

**FACTORS AFFECTING ORGANISATIONAL PERFORMANCE:  
THE CASE OF THE NATIONAL ENVIRONMENTAL  
MANAGEMENT AUTHORITY (NEMA)**

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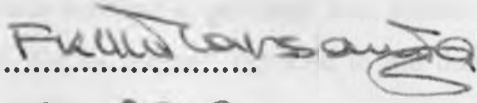
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**A PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF A MASTER OF ARTS DEGREE IN  
PROJECT PLANNING AND MANAGEMENT  
OF THE  
UNIVERSITY OF NAIROBI**

**2012**

**DECLARATION**

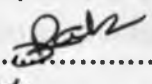
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## **ACKNOWLEDGEMENT**

Many have helped me in the development of this report. I feel particularly indebted to my supervisor, Ms Esther Magambo who provided me with different perspectives of environmental governance and valuable insights of NEMA's mandate.

I feel particularly indebted to personnel from NEMA, UNEP, UN HABITAT, USAID and DANIDA for the support extended to me during the survey. In spite of their overloaded schedules, they were always available to provide me with the required information.

I am also very grateful to my classmates for sharing their experiences in organisational performance and effectiveness.

Library personnel of the University of Nairobi deserve special recognition for their usual support in assisting me to locate the relevant reading material.

I will always remain appreciative of the guidance provided to me in statistics by Prof Pokhariyal in spite of his busy schedule.

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## ABBREVIATIONS AND ACRONYMS

DRSRS	-	Department of Resource surveys and Remote Sensing
EMCA	-	Environmental Management Coordination Act No 8 of 1999
EU	-	European Union
FAO	-	Food and Agricultural Organisation
KES	-	Kenya Shilling
KFS	-	Kenya Forestry Service
KWS	-	Kenya Wildlife Service
M & E	-	Monitoring & Evaluation
MTEF	-	Mid-Term Expenditure Framework
NEAP	-	National Environmental Management authority
NEAPC	-	National Environmental Action Plan
NEC	-	National Environmental Council
NEMA	-	National Environmental Management Authority
NET	-	National Environmental Tribunal
NETFUND	-	National Environmental Trust Fund
PCC	-	Public Complaints Committee
PECs	-	Provincial Environmental Committees
PPCSCA	-	Permanent presidential Commission on Soil conservation and Afforestation
UN	-	United Nations
UNDP	-	United Nations Development Programme
UNEP	-	United Nations Environment Programme
USAID	-	United States Agency for International Development

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## ABSTRACT

The Environmental Management and Coordination Act (EMCA) was enacted in 1999 marking a key milestone in promoting sustainable environmental management in Kenya. The National Environment Management Authority (NEMA) was established under the EMCA as the principal instrument of Government for the implementation of all policies relating to environment. In spite of its strengths and opportunities, NEMA's visibility remains low. This study was undertaken to obtain some perspectives on the effect of organizational culture, Monitoring and Evaluation, Coordination on the performance of NEMA. Thirty five (35) respondents from NEMA, nine (9) respondents from Government Ministries specified on the First Schedule of EMCA, four (4) from United Nations agencies and two (2) from the donor community were interviewed to obtain information on factors affecting NEMA's performance. NEMA respondents were selected through stratified random sampling using the Authority's organogram and staffing table. Each of the seven departments of NEMA was considered a stratum. Fifteen senior managers and twenty technical personnel were selected from a sample frame of 105 subjects. Departmental heads were purposively selected while other respondents were randomly selected. Respondents from the ministries were selected using the EMCA first schedule. A stratified sampling technique was employed for Government Ministries and 18 respondents were purposively selected from a sample frame of 36 subjects drawn from the 18 ministries specified on the First Schedule of the EMCA. Each ministry was considered as a stratum. The data collected was analysed using the Statistical Package for Social Sciences (SPSS). Findings of the study indicate some relationship between organizational culture, coordination and NEMA's performance. There was no evidence of any relationship between Monitoring & Evaluation and knowledge management, a key factor in organizational performance. For NEMA to improve its performance and enhance its visibility, it will need to strengthen its cross-departmental communication and collaboration, embrace technology and leverage its intellectual capital through better use of its knowledge management systems.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the study

The Environmental Management and Coordination Act (EMCA) was enacted in 1999 and received presidential assent on the 6<sup>th</sup> of January 2000. The act marks a key milestone in promoting sustainable environmental management in the country and it provides an avenue for the harmonization of approximately 77 sectoral statutes, which address the various aspects of the environment. The act provides legal institutional frameworks and procedures for management of the environment as well as modalities for conflict resolution.

