Kenya not only focused on potential environmental elements of the PPP, but also identifies social impacts during the assessments. One report, however, commented on the fact that the social impact assessment was limited due the lack of socio-economic baseline data. That all SEAs identified both negative and positive potential impacts of the strategic action was another noted similarity amongst the examined reports.

SEA also ideally addresses cumulative impacts, a commonly cited failure of conventional project level EIA (Haq 2004; João 2005). However, only four of eight reviewed impact-based reports included a discussion of the likely cumulative impacts derived from the strategic action. The KESSP report defined cumulative impact, but did not complete an assessment for the specific PPP. Rather it delegated cumulative impact assessment to the potential future lower tier EIAs, thus potentially rendering this important aspect of SEA ineffective. Others, such as the KCDP, predicted potential cumulative impacts and established methods for future project screening to prevent and monitor the impacts.

Perhaps the SEAs displayed the most variability in terms of the methods and level of detail used to assess the potential impacts of the PPP. The Tatu City SEA exhibited the most detailed impact evaluation using a complex scoring and ranking system, taking into account the spatial scope, severity, frequency, duration, and likelihood of each identified impact. Three others also used ranking exercises, though less detailed and with fewer indicators, to assess potential impacts. The least detailed impact assessment, completed for the Reforestation, Sustainable Development, and Carbon Sequestration Project, only listed potential impacts but neither explained nor evaluated each. The Taveta Expansion consultants listed the environmental objectives and strategic development plan objectives of the PPP and assessed them against one another, identifying areas of conflict and agreement and using the findings to develop an action plan.

Impact Mitigation and Enhancement

As in project level EIA, an important component of SEA is to mitigate potential negative impacts of the PPP. Moreover, a central purpose of SEA is to contribute to overall sustainability and, therefore, enhancing the positive impacts of a strategic action is also a vital aspect of the process. The Taveta Expansion SEA was unique in that it did not provide a list of impacts and mitigations, but developed six environmental strategies and means by which to achieve them. For example, the first environmental strategy was to ‘make efficient use of available land and existing buildings.’ The strategic action plan included giving consideration to improving existing buildings as an alternative to building on undeveloped sites. The seven remaining reviewed impact-based SEA reports all recommended ways to mitigate both negative social and environmental impacts, although with varying levels of detail. Mitigation activities for the urban developments were organized by project phase (construction, operation, etc.), while others were

organized into categories of social and environmental impacts (KESSP), by PPP component (KCDP), or by regional and local effects (BecA). Most used tables to display the identified impacts and mitigations.

Although all reviewed SEAs discussed the potential positive impacts of the strategic action, those for MMUST, the Reforestation Project, and BecA did not address enhancement measures for those impacts. Only one report, namely that for Tatu City, explicitly listed enhancement techniques for the positive impacts, while the others included enhancement measures, but referred to them as mitigation measures.

Monitoring and Evaluation

A framework for monitoring and evaluation was included in all of the reviewed SEA reports and, like other components of SEA, displayed high diversity in terms of level of detail and information included. On one end of the spectrum, the Tatu City SEA consultants developed a 45 page Environmental and Social Management Plan (ESMP) including an overview of potential impacts and mitigation strategies, the methods, timing, and duration for impact monitoring, the authorities responsible for implementation of mitigation and enhancement measures, an impact reporting strategy, methods for notifying and involving the public, and training needed to ensure successful implementation. At the other end of the spectrum, the Reforestation Project SEA report included a three paragraph discussion outlining the need for water effluent testing, but did not include monitoring parameters or designate responsibility for mitigating any of the other potential impacts.

The ESMPs for the other SEAs were situated between the two extremes and most often included tables summarizing the identified potential impacts, mitigation strategies, and parameters, methods, timing, and responsibilities for monitoring. The Tatu City, KCDP, and

BecA SEAs also included public consultation plans for the implementation and monitoring phases of the strategic action.

4.2 PARTICIPATION

Public participation has been acknowledged as a cornerstone of environmental assessment and is a key component in international effectiveness criteria for SEA (IAIA 2002; Fischer and Gazzola 2006). Likewise, a staff member in the compliance department at NEMA recognized that although there is need for flexibility within the Kenyan SEA process, public participation is a consistently necessary element that must invariably be conducted with rigour (Interview 33). This section gives an overview of the current status of public participation in Kenyan SEA using data collected through document reviews and interviews with EA professionals.

4.2.1 Who Participates

A NEMA staff member revealed three levels or categories of stakeholders that reviewers look for when considering the consultation component of the SEA process:

“The first one is public recognition. Is the public there? The affected and interested people - the general public. Are their concerns being taken? The second level we look for is the technical recognition. Are there experts to advise? There are certain things where we need experts to advise us. The third one which is very critical is institutional recognition. Institutional in the terms that there are government agencies who have mandates that might be having a bearing or control on a component of that PPP. Are they being consulted well so they can give their input (NEMA staff, interview 33).”

Reports and practitioner interviews were reviewed to identify the groups of stakeholders consulted for each of the reviewed SEAs. Table 4 presents the identified groups of stakeholders within each of the three previously mentioned categories and the number of SEAs that involved each group. This data represents only 9 of the 11 completed reports, as two were inaccessible to

the researcher. The ‘general public’ group represents participants who attended consultations open to any interested parties, while the ‘neighbors of the PPP locale’ group corresponds to participants who were specifically targeted and invited because they were likely to be directly affected by the PPP. The marginalized populations group includes specifically selected groups of women, youth, indigenous people, slum dwellers, and people affected by HIV/AIDS. While no one SEA involves every identified group of stakeholder, all of the assessments include at least one group from each of the three broad categories. The emphasis of this research is on public participation; therefore, the remainder of the chapter will focus on the ‘public’ category of stakeholder and the word ‘participant’ will usually refer to members of these groups.

Category of Stakeholder	Stakeholder Group	Number of SEAs
Public	The general public	5
	Neighbors of PPP locale	7
	CBOs	4
	NGOs	8
	Marginalized populations	6
	Indigenous peoples	1
	Students	2
Technical experts	Technical specialists	4
	Private corporations/investors	5
	Public services	2
	Academics	3
Government	NEMA officers	4
	Local Authorities	5
	District & Provincial Officers	5
	Ministry Representatives	5
	Government Research Institutes	3
	Government agencies (KWS, KFS, etc.)	5

Table 4: Stakeholders involved in completed Kenyan SEA (of nine reviewed SEAs).

The method of participant selection and invitation seemed to vary depending on whether the consultation was open to the general public or focussed on a targeted potentially affected population. Although not every report specifies exactly how participants in targeted groups were selected, in at least three cases (Tatu City, KCDP, and Reforestation Project) local or provincial

authorities played a significant role in identifying which members of the public might be affected by the PPP and in inviting them to the consultations on behalf of the SEA consultant. SEA professionals cited the importance of using previously established networks to access local participants and to add legitimacy to the process.

“Invitations were given through the provincial administration – this legitimizes the process. Otherwise people can be quite skeptical and tend to mistrust outsiders (Socio-economic professional, interview 3).”

“We try to send information ahead of time that we would like this kind of participation, and [local authorities] select an appropriate date that will be applicable. Because you don’t want it on like a market day, people will be busy. They will be busy and won’t have time for you. You don’t want to put it on a church day. So the local authority will guide in terms of a convenient day and time (Environmental professional, interview 23).”

“KEFRI has a community liaison wing and through the community liaison wing, they have been able to do a lot of things together with the community. That also now made it easy to get these communities to come together since they have been working without suspicion between them (Socio-economic professional, interview 11).”

Additionally, local authorities were used during stakeholder analyses both to identify relevant NGOs and CBOs that could contribute input and, when deemed important by the SEA consultants, to ensure that a balanced participant demographic would be achieved through the inclusion of marginalized populations, such as women and youth. In at least one case (Tatu City), local authorities were used to invite people to an open public meeting by announcing the event during a national holiday ceremony.

For one SEA (KDCP), individuals from an indigenous population were consulted to fulfill a World Bank safeguard policy requirement and were invited through a respected community member working for a local government agency. Other means of raising awareness about public meetings include and local radio broadcasts, local and national newspaper announcements, posters, and word-of-mouth. Other categories of participants (i.e. technical

experts and government agencies) were usually invited to consultations via letter, email, or phone call.

4.2.2 Methods and Techniques for Participation

The available completed SEA reports indicate a variety of methods and techniques used for stakeholder consultation. Fischer (2007) lists commonly utilized SEA participation techniques and categorizes them into three levels of participation. Full participation, and consequently participant empowerment, may be realized through methods such as focus groups, workshops, and citizen juries. Consultation techniques may include workshops, public meetings, interviews, and questionnaires. In these forums, facilitators not only inform participants, but also elicit their views and opinions. Communication and reporting methods, the lowest level of participant involvement, include open houses, site visits, newspaper and radio announcements, and website information. Their purpose is primarily to inform stakeholders of the strategic action, rather than to gather input. Table 5 exhibits the participation, consultation, and communication techniques used in Kenyan SEA and the category of stakeholders involved in each. Again, only 9 of 11 completed reports were available for analysis.

There was apparent variability in the methods and extent to which the public were engaged. Stakeholder consultation for the Taveta Expansion SEA was deemed inadequate by NEMA reviewers because lead agencies were not consulted and only five individuals were given the opportunity to fill out a questionnaire. One other SEA (KESSP) used only a single consultation technique, namely focus groups, but participation appeared more comprehensive due to the evidence of interview schedules for the focus groups, participant lists, and stakeholder comments included in the report.

Method for Participation	Number of SEAs Utilizing each Method	
	Public participants	Technical experts and government participants
Focus Groups	2	0
Workshops	4	4
Formal meetings	2	6
Public <i>baraza</i> * (meeting)	2	1
Interviews	2	5
Questionnaires	3	1
Email conversations	0	1
Open house	1	1
Site visits	3	2
Newspaper	7	7
Websites	3	3

* *Baraza* – a Swahili word meaning a public meeting where officials can address the public (Haugerud 1997).

Table 5: Methods and techniques for participation in completed Kenyan SEA.

Multiple methods and techniques for public consultation were used in the remaining SEAs. The most commonly employed consultation methods for the technical expert and government stakeholder categories were workshops, formal meetings, and interviews, while workshops, questionnaires, and site visits were most frequently used to involve the public. Seven of the nine reviewed reports explicitly stated the concerns and comments that arose from stakeholder consultations, but only four clearly specified how those concerns could be addressed. In addition, of the nine reviewed reports, only one included minutes from formal meetings, workshops, and public meetings. Therefore, it is difficult to know precisely how the majority of consultations were conducted, the extent to which the public were involved in the forums, or how their opinions and input were elicited and used. In chapter five, these issues will be explored in greater depth using two case study examples.

4.2.3 Stages of Participation

Kenyan national guidelines indicate that stakeholder engagement ideally occurs throughout the entire SEA process, from preparatory tasks and scoping through to the stakeholder validation meeting following review of the draft report. In an examination of completed SEA reports, groups from the ‘public’ stakeholder category were involved at variable stages throughout the process. Two of the nine reviewed reports (Konza Technology City and the Forest Act) identified the groups of participants involved, but were unclear about the stages of the process at which they were engaged. Among the other SEAs, the public was variably involved in scoping, gathering baseline data, considering alternatives and best options, identifying impacts and mitigation strategies, and reviewing the draft report.

The public most frequently had the opportunity to participate during the baseline gathering, impact and mitigation identification, and draft report review stages. Six of the remaining seven SEA reports indicated that participants were involved in discussing potential impacts of the PPP, five included the public in suggesting mitigation measures, and four used participant knowledge to gather baseline data. More often than not, these consultations seemed to elicit primarily socio-economic information, concerns, and means of mitigating impacts. The principal channel for integrating participation at the draft report review stage was through a call for public comment advertised in nationally circulated newspapers, as required by law. Although a summary of each report was circulated for two consecutive weeks, two SEA practitioners mentioned that response rates were very low. In one of these cases, the only comment submission came from a government agency. This may be partially attributed to the fact that newspaper readership, especially in rural areas, may be low due to inaccessibility and illiteracy (Okello et. al 2009).

Only one SEA, the KCDP, engaged the public in discussions about alternatives and best options for one of the PPP components. However, though many groups and levels of stakeholders were involved in this SEA, the public did not appear to have a significant role in impact prediction and mitigation strategies. The SEA for Tatu City revealed the most consistent public participation throughout the process, with participants involved at all of the previously mentioned stages except for PPP alternatives and best option identification. The SEAs for the KCDP and Tatu City were selected as case studies in this research and will be explored in greater depth in chapter five.

4.2.4 The Value of Public Participation

All SEA practitioner and government interviewees acknowledged the significance of public participation in this type of assessment. Among them, the most commonly cited benefits of integrating public opinion and knowledge included gathering a broad range of views and opinions to reduce future conflict and add value to the process, better meeting the needs of the public, creating relationships amongst groups and categories of stakeholders, and enabling practitioner learning.

A staff member in the compliance department at NEMA acknowledged the value of taking into consideration a diversity of viewpoints during the SEA process:

“To have diverse views and opinions, the decision you are going to reach is very optimal. Optimal in the way that it will be fair economically, a decision that will be justified environmentally, a decision that will be acceptable socially and politically. So where you have diverse views, take it as a positive (NEMA staff, interview 33).”

Furthermore, one SEA practitioner provided an example of a case where local knowledge challenged PPP component designs, and subsequently added value to the process (Interview 6). A local resident brought to the attention of the SEA team that due to climate variability in recent

years, flooding events in the area of the proposed urban development plan have been increasingly common and, therefore, effective drainage measures would be necessary. According to the practitioner, this information was merged with expert knowledge from an engineering team and effective mitigation measures were formulated. In considering a diversity of views, plan designs became more compatible with the local context and negative unintended outcomes were avoided.

Other SEA practitioners specified that integrating public opinion and knowledge is especially important as a pro-active measure to reduce potential future conflict and increase positive stakeholder reception of the PPP following implementation.

“We told [the proponent] this is best practice and it is good to get negative comments on your project before you start. There are some projects that have stalled because of communities actually coming up and saying ‘we didn’t know about it... you are affecting our cultural area’ or something like that. We are opening up the project, everybody is commenting, some people are saying negative things about the project. But we tell them this is the opportunity for us to receive these comment, negative or positive, and we can decide how to act on them (Environmental professional, interview 6).”

“We are launching when we are confident that this is not an elitist kind of project. Many projects usually suffer and fail to impact because they are more elitist in nature. If a project is just designed from somewhere else then planted on the people... the people can sometimes just ignore it, or it may come, but it doesn’t really meet the needs of the people. Through the public consultations, the needs the aspirations of these communities were captured (Socio-economic specialist, interview 11).”

“Public engagement is good for you to do it proper because finally we are going to work with the same people, the same communities, the same NGOs. And imagine if we are to go [ahead with implementation] and they have never heard of the project. The reception would be very poor (Socio-economic specialist, interview 3).”

The latter quote also implies that public engagement in such processes allows for the maintenance of relationships amongst various stakeholders and keeps doors open for future cooperation. The SEA report for the Masinde Muliro development also indicates that public engagement was successful in creating channels for communication amongst the general public,

the EA consultants, the university as a community member, and the concerned government agencies that perhaps did not previously exist.

Practitioner learning was also identified as a positive outcome of public participation in SEA. Two interviewees learned more about the communities they were working with and about some of the issues facing those communities. One of these was also given new insight into effective methods of eliciting public input during a workshop style forum. A third interviewee indicated that because SEA is still a new process in Kenya there is additional need for capacity development when it comes to planning effective consultation processes, but that the experience so far has begun to strengthen the process.

“[The public participation process] is raising awareness and prompting people to think broadly. It is also prompting some of the institutions we have to test their strength and abilities to test some of these issues and the where are the capacity gaps that need to be addressed. So that is a good contribution (Environmental professional, interview 23).

The observed benefits of integrating public engagement into the SEA process in Kenya align with those frequently denoted in SEA literature (e.g. Fitzpatrick and Sinclair 2003; Heiland 2007; Kende-Robb and Van Wicklen 2007; Dietz and Stern 2008; Sinclair and Diduck 2009) as outlined in chapter two of this thesis. However, determining the extent to which public participation actually influenced SEA outcomes, and ultimately the PPP, is often difficult from simply examining the reports. This will be further explored in a case study evaluation in chapter 5.

4.2.5 Challenges Associated with Participation

While the acknowledged benefits of public engagement in SEA are many, unsurprisingly, SEA professionals in Kenya also spoke of the challenges associated with the endeavor. The most commonly cited challenges in conducting an effective consultation process include overcoming a

lack of political and proponent will, engaging a public that has little experience in being involved in such decision-making processes, and dealing with financial and time constraints.

Two SEA practitioners acknowledged that SEA in Kenya is still largely a top-down process and that there is frequent hesitation on the part of the proponent to open up the process to the wider public.

“Let the public know about the project and call them to solicit their views and document them. That is something that most clients are reluctant to give time to. Nobody really wants to open up their project for scrutiny and for the public to make comments on. We actually literally forced the client (Environmental professional, interview 6).”

“One challenge is the way SEA is in Kenya is a top down driven tool in terms of strategic thinking. And from top down, you find you meet a bit of resistance in certain areas that you are dictating what needs to be done. What needs to be done is to switch the approach so that people start to see it evolving from the bottom up approach. The communities and stakeholders should drive the process rather the experts driving or providing the strategic guidance for how it should be done. I think that will happen over time (Environmental professional, interview 23).”

Perhaps precisely because of this history of reluctance to engage the public in decision-making processes, practitioners have observed that people at the grassroots level may not be used to participating and are, subsequently, skeptical that their input will meaningfully contribute to the process.