The National Environment Management Authority (NEMA) was established under the EMCA as the principal instrument of Government for the implementation of all policies relating to environment. The National Environment Management Authority (herein after being referred to as “the Authority”) became operational on 1<sup>st</sup> July 2002 following the merger of three existing Government departments; the National Environmental Secretariat, the Permanent Presidential Commission on Soil Conservation and Afforestation (PPCSCA) and the Department of Resource Surveys and Remote Sensing (DRSRS). Working within the policy guidance of the Ministry of environment, NEMA is responsible for the general supervision and co-ordination of all matters relating to the environment.

According to Section 9 of the Environmental Management Coordination Act No 8 of 1999, NEMA’s strategic objectives entail supervision and coordination of environmental matters undertaken by lead agencies and other stakeholders and ensuring compliance with, and enforcement of regulations, standards and guidelines developed under the said EMCA. NEMA has also been mandated to enhance environmental education and public awareness for sound and sustainable environmental management. In addition, the authority (NEMA) has also been mandated to undertake capacity building of institutions engaged in environmental activities, integrate environmental concerns into national development policies and to coordinate environmental research, investigation and surveys (NEMA Annual report 2008).

Since its inception, NEMA has recorded significant achievements including development of various regulations, processing of environmental impact assessments, identification of projects for environmental audits, formulation of procedures and safeguards for the prevention of accidents plus training and gazetting of Environmental Inspectors.

In spite of the abovementioned achievements, effective execution of NEMA's mandate appeared to be hamstrung by several challenges including institutional fragmentation where ministries seemed to be operating as 'silos' with no systematic inter-ministerial information flow. There was no evidence of systematic information sharing between the ministries and NEMA leading to lack of holistic approach to environmental issues and loss of synergy. The Spasmodic nature of NEC meetings negatively impacted on execution of NEMA's core functions.

According to its 2008 annual report, NEMA recorded a budgetary surplus of KES 57,345,920 during the financial year that ended on 3<sup>0th</sup> June 2007. Audited accounts in the same report indicate that as at 30<sup>th</sup> June 2006, the authority posted a budgetary surplus of KES 62,697,657 which is rather unusual given the prevailing environmental challenges in the country. While various reasons may be given for the budgetary surplus, its inability to effectively utilize financial resources at its disposal could be a manifestation of its organisational culture. In the aforementioned annual report of 2008, NEMA does not make reference to any Monitoring & Evaluation (M&E) findings. This lacuna gives the impression of inadequate utilisation of Monitoring & Evaluation (M&E) services by NEMA mechanism to regularly review its programmes to determine effectiveness of its goals and objectives. Worse still, there was no evidence of a knowledge management strategy in NEMA. The authority needs to embrace more aggressive knowledge management mechanisms to enable it draw lessons, distil best practices, improve operational quality, efficiency and enhance organizational knowledge creation. In view of the foregoing, it was imperative that a study be undertaken to obtain a more in-depth understanding of factors affecting NEMA's performance.

## **1.2 Statement of the problem**

This study sought to establish why NEMA had not rolled out its mandate in a more aggressive manner. The study also sought to identify drivers and restraining factors impacting on NEMA's operational landscape, coordination arrangements and support to government ministries in the implementation of environmental policies. This study sought to establish the link between NEMA's organisational culture and its capacity to execute its mandate. According to the EMCA, NEMA is supposed to be providing technical and policy advice on environmental issues to government ministries. To perform this function, the authority needs to have a sound knowledge repository. However, NEMA's capacity to harness high quality information for use by its clients remains unclear. The proposed study also considered NEMA's monitoring & evaluation systems as well as its knowledge management practices.

## **1.3 Purpose of the Study**

The purpose of the study was to identify factors hampering implementation of NEMA's mandate and recommend possible strategies for strengthening its performance and effectiveness.

## **1.4 Objectives**

The objectives of this study are to:

- To assess the effect of Organisational Culture on the mandate implementation of the National Environmental Management Authority (NEMA)
- To assess the effect of NEMA's Monitoring & Evaluation system on knowledge management
- To assess the effect of existing coordination arrangements on NEMA's performance

## **1.5 Research questions:**

The study was an attempt to answer the following questions:

- To what extent does NEMA's organisational culture affect implementation of its mandate?
- To what extent has NEMA's M&E system contributed to the functionality of its knowledge management system?
- To what extent is NEMA's performance affected by existing coordination arrangements?

## **1.6 Significance of the Study**

NEMA's organizational structure, policies and practices need to be congruent with its strategy, culture and objectives. Its visibility needs enhancement and this study was an attempt to identify innovative strategies that would strengthen NEMA's operational capacity, boost environmental governance and ultimately enhance NEMA's visibility. The study was intended to elaborate NEMA's operational context by examining NEMA's organisational structure as well as its processes and partnerships with other government entities. During the study, NEMA's human resource characteristics were examined to ascertain the extent to which its organizational structure supports attainment of planned objectives. The study ascertained the number of encumbered posts in NEMA with a view to verifying existing staff levels. Findings of the study were intended to ascertain the effectiveness of coordination and collaboration between NEMA, government ministries and other actors involved in environmental governance.

## **1.7 Delimitations of the study**

Due to financial constraints and limited time, the scope of the study was restricted to NEMA headquarters, UNEP, donor representatives and the 18 Ministries specified under the 1<sup>st</sup> Schedule of the EMCA. All interviews took place in Nairobi and its immediate environs. Provincial and District environment offices were not included. However, efforts were made to obtain information pertaining to Provincial and District environmental offices from Nairobi. Buy-in from respondents was critical for the success of the study.



## **1.8 Limitations of the study**

This study was limited to NEMA and its findings cannot be generalised. The study was contingent upon availability of key respondents like NEMA directors and senior officials of government ministries. Due to exigencies of work, it was not possible to have all the appropriate officers available for one-on-one interviews at the required time. Repeat visits were made to the various offices to secure audience with the key respondents.

While organizational culture may influence one's management style, this study did not cover NEMA's leadership and/or intra-ministerial administration which are also contributing factors to NEMA's performance. Information provided by NEMA headquarter personnel regarding its operations in the provinces could not be verified. In addition, the study covered the period 2008 – 2011. Some of the provided information was gathered more than three years ago and needed validation. Owing to financial and time constraints, it was not possible to validate information that was more than three years old. From the definition of organisational culture, some dimensions of culture were difficult to measure and as such the study could not yield precise answers to some of the research questions. In addition, most of the indicators of organizational effectiveness were qualitative and it was not possible to test hypotheses.

## **1.9 Assumptions**

This study was planned with various assumptions including availability of adequate and up to date data/information, easy access to key respondents, honesty of respondents plus buy-in and cooperation from Government ministries that were to be visited. The study was also planned on the assumption that there would be no abrupt changes in the administrations of NEMA and Government ministries. The study was also planned on the assumption that there would be buy-in and cooperation from NEMA and that the study would not be misconstrued as an audit of NEMA's operations.

While there might have been various factors affecting environmental governance in Kenya, this study was limited to NEMA's Organisational culture, its organisational structure and implications for its support to Government ministries. The study focused on seven variables namely; organisational culture, Mandate implementation, M&E, Knowledge management, coordination arrangements, organisational performance and provision of policy/ technical advice to NEMA's clients.

## **1.10 Definition of significant terms**

**Organisational culture** – For purposes of this study, organisational culture was defined as a “pattern of shared values, norms, beliefs, attitudes, and assumptions that shape the way people behave and get things done. Values refer to what is believed to be important about how people and organisations behave. Norms are the unwritten rules of behaviour” (Armstrong M 2006).

**Organisational structure** – is a schematic representation of roles and relationships which are harnessed to ensure that collective effort is explicitly organised to achieve specified ends. An organisational structure consists of units, functions, divisions and formally constituted work teams into which work activities related to a particular process and projects are grouped together (Armstrong M 2007). The structure of an organisation may be regarded as the framework for getting things done and is diagrammatic representation of all tangible and regularly occurring features which help to shape the behaviour of organisational members.

**Coordination** – is the systematic use of policy instruments to deliver services in a cohesive and effective manner. Such instruments include strategic planning, gathering data and managing information, mobilising resources and ensuring accountability, orchestrating a functional division of labour, maintaining serviceable framework and leadership (Brahimi L 2001).

**Organisational performance** – refers to the results of an organisation over a given period of time as measured against intended outputs (goals and objectives). Main issues of organisational performance are centred around efficiency (utilisation of resources) and financial viability; i.e. the organisation’s capability to secure adequate funding to enable it continue its operations in both the short and long term (Lusthaus C. et al 1999).