“For every community that we go into, [the participants] find that it’s something totally new. So we find them sharing some of the information and contributing to tell us about their knowledge of the local area. But they still don’t feel totally empowered to alter decisions.”

and

“For [the participants], that was something new so they were not very open. When we do consultations in the up market side of Nairobi like Karen where we have done projects, we really get effective public consultation. People know the issues. People show up for meetings. People will actually document the issues and it helps us in our assessment to communicate this information to the client to change the design of their project. With this peri-urban community, since this was the first time they’ve ever seen this type of process, they were not really sure that they have a say and a stake in the project and they can make meaningful suggestions that can be taken on board for their benefit (Environmental

professional, interview 6).

In this case, it is difficult to assert whether participants are doubtful in their ability to contribute to decision making simply because they are new to participation generally, or whether there are other factors at play. For example, the literature suggests that at the SEA level, ideas tend to be broader and more abstract, which may also inhibit participant willingness to contribute (Heiland 2007). Alternatively, participants may feel powerless to meaningfully contribute because of possible coercion from other stakeholders or because of the conditions under which the consultations take place.

Proponents may also be hesitant to open their PPPs to public scrutiny because of the introduction of financial and time requirements. In fact, the costs of consultation may create a competitive disadvantage amongst consulting firms and a clear disincentive for meaningful engagement.

“It is easier to budget for EIAs because it is a one-time, very straight forward type of thing. You know how many people you’re going to talk to for the consultation, but for the SEA it is difficult because it is cutting across a bigger area and you’re covering different communities in different locations. You can find your competitors might have other ways of getting information without necessarily going through the entire rigorous consultation and will cut down the cost. So your cost might look a bit higher because you have to be more inclusive and more elaborate. So you’ll find over time, you’ll not be able to have a genuine type of informed SEA because of the cost element because the cost will dictate in terms of terms how good and how informative the report should be (Environmental professional, interview 23).”

“But at the local level because of the rigorous stakeholder engagement processes, it is costly. I think if it is done the way it should be done, it is costly. A program is a big thing. There are the intermediate and the low level stakeholders. The immediately affected people down there - it will be quite an expensive exercise if you take care of all of their traveling allowances and all the livelihood issues. So I think it’s depending on the magnitude and extent of the PPP and how that will affect the cost of the public consultations. When it is too high, obviously there will be a compromise (NEMA staff, interview 33).

Furthermore, due to fear of process delay, there has been an acknowledgement of a need

to find strategies to conduct the public consultation in a time efficient manner. Alternatively, there is risk in losing out on potentially valuable information if insurmountable time constraints limit public consultation.

“Since this project is a national scale in nature, we had to choose strategic locations in areas of proximity and accessibility to these areas and also we are constrained by time. We spread out in teams of smaller groups to be able to cope with the time aspect (Environmental professional, interview 23).”

“In the consultation that we had, everything was fast tracked. So we don’t know to what extent we lost in quantitative and qualitative aspects of information. (Environmental professional, interview 22).”

Especially in PPPs with external donor involvement, the process can inherently be a time consuming process due to layers of bureaucratic red tape. One practitioner mentioned that public engagement in such onerous high level environmental assessment may create disillusionment amongst stakeholders, primarily because of the potentially significant amount of time between consultation and actual implementation of the PPP.

“Participation is okay involving people in planning what affects them. The only issue may be the time it takes between you talking to them and when you really hit the ground. And the World Bank process is long. The planning starting in 2009 and the communities talked to in 2009 in between issues of change other things have come up and some could have lost hope along the way (Socio-economic specialist, interview 3).”

In spite of the apparent benefits of public engagement in SEA, there remain significant barriers to ensuring meaningful participant contribution to the process. Several of the challenges acknowledged by practitioner and government interviewees in this research, including the prevailing top-down nature of the process, the problematic nature of engaging inexperienced members of the public, and the potential lengthiness of the process, were also identified by those who participated in consultations. Among the most significant advantages of public engagement in environmental decision making, as identified in the literature, is the facilitation of participant learning for action on sustainability. Whether some of these challenges to public participation

inhibited the creation of ideal learning conditions in Kenyan SEA will be explored in the following chapter.

4.3 SUMMARY

Variable is a word that adequately describes SEA implementation in Kenya thus far. As displayed throughout this chapter, variability is evident in the sectors represented by the completed SEAs, in the methods and techniques used during the process, in the approach to public consultation, and in the thoroughness of practice and reporting. Variability is not necessarily a shortcoming, as international literature cites the importance of allowing for flexibility within the process to make allowance for customization to the PPP context (IAIA 2002; Fischer and Gazzola 2006; OECD 2006). The apparent inconsistency in Kenyan SEA practice and reporting may be, however, partially due to the lack of national experience and guidance since the tool was first introduced. It is hoped that the current effort being put into national guideline formulation and capacity development will visibly strengthen the Kenyan SEA process and lead to greater sustainability outcomes where the tool is used.

In a review of SEA effectiveness criteria from 45 international documents, Fischer and Gazzola (2006) found general agreement that SEA should be integrated, sustainability-led, stakeholder-driven, iterative, flexible and adaptive, and accountable and transparent. There is, however, debate over what some of the criteria, such as the need to be flexible and adaptive, actually mean and to what degree they should be demonstrated (Retief 2007). For Kenyan SEA, it is difficult to assess the process as a whole against effectiveness criteria (particularly through a document review) as considerable variability is evident amongst individual assessments. Nonetheless, there were a few generalizations alluded to throughout this chapter that address some of the strengths and weaknesses of Kenyan SEA in comparison to effectiveness criteria.

Integration in SEA, as discussed in chapter 2, can refer to the incorporation of environmental, social, and economic considerations, to the inclusion of diverse sets of knowledge, and to the initiation of the SEA at the beginning of the PPP planning process. An identified strength of Kenyan SEA was the consistent consideration of socio-economic factors as well as environmental ones, a positive contribution to sustainability objectives. Furthermore, multiple groups of stakeholders were consulted and, in some cases, knowledge and input from marginalized and indigenous populations was incorporated. Often, however, the SEA seemed to enter the decision making process late, thus risking its ability to adequately influence PPP outcomes.

Sustainability-led, as defined by IAIA (2002) effectiveness guidelines, means that adequate consideration is given to alternative PPP options in order to enhance sustainability. While certain SEAs provided a more thorough and timely discussion of alternatives than others, the timing generally seemed late and often only allowed for the consideration of modifications to minor aspects of PPP components as shown with examples from the Tatu City and Reforestation Project SEA documents. This likely inhibited the ability of the SEAs to genuinely contribute to sustainable development.

A stakeholder-driven process is one that involves all appropriate stakeholders, explicitly addresses their concerns and input, and ensures adequate access to relevant information (Fischer and Gazzola 2006). Public consultation for only one SEA was deemed inadequate by NEMA reviewers. The others involved various groups of stakeholders in numerous types of consultation. While most reports outlined the concerns raised by stakeholders, less than half explicitly stated how those concerns would be addressed. Often it was difficult to judge from the reports the extent to which the public were actively engaged during consultations, whether input actually

had influence over final decisions, and if participants had adequate access to PPP and SEA related information and reports.

An iterative SEA process ensures that recommendations from the assessments are provided early in order to influence the PPP planning process and is tiered with project level EIA (IAIA 2002; Fischer and Gazzola 2006). In at least three cases in the Kenyan review, SEAs were predecessors to, and fed into, downstream EIA. It was, however, difficult to determine through SEA document reviews the extent to which SEA outcomes actually influenced PPP planning and implementation.

SEA is still a relatively new tool in Kenya and continues to evolve as experience builds and capacity develops. Variability is evident, especially in regards to the public participation, and its strengths and weaknesses have been identified by participants in this research. Aspects of public engagement, such as who participates, how they participate, and how their input is used will be further explored in the next chapter using two case study examples. Additionally, the following chapter will explore learning and action outcomes experienced by the participants involved in the two SEAs.

5.0 PARTICIPATION IN SEA: LEARNING AND ACTION FOR SUSTAINABILITY

5.1 CASE STUDY OVERVIEWS

5.1.1 The Kenya Coastal Development Project

The purpose of the Kenya Coastal Development Project (KCDP) is to, within a sustainable development framework, improve the management of Kenya's coastal and marine resources and promote livelihood enhancing enterprises in coastal communities (KMFRI 2010). The KCDP was developed in response to high poverty rates and apparent degradation of coastal resources throughout the coast province. The coast province covers almost 12 percent of Kenya's landmass and stretches from the border of Tanzania to the border of Somalia, with almost 70 percent of the population living in rural areas. The province's largest urban centers are Mombasa and Malindi. It is hoped that the project will contribute to the achievement of Vision 2030, a strategy to transform Kenya into a middle income country by that date.

The four components of the project include sustainable management of fisheries resources, sound management of natural resources, support for alternative livelihoods, and capacity building, monitoring and evaluation system, project management and communication (KMFRI 2010). Proposed activities within the components include the improvement of fisheries governance, monitoring, and research, the promotion of better resource management for increasing eco-tourism and spin-off opportunities, the support of community micro-enterprise development, and the development of a capacity building program and communication strategy. The KCDP was in planning stages from prior to World Bank funding approval in July 2010 to the project's recent launch in November of 2011 and implementation of the project is expected to span a four year period.



Map 1. Kenya country map. The KCDP covers the Coast Province, which encompasses Mombasa and Malindi on this map (CIA 2012).

Numerous World Bank environmental and social safeguard policies, such as those for environmental assessment, natural habitats, forests, physical cultural resources, and indigenous peoples, were triggered due to potential impacts of the KCDP (KMFRI 2010). To comply with these policies, the Kenya Marine and Fisheries Research Institute (KMFRI) - the lead agency for the project – prepared an Environmental and Social Management Framework (ESMF) and an Indigenous Peoples Plan Framework (IPPF). The two documents were also submitted to Kenya’s National Environmental Management Authority (NEMA) in fulfilment of the national SEA requirement. Although neither document explicitly mentions SEA, the standard components of the high level assessment are present and together were granted approval by NEMA (Appendix 3).

5.1.2 Tatu City Structure Plan

Tatu City is an urban development proposed by foreign investors in collaboration with a local Kenyan businessman (GIBB Africa Ltd. 2011). With the intention of alleviating congestion and high housing demand in Nairobi as well as contributing to the achievement of Kenya's Vision 2030, the high profile development will be built 16km north east of the capital city on nearly 1200 hectares of land currently operating as a coffee estate. Tatu City will be the first privately developed center of its kind in Kenya and includes plans for residential, commercial, retail, social and recreational, and tourism infrastructure (TATU City Ltd 2011). Within the urban design, planners emphasize principles of multi-use and self-sufficiency, mobility, and environmental sustainability. The city will house an approximate 62,000 residents and expect a daily influx of 23,000 visitors following the projected eight to ten year construction period. All required permits have been obtained and, despite delays due to an on-going court case, planners expect to commence construction within the first half of 2012.

The development proposal triggered an SEA, which was conducted by GIBB Africa, an independent environmental consulting firm. According to the SEA report, objectives of the assessment included identifying and evaluating potential environmental and social impacts of each development phase, proposing mitigation measures, gathering baseline data against which monitoring findings can later be assessed, developing an implementation, monitoring and evaluation plan, and integrating public input (GIBB Africa Ltd. 2011). The assessment was one of two completed following the disclosure of the national SEA guidelines, resulting in staff at the NEMA compliance department upholding the case as a model SEA.

5.2 PARTICIPATION IN THE SEA CASE STUDIES

5.2.1 The Kenya Coastal Development Project

According to the ESMF submitted by KEFRI, two series of consultations were conducted for the natural resources component of the KDCP and one set was carried out for each of the fisheries and micro-enterprise components (KEFRI 2010). Within the four sets, a total of 26 separate consultations were conducted, of which 11 were meetings with a small number of government agency representatives and the remainder were external stakeholders meetings and workshops attended by a wide variety of government agency, local, national, and international NGO, CBO, and private sector representatives. The consultations were scattered throughout the multiple districts of the coast province and although detailed participant lists are not included in the ESMF, the report indicates that a total of 628 participants were in attendance across the 26 consultations.

Due to the extensive physical area covered by the workshops and the community-based focus of this research, it was necessary to narrow the scope and concentrate on a select population of participants. Two KMFRI staff members, key players in the compilation of the ESMF and IPPF, indicated some of the most valuable community consultations took place in the Malindi district towns of Malindi and Gede. The four consultations were evidently valuable primarily because of the eagerness of participants to participate in discussion. The first consultation, held at the Malindi community hall in July 2009, was for the ESMF and included local leaders and representatives from local CBOs and NGOs. The three others took place in early 2010 at the Gede Kenya Forestry Research Institute (KEFRI) meeting room (plate 1).

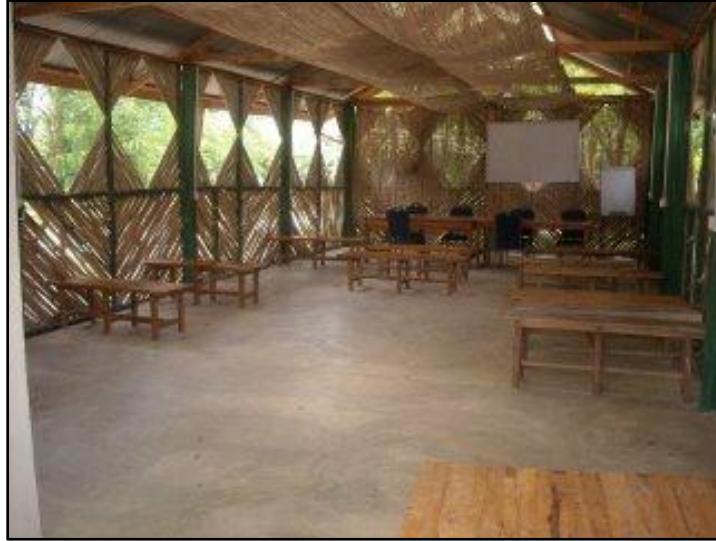


Plate 1: Location of the community consultations at KEFRI Gede.

The first of these three was for the purpose of collecting input from indigenous peoples, more specifically the Watha community, to compile the IPPF. The second involved members of both the Watha and dominant Giriama communities and was for the purpose of developing a process framework, a document addressing alternative income generating livelihoods projects and conflict resolution mechanisms in the case that implementation of the KCDP results in certain restrictions to resource access for local communities. The final meeting included the same stakeholders along with representatives from the World Bank and acted as an information feedback and verification session. The broad objective of the meetings, according to a KCDP facilitator, was to:

“sensitize the stakeholders, the communities, and particularly the Watha also on how the project will be implemented, the activities that are proposed broadly so that they can also give their input in terms of the activities they think will be good for them and have an impact on their livelihoods because this is a developmental project that is meant to benefit the communities (Socio-economic professional, interview 3).”

Of the 21 participants interviewed in this case study, 15 were members of the Watha community and six were Giriama. Participants were residents of six villages surrounding the Arabuko-

Sokoke forest and coastal mangrove forest. Fisheries livelihoods are dominant in two of the villages, while agriculture is the most common livelihood activity of the other four.

5.2.2 Watha Community Profile

The Watha, traditionally hunter and gatherers, are not considered one of the official 42 tribes of Kenya despite having retained their own distinct language and culture. In spending time with the Watha people, their cultural pride became apparent as conversation would invariably include accounts of Watha history, lifestyle, and tradition. Although not permitted to live within the Arabuko-Sokoke forest since about the 1930s due to the abolishment of wild game hunting, they still possess and utilize an immense abundance of traditional knowledge about forest species and harvesting practices. For example, I was shown plant species that are used for food, medicine, and insect repellent and was told about honey harvesting methods that does no damage to the hive or the tree in which it is housed. Since being pushed from the forest and scattered throughout the region, they have been largely forced to adopt the agricultural lifestyle of the regionally dominant Giriama population, and to some extent, have assimilated into the surrounding communities through intermarriage and the adoption of dominant language, livelihoods activities, and religion. One interviewee, recognizing the extent of assimilation, asserted that the practice of Watha culture and tradition is still first priority.

“Watha people tend to assimilate into the religion of the surrounding community, but still practice Watha traditions. Being Watha is first priority, the second is the traditions of the religion and surrounding community (KCDP participant, interview 8).”

The relationship with surrounding Giriama communities has always been generally peaceful despite feelings of marginalization in the Watha community and lingering stigma held by the some members of the Giriama community. A local church leader mentioned that persisting beliefs, such as that marrying a Watha woman will inevitably result in a life of

poverty, partially accounts for the reason that the Watha have attempted to assimilate into other communities and even hide their cultural roots. Watha interviewees attribute marginalization in education, employment, and land acquisition to the fact that when they moved out of the forest, the sub-division and entitlement of land to the Giriama community was already well underway, leaving them disadvantaged from the start. Nonetheless, within the last decade the Watha have begun to realize an increased pride in their culture and language and speak of their desire to have their name and heritage officially recognised.

The Watha self-identify as conservers of the forest, often referring, for example, to methods by which they harvest honey that does no damage to the tree and traditionally harvested animals to ensure sustainable populations. The community's enduring link to the forest is still evident, with numerous individuals still going to the forest to collect wild fruit, plant products, mushrooms, and honey. In addition, essences of the hunter/gatherer lifestyle are evident in traditional dances and ceremonies (plate 2).



Plate 2: A traditional Watha dance. The movements mimic the courtship display of a forest bird.

5.2.3 Tatu City Structure Plan

The Tatu City SEA included a wide variety of stakeholders in a variety of consultation types, including questionnaires, one-on-one interviews, focus groups, formal meetings, workshops, and public meetings (GIBB Africa Ltd. 2011). Initial consultations with key stakeholders held during the scoping phase of the assessment were followed by more extensive consultations with key stakeholders and the broader public during the actual SEA study between November 2010 and February 2011. More specifically, SEA study consultations included almost 400 household surveys within 5km of the proposed development, separate meetings with local leaders, neighboring businesses and estates, and Tatu Estate coffee workers, interviews with government officers, and three public meetings. Summaries of comments, concerns, questions, and responses for each of the consultations were included in the SEA report.

As in the KCDP case study, a select group of participants were chosen to keep the scope of this research manageable. Due to the desire to include participants at the community level in this research, the consultations for the neighbors and coffee workers of Tatu Estate were decidedly the most adequate for further exploration due to the apparent extent of their participation. During the SEA study, questionnaires inquiring about the potential environmental and social impacts of Tatu City and suggested mitigation measures were given to neighbors of Tatu Estate and were followed by a meeting to discuss the results. The neighbors included managers of adjacent coffee estates and large scale agricultural businesses. Two of the 12 participants involved in the meeting, both managers of neighboring coffee estates, were interviewed for this research.

An after work meeting to inform participants of the proposed development and gather comments and concerns was held with the Tatu coffee workers on the estate. The coffee workers,

mostly women, are unskilled and often uneducated daily labourers from the nearby communities. For this research, interviews with four coffee workers, three men and one woman, were conducted and a focus group with 15 women was held.

5.3 EFFECTIVENESS OF LEARNING CONDITIONS IN SEA CONSULTATIONS

Evaluation Criteria	Operational Definitions
1) Accurate and complete information	<ul style="list-style-type: none"> Does the public have adequate information about the purpose and process of SEA? Is public notice adequate? Does the public have access to SEA documents?
2) Freedom from coercion	<ul style="list-style-type: none"> Are all participants able to freely express thoughts and opinions during the participation process?
3) Openness to alternative perspectives	<ul style="list-style-type: none"> Does the process address need, purpose, and alternatives? Does the SEA and public participation occur simultaneously with PPP planning?
4) Opportunity to reflect critically on presuppositions	<ul style="list-style-type: none"> Are SEA results disseminated to the public? Is the public shown how its input is used in the decision-making process?
5) Equal opportunity to participate	<ul style="list-style-type: none"> Are there opportunities for participation throughout the process? Are marginalized people (such as women and youth) invited into the participation process? Are there opportunities for active participation? Are participants compensated for their involvement?
6) Opportunities to have arguments evaluated in a systematic fashion	<ul style="list-style-type: none"> Are there specific techniques used to assess and rank participant input and encourage consensus? Does transparency exist in decision-making processes?

Table 6. Learning conditions assessment criteria and associated operational definitions (Adapted from Sinclair and Diduck 2001).

Mezirow (2000) identified six ideal conditions that create an effective learning environment and facilitate opportunities for transformative learning. The necessary learning conditions include access to accurate and complete information, freedom from coercion, openness to alternative perspectives, opportunity to reflect critically on presuppositions, equal opportunity to participate, and chances to have arguments evaluated in a systematic fashion.

Numerous studies have explored factors in EA public participation that create opportunities and barriers to transformative learning and, subsequently, action that facilitates sustainability (Sinclair and Diduck 2001; Diduck and Mitchell 2003; Fitzpatrick and Sinclair 2003; Jha-Thakur et al. 2009; Sims 2011). In order to assess the learning conditions facilitated in the case studies pertaining to this research, ideal learning conditions as identified by Mezirow (2000) and operational definitions for EA formulated by Sinclair and Diduck (2001) were adjusted to fit within the context of SEA in Kenya (Table 6). Community interviews, supplemented by practitioner interviews and document reviews, were the primary data source used to analyze the issues presented in this section.

5.3.1 Access to Accurate and Complete Information

Empirical evidence shows that access to information is significant in the facilitation of learning in EA and natural resource management (Sinclair and Diduck 2001). Operationalized definitions for the learning condition pertaining to access to adequate information and address issues such as the adequacy of public notice, the sufficiency of information regarding the purpose and process of SEA, and the accessibility to SEA documents.

Is public notice adequate?

Whether notice was deemed adequate by SEA participants depended on the type of consultation and the groups in attendance. The participants at the KCDP ESMF stakeholder workshop in Malindi and the workshop for the neighbors of the Tatu City development were generally satisfied with the notice given. In both cases, attendees were invited by letter and/or phone call one to three weeks in advance. All cited that it was enough time to prepare for the meetings.

For the three KCDP meetings held at the Gede KEFRI station, the majority of interviewed participants (all but one) were dissatisfied with the amount of notice given prior to consultations. All members of the Watha community and four other participants from the surrounding communities indicated that the one to two day notice was not enough to prepare themselves for the meetings and to ensure that the potentially affected members of more distant communities had the opportunity to attend. They were invited in person by a respected KEFRI staff member.

“For most of the meetings, especially for the first and second meetings, we got the information very late. Most of the times we were not prepared for the meetings because there was not enough time... One week before the meetings is better so we can organize ourselves and get our points together that we want to raise (KCDP participant, interview 1).”

“It was very quick. We are told today, the meeting is tomorrow. So [the KEFRI staff member] only had time to talk to nearby residents. There are only a few people from far away who have phones. It didn’t give us very much time to organize ourselves (KDCP participant, interview 7).”

“We were told one day before the meetings. We had no time to organize ourselves well for the meeting because time was so short. We only chose our spokesman when we got to the meeting because we didn’t have time before (KCDP participant, interview 9).”

Similarly, coffee worker participants in the Tatu City consultation indicated frustration with the lack of notice. Two interviewees saw posters advertising the meeting approximately one week before. In most cases, however, participants were told of the meeting the same day, resulting in too little time for proper preparation.

“How did you hear about that meeting?”

We were told to pass by after work on our way home.

Were you told on the same day as the meeting?

We were told just to pass by on the same day.

Do you feel that was enough notice to prepare yourselves?

We need some kind of notice. Even two days would be enough. Just to know what they will be talking about so we can prepare questions. And we can also participate in the

discussion. That would be good enough for us. Instead of just bombarding us and just showing up and asking us questions (Focus group, Tatu City participant).”

Some participants who felt that notice was inadequate would have been content with as little as two to three days notice. The majority indicated a preference for notice about one week prior to the consultation.

Does the public have adequate information about the purpose and process of SEA?

Although approved by NEMA as a SEA, neither the ESMF nor IPPF reports actually mentioned the term SEA. It is therefore unsurprising that the term was apparently not used during consultations and was unknown to every interviewed participant. When asked about the purpose of the consultations, participants invariably alluded to discussions about what the KCDP is, the problems facing the local communities, projects that could improve the living standards of coastal communities, and about the need to conserve the environment.

“The KCDP members wanted to know about the Watha because they heard about their life history. They wanted to see and talk to them about how to improve the life standard and about conserving the forest (KCDP participant, interview 20).”

“In their introduction, they said that the KCDP is a project for the coastal people and they are trying to teach them how to conserve the environment, to improve their living standards and to teach them new skills (KCDP participant, interview 30).”

“We explored the problems within the community groups and local ways of finding solutions to the problems. We made proposals about what projects are needed in each area. (KCDP participant, interview 7).”

Other than consideration of project alternatives, no interviewee mentioned involvement in what would be considered SEA components, such as environmental impact assessment and the development of mitigation and enhancement strategies. Additionally, the process framework report indicated that objectives of the consultation included the identification of potential impacts and mitigation strategies of the KCDP, but summaries of stakeholder input were primarily

centered on discussions of current resource use and community-based development projects, suggestions for future project establishment, and the development of conflict resolution mechanisms. Similar topics were apparent in minutes from the Malindi ESMF stakeholder meeting. Everyone who was asked about the adequacy of the information given by the facilitators replied that they were satisfied with the amount of information given about the KCDP and that they understood the information presented.

Tatu City SEA practitioners also indicated that the term SEA was not used during the consultation with the coffee workers, but the purpose of environmental assessment was summarized in *Kiswahili*. Interviewees who participated in the meeting confirmed that the term was unknown and cited that the purpose of the meeting was primarily to give information about the Tatu City development and some of the social impacts it might have on the surrounding communities. Women in the focus group for this research had no recollection of discussion about the potential environmental impacts of the development.

The two interviewed participants from the neighbors of Tatu consultation knew the term SEA, and one indicated that he heard about the process for the first time at the meeting. Both felt the information given about the development and about SEA was highly relevant. It was apparent that the questionnaires and neighbors' meeting emphasized the identification of environmental and social impacts and encouraged the suggestion of mitigation measures.

Does the public have access to SEA documents?

Other than in the invitation letters distributed to participants of the KCDP Malindi stakeholders' meeting and neighbors of Tatu Estate meeting, there is no indication that participants were provided with documented information about the PPP or SEA prior to the meetings. Practitioners involved in carrying out the two SEAs and associated public

consultations indicated a variety of ways in which final SEA documents were disseminated to the public. Socio-economic professionals involved in the facilitation of the KCDP consultations disclosed the finalized IPPF, translated into locally spoken *Kiswahili*, back to participants at the final community meeting. One practitioner indicated that the primary means of disclosing results following the completion of the SEA study and accompanying consultations was through the World Bank website.

“All the major information that has come through the process is posted on the World Bank website so that the public can go in and get that. Community representatives have been able to do that. The NGOs have been able to do that. The government departments have been able to do that. Because of financial limitations, we have not been able to widely disseminate, but because we know that that information is accessible to the public I think the process is open enough in terms of sharing and reaching out to people and what the project promises (Socio-economic professional, interview 3).”

Tatu City SEA practitioners indicated that SEA results were made available in hard copy to local community leaders and that the interested public could obtain the documents through this channel. Another practitioner mentioned that summaries of SEA results are required to be published in national newspapers as a means of circulating the information and inviting public comment. Copies of the full reports should be made available through local NEMA offices or on the NEMA website. Currently, however, there are no SEA documents available on the website.

Members of the Watha community confirmed the distribution of the IPPF documents written in a local language. However, none of the interviewed KCDP participants mentioned ever obtaining documents related to the ESMF, process framework, or consultation outcomes. The majority of interviewed Tatu City participants have not seen the final SEA reports, although some have an idea of where they might obtain a copy if interested. One interviewee saw a summary of the SEA results in a national newspaper.

“Have you seen any of the reports that were produced?”
I haven’t seen any of the reports.

Would you know where to access the reports if you wished to see them?

I maybe have the email for the consultants. If I wanted to see the reports, I could probably talk to the Tatu farm manager (Neighbor of Tatu, interview 14)."

"We haven't seen any reports, but maybe the bosses have (Tatu City participant, interview 19)."

"The top people have access to the reports, but we don't (Tatu City participant, interview 13)."

"I have not [seen the reports], but we've heard something in the print media. There was quite a big report from NEMA to know what is being done. That's like a brief on what their report was. (Neighbor of Tatu, interview 24)."

Therefore, final SEA documents were accessible to participants, but the methods of distribution may exclude members of the public who do not have regular access to internet and newsprint.

5.3.2 Freedom from Coercion

Are all participants able to freely express thoughts and opinions during the participation process?

All interviewed KCDP participants felt free to express opinions and ask questions during the meetings. Even in a cultural setting where men typically act as the primary spokesmen, all interviewed women also felt comfortable to raise issues and numerous women actually took the opportunity to speak at the meetings. According to socio-economic professionals involved in consultation facilitation, intentional effort was put into ensuring that all participants had equal opportunity to participate.

"Everyone was given a chance. It was free to express views about any issue which any participant had. (KCDP participant, interview 32)."

"I felt free to ask questions, and [the facilitators] were very good at answering questions (KCDP participant, interview 7)."

"I feel like I was able to express the problems of the Watha women. I expressed my views at one of the meetings and raised a question. I asked the KCDP people if the project can

improve the lives of children of the Watha community and increase their standard of living in the future (KCDP participant, interview 10).”

However, these sentiments did not hold true for all Tatu City SEA public consultations. Some participants, particularly the coffee workers involved in the focus group for this research, felt hindered to freely express themselves due to the presence of their superiors, the lack of choice in meeting attendance, and the time of day during which the meeting was held.

“We were not comfortable in the meeting because we were mixed with our bosses and were afraid to say what we are saying right now because we were afraid to be picked out and told ‘you were the one who was speaking the most – tell us what you were saying or go home. (Focus group, Tatu City participant).”

“There was not much of a choice [to attend] because we were told on our way home that we have to pass by and if we have to use the gate, we have to show up for the meeting. We didn’t even have questions at that point because they didn’t know much about Tatu City and being that it was an evening and we were tired, we just didn’t want to get involved. (Focus group, Tatu City participant).”

Contrarily, one interviewee in attendance at the coffee workers’ consultation remembered feeling comfortable to contribute during the meeting and took the opportunity to raise a question concerning a potential impact the development may have on her community (Interview 17). Both interviewees who participated in the Tatu neighbors’ consultation felt able to freely contribute to discussion and indicated that every participant was given the opportunity to engage in discourse.

5.3.3 Openness to Alternative Perspectives

In EA, project and PPP proponents and consultants must be willing to examine alternative perspectives, including input from different knowledge paradigms, to allow for the facilitation of participant learning and to increase the legitimacy of EA and PPP results (Webler et al. 1995; Sinclair and Diduck 2001). However, especially in SEA, evidence shows a frequent

lack of political and proponent will to implement adequate participation practices for fear of losing control over the process (Rauchmeyer and Risse 2005).

Does the process address need, purpose, and alternatives?

Sinclair and Diduck (2001) note that development proponents may often be in opposition to the examination of the project's need and alternatives through EA, while external entities, such as NGOs, argue that they are an essential element of the process. The Kenyan national SEA guidelines and international SEA literature recommend that PPP need should be addressed first in the evaluation of alternatives (Therivel 2010; NEMA 2011). SEA reports for both case studies suggest a 'no project' alternative and subsequently deem them unfeasible and justify the need for the respective PPP. Both processes assess PPP alternatives, but as alluded to in chapter four and in the following section, alternatives evaluation is generally integrated in into the process late, limiting the SEA and public participants in their ability to influence major decisions pertaining to the PPP.

Does the SEA and public participation occur simultaneously with PPP planning?

The literature argues that a lack of public participation at strategic levels of planning can result in participant cynicism, giving the impression that decisions are already forgone conclusions (Diduck and Sinclair 2002; Sinclair and Diduck 2009). Moreover, an effective SEA requires information, including public input, to be available early enough to influence SEA recommendations and ultimately, the PPP (Dalal-Clayton and Sadler 2005; Fischer 2007).

KCDP practitioners insisted that public input was collected early enough to be discussed and integrated into subsequent proponent planning meetings and inform final documents.

“There are several meetings for planning with different committees in different parts of the coast region. So that definitely formed the planning process and activities were picked based on what came out of the stakeholders meetings. They informed our final project

planning process and final project appraisal document... Input from the [Malindi meeting] was consolidated into a report that was now shared back to the planning meetings and government departments and also the project coordinating unit and World Bank staff in the subsequent meetings we had. (Socio-economic professional, interview 3).”

However, data collected from document reviews and interviews indicate that consultation participants were primarily involved in discussions pertaining to current resource use and evaluations of alternative income generating activities to be supported by the KCDP. The concept of the KCDP and its specific components had been planned before the public consultations were initiated.

A Tatu City SEA practitioner also commented on the late initiation of the environmental assessment. The city master plan was developed before the consultants were commissioned to undertake the SEA, thus limiting the opportunity to analyze PPP alternatives and allow the public to have meaningful influence in PPP planning.

“Was the SEA carried out at the same time they were doing the plans for the city?

The SEA came at the stage where now they wanted detailed plans of the infrastructure because the master plan had been done and was cast in stone. When we were getting into the SEA process it was a matter of how do we do the land use subdivision for the central spine for the city. At the same time the SEA was being commissioned, the engineering teams were being commissioned to look at the feasibility and the costs for putting in the different infrastructure components that were in the master plan.

From what you’ve experienced, has the SEA contributed to adjusting the plan for the city in making it more environmentally/socially sustainable?

Yes, to a limited extent because now there was no flexibility to really change the plan and the land uses such that to try and avoid impacts with the community (Environmental professional, interview 6).”

Information provided to participants at the Tatu City consultations also indicated that many details of the city plans had been developed prior to gathering public input on the development itself.

“A map was shown. We were shown the map and were told ‘this is going to be this, this

is going to be the shopping mall, this is going to be the houses, this is going to be the water.’ Just that. (Focus group, Tatu City participants).”

“They also showed us maps. A draft with the different phases – where the road will pass and other things would go - ideas already placed (Tatu City participant, interview 18).”

In both case studies, especially for Tatu City, the SEAs and public participation process were integrated late into the planning process, meaning there was no chance to discuss alternative visions for the PPP suggested. The late initiation likely allowed for the provision of input and formulation of recommendations on only minor operational aspects of the PPPs such as, in the case of Tatu City, water supply source, road alignments, and employment opportunities as opposed to the types of development that should happen.

5.3.4 Opportunity to Reflect Critically on Presuppositions

A forth significant condition for learning is the opportunity to reflect critically on presuppositions. The condition is operationalized in this study through the exploration of whether SEA results are verified with and disseminated back to the participants and how the public is shown its input is used. The feedback of information provides an opportunity for participant self-reflection, a prerequisite of transformative learning.

Are SEA results disseminated back to the public?

To address this question, interviewees were asked whether they received information or feedback from the facilitators following the meetings. Two KCDP community participants recognized the final meeting as an information verification session, the perceived purpose being to satisfy World Bank funders that public consultation requirements had been fulfilled, to verify the information and projects suggested by the community as correct, and to ensure a mechanism for project funding and implementation was in place.

“At the last meeting, we had a discussion about all of the meetings. The World Bank

people accepted to give out the money for the KCDP. They said that the requirements [for consultation] have been fulfilled. And all the projects were discussed. The Dabaso people suggested projects for crab farming and a *makuti* group. We suggested a traditional hut. We were told that those projects were accepted (KCDP participant, interview 25)."

"The third meeting we were called and there were some guys there from the World Bank. They wanted to know how sure they were that if they put money in that sector that it would reach the local community. So we were told at the meeting to come up with the strategy. And we went away. But from there I have heard nothing since (KCDP participant, interview 16).