**Organisational effectiveness** – is a measure of the extent to which the organisation is performing to achieve its mission (i.e. the impact of its activities, goals and objectives) in addition to its relevance i.e. how well its mission meets the requirements of its stakeholders.

**Knowledge management** - Knowledge management is a concept where organizations intentionally collect, organize, share and analyze their knowledge within the resources, documents and qualifications of employees with a view to leveraging organizational intellectual capital to improve organizational performance (Shaikk S 2011).

**Monitoring & Evaluation (M&E)** – Monitoring is the process of determining the status of an ongoing activity in comparison with the plan with a view to detecting deviations and offering corrective action. Evaluation is a systematic and objective assessment or judgement of the value or worth of an ongoing or completed project, programme or policy. This assessment is done after careful consideration of various factors or features against some predetermined baseline information.

### **1.11 Organisation of the study**

This study was divided into five chapters. Chapter One is the background to the study and provides a synopsis of the context of the study, research objectives, research questions, problem statement and thus sets the landscape for the proposed study. Chapter two comprises the literature review which provides a critical discussion of similar studies undertaken before that relate to the proposed study. In some cases, a critique has been provided on some of the studies quoted in the literature review. Chapter three contains the methodology component of the research proposal comprising the research design, sampling technique, sample size, data collection procedures, data analysis and operationalisation of variables. Chapter four contains data presentation, analysis and interpretation. Chapter five brings together the different strands of the study including research questions, literature review and discussion of findings to draw logical conclusions.

### **1.12 Summary**

This chapter provides an introduction to the National Environmental Management Authority (NEMA) and an overview of the possible factors impacting on the execution of its mandate. The chapter sets the landscape for the proposed study whose scope is defined through formulation of objectives and research questions. In this chapter, the researcher postulates possible relationships between organisational culture, M&E, knowledge management, coordination and NEMA's performance.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

A lot of work has been done on global environmental governance but very little on environmental governance at national level in Kenya. Worse still, information available on NEMA's effectiveness in support to implementation of National environmental policies in Kenya remains rather scanty. The purpose of this chapter is to draw comparisons with previous works and the proposed study, identify knowledge gaps and the need for additional information. This chapter is to identify adjuncts and lacunae between the cited literature and the proposed study. It is intended to compare findings of previous studies with the expected outputs of the proposed study.

#### **2.2 Overview of Environmental Governance**

According to the official website of the Ministry of Environment, the lead agency for environmental governance in Kenya is the Ministry of Environment and Mineral Resources. Its mandate is to monitor, protect, conserve and manage the environment with a view to ensuring sustainment of a clean environment now and in the future. The ministry serves as a catalyst for the promotion of environmentally sound national development through the provision of management information, technical expertise, monitoring, research and administrative support. The work of the Ministry has been enhanced through the enactment of the Environmental Management and Coordination Act (EMCA) No.8 1999 which serves as the main legal framework for environmental governance. Prior to the enactment of the EMCA, Kenya had no framework for environmental legislation. Its approach to environmental legislation and administration was based on Common Law and sectoral legislation with environmental management components which were largely formulated in line with natural resource sectors. The legislation was diffuse in nature with provisions contained in seventy-seven statutes (Angwenyi, 2008). The sectoral approach also had diffuse power and responsibility in numerous government departments and created jurisdictional overlaps and conflicts and ignored the indivisibility of and the interrelationships within the ecosystem.

According to Angwenyi (2008), it therefore became very necessary to have a focal point within the government to coordinate policies and activities, and to advise government on environmental management issues.

Following the enactment of the EMCA, fundamental principles of the environment espoused in various multi-lateral agreements were incorporated into Kenyan law. The EMCA created the National Environmental Management Authority (NEMA) and several other statutory bodies including the National Environmental Council (NEC), the National Environmental Action Plan Committee (NEAPC), the Public Complaints Committee (PCC), the National Environmental Tribunal and the National Environmental Trust Fund (NETFUND) in the hope that these bodies would complement each other. The National Environment Council (NEC) is engaged in policy formulation, setting of priorities, national goals and objectives for the protection of the environment. Implementation of policies developed by the NEC is coordinated by NEMA.

NEMA was established to “exercise general supervision of all matters relating to the environment and was to serve as the principal instrument of Government in the implementation of all policies relating to the environment”. Its other function is “to promote the integration of environmental considerations into development policies, plans, programmes and projects with a view to ensuring proper management and rational utilization of environmental resources”.