However, frustration with the lack of information and feedback dissemination following that final meeting was consistently communicated by community participants. There had apparently been no communication about the status of the project between the last meeting in early 2010 and the time of this research in late 2011. Frequently, participants expressed concern that they, and the implementation of the project, had been entirely forgotten. Similarly, a lack of feedback was indicated by Tatu City participants.

"After the meetings, the KCDP people told us that they would make a report and would come back with the outcomes of the meetings, but they have not come. We don't know what is going on now (KCDP participant, interview 9)."

"During the meetings, we expressed what developments could be done in this area. In Mabuni, we need a project where we can plant *Casuarina* and sell it. In Dabaso, they need a *makuti* project. But we haven't got feedback from what we put on the table (KCDP participant, interview 10)."

"Right now, they are still keeping quiet. There has been nothing since the meetings! (KCDP participant, interview 26)"

"We are still waiting. They said they would come back, but they haven't come back (Tatu City participant, interview 17)."

A socio-economic professional involved in the KCDP consultation facilitation confirmed that the final community meeting, with the presence of World Bank representatives, was for the purpose of information disclosure and verification (interview 3). Another indicated that no feedback was dispersed to the communities following that meeting because details for project

implementation methods and timing were still evolving (interview 11). A practitioner for the Tatu City SEA also indicated that feedback following the consultations had not yet been given to the community, but that the responsibility for dissemination shifted back to the proponent.

“After that we have gone through a series of meetings and planning because we are not at a state where we have started [implementation]. We’ll still hold until we get clear signal which as you know, for environment project the bureaucracies, getting feedback takes time, so you don’t want to risk telling the communities something that will later on be changed (KCDP SEA practitioner, interview 3).”

“Communication back to the community has not happened. That one hasn’t been done. We gave a public consultation and disclosure plan to the client for future consultations beyond the approval. Us, we stop at the approval. In their next consultations and communications, we’ve already outlined to the client what they need to do, how they need to give feedback to the community on some of the recommendations they’ve taken on board. We hope that the client is going to take it seriously and actually communicate some of these positive things that they’ve taken on board to the community. At least give them the hope and they’ll see that some of the concerns they raised are actually taken on board in implementation (Tatu City SEA practitioner, interview 6).”

An identified challenge associated with public participation in Kenyan SEA, as indicated in chapter four, is that planning and implementation of considerably complex PPPs is a lengthy process and continual communication can be difficult. From the standpoint of community participants involved in both case studies, lack of consistent feedback proved to be a source of significant discontent in the participation process.

“The KCDP people promised that wouldn’t be the last meeting. They would have another after one or two weeks, but I was not called again. I didn’t want to attend again because I was annoyed (KCDP participant, interview 31).”

Is the public shown how its input is used in the decision-making process?

Community interviewees were asked whether their input contributed during meetings was used. As alluded to in the previous section, a few KCDP participants were pleased that project suggestions were approved and accepted by the World Bank funders at the final disclosure

meeting. Examples of such projects included fast-growing *Casuarina* (whistling pine) nurseries planted to generate fuel wood and income, *makuti* (roofing material made of coconut palm leaves) business training for women, and the construction of a Watha cultural centre. However, the KCDP has not yet been implemented and the lack of communication and evidence of activity has resulted in uncertainty amongst participants in regards to the meaningfulness of their contributions.

“At the time, the KCDP members accepted what we said, but we are still waiting for them and the things that they want to put into practice (KCDP participant, interview 2).”

“We don’t know because even now we haven’t got the message, but maybe in the future when they come our input will be used (KCDP participant, interview 27).”

“They wrote down the concerns, but if they use it, I wouldn’t know (KCDP participant, interview 16).”

Coffee workers’ consultation participants showed even more skepticism concerning the value of their inputs, with interviewees sensing that the meetings were a form of tokenism, a simple fulfilment of requirements on the part of the proponent and consultants.

“I’m not too sure that they put the information into use. It didn’t look like the facilitators were very interested in our comments, but they answered all of the questions. They tried as much as possible to answer them (Tatu City participant, interview 19).”

“I feel like they didn’t really have a particular concern with us, but they were sent here to deliver something and to go back with the information. Just so they can be seen that they did something (Focus group, Tatu City participant).”

Both interviewed participants from the neighbors of Tatu City consultation felt the concerns raised through the initial questionnaires were adequately addressed by the consultants at the subsequent meeting. Answers and mitigation measures were provided in response to concerns about coffee farm labour shortages and pollution potentially created by the city.

SEA practitioners involved in the two case studies emphatically asserted that community

input was certainly utilized in the formulation of SEA recommendations and further PPP planning. For example, Tatu City SEA practitioners recommended the provision of water infrastructure for existing communities on the outskirts of the future development and the creation of an employment database to ensure priority goes to job seekers from the local surrounding communities in response to socio-economic concerns raised at the consultations. A KCDP consultation facilitator indicated that input gathered from the community meetings was discussed at subsequent planning meetings and integrated within project appraisal documents. Unfortunately, such progressions have not been communicated to the concerned communities, resulting in general disillusionment and frustration amongst the participants.

5.3.5 Equal Opportunity to Participate

Webler et al. (1995) argue that equality in opportunity to participate is vital in ensuring legitimacy of the EA process. To examine whether the Kenyan SEA process adequately facilitated equal participation, questions pertaining to the stages of participant involvement, who was invited to attend, what methods and techniques were used to actively engage the public, and compensation provision were asked.

Are there opportunities for participation throughout the process?

Kenyan SEA guidelines encourage the integration of stakeholder involvement throughout the entire process, from scoping to report review (NEMA 2011). Chapter four acknowledged the KCDP and the Tatu City Structure Plan as unique cases amongst the reviewed reports. The KCDP was the only submitted SEA providing evidence of public engagement in the assessment of alternatives; however, it was also noted that the discussion focused on the identification and prioritization of livelihood and income generating alternatives under specific PPP components, rather than on the assessment of alternatives of the proposed KCDP itself. No evidence of

involvement at other stages of standard SEA, such as impact and mitigation assessment, was provided by interviewees. The Tatu City SEA demonstrated the most consistent stakeholder engagement throughout the process, with the identification of alternatives the only stage at which it was absent. However, the community participants involved in this research were not engaged during all of these phases.

Of the 21 interviewed KCDP case study community participants, one attended all four meetings (Malindi stakeholder meeting and three at KEFRI - Gede), 10 were present at three consultations, six attended two of the meetings, two were in attendance at only one, and two were unknown. The IPPF consultation was exclusively attended by Watha community members and only invited community representatives were in attendance at the Malindi stakeholder workshop. One practitioner noted that attendance numbers were not restricted at the Gede consultations and turnout was often much higher than anticipated.

Of the 15 women who took part the Tatu City case study focus group, all attended the one meeting at the coffee estate, while one additionally attended a meeting held for a subsequent EIA study for the proposed development. Three individual coffee worker interviewees all attended the SEA consultation at Tatu Estate. Two interviewed managers from neighboring estates of the proposed Tatu development indicated involvement in one SEA and one EIA consultation, both of which were held exclusively for representatives of neighboring firms and estates. Both participated in completing the questionnaires circulated prior to the meeting and one also attended one of the three public meetings.

Interviewed coffee workers indicated that the meeting was structured as a question and answer session, with participants taking the opportunity to raise questions and concerns primarily about potential socio-economic impacts of the proposed development such as whether they will

be qualified for employment opportunities within the city. Neighbors of Tatu also had the opportunity to discuss potential environmental and business specific impacts and suggest mitigation measures through the initial questionnaires and follow-up meeting. Almost 400 household surveys were conducted in surrounding communities to collect socio-economic baseline data (GIBB Africa 2011). Key stakeholders, such as project planners and government and utilities representatives, were engaged during the scoping phase of the SEA, as well as throughout the main SEA study. However, none of the participants in this research were involved in the household surveys or key stakeholders meetings.

Are marginalized people invited into the public participation process?

Practitioners involved in both case studies stated that intentional effort was made to ensure the inclusion of frequently marginalized populations, such as indigenous people, women, and youth. As previously noted, the Watha people were consulted both exclusively for the development of the KCDP IPPF and also as part of the wider community for the remainder of the Malindi district consultations. Members of the Watha community frequently mentioned a history of exclusion from decision-making and development activity in the region.

“We asked the KCDP members if they were ready to try to help us and we wanted our community to be recognized by the government, because in the past we have been forgotten by the government (KCDP participant, interview 2).”

“The issues raised at the meetings were mostly how the Watha have been neglected by other communities through education and also during employment. And we had to know how the KCDP people can help us form those things taking place (KCDP participant, interview 29).”

There were some Watha members who stood up and talked about their lifestyle and how they are being neglected by other communities (KCDP participant, interview 21).

The opportunity to participate in the KCDP consultations provided an outlet for the community to voice long-standing concerns that would perhaps otherwise not have been heard. Watha participants expressed great appreciation for the opportunity and, to some extent, felt

empowered to influence the PPP and government decisions through the experience. These sentiments will be further explored in the ensuing discussion of learning and action outcomes.

In both case studies, women were invited into the SEA process. Women involved in the KCDP consultations said they felt comfortable to participate and a meeting facilitator confirmed that they were quite vocal and enthusiastic to express their concerns and opinions. A practitioner noted that at another community meeting outside of the Malindi district, women were hesitant to engage in the discussion. In response, facilitators decided to break the participants into gender specific groups to ensure that the input was representative of all community segments. Most coffee workers at Tatu Estate are women and therefore represented the majority in attendance at the Tatu City consultation. Even still, the lead expert for the Tatu City SEA mentioned that after the meeting for the coffee workers, facilitators met exclusively with a group of women to ensure their concerns were adequately gathered and addressed.

Youth populations were somewhat represented in both cases. KCDP practitioners indicated to local government agencies prior to consultations that they would like to include youth. The one youth participant involved in this research confirmed the involvement of a few youth in the meetings; however, he felt that young people were somewhat excluded due to the fact that all consultations were held midweek during working hours. A Tatu City practitioner indicated that although a brief informal meeting was held with a community youth group, the process would have ideally integrated more extensive engagement with that age group.

Are there opportunities for active participation?

Passive participants might be the receivers the ‘information-out’ variety of communications that define token engagement on the lower rungs of Arnstein’s (1969) ladder of participation. Conversely, active participation uses methods and techniques that encourage

dialogue and critical reflection and allow participants to adequately express their concerns and influence the decision making process (Sinclair and Diduck 2001). The KCDP consultation facilitators commendably established opportunities for active participation by ensuring that information was accessible to all participants and encouraging group dialogue, as discussed below.

Perhaps the most highly interactive consultation, the KCDP Malindi stakeholders' workshop facilitated substantial dialogue amongst participants. Minutes from the workshop, facilitators, and participants all indicated that following the initial introduction to the KCDP, attendees were divided into five groups based on their area of residence within the Malindi district.

“And now we went half the time we spent on working groups. These working groups were started in such a way that all of these representations that we talked about were in each particular group. We divided them by regions because the project is covering the whole of the coastal region – Tana River, Lamu, Malindi was big so we divided it by A and B, and the south coast was another team so that they would address specific issues affecting their areas. And gave their proposals to what they think would be useful for the project so that they could be incorporated in the subsequent project planning meetings (Socio-economic professional, interview 3).”

Pens and paper were provided for the groups to record results from brainstorming activities surrounding issues of current resource use and potential activities they would like to integrate into the KCDP. Outcomes were presented back to the entire group, recorded by facilitators, and utilized in subsequent planning meetings.

According to a KCDP socio-economic professional, the three consultations held at the KEFRI Gede forest station took a *baraza* approach where participants were given information about the PPP and then given the opportunity to discuss issues in a single large group. One participant indicated that discussion facilitated at the forums resembled a consensus building exercise.

We exchanged ideas. What I know and what others know is different, so together we came up with the correct answer. The KCDP gave time for people to talk both days (KCDP participant, interview 30).

Interviewees noted that the facilitators ensured everyone was provided with adequate information by communicating in *Kiswahili*, the most widely spoken national language, and allowing time for translation into the Watha language for the older generation. In addition, when written material was dispersed, it was read aloud for the sake of the illiterate. All but one interviewee concluded that the length of discussion was enough to allow everyone with an opinion to voice it; however, it seems that some segments of the community elected spokesmen to represent them at the second and third meetings. Watha participants mentioned the opportunity at the first Gede consultation to demonstrate a traditional dance and inform the facilitators about traditional wedding and burial ceremonies unique to their culture.

The neighbors' Tatu City consultation evidently provided greater opportunity for active participation than that for the coffee workers, although an interesting participatory technique was used to gather baseline data from the latter group, namely a community mapping exercise. Participants of the Tatu City neighbors' consultation revealed that the consultation was somewhat interactive. Approximately 12 attendees were shown information and maps pertaining to the development, followed by a group discussion pertaining to the impacts suggested in the previously completed questionnaires and possible mitigation responses. One interviewee would have preferred to be physically shown where the indicated city infrastructure components would be situated, rather than be asked to visualize it from maps and diagrams.

“One preference I would have – we all just went to one place and were shown about the development on a screen. I would prefer to actually go to the place where the development will happen and be shown on the ground. Like where the water will be diverted from the dam (Tatu City participant, interview 14).”

The coffee workers attended the consultation at Tatu Estate at about four o'clock following the work day. Interviewees suggested that the meeting consisted primarily of 'information-out,' with facilitators informing attendees of the proposed development verbally and visually with maps and diagrams. Participants were given the opportunity to raise questions and concerns, which were addressed by the facilitators and project proponents, but there was no indication that group dialogue was encouraged.

"We were not told why we were explicitly required in the meeting, we were just being told what's going on. It was just like giving information, it wasn't really a discussion... You put up your hand, and say I want to give an answer to something. That's how they were being told to go about it (Focus group, Tatu City participant)."

"There were the people heading the meetings, recording questions, and giving answers. We listened and if we had any questions we could raise them (Tatu City participant, interview 18)."

Tatu City consultants used a community mapping exercise involving coffee workers to gather baseline information such as the location of community water sources, schools, waste water disposal, and sources of employment. However, none of the participants in this research indicated attendance at this activity.

Are participants compensated for their involvement?

Practitioners involved in both SEAs recognised that due to high poverty rates in communities affected by the PPPs, it would not be feasible to ask individuals to forgo their daily livelihood activities to participate in consultations without being compensated for their time. KCDP participants were given the equivalent of an average labourers' daily wage, which covered transportation costs to and from the meetings and other daily expenses. For at least one Gede meeting, KEFRI transport was used to pick up and drop off participants. Because the consultations spanned full days, lunch and refreshments were also provided, a gesture

appreciated by numerous interviewees. Interestingly, one participant would have preferred to forgo receiving compensation if the money was instead put towards some of the projects suggested during the meetings.

“After the meeting, those who attended the meetings were given a small amount of money. Between 300 and 500 shillings. I asked them if they would withhold that money so that instead of giving out money, they should put it towards projects that are more useful (KCDP participant, interview 1).”

A Tatu City SEA practitioner mentioned that the PPP proponent declined to provide funding for community consultations. Therefore, instead of providing participant compensation, Tatu City consultants planned short meetings outside of work hours. For example, the coffee workers’ consultation was held for approximately one hour after working hours. All three public meetings were conducted on weekends to encourage greater participation.

5.3.6 Opportunities to have arguments evaluated in a systematic fashion

Are there specific techniques used to assess and rank participant input and encourage consensus?

Engaging in rational discourse allows for the consideration and exploration of diverse viewpoints, thus encouraging the formulation of more justified individual frames of reference (Mezirow 2000; Diduck et al. 2011). Such discourse also encourages participants to evaluate arguments and come to a rational consensus pertaining to the problem at hand. There was little empirical data collected in this research to adequately evaluate this question. However, in one case a KCDP consultation facilitator recalled an instance where community participants were asked to discuss and prioritize the suggested projects and activities that had been raised by community members during the course of the meeting.

“People tell you about the kinds of activities they engage in and how they value them, and when they were asked to rank these activities, they ranked. Then when they were asked about what they would want or wish to do if they were facilitated to improve their living conditions, they’ll tell you ‘we’ll really maximize on this, we’ll do this.’ Then they

were asked to rank these activities. And then they ranked the same. ‘If the resources are not enough, we’ll start from here. This is what we need to start with (Socio-economic professional, interview 11).’”

An activity such as this obviously requires discussion in order to arrive at an agreed upon conclusion, an important element in the facilitation of transformative learning. Other specific techniques for assessing and ranking participant input and obtaining consensus were not evident in this research.

Does transparency exist in the decision-making process?

Transparency is an essential element in the facilitation of meaningful participation and creation of individual and social learning opportunities (Sinclair et al. 2008). Ensuring transparency throughout the decision-making process allows participants to assess the means by which their input is integrated into final decisions and PPP implementation. As discussed earlier in this section, noted weaknesses of the two SEA case studies include lack of participant access to assessment documents and deficiencies in the amount and frequency of feedback provided to those consulted. Especially in the case of the KCDP, participants have evidently become disillusioned with the process and are uncertain that their input has been used in the decision-making process due to a lack of communication and transparency.

5.4 LEARNING OUTCOMES

Participation in environmental decision making, including EA, potentially results in positive learning outcomes that facilitate a transition towards sustainability (Fitzpatrick and Sinclair 2003; Sinclair et al. 2008; Sims and Sinclair 2008; Jha-Thakur et al. 2009).

Transformative learning involves critical reflection on uncritically assimilated presuppositions and facilitates the development of more functional frames of reference to inform decisions

(Mezirow 2000). The theory identifies two domains of learning, instrumental and communicative, although learning outcomes are often not easily categorized into one or the other (Mezirow 1996, 2000). Most learning has both instrumental and communicative elements (Mezirow 1996), or moves from instrumental learning to communicative and vice versa (Sims and Sinclair 2008). The section above assessed the conditions for learning facilitated within the SEA process and although they were not fulfilled in a robust way, participant learning still occurred. KCDP participants demonstrated instrumental, communicative, and transformative learning outcomes, while approximately only half of Tatu City interviewees remembered instrumental learning experiences.

5.4.1 Instrumental Learning

The instrumental domain of learning pertains to the enhancement of one's ability to understand and cope with external forces by learning how to successfully achieve the desired ends (Mezirow 2000; Diduck and Mitchell 2003; Sims and Sinclair 2008). In a SEA case study, Sims and Sinclair (2008) identified obtaining new skills and information, determining cause and effect relationships, and task-based problem solving as types of instrumental learning outcomes demonstrated by participants. Eighteen of the 26 community participants involved in this research demonstrated instrumental learning outcomes, which primarily included examples of obtaining new skills and information, but also revealed a few references to determining cause and effect relationships and task-based problem solving. The most frequently mentioned topics for instrumental learning included tree planting, forest and environmental conservation, crop production, and group formation.

Tree planting was the most commonly cited example of instrumental learning (14 of 21 KCDP participants). Three interviewees learned about the general benefits of planting trees on

the *shamba* (family homestead), while the majority specifically mentioned learning about *Casuarina* (whistling pine), a fast growing exotic tree used for fuel wood and building material. Participants realized the connection between planting such species and reducing pressure on the native forest. The subject arose at the consultations during discussions among participants about income generating activities participants would like to integrate into the KCDP.

“We were taught most about conserving by planting trees so that we can easily get either firewood or money after selling. We were taught to plant the trees on the *shambas* and by that part, we can conserve [the forest] (KCDP participant, interview 28).”

“The Watha community and other communities can help conserve the forest by planting *Casuarina*, which is a way of conserving the environment also. *Casuarina* is used for roofing our homes. After growing it for 3 to 4 years, you can sell it for a lot of money. We didn’t consider it before. After the meetings, we knew the importance of it and how it can change our lives (KCDP participant, interview 30).”

“What I learned about *Casuarina* planting – I knew some already, but I was educated more and learned also about how and what benefits *Casuarina* can give to a family. The benefits of *Casuarina* are that you can get building materials without buying it and can also sell the seedlings to those who don’t have them and can also sell poles for building hotels. (KCDP participant, interview 15).”

Some participants not only learned about the benefits of tree planting, but through trial also learned that they were capable of successfully carrying out such a project.

“Before the meetings, I didn’t know about the idea of *Casuarina*. I just saw it with other people and neighbors, but I didn’t know how to raise it or about its benefits. So at the meetings, I came to know that *Casuarina* can grow on my *shamba* and also that I can raise it in my own nursery and also about its uses as a building material to get money. After that discussion, I knew I could try. I decided to buy it from local people who work at the forest station. They know about *Casuarina* growing. I tried it at home and discovered I can do it (KCDP participant, interview 4).”

Also evident were learning outcomes regarding the cause and effect relationship between forest degradation and climate patterns. Interviewees mentioned methods by which they could individually address the issue.

“On my part, I learned more about why I must help in forest conservation because I get

many things from the forest and also that the forest also helps this area in attracting rain. And also why there is a need of planting trees in my home so that I can reduce the destruction of the forest through building materials (KCDP participant, interview 32).”

“We were told to continue conservation of the forest because of the benefits of the forest. Because if the community destroys it, future generations will face many problems about climate, so they told how important it is to conserve the forest (KCDP participant, interview 4).

Through discussions initiated by the facilitators at KCDP consultations, participants also obtained new knowledge and skills about cropping practices on the *shamba*. Five interviewees learned about crops that are more ideally suited for the local climate or methods of increasing productivity.

“The skills we had before are not as good as the ones they told us. The crops that most of us used to grow were not suitable in our climate. They told us about the crops that are suitable in our community. Some crops take less time to mature like ground nuts, cow peas, beans. These crops take little time to grow. They are good for this climate (KCDP participant, interview 30).

“I learned about ways to water that stop the water from evaporating. You can put cut up grass around the trunk of the tree so the water doesn’t evaporate quickly (KCDP participant, interview 2).”

Interestingly, all instances of learning outcomes related to cropping practices came from Watha participants, a group with a relatively short history of experience in the agricultural lifestyle. A Watha youth, quoted above (interview 30), also acknowledged the need to gain further skills to improve the community’s living standard.

“What I remember is that we have to change our lives personally as Watha from the way our old people live. Our grandparents used to live in the forest. We need to have ways of getting our daily needs like the other communities.”

This quote demonstrates an instance where instrumental learning led to critical reflection and evolved into a more communicative learning outcome pertaining to the community and the way in which it interacts in the environment.

More directly related to the KCDP, four interviewees mentioned learning about the need

to form organized groups and write proposals in order to receive funding for the suggested livelihoods projects.

“They told us to form groups because only through groups we can be sponsored. Most groups don’t fund individuals, but just groups... We were told to write proposals, but we have not yet heard from them about how to improve our skills (KCDP participant, interview 1).”

“And also we were taught how we can form groups so we can be funded easily as groups. If we form groups, the living standards can go high and childrens’ education can go high (KCDP participant, 29).”

Although the participants learned the importance of group formation and proposal writing, they seemed largely uncertain about how to act upon it.

A participant at the consultation for neighbors of Tatu City learned about the concept of SEA for the first time and was able to vaguely identify the broad purpose of the process.

“It makes sure of compliance with environmental regulations... to make sure it does not interfere with things like rivers – not polluting the rivers, how wastewater will be treated... (Tatu city participant, interview 14).”

This was the only instance in either case study that a participant mentioned learning about the SEA process. Two other participants involved in Tatu City SEA consultations learned about measures which city developers would take to ensure the project is environmentally sustainable. One learned that fragments of the coffee plantation will be left intact to provide bird habitat. The other learned that environmentally friendly waste disposal systems and green power would be utilized in the city. Although the participants found this information interesting, there was no evidence that it resulted in deeper transformative learning pertaining to human relationships with the environment or created opportunities for personal action on sustainability.

5.4.2 Communicative Learning

Communicative learning involves trying to understand others and be understood when communicating with them, and it engages the learner in negotiating meanings, intentions and values (e.g., resource conflict resolution) (Mezirow 2000). In EA studies, communicative learning has been exemplified by participants negotiating values and normative concepts, gaining insights into their own interests and the interests of others, and acquiring new strategies for communication (Diduck and Mitchell 2003; Sims and Sinclair 2008). Participants in Kenyan SEA demonstrated themes of communicative learning by citing examples of acquired insight into intra- and inter-community relationships, the identified need to work together to achieve goals, and reflection on the situation of one's own community within the broader society. Seventeen of 26 community interviewees, all of whom were participants in the KCDP consultations, identified examples of communicative learning.

Learning about the importance of relationship within and amongst communities was a frequently cited communicative outcome. One interviewee enjoyed the opportunity for participation as it gave her greater insight to the interests of her own community, in this case the Watha community.

“It is a good use of my time because after the meeting, I was more educated about my own community. It is very good to interact with other members of the Watha community from other areas and to see some relatives I haven't seen for a long time (KCDP participant, interview 10).”

Learning about the importance of interaction amongst communities was also evident.

Participants recognized the interaction as a way to exchange information and expand their existing knowledge base to potentially become more competent problem solvers.

“I learned the importance of trying to share experiences with people from other areas. Other communities have had similar problems and they may have different solutions to the problems. This is a way of exchanging ideas (KCDP participant, interview 13).”

“Do you think participating in the meetings was a good use of your time?”

Very much. I learned how people live in other parts like Mombasa and Lamu and got exposure to other ways. (KCDP participant, interview 5).”

“It is a good use of time because usually there is little time to listen to people from other parts of the country (KCDP participant, interview 9).”

Two non-Watha participants acknowledged that interaction at the consultations allowed them to gain a greater understanding of the Watha culture and to reflect on the past relationship between the communities. This provides an example of how participation allowed for the generation of insight to the interests of others.

“We mostly heard questions from other communities – that is the Watha. We heard many questions from them and talking about their problems and after that learned how it is good to live as good neighbors (KCDP participant, interview 4).”

First I learnt why it is good to live as good neighbors and give [the Watha] respect because it was during the meetings that I learned how the Watha community were not respected before. So now I know why it is important to give respect. (KCDP participant, interview 15).”

Going further, some interviewees also remarked not only that they learned about the importance of community relationship, but also about the benefits of working together to achieve common goals.

“What I learned about is how we can get together so that the management and conservation of the forest becomes easier (KCDP participant, interview 32).”

“In the meeting, we learned how to unite together and that everyone should express his opinion together (KCDP participant, interview 8).”

“I learned that as a Giriama, I must educate my fellow Giriamas to respect other communities so that they can help each other in many decision makings because even if we start a project, it must consist of everybody. So with a good relationship, any decision making concerning the environment and any other issues will be so easy to handle if it involves both communities (KCDP participant, interview 15).”

Such acknowledgement of the need for cooperation may continue to facilitate reflection and

result in the development of additional communication strategies that allow individuals to act on this revelation. Another significant learning outcome was evident in the way that Watha participants came to view the relationship of their community with the broader society through the meetings. They felt that their interests were recognized by other communities and as a result became more highly respected and gained pride in their own culture.

“One issue that was raised is that before, no one knew about the Watha. During the meetings, awareness increased (KCDP participant, interview 10).”

“I felt like the awareness of the Watha community was increased so we can be respected in other communities (KCDP participant, interview 9).”

Not only did they feel that they had been recognized by the surrounding communities, but also believed that issues raised during the meetings were heard by the governing institutions, entities by which they had felt marginalized in the past. This sense of empowerment may provide evidence of a deeper transformative learning outcome and will be further discussed in the following section.

5.4.3 Transformative Learning

Transformative learning involves critical reflection on presuppositions and allows for the development of more functional frames of reference (Mezirow 2000, 2003). According to Cranton (2006), this type of learning occurs when critical reflection on acquired instrumental or communicative learning results in a positive shift in one’s perceived notion of self or one’s relationship with broader societal or environmental surroundings. While an abundance of instrumental and communicative learning outcomes are evident in previous EA studies, instances of transformative learning are less common likely because consultative forums in EA frequently do not conform to the ideal conditions of learning, as was the result in both of the case studies in this research (Sinclair et al. 2008; Diduck et al. 2011). Nonetheless, conditions that facilitate

transformative learning can lead to participant empowerment by increasing the confidence and ability of communities to be involved in, and influence, environmental decision-making (Sinclair et al. 2008; Sims and Sinclair 2008).

As discussed earlier in the chapter, KCDP consultations were generally successful in allowing participants to freely express their opinions and in providing equal opportunity to participate. Especially for the Watha community, these elements allowed for the expression of enduring concerns and created a sense that the issues were heard, and to some extent acted upon, by surrounding communities and governing institutions. This evidently resulted in a sense of empowerment and increased confidence in their ability to affect change through the provision of their input. In addition, it generated enthusiasm for further participation in the future.

Numerous interviewees spoke of issues raised during the KCDP consultations concerning the perceived marginalization of the Watha community.

“We told the KCDP that we want our standard of living improved and that the government may recognise that there is a community called the Watha (KCDP participant, interview 8).

“The Watha community recorded that it remains and has resulted in a poor life, when it comes to education, employment, and business opportunities (KCDP participant, interview 7).”

“There were some Watha members who stood up and talked about their lifestyle and how they are being neglected by other communities. The KCDP tried to talk to the government so we can be recognised (KCDP participant, interview 21).”

Since taking the opportunity to raise these concerns, Watha participants have noticed tangible positive changes in the manner in which other communities relate and interact with them.

“We used to get abuses from the Giriama community by being called names like *walangulo* and *wapana* [derogatory terms]. We were surprised to hear about the Watha and that the Watha community is known by people from far away. After hearing about that, the neighbors started to respect us more (KCDP participant, interview 28).”

There is a little difference from before [the meetings]. The other communities started to recognize the Watha and [accept] us as one of the tribes in Kenya. And we help each other as neighbors (KCDP participant, interview, 27).”

In a casual conversation with a Watha individual, it was mentioned that such recognition has allowed for the realization of increased pride in their own culture. They are no longer so hesitant to speak their own language in the presence of others and are proud of the fact that many of the place names from the surrounding area are derived from the Watha language. In addition, there has been increased pride in their unique traditions and another individual mentioned that the community even hopes to build a Watha cultural centre to share their history with others.

“The Watha want to be recognised and they want to build a cultural site where tourists and other communities can pass by and know how our community used to live in the old days and now (KCDP participant, interview 27).”

Also evident was the fact that Watha interviewees not only enjoyed the benefit of improved community relationships, but also simply took pride in the fact that their name was known by individuals and institutions external to their immediate region.

“There was nothing new. I already knew a lot about conservation. But I was not aware that the World Bank knew about us. It was a gift. I used to think we were neglected by the other communities (KCDP participant, interview 25).”

“It is a good use of time because usually there is little time to listen to people from other parts of the country. It is very good to know that the Watha community is known (KCDP participant, interview 10).”

Additionally, participants saw that their input and project suggestions were accepted by external entities involved in the KCDP at the final community meeting. This reassured some participants that their input was integrated into final decisions (see interviewee 25 quote, section 5.3.4), but unfortunately no tangible evidence of implementation has yet occurred.

The transformative learning process is complete when action is taken on newly formed perspectives and it is at this action stage that learning can become emancipatory (Diduck et al.

2011). In this case, due to the noted positive outcomes pertaining to a new sense of community identity, in addition to eagerness to learn new information and skills, almost all of the interviewed participants enthusiastically indicated their willingness and desire to participate in the future. This decision for action provides a channel by which the community can contribute input into decision-making processes and continue to shed its perceived notions of marginalization. The following quote also indicates acknowledgement by the participant that it was their own input that allowed their community to be recognized and, by extension, fostered the positive changes associated with that recognition.

“It is good to express our views about the community. It is good to know that the Watha community is now known on the map of Kenya. I would be very happy if there was a meeting every month if our views can be raised (KCDP participant, interview 9).”

Although transformative learning necessitates action on newly formulated perspectives, there may be situational, emotional, or informational constraints that hinder such action (Mezirow 1996). In the case of the KCDP, deviance from the ideal conditions for learning, as discussed earlier in the chapter, may compromise the ability of participants to maintain motivation to act on the developed sense of empowerment. For example, participants were concerned about the lack of feedback provided by KCDP facilitators and were uncertain about how their input was actually used. A few interviewees alluded to feelings of disillusionment that may threaten their enthusiasm for participation in the future.

“In most cases, I feel like it is not wasting my time, but the KCDP people said they would come again later and then they just disappeared (KCDP participant, interview 26).”

“Of course [participating] is a good use of my time. But I feel like I’m wasting my time if implementation doesn’t happen. People give ideas and they are not used (KCDP participant, interview 12).”

“But sometimes you think why should I go if nothing happens after? When there are a lot of words, but no action. When you sit in a meeting, but there are no results. Someone needs to go and tell the people that the project is still on (KCDP participant, interview

5).”

Although evidence of transformative learning is apparent, communication deficiencies may inhibit long-term realization of and action on community empowerment outcomes.

5.5 ACTION OUTCOMES

5.5.1 Individual Action

KCDP participants primarily demonstrated individual action for sustainability by putting newly acquired information and skills into practice. Numerous participants learned about the benefits of tree planting, especially *Casuarina*, on the *shamba*. Perceived benefits of the endeavor primarily included opportunities for income generation and the protection of native forest through the production of an alternative source of fuel wood and building material. Since the consultations, some of the participants have started planting the trees on their homesteads.

“I bought seeds after getting educated about *Casuarina* and tried to raise them in a seedbed. Though some died, I got some seedlings and planted them on my *shamba*. I have not yet harvested them – they are still young. I am just trying to see if it’s something [worth pursuing] (KCDP participant, interview 4).”

“We knew about the plants before, but didn’t put it into consideration. After the meetings, we found out about the importance for the community so we started practicing this (KCDP participant, interview 27).”

“We didn’t consider it before. After the meetings, we knew the importance of it and how it can change our lives. ... We have planted many *Casuarina*. And we are also planting beans and cowpeas. (KCDP participant, interview 30).”



Plate 3: *Casuarina* planted on a *shamba* after participation in the KCDP consultations.

As the previous participant indicated, discussion and learning centered on adapting cropping practices to local climate conditions also prompted participants to action. Following the meetings, one participant started planting legumes on his *shamba* (Interview 30) and another planted cashew trees (Interview 8). Others, however, have not yet put into practice new information and skills learned during the consultations. For example, a participant learned about using grass clippings to reduce water evaporation around tree trunks, but has not yet used this technique (Interview 2). Individual action has also been taken to educate non-participants about information learned at the consultations; this will be discussed in subsection 5.5.2.

As discussed in the previous section, learning outcomes from participation in Tatu City SEA consultations were essentially limited to the attainment of project-based information. Due to the drastic proposed shift in land use revealed at the meetings, coffee workers were concerned about losing current livelihood opportunities and managers of neighboring coffee estates were worried that the labour force would be drawn away in favor of new urban-based opportunities.

Individuals from both groups have begun considering adaptation techniques, but interviewed participants have not yet actually acted on these considerations.

“I will find an alternative source of livelihood. I can farm for food or raise cows for extra income. It personally might not affect me because I already have cows, a house, and big kids. I will be fine.

What about others?

They can go back to where they came from.

Has anyone started moving away yet?

No, they are still waiting to see what happens, so they have not moved or changed livelihoods yet (Tatu coffee worker, interview 17).”

“We are all planning about what we will do in the future, but we don’t tell each other what our plan B is. We all have different ideas about what we will do (Tatu coffee worker, interview 18).”

“We have started strategizing, especially about what we will do about labour shortages. We want to start improving and building additional worker housing on the estate to attract workers.

Have you started the housing improvements yet?

We haven’t yet started the improvements (Neighbor of Tatu Estate, interview 14).”

Lack of action on the considered alternative strategies is likely due to the fact Tatu City construction has not begun and so adaptation is not an immediate necessity. Interviewees provided little evidence of prevalent discourse within or outside of the consultations and did not mention individual or social action taken for environmental sustainability as a result of learning outcomes.

5.5.2 Discourse amongst Participants and Non-participants

Dialogic reflection is regarded as a critical element of the transformative learning process. In the case of the KCDP, discussion occurred not only during the consultations, but also took place amongst participants and non-participants following the meetings. This external exchange of information and ideas appeared to be the driving force of the identified social action outcomes. Almost all of the participants in this research (19 of 21) remembered engaging in discussion about the meetings with neighbors and family members.

“I shared the information with neighbors and relatives living far away. When I visit them, I take the time to share the information with others (KCDP participant, interview 4).”

“After the meetings, we went to our families and tried to talk to them about how we got educated in the meetings (KCDP participant, interview 21).”

“I shared with my immediate family and I am sure that my family passed the message to neighbors also.

Do you remember what information you shared with your family?

I shared the message by telling them how the message took place and what activities were done there and the benefits of planting trees, especially *Casuarina* and better skills learned about *Casuarina* planting (KCDP participant, interview 32).”

Like the participant in interview 32, numerous other participants also shared instrumental learning outcomes, such as the benefits of tree planting, planting for the local climate conditions, and the negative consequences of cutting down trees, with non-participants. In addition, other participants took part in discussions surrounding communicative learning outcomes of the meeting. For example, the participant in interview 4, as indicated in the previous section, discovered the importance of having respect for, and working in collaboration with, other communities. Following the meetings, he recognized the need to share this message with family and neighbors for the purpose of facilitating future collaboration on environmental decision-making. As a result of the discourse, social action for sustainability became apparent in these communities.

5.5.3 Social Action

As a result of learning and dialogue within and outside of the KCDP consultations, action producing shifts towards sustainability and greater communicative competence became visible at a broader societal scale. After relaying information pertaining to the benefits of planting *Casuarina* and climate appropriate crops, three interviewees observed changes in the practices of those family members and neighbors with whom information was discussed.

“Yes, other community members have [changed]. I tried to educate others who weren’t at

the meeting. They have planted some new crops as well (KCDP participant, interview 8).”

“Most neighbors who attended the meetings are planting *Casuarina* and taking it seriously and finding out about its benefits. I shared the information with neighbors and relatives living far away. When I visit them, I take the time to share the information with others... They are all growing *Casuarina* now. They are all taking it seriously, even more so than I am (KCDP participant, interview 4).”

“Most people have benefited from what I shared with them. Especially on *Casuarina* planting. Now it is hard to see any homestead without *Casuarina* planting. Really hard. So they got the information and utilized it (KCDP participant, interview 15).”

Widespread growth of such species for fuel wood and building material could have a significant impact on reducing pressure on the nearby Arabuko-Sokoke and mangrove forests. Growing crops more suitable for the local climate would likely have a positive impact on food security in the region.

Positive communicative learning outcomes during the consultation and subsequent discussion produced action to improve intercommunity relationships. As discussed in the learning section, since the meetings Watha individuals have noticed a visible difference in the way that their community is viewed and approached by the broader society.

“After the meetings, the Watha communities are now more respected by our Giriama neighbors. The Giriama used to call the Watha as *walangulo*. At the meetings they heard that we are called Watha. So we are getting more respect from the neighbors (KCDP participant, interview 1).”

“Other communities are learning of the Watha. Now they are using the name ‘Watha’ because of the meetings (KCDP participant, interview 7).”

The increased intercultural awareness evidently prompted action that fosters community relationship and, consequently, potentially facilitates opportunities for collaboration in future development and environmental decision-making.

Furthermore, discourse amongst participants and non-participants facilitated social action in the form of indirect participation in future decision-making. Two interviewees mentioned that

family members and neighbors who were told about the meeting proceedings and discussions were eager to have their input presented as well.

“I used to pass the information from the meetings on to neighbors and especially members of my family who did not attend. The issues that I raised with my family members were especially about how we can get help from what they told us at the meetings. Also, my family members gave me some points that they wanted to be raised at the next meeting (KCDP participant, interview 1).”

I had discussions with other Watha people after the meeting about what happened at the meeting. I talked to the Watha people in Chamari. There are many Watha people there. They also had issues that they wanted me to bring to the meeting (KCDP participant, interview 12).”

The sense of empowerment gained by the Watha participants through having an opportunity to raise concerns and opinions evidently impelled others to also reflect on the community’s situation and establish their own opinions related to consultation discussions. These individuals may be encouraged to directly participate in future opportunities to influence decision-making.

The need for group formation and proposal writing to gain funding for livelihoods projects was a frequently cited instrumental learning outcome that would naturally lend itself to social action. However, interviewees indicated that no groups have been formed or proposals written since the meetings, primarily due a lack of skill and knowledge about the process.

5.6 SUMMARY

The ideal conditions for learning were variably facilitated, showing both strengths and weaknesses in two Kenyan SEA case studies. Although the ideal conditions were fulfilled in neither case, examples of instrumental learning were nonetheless evident in the Tatu City case study and instrumental, communicative, and transformative learning occurred during the KCDP consultation process. In response to the learning outcomes realized during the consultations, especially for the KCDP, individuals and, subsequently, broader society demonstrated action that

has and will potentially continue to facilitate the transition to sustainability. The relationship amongst the instances of public participation, facilitation of learning conditions, learning outcomes, and action for sustainability will be further explored in the next chapter.

6.0 REFLECTIONS ON THE LINKAGES AMONGST LEARNING CONDITIONS, LEARNING OUTCOMES, AND ACTION FOR SUSTAINABILITY

A primary benefit of the integration of meaningful participation into environmental decision making is the potential for facilitating participant learning that fosters individual and social action for sustainability (Webler et al. 1995; Fitzpatrick and Sinclair 2003; Rauchmeyer and Risse 2005; Sinclair and Diduck 2009). This research demonstrates the importance of learning conditions in Kenyan SEA public consultation for effective participation and the realization of positive learning outcomes. A number of strengths and weaknesses of participation processes were identified through the empirical examination of two SEA case studies and are summarized in table 7.

Strengths		Weaknesses	
KCDP	Tatu City	KCDP	Tatu City
<ul style="list-style-type: none"> • Inclusion of marginalized populations • Integration of socio-economic concerns • Opportunity for active participation • Freedom from coercion • Compensation 	<ul style="list-style-type: none"> • Inclusion of marginalized populations • Integration of socio-economic concerns 	<ul style="list-style-type: none"> • Inadequate notice • Document inaccessibility • Lack of feedback and communication • Late analysis of alternatives 	<ul style="list-style-type: none"> • Inadequate notice • Document inaccessibility • Lack of feedback and communication • Late analysis of alternatives • Lack of opportunity for active participation • Proponent control • Lack of funding

Table 7: Strengths and weaknesses of Kenyan SEA participation processes

Some of the identified strengths and weaknesses, such as the inclusion of marginalized populations and inadequate notice, were consistent across both case studies, while others, such as the presence (or lack) of opportunity for active participation, proved to be a strength in one, but a weakness in the other.

6.1 STRENGTHS OF THE PARTICIPATION PROCESS

6.1.1 Inclusion of Marginalized Populations

The most vulnerable populations tend to be highly dependent on natural resources for their livelihoods and are therefore often disproportionately affected by decisions that impact those resources (Kende-Robb and Van Wicklen 2007). Engaging marginalized segments of the public in decision-making can increase general awareness of environmental issues (Okello et al. 2009) and empower individuals and communities to voice concerns and ultimately influence final decisions (Sinclair and Diduck 2009). In both SEA case studies, in addition to four other SEAs evaluated during the document review phase (six of the nine reviewed reports), marginalized populations, including indigenous peoples, women, and youth, were invited to participate in the process.

KCDP case study evidence shows that participation resulted in transformative learning and community empowerment for the Watha, an indigenous peoples group that previously felt excluded from government decisions and stigmatized by surrounding communities. Through the consultations, the Watha community was encouraged by their ability to participate and influence decision-making. Furthermore, inter-cultural relationships have begun to be reconciled, with members from both the Watha and Giriama communities recognizing the importance of working together to achieve higher standards of living and environmental sustainability.

Women were also intentionally invited in both SEA processes. This was especially significant in the Tatu City case because the majority of coffee workers on Tatu Estate are women and will, therefore, be disproportionately affected by the change in land use. Although they were generally cynical about the participation process, the women were nonetheless pleased

to be informed of the development and given the opportunity to raise questions and concerns in order to adequately prepare for future livelihood changes.

6.1.2 Integration of Socio-Economic Concerns

International SEA literature and effectiveness criteria regard the integration of socio-economic concerns in addition to environmental concerns as a means of achieving sustainability goals (IAIA 2002, Fischer and Gazzola 2006; Ahmed and Sánchez-Triana 2007, Fischer 2007). Both SEA case studies, as well as the majority of reviewed reports, addressed socio-economic concerns and identified potential socio-economic impacts and mitigation/enhancement measures. For example, the coastal communities involved in the KCDP consultations collaboratively suggested livelihoods projects that would improve their standards of living and fulfill the objectives of the KCDP. Tatu City consultants addressed concerns and formulated mitigation measures pertaining to the future loss of employment opportunity on Tatu Estate.

6.1.3 Opportunity for Active Participation

Active participation encourages dialogue and critical reflection and, therefore, enhances opportunities to achieve positive learning outcomes. KCDP practitioners effectively facilitated active participation in the Malindi district consultations. Participants cited opportunities for group brainstorming and discussion, sharing cultural information and traditions, and ensuring that every participant had access to information presented during the sessions regardless of language and literacy barriers. Additionally, the meetings were half to full day events, allowing ample time for facilitators to disperse information and for participants to engage in lengthy discussion.

6.1.4 Freedom from Coercion

Sinclair and Diduck (2001) cited empirical examples where public participation and learning were hindered due to proponent control over environmental decision making. It can therefore be deduced that reducing top-down control and encouraging greater grassroots influence over the SEA consultation process will better facilitate positive learning outcomes. Although not entirely controlled by the grassroots participants, the KCDP consultations were conducted in a manner that allowed all participants to feel free and comfortable to express opinions, contribute input, and raise questions. Having the opportunity to freely articulate concerns and ideas resulted in an overall positive experience for the majority of interviewees in this research.

6.1.5 Compensation

The provision of participant funding is important in the facilitation of full and meaningful participation (Sinclair and Diduck 2001, 2009). Participants in attendance at KCDP consultations were provided with transport to and from meetings, meals and refreshments, and the cash equivalent of a labourer's daily wage. This could partially explain the higher than expected participant turnout at the meetings. Furthermore, compensation allowed participants, mostly subsistence farmers, to spend the day away from their *shambas* while still maintaining the ability to purchase daily necessities. Without compensation, participation for many community members would have been unfeasible. The majority of interviewees in this research were pleased with the nature and amount of compensation provided.

6.2 WEAKNESSES OF THE PARTICIPATION PROCESS

Weaknesses of the participation process evident in both case studies include inadequate notice, inaccessibility of key documents, lack of feedback and communication, and late

consideration of alternatives. Some of these challenges are not unique to SEA, but were also identified community-based EA research in Kenya (Spaling et al. 2011). For example, little notice was given prior to meetings and participants had not received any updates or results since the consultations were completed, as with other cases. Limitations specific to the Tatu City case also include lack of opportunity for active participation, a high degree of top-down control, and a lack of participant funding.

6.2.1 Inadequate Notice

According to Sinclair and Diduck (2001, 2009), the provision of adequate notice is essential in the facilitation of meaningful participation. While certain groups of participants involved in the two case studies regarded notice as adequate, the majority of community members cited lack of notice as a primary concern with the participation process. Likewise, Spaling et al. (2011) found that inadequate notice was given to participants in previous cases of community-based EA in Kenya and that in a test case, ensuring timely notice through local communication networks was difficult.

Community participants involved in the KCDP consultations at Gede were generally informed the day prior to the meetings. They complained that this provided insufficient time to prepare comments and questions or to reflect on the issues at hand. It likely also excluded willing participants from more distant communities due to the inability to spread the word about the imminent gatherings in a timely fashion. As found by Spaling et al. (2011), all those who felt notice was inadequate would have preferred approximately a one week notice in order to better prepare for the meetings.

Similarly, the majority of participants in attendance at the Tatu City coffee workers' consultation criticized the amount of notice provided. Most learned of the meeting earlier in the

same day, being told to pass by after work. Due to the lack of notice, they were unable to adequately prepare for the meetings and, therefore, could not fully and meaningfully participate in discussion. They would have preferred to be informed of the meetings two days to one week prior.

6.2.2 Document Inaccessibility

Obtaining final SEA reports and results is vital for participants to observe if and how their input and opinions were utilized. In past reviews and case studies looking at public participation in Kenyan EA, it was found that access and readability of final reports were limited (Okello et al. 2009; Spaling et al. 2011). Similar findings were observed in this research. In the case of the KCDP, the Indigenous Peoples Planning Framework (IPPF) final document was distributed to community members; however, distribution of the Environmental and Social Management Framework (ESMF), process framework, and other project related documents was primarily via the World Bank website. A small minority of rural community members has regular internet access and none have seen evidence of these reports or know how their input was used.

Similarly, coffee workers involved in the Tatu City consultation have not seen final SEA reports and are unsure about how their input was used. Although a summary of the findings were published in a national newspaper, many community members have limited access to print, struggle with illiteracy and language barriers, or were unsure of other means by which to access the reports. Only one interviewee, a manager of a neighboring coffee estate, mentioned seeing a summary of results.

6.2.3 Lack of Feedback and Communication

Open communication between facilitators/proponents and the public is also essential in showing participants how input was used, maintaining motivation for future participation, and encouraging self-reflection as a pre-requisite for transformative learning. A lack of communication and transparency within the process was a major concern for participants involved in both case studies. KCDP participants had heard nothing about the project in almost two years following the final meeting and were uncertain whether project implementation was still planned. They feared that they had been forgotten and that their input would be unutilized. Tatu City participants also indicated that they had not heard from facilitators since the consultation.

6.2.4 Late Analysis of Alternatives

Ideally, participation should occur at normative stages of planning to integrate public input into the analysis of project alternatives, thus addressing project need and reducing the impression that decisions are already forgone conclusions (Diduck and Sinclair 2002; Sinclair and Diduck 2009). Lack of early participation, however, is a common deficiency even in SEA. In both case studies, the PPP and its components had already been developed prior to the initiation of public consultation, thus allowing comment and input on only the finer details of the PPPs. Especially in the case of Tatu City, even the SEA itself was initiated too late to comment on PPP need and recommend alternatives. This was not only an issue in the case studies, but was also evident in other Kenyan SEAs examined during the document review phase of this research.

6.2.5 Lack of Opportunity for Active Participation

In the absence of dialogic discussion, critical reflection and learning is hindered. While opportunities for collaborative discussion were evidently abundant in the KCDP case study

through activities such as small group brainstorming and ranking/prioritizing exercises, participants in the Tatu City coffee workers' consultations criticized the forum for resembling a form of tokenism, a simple fulfillment of process requirements. Interviewees indicated that they were able to raise questions and concerns, but there was little or no opportunity for group discussion. This is likely a key deficiency that impeded the realization of greater communicative and transformative learning outcomes.

6.2.6 Proponent Control

The opposite of freedom from coercion in the context of EA public consultation is a high degree of top-down control or manipulation over the process (Sinclair and Diduck 2001). While the KCDP process was not completely free of proponent control, participants indicated they felt free to raise and discuss any concerns, opinions, and suggestions. Conversely, participants involved in the coffee workers' consultation for Tatu City cited a variety of reasons for their inability to be meaningfully engaged in meeting discussions. For example, with the coffee estate managers present at consultations, they feared that what they said may impact their employment. Additionally, little notice was given, the meetings were brief, and they met after a full work day, all of which jeopardized the workers' ability to fully participate.

In some instances, proponent control over environmental decision making processes can hinder opportunity for participation and learning, while in others it actually spurs the public to action and enhances learning outcomes (Sinclair and Diduck 2001). In the Tatu City case, it seems that the lack of learning outcomes could partially be attributed to the consequences of a high degree of top-down control.

6.2.7 Lack of Participant Funding

Practitioners involved in both SEA case studies recognized the importance of compensation provision for attracting participants who could otherwise not forgo a day's income from daily livelihoods activities. However, Tatu City proponents apparently denied funding for the participation process, resulting in the planning of brief consultations after the workday. Due to the limited timeframe, the forum did not adequately facilitate substantial dialogue that is so important for participant learning. Additionally, interviewees mentioned that they were fatigued after a full day of work and thus inhibited their desire to participate. The provision of compensation would otherwise facilitate forums that better encourage dialogic and meaningful participation.

6.3 EFFECTS OF LEARNING CONDITIONS ON LEARNING AND ACTION OUTCOMES

As apparent in the discussion of the strengths and weaknesses of the SEA participation processes, neither case study fully met the ideal conditions of learning. This is not surprising as other studies have also noted consistent deviation from ideal learning conditions in EA public participation processes (Sinclair and Diduck 2001; Diduck and Mitchell 2003; Fitzpatrick and Sinclair 2003; Fitzpatrick 2006). As Sinclair and Diduck (2001) note, while each deficiency decreases opportunity for the full realization of positive learning outcomes, the presence of multiple deficiencies can create profound barriers to meaningful participation, learning, and by extension, action for sustainability. While each case study revealed certain strengths in the respective participation processes, notable weaknesses were also evident. Nonetheless, instrumental, communicative, and transformative learning outcomes, as well as individual and social action outcomes were identified through interviews with community participants (Table 8).

Learning and Action Type	Identified Learning and Action Themes
Instrumental Learning	Benefits of tree planting on the <i>shamba</i> Benefits of planting <i>Casuarina</i> Relationship between forest degradation and climate change Species of crops ideally suited for the local climate Techniques to increase crop productivity Importance of group formation for securing project funding PPP related information Information about SEA purpose and process
Communicative Learning	Greater insight into the interests of one's own community Greater insight into the interests of other communities Importance of information sharing to become more competent problem solvers The benefits of working together to achieve common goals
Transformative Learning	Changed perception of the situation of one's community (the Watha) within the broader society Ability to affect change through the provision of input
Individual Action Outcomes	Planting trees on the <i>shamba</i> Planting climate appropriate crops and trees Educating non-participants Formulating adaptation techniques in response to changing land use
Social Action Outcomes	Tree planting on the <i>shamba</i> Planting climate appropriate crops and trees Increased respect for the Watha community Indirect participation in KCDP consultations

Table 8: Summary of learning and action outcomes identified in two Kenyan SEA case studies.

It should be noted, however, that the communicative and transformative learning outcomes, social action outcomes, and the majority of the instrumental learning and individual action outcomes were identified in only the KCDP case study. The learning outcomes evident in the Tatu City case were limited to information about the proposed development and in one case, about SEA. The singular action outcome proved to be the initial consideration of future livelihoods changes to allow for adaptation to the proposed transformation in land use. The lack of learning outcomes observed in the Tatu City SEA consultations could indicate that either key learning conditions were neglected or that the specific combination of deficiencies profoundly constrained the facilitation of meaningful participation and consequential learning. It could also

be partly attributed to the constraints on the researcher during the data collection for this case study. It was completed in less depth than the KCDP case and fewer one-on-one interviews were conducted due to time constraints and difficulty in accessing participants. Unfortunately, none of the interviewees or focus group participants took part in the community mapping exercise conducted by the Tatu City SEA consultants for the purpose of baseline data collection, although this was an interactive activity that had the potential to facilitate participant learning.

Two strengths evident in the Tatu City participation process were that it integrated socio-economic issues and that it included marginalized populations. Lack of representation by marginalized groups, namely women and youth, was an identified weakness in a previous study on community-based EA in Kenya (Montes 2008; Spaling *et al.* 2011). The authors observed that participation was dominated by the local elite, primarily because they were the first point of contact for EA facilitators, had an obvious and direct stake in the process, and were the most knowledgeable about the project of concern. This created a power structure that largely excluded women and youth from the EA process. Interestingly, this research identified the inclusion of marginalized groups as a strength of both SEA case studies, with indigenous peoples and women involved in the KCDP case and women participating in the Tatu City case. The inclusion of these groups was at least partly attributed to the specific contexts of each of the cases. KCDP proponents were obligated to consult potentially affected indigenous peoples to fulfill World Bank requirements. The majority of coffee workers at Tatu Estate are women and thus were well represented in the SEA consultations specifically conducted for estate staff. Youth were somewhat represented in both cases. Spaling *et al.* (2011) point out that better inclusion of youth could be highly beneficial in EA processes as this segment of the population could transfer and advocate knowledge pertaining to sustainability that they may have learned in school. Regardless

of the motivations for involving indigenous peoples, women, and youth in these SEA processes, the benefits of engaging such groups is clear as evidenced through transformative learning outcomes for the Watha people in the KCDP case, for example.

However, the identified process weaknesses may have had a significant impact on learning outcomes, especially in the Tatu City consultations. The lack of proponent will to open the process to public scrutiny, a challenge cited by a SEA practitioner in chapter four, was evidenced in the unwillingness to provide participant funding for the SEA process. Therefore, in order to fulfill the public consultation requirements in the absence of funds for participant compensation, the coffee workers' meeting was restricted to a short time period of approximately two hours following the work day. The length of the meeting, in conjunction with the short notice provided to participants, evidently severely limited the opportunity for participants to engage actively in dialogic discussion.

Kenya's national guidelines indicate that an education component must be embedded into the public participation process as many individuals have not been involved in such a process, especially at the strategic level (NEMA 2011). While SEA practitioners mentioned that the SEA purpose and process was briefly introduced at the beginning of meetings, most participants had not heard the term and did not articulate the general definition of SEA when asked about the purpose of the meetings. Coffee workers involved in the Tatu City SEA usually stated that the meetings were for the purpose of giving information about the development. Participants from KCDP consultations also cited that the meetings were to learn about the KCDP and to discuss issues concerning the coastal communities. Not having a clear understanding of the process may hinder participants' ability to meaningfully influence SEA outcomes and learn through involvement.

Reflective discourse is a fundamental precondition for meaningful participation and transformative learning (Mezirow 2000). It allows participants to assess alternative perspectives, examine underlying assumptions, and seek common understandings. In the Tatu City case, the specific combination of failings in the facilitation of the ideal learning conditions, and thus little opportunity to engage in dialogue, resulted in significantly fewer participant learning outcomes than in the KCDP. Strengths of the KCDP consultations, absent in Tatu City meetings, included opportunity for active participation, freedom from coercion, and participant compensation. These strengths allowed for more dialogic discussion within the consultations, resulting in a significant number of instrumental, communicative, and transformative learning outcomes.

Instrumental learning outcomes, such as learning new information and techniques for tree and crop planting, were realized through discussion with other community participants who were knowledgeable on the subjects. A consultation facilitator mentioned that these topics were not ones that were initiated by KCDP staff, but that they arose during discussion pertaining to projects participants would like to see funded by the project. The skills and information gained by numerous participants has been put into practice since the meetings. Many have planted trees and climate adequate crops and have educated non-participants about the benefits of the same. Such action could have significant positive environmental and social impacts through the reduction of pressure on nearby forests and the production of more secure and sustainable sources of fuel wood, building material, and food products.

Transformative learning theory also accounts for learning that does not result in transformation, but elaborates on existing frames of reference (Mezirow 2000; Diduck et al. 2011). In this research, instrumental learning outcomes generally did not seem to stimulate deeper and more profound transformational learning. The Watha community, self-identified

conservers of the forest, likely embraced and acted on newly found skills like tree planting on the *shamba* because of enduring identification with the forest-based lifestyle and deeply held values for the protection of the forest. The information and skills gained through the KDCP consultations allow them to live more productively in the agricultural lifestyle while also acting on existing values.

Learning rarely neatly fits into the domain of instrumental or communicative learning, but often includes elements of both (Mezirow 2000). Furthermore, it can move from instrumental learning to communicative, or vice versa (Sims and Sinclair 2008). For example, a Watha youth learned about certain crops that are ideally suited for the local climate and can easily be planted on his family's *shamba*. Upon critical reflection and as a member of only the second or third generation of Watha people to live outside of the hunter and gatherer forest-based lifestyle, he came to the realization that there are still adjustments that his community needs to make to live more productively in this 'new' way of life. Therefore, learning new information (instrumental) caused him to critically reflect and arrive at new understandings of his community's relationship with the land and the agricultural lifestyle (communicative learning).

The learning conditions that facilitated dialogue amongst participants also allowed for the realization of a number of additional communicative learning outcomes. The sharing of ideas developed participants' understandings of the interests of their own communities and the communities of others, also leading to action that continues to develop and enhance inter-cultural relationships and motivates community members to work together to achieve common goals.

Critical reflection on instrumental or communicative learning outcomes can result in a positive transformation in one's frames of reference (Mezirow 2000; Cranton 2006). Transformative learning, stemming from some of the communicative learning outcomes, was

evident through the realization for the Watha community that they had been recognized and, consequentially, more respected by surrounding communities and government officials. This realization empowered them in their perceived ability to influence decision making and generated a great deal of enthusiasm for participation in the future.

Despite the numerous positive attributes of the KCDP public participation process that allowed for the transformative outcomes, failures in the facilitation of certain learning conditions could threaten the long-term permanence of the transformations. For example, the lack of feedback and communication provided by KCDP proponents and consultation facilitators following the final meeting has caused significant disillusionment and cynicism amongst community participants. They are unaware if and how their input has actually been used and are unsure whether the KCDP will even still be implemented. This deficiency compromises the maintenance of the Watha's enthusiasm for participation and if tangible results are not obvious based on the input they provided, feelings of empowerment could be reversed and those of marginalization reemerge.

Moreover, a lack of feedback and communication could delay or inhibit positive social action. One of the instrumental learning outcomes demonstrated by participants pertained to the need for group formation and proposal writing in order to secure funding for community projects suggested under the KCDP. Due to the uncertainty in regards to whether project implementation will actually occur, no groups have been formed or proposals written. Constant communication with communities would allow them to more adequately prepare for when implementation does happen by either beginning to form groups and prepare proposals or by seeking additional training on how to do so. This could significantly expedite the implementation process in the future.

It should be acknowledged that it was not the mandate of consultation facilitators involved in either SEA case to fulfill the ideal conditions of learning. Nonetheless, the conditions were variably filled, or unfulfilled, in each case by those who conducted the consultations. While providing opportunities for learning was not the primary objective of the consultations, future attention to the conditions of learning in Kenyan SEA participation processes could aid in the realization of numerous recognized benefits of participation in SEA as outlined in chapter two. Fulfillment of the conditions would, for example, ensure that a broad range of perspectives is adequately considered early on, thus reducing future conflict and potential negative outcomes and increasing public acceptance of final decisions. In addition, it could facilitate the development of trust and relationship between those at the grassroots level and those in positions of power.

6.4 FILLING THE GAPS IN TRANSFORMATIVE LEARNING THEORY

This research addresses two gaps in transformative learning theory, namely the link between participation, individual learning, and social action and the applicability of the theory in a cross-cultural context. Evidence shows that participation in the KCDP consultations resulted in numerous individual learning outcomes, which, in turn, led to critical reflection, dialogue amongst participants and non-participants, and social action. Examples of social action for environmental and social sustainability included participation in planting trees and climate appropriate crops, respecting the heritage and culture of other communities, and indirect participation in consultations. The primary mechanism for the achievement of social action proved to be dialogue and the passing on of information from participants to non-participants. This is consistent with findings from a study of community-based SEA in Costa Rica (Sims and Sinclair 2008).

Transformative learning theory was developed in the classroom setting in the USA, but little research has been done to understand the validity of the theory outside of that context (Taylor 2007; Sims and Sinclair 2008). This study provides evidence that transformative learning theory can be applied in the context of consultations for natural resource management with mainly subsistence farmers in rural Kenya. As opposed to the ‘individualistic’ mentality that dominates North American culture where the theory originated, rural Kenyans are generally guided more by a ‘collective’ rationality. This fundamental cultural difference has become evident through my own experience of living, working, and learning in rural Madagascar and Kenya. It appears that in this African context, people tend to identify with a group mentality, especially within the extended family unit and the cultural group or tribe. Rather than an emphasis on self or personal achievement, people are viewed as inextricably linked with one another and their community.

This collective type of rationality was evident even within this research. For example, interviewees, especially Watha KCDP participants, often suggested that their primary motivation for attending the consultations was so that they could raise issues that face the community and to find out how the KCDP could improve the living standards of the entire Watha group living in that region. While individual learning outcomes were identified, such as learning about planting trees on individual *shambas* for fuel wood and profit from building material, almost all participants noted that they shared this information with other family members and neighbors so that the others could utilize the new information as well.

While transformative learning theory mainly focuses on the individual, this study provides evidence that the theory is valid in a cultural context outside of the primarily individualistic and classroom setting in which it was developed as others have also found (e.g.

Sims and Sinclair 2008 and Marschke and Sinclair 2009). The participants, especially members of the Watha community, often felt marginalized and excluded from decisions that affect them and the resources on which their livelihoods traditionally depend. Participation in consultations provided a forum for the Watha to raise issues and concerns and resulted in the transformational realization that they are now a recognized community and that they can influence decision-making. In addition, adult learning in a more collective cultural context may be highly conducive to social action based on learning outcomes. This may be due to the fact that people view themselves in terms of the wider community around them and readily engage in dialogue and share information that has the potential to elevate the situation of that community.

6.5 SUMMARY

Strengths and weaknesses of the participation processes for each of the KCDP and Tatu City case studies were identified. Strengths consistent across the two cases included the inclusion of marginalized populations and socio-economic concerns. Consistent weaknesses include inadequate notice, document inaccessibility, lack of feedback and communication, and late analysis of alternatives. Learning conditions appeared to be more adequately facilitated in the KCDP consultations as strengths in that case also included opportunity for active participation, freedom from coercion, and compensation for participants.

The combination of deficiencies in the Tatu City SEA consultations severely limited opportunity for participant learning, especially communicative and transformative learning. While KCDP consultations did not entirely fulfill the ideal conditions for learning, they allowed for dialogue and critical reflection that resulted in instrumental, communicative, and transformative learning, as well as individual and social action for sustainability. However, lack

of communication and feedback between facilitators and community members could threaten the maintenance of the positive transformational outcomes.

This research also approached two gaps in transformative learning theory. It provided evidence that social action can be achieved through individual learning and subsequent education of others. In addition, it is apparent that transformative learning theory is applicable in a cross-cultural, non-formal educational context.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 SUMMARY OF FINDINGS

The purpose of this research was to examine if and how participation in SEA processes in Kenya can lead to transformative learning that supports sustainable resource use at the community level. Qualitative research methods, including document reviews, semi-structured interviews, participant observation, and a focus group were used to collect data pertaining to the specific research objectives: to examine completed SEA and compare procedures with standard SEA practice, with particular attention given to public participation; to determine the extent of participation in SEA; to identify learning outcomes of the SEA process and discover if any are transformative; and to determine if the learning outcomes of participation in the SEA lead to social action on sustainability at the community level. This chapter will provide a summary of findings related to each objective and make recommendations in light of those findings.

Examine completed SEA and compare to standard practice

Although SEA is relatively new to Kenya, capacity for the process is increasing as evidenced by the development of national guidelines and capacity building workshops for government staff and registered practitioners. All of the SEA documents examined in this research addressed the main components of SEA identified in international literature and national guidelines (e.g. Fischer 2007; Therivel 2010; NEMA 2011), but showed significant variability in the methods by which they were conducted and reported.

All interviewed SEA professionals cited the importance of public consultation and each completed SEA integrated public engagement in some form. However, significant variability was also evident in who participated, the stages at which they were involved, and the methods of engagement used. Identified challenges in Kenyan SEA that hinder the realization of benefits

derived from participation include lack of political and proponent will to open the process to the public, engaging a public that has little experience in being involved in such decision-making processes, and financial and time constraints.

Determine the extent of participation in SEA

In addition to document reviews of completed SEAs that provided evidence of variability in the extent of participation, learning conditions in two SEA case studies were examined in order to address this objective. Strengths apparent in both participation processes included the inclusion of marginalized populations and the consideration of socio-economic concerns, while consistent weaknesses include inadequate notice, lack of feedback and access to results, and late analysis of alternatives as summarized in chapter 6.

Identify learning outcomes of the SEA processes

Learning conditions, which were most adequately facilitated in the KCDP case, gave rise to an abundance of instrumental, communicative, and transformative learning outcomes for community participants. Examples of instrumental learning included information and skills related to tree and crop planting, group formation for funding securement, and PPP based information. Communicative learning included, broadly, increased insight into the interests of one's own community and those of others, as well as increased understanding of the benefits of sharing information and working together. The transformative learning outcome involved a profound shift in the manner in which the Watha perceived the situation of their community within the broader society, empowering them in their ability to influence decision making. Significant deviance from the ideal learning conditions in the Tatu City case limited outcomes to instrumental learning pertaining to PPP based information.

Determine if learning outcomes lead to social action for sustainability

In the KCDP case, individual actions for sustainability, including planting trees and climate appropriate crops on family *shambas* and educating non-participants about information and skills learned, was evident. Instrumental and communicative learning led to action at the broader societal level due to dialogue amongst participants and non-participants. While instrumental learning in the Tatu City case led to the initial consideration of potential alternative livelihoods once land use changes, there was no evidence of concrete social action.

7.2 RECOMMENDATIONS

7.2.1 Communication

Consistent communication between proponents/consultants and community participants is important in ensuring effective participation processes and lasting positive benefits resulting from consultation forums. This includes giving early and adequate notice prior to consultation and maintaining communication channels following meetings.

The majority of interviewees in this research indicated that notice was given late, allowing little time to prepare for meetings and excluding those living in more distant communities and those who could not commit on such short notice. In both cases, the primary means of providing notice was through trusted representatives from local government agencies or from superiors in the work environment. In the Kenyan context, as noted by SEA practitioners in chapter four, conveying information through local authority figures is the most effective way to avoid suspicion on the part of community participants. Therefore, this method should continue to be utilized, but SEA proponents and consultants should ensure that notice is given to potential participants at least one week prior to consultations. In addition, this notice should include a

summary of the basic information related to the purpose of the consultation either communicated orally or written in using the local language.

Another highly significant, but consistently lacking necessity is consistent communication and feedback to SEA participants following meetings. As demonstrated in the case of KCDP, a lack of feedback has left participants uncertain about if and how their input has been used and threatens to negate the positive empowering transformative learning outcomes realized through participation. High level EA and PPP planning can be inherently time consuming processes due to bureaucracy and expansive spatial scales, with lengthy time spans apparent between planning and concrete signs of implementation. Because of this, communication should be maintained with local communities in order to prevent this disillusionment experienced by participants. Representatives from local authorities should be used to pass on occasional updates about the status of the PPP and how local input is being used. This would ensure that community participants continue to feel they are a valuable part of the process.

7.2.2 Active Participation

The facilitation of active participation is vitally important to the quality of input received and to increase the potential for learning, as demonstrated through this research. Active participation allows for dialogic discussion that can greatly enhance opportunity for learning, including transformative learning, and subsequent action for sustainability by participants. Methods that encourage active participation, such as those associated with participatory rural appraisal (PRA), should be incorporated into public consultation planning, especially when participants in the rural context are engaged. These include techniques such as focus groups, workshops, resource mapping, and transect walks that facilitate small group discussion and

interaction and, therefore, encourage all participants in dialogue and elicitation of ideas and opinions.

In addition, where possible, consultations should include site visits to allow participants to better visualize the implications of the PPP. For example, a participant involved in the neighbors' consultation for the Tatu City SEA would have preferred to visit the physical area covered by the proposed plan rather than simply viewing representations on a map. He felt he would have been more confident in his ability to comment and give input if this place-based technique had been implemented.

Also related to location, consultations should be held at a place central and accessible to community participants, ideally where their livelihoods are carried out (Okello et al. 2009). Two KCDP participants would have preferred the consultations to be held at their homesteads or other local facility, rather than in a meeting room at a local government office building. This could serve to balance power relationships between facilitators and participants by increasing comfort levels of individuals to engage in discussion and providing PPP proponents and SEA consultants with greater insight into the lives of those who will be affected by the proposed PPP.

7.2.3 Provision of Compensation for Participation

Compensation for participation is demonstrably a vital element in the creation of meaningful participation processes. A lack of funding for participant involvement in the Tatu City SEA resulted in a necessity for brief meetings, consequently creating time constraints that severely reduced opportunity for active participation and dialogic discussion. To ensure the ability of community members, especially those engaged in subsistence and other low income livelihoods, to enter and be actively engaged in the process, it is necessary to make provisions for at least transportation and meals. KCDP participants were generally satisfied with the

transportation, meals, refreshments, and small monetary reimbursement with which they were provided. This variety of compensation encourages participation from those who may not otherwise have the ability to forgo wages acquired from regular livelihoods activities. As an alternative to individual monetary compensation, equivalent funds could be rolled back into mitigation/enhancement projects suggested by community members during consultation. This would provide concrete evidence that input was used, but would, however, require transparency, adequate documentation, communication, and immediacy to ensure the link is apparent to participants.

Furthermore, from the proponent's perspective, a price for participant engagement increases the value of input gained through such forums and, therefore, may better encourage the integration of public input into final decisions. It may also communicate to the engaged communities that their opinions are valued and that the process is more than a simple formality. It would be beneficial to include participant compensation as a required consideration in the scoping section of the SEA national guidelines (as a component of the stakeholder analysis), thus allowing for early consideration of the issue by proponents and consultants.

7.2.4 Ensure Accessibility of Documents

Since the consultation meetings, almost no community participants involved in this research have seen documents containing SEA results or information about the PPP itself. Although many of the documents or summaries are publicly available via the internet and newsprint, the means of distribution severely limits the accessibility of the information to the average community participant. Other means, such as posters and pamphlets, should be used to distribute results and information directly to the concerned communities. These should contain non-technical, largely pictorial summaries translated into dominant local languages and be

distributed through trusted local authorities or prominent community members. For providing community feedback, Spaling et al. (2011) recommend using a pictogram, a series of photos and captions that tell the story of the participants' involvement and relate the key findings of the EA. They found that the pictogram was appreciated and easily understood by community participants and that it reinforced learning outcomes gained through participation. In addition, local radio is a primary means of receiving information in rural communities. This channel of communication could be an effective way to disperse results summaries and provide updates on the status of SEA and PPP planning processes.

7.2.5 Early Consideration of Alternatives

The majority of completed Kenyan SEAs examined in this research were initiated late in the PPP planning process, thus limiting the ability of the SEA and participants in the process to address the need and potential alternatives of the proposed PPP. This poses the danger of creating public cynicism, leading to the belief that opportunity for participation is simply a token gesture and that decisions are forgone conclusions. PPP proponents and SEA practitioners should be encouraged to raise these normative issues at public consultation forums for the realization of the widespread benefits it could potentially foster. For example, opening the process to the consideration of strategic issues could pro-actively mitigate future conflict, increase public acceptance of the initiative, and generate additional perspectives that would have otherwise not been considered. Internationally recognized SEA frameworks, such as the European Union SEA directive, requires public consultation on both the draft plan or programme as well as the environmental report (Article 6(2), European Parliament 2001).

7.2.6 Clarity about the Purpose and Process of SEA

The majority of participants in this research had never heard the term ‘strategic environmental assessment,’ which is not surprising as consultations were conducted in the dominant local languages and there is no direct translation for the term. However, participants were generally unable to articulate the central purpose of SEA. When asked about the purpose of the meetings, KCDP participants usually responded that they were about conserving the environment and discussing the problems of the people, while Tatu City participants mentioned it was to “tell [people] about Tatu City (interview 18)” and about the “impacts on the community around (interview 24)” To enable the public to adequately engage in discussion surrounding the normative issues of a PPP, the definition and purpose of SEA must be clearly communicated by proponents and practitioners.

Spaling et al. (2011) indicate that conducting information sessions to clearly communicate the purpose and process of the forthcoming EA to participants can minimize the assumption that the facilitators, often ‘outsiders’, are financial donors for development initiatives. The findings also underscore the need for NEMA to review how the requirement for participant education is being carried out by proponents and consultants. It may be found that the provision of more detailed process guidelines in regards to this requirement would be highly beneficial.

7.3 FINAL THOUGHTS

Strategic environmental assessment is a relatively new process in Kenya. Despite limited experience with it, Kenya demonstrates progressiveness in the fact that it was the first, and remains one of the few African countries to legally require SEA consideration. Although significant variability was apparent in methods of conducting and reporting completed SEA,

including within the public participation processes, evidence also reveals that Kenyan SEA continues to evolve and be strengthened as experience and capacity increases.

Public participation is recognized, both internationally and domestically, as a cornerstone of the environmental assessment process as it, among other things, affirms democratic principles and creates potential for learning that promotes sustainability outcomes. This research confirms that active public participation, at least in the context of SEA in Kenya, can result in instrumental, communicative, and transformative learning outcomes that result in action for sustainability at the community level. Participants involved in consultations for the Kenya Coastal Development Project have since begun to plant trees and climate appropriate crops on their homesteads in order to increase food security and reduce pressure on nearby forests, and have taken the initiative to educate neighbors and family members on the benefits of such activity. Significantly, the active involvement of marginalized populations within the process led to a profound shift in the way in which the community perceives its place within the broader society, thus empowering them to be involved in, and influence, decisions that affect their livelihoods and the resources on which they depend. Moreover, the opportunity to voice long-held concerns led to increasing awareness of the issues of the most marginalized communities, resulting in greater mutual respect and cohesion within the wider community.

Despite encouraging outcomes observed in this case, the examination of another consultation process revealed a significant lack of participant learning. This research highlights the importance of conditions facilitated within the public participation process, as the omission of key elements can erect significant barriers to learning and empowerment and may even threaten to hinder the maintenance of benefits and actions arising from learning outcomes. Such barriers identified in this study include lack of feedback and communication, inadequate notice,

inaccessibility of documents, late analysis of alternatives, lack of opportunity for active participation, lack of compensation for participation, and a high degree of proponent control over the process.

Many of these identified challenges transcend the context in terms of both process (SEA) and place (Kenya). For example, EIA research has also recognized lack of feedback, inadequate notice, and inaccessibility of information as common barriers to effective public participation (Sinclair and Diduck 2001; Diduck and Mitchell 2003; Stewart and Sinclair 2007; Okello et al. 2009; Spaling et al. 2011). Research outside of Kenya also indicates that involving the public too late, lack of meaningful integration of input, inaccessibility of information, and ineffective communication among stakeholders are challenges that frequently hinder the effectiveness of SEA processes (Liou and Yu 2004; Retief 2007; Noble 2008; Wirutskulshai 2011). These issues apply to SEA in developed and developing countries alike, therefore, many of the SEA issues identified by my research are shared and not unique.

None of the identified barriers are insurmountable, but overcoming them to make public participation processes more effective and responsive at the local level is largely dependent on the will of policy, plan, and programme proponents and government SEA reviewers and enforcers. Furthermore, although many of these challenges span various types of EA processes in diverse locations, finding ways to overcome such barriers is highly dependent on attention given to the local context. Information accessibility is a common challenge, but the solution to the issue will be very different in the Kenyan context than in the Canadian setting, for example. Regardless, public participation must not be viewed simply as a requirement to fulfill, but as a process from which mutual benefits can arise. Not only can it empower individuals at the community level, but from the proponent's perspective, the integration of a broad range of

perspectives and ensuring the needs of the public are met can reduce uncertainty and future resistance potentially arising from decisions imposed on an otherwise unconsulted public.

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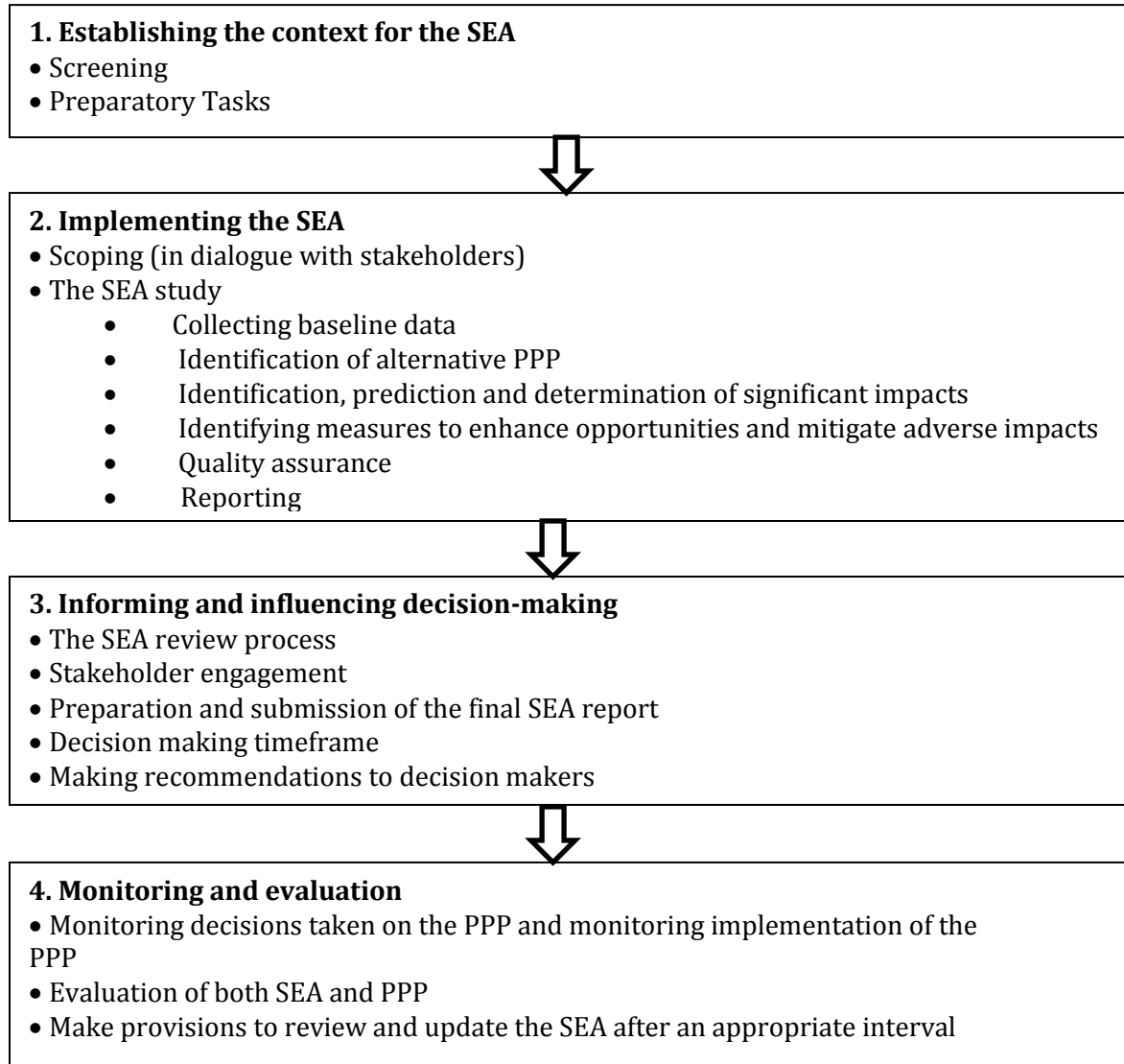
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APPENDIX 1: NEMA SEA Process and Reporting Structure

Figure 1. Basic Stages in SEA, according to the Kenyan national guidelines



Source: NEMA 2011

SEA Reporting Structure According to Kenyan National Guidelines

(a) *Title of the report*

(b) *A succinct non technical Summary* briefly describing the study and its outcomes

(c) *Introduction*. This should contain the scope and methodology of work

(d) *Proposed policy, plans or programmes*

- Objective, Purpose and rationale
- Alternative policy, options and strategies
- Areas and sectors affected
- Proposed activities for plans and programmes
- Implementation plan and time scale

(e) *Environmental analysis*

- Description of baseline environmental conditions focusing on areas potentially affected
- Relevant legislative framework and related PPP documents
- Overview of consultation and public/stakeholders engagement activities undertaken
- Prediction and evaluation of impacts including cumulative effects
- Alternative PPP options considered and compared against environmental indicators and a justification for the considered alternative
- Linkages with ongoing projects and how they fit in the proposed PPP

(f) *Recommendations*

- Recommended PPP changes
- Recommended mitigation measures and
- Recommended alternative
- The need for subsequent EIA for plans and programmes

(g) *Relevant technical appendices such as stakeholders' meetings referred to in the assessment*

(h) *Environmental Management and Monitoring Plan (EM&MP)*

The EMP should outline the measures to be taken during PPP implementation and operation to control adverse environmental impacts and the actions needed to implement these measures.

Source: Adapted from NEMA 2011

APPENDIX 2: Interview Schedules

SEA Professional Interview Schedule

Background

1. In your opinion, what is the purpose of SEA/ why is it used?
2. How many SEAs have you been involved in?

Process

3. Can you tell me about this specific SEA (purpose/process)? (If the person has been involved in more than one SEA I will attempt to get details on either the most recent one and/or one that I have reviewed).

- What guided the SEA design? (legislation/national/international guidelines?)
- Was sustainability/sustainable development a major objective of the SEA?
 - What does sustainability mean in the local context?
 - Were ecological, social, and economic aspects considered?
- What were the major steps of the SEA?
- How were the participants chosen?
- How was baseline data gathered?
- Did the process consider PPP alternatives?
 - What techniques were used to decide amongst them and choose the best option?

5. Did the SEA process occur at the same time as PPP planning?
6. How was the SEA process designed to ensure public input into decisions?

Public Participation/Conditions for learning

7. At what stages of the SEA process did the public participate in decision-making?
 - Scoping?
 - The SEA study? (describing baseline environmental conditions/identification of PPP alternatives/impact predictions/best options/impact mitigations)
 - SEA report review?
 - Monitoring and evaluation?
8. Which members of the public were invited to participate in the SEA?
 - Were marginalized peoples (women/youth) asked to participate?

9. How were the members of the public notified/recruited?
10. How were the public involved?
 - What methods/techniques are used to actively involve the public?
11. What information (e.g. About the SEA process, the value of SEA, information related to the specific case, etc.) was shared with the public to increase their capacity for participation?
 - How was this information given/presented to the participants?
12. Was there any funding /compensation for those who participate in the SEA?
13. How was the public's input integrated into the decision making process?
 - How is the public shown that their input is used?
 - Are final SEA reports/conclusions given to the participants?
 - If so, in what format are they presented?
14. Was the public participation aspect of the SEA effective/valuable?
 - Is there anything you would change/improve in the future?
15. Did the SEA succeed in making the PPP more environmentally sound?
16. Do you have any other comments on SEA and/or the success of implementation of SEA in Kenya?
 - Have you identified any needed improvements to the SEA process in Kenya?
17. Do you have any additional comments about the interview? Do you want a copy of the results?

Community Interview Schedule

Background

1. Record: Name, sex, occupation, determine if and in what way they use the resources that the specific SEA addresses

Public Participation/ Conditions for Learning

2. Do you remember participating in meeting about the [topic of the specific SEA]?
 - What was the purpose of the meeting?

3. How were you involved?

- What activities did you participate in? (I hope to have reviewed the SEA case documents and can prompt people if they do not recall how they were involved – I could ask if they recall participating in a meeting that was documented)
- How often were there opportunities to participate?

4. Do you know of the term SEA?

- Did anyone tell you why an SEA was done?

5. How were you told about the SEA (meeting)?

- How long before the first meeting were you told?
- Was this enough notice?

6. Can you tell me about any of the information you were given during the SEA?

- Was there enough information given for you to understand why the meeting was held?
- How was information presented to you?

7. Did you talk about the SEA (meeting) with other participants or your neighbors outside of the formal meetings/workshops?

- If yes, what were these discussions about?

8. How comfortable did you feel to express your opinions when participating in the SEA (meeting)?

- In your opinion, was everyone free to give their opinions?

9. After the meetings, did you hear anything from the facilitators?

- If so, how did they present the information to you?
- Was the information correct?

10. Do you think your input was used?

Learning/Action Outcomes

11. What issues (challenges/benefits) were brought up during the SEA (meetings)?

- Were there issues important to you or your community that were brought up during the SEA?

12. What did you learn about participation in this project?

- Did anyone tell you about why SEAs (participating in this project) are important?
 - If so, what did they tell you?
 - If not, after participating why do you think it is important?
- What does what you learned effect the community?
- How is the SEA relevant to you personally? Does it affect you either positively or negatively?

13. What other things did you learn by participating in the SEA?

e.g Did you learn anything about:

- the local environment?
- your community?
- working together with others?

Did you learn any new skills?

14. Have any of the things you learned caused you to change your viewpoints about:

- Your activities in the environment?
- Your community's activities in the environment?
- How you can be involved in environmental decisions?

15. Did participating in the SEA change the way you act or things you regularly do (ex. on the shamba, in the forest, household, etc.)?

- Have other people within the community changed in this way too? (Other participants/non-participants?)

16. Do you think participating in SEA is a good way to use your time?

- Would you participate again?

17. Do you have anything to add or anything to ask me?

APPENDIX 3: Kenya Coastal Development Project SEA Approval