An initiative towards a national environmental policy is contained in the Sessional Paper No. 6 of 1999 on Environment and Development. The said paper advocates for the integration of environmental concerns into the national planning and management processes and provides guidelines for sustainable environmental development. According to the Kenya Environmental & Political news weblog (2009), the challenge of the document and guidelines is to critically link the implementation framework with statutory bodies namely, the National Environmental Management Authority (NEMA), Kenya Wildlife Service (KWS), Kenya Forestry Service (KFS); the Public Complaints Committee (PCC) and the National Environmental Tribunal (NET).

Caravavi and Bird (2009) aver that the role of national government is critical to the delivery of environmental outcomes through the setting of policy and regulatory frameworks, planning as well as compliance monitoring. Caravavi and Bird (2009) provide a fairly optimistic prognosis of government environmental programmes and

opine that greater continuity of government programmes could be expected as national budgetary processes move beyond annual budget cycles to multi-year systems such as the Medium Term-Expenditure Frameworks (MTEFs). They contend that policy prioritisation, sequencing and implementation are inherently medium to long-term exercises and therefore the medium-term perspective offered by the introduction of MTEFs has much to offer environmental programmes.

Having been established by parliamentary legislation, NEMA is fairly insulated from competitive pressures and enjoys several privileges and opportunities. The authority (NEMA) commands phenomenal goodwill and has access to adequate financial resources including the National Environment Trust Fund, Deposit Bonds, donor funds and internally generated revenues through licensing, penalties, grants and gifts. The presence of United Nations Environment Programme (UNEP) headquarters and a host of other United Nations organizations (UN Habitat, UNDP, FAO, UNIDO, World Bank UNICEF, WHO etc) operating in Nairobi provides NEMA with opportunities for technical and financial support for environmental programmes.

In spite of these privileges, the absorption capacity of resources coming into NEMA appears to be unsatisfactory. In an apparent allusion to NEMA's challenges, Caravari & Bird (2009) opine that resources channelled through the government institutions have not yielded the desired environmental outcomes, as measured against a number of environmental indicators. They attribute this to the apparent relegation of environmental issues to a lower priority rating. Like most governments in sub-Saharan Africa, in Kenya, environmental issues are not seen as a policy priority for government when juxtaposed with other imperatives like provision of social services and poverty reduction. Consequently, NEMA and related environment institutions have remained on the margins of the government and the national policy discourse. This is echoed by the Vision 2030 which affirms that "institutional arrangements for addressing environmental issues are not robust" and that "Kenya's current institutional framework to manage the environment is characterised by fragmentation".

The situation has been compounded by clandestine activities of the elite who seek to block environmental reforms because of their selfish interests. Strengthening of environmental governance exposes the elite to loss of revenue from activities such as

logging, quarrying and similar activities of natural resource extraction. This has contributed to the challenges characterising NEMA's operations and effectiveness.

The document by Caravari and Bird focuses Government's priority ranking of NEMA and does not take into consideration effect of NEMA's organisational culture on its performance.

The proposed research is to assess how organisational culture affects NEMA's response to emerging challenges of fragmentation, clandestine activities of the elite and government's ranking of NEMA.

### **2.3 Organisational Culture**

Armstrong (2006) defines Organisational Culture as the "pattern of values, norms, beliefs, attitudes, and assumptions that shape the way in which people behave and things get done. Values refer to what is believed to be important about how people and organisations behave. Norms are the unwritten rules of behaviour.

Lynch et al (2005) hold the same view and define Organisational culture as a "pattern of shared values and beliefs that help individuals understand organisational functioning and thus provide them with the norms for behaviour in the organisation". Values typically act as the defining elements of a culture. Lynch uses the organisational culture profile to identify various dimensions of organisational culture including innovation, stability, outcome orientation, team orientation and aggressiveness. It is not very clear as to which of these dimensions apply to NEMA. The proposed study therefore is to look at how NEMA's organisational culture affects its operations including programme management, personnel, administration and its overall effectiveness.

Making reference to Brown (1995), Willcoxson and Millet (2000) note that organisational culture gives the organisation a sense of identity. Consequently, members within that organisation will feel connected to that organisation because of its culture. A similar view is held by Duchon and Burns (2008) who affirm that all organizations have identities much the way all people have identities. An organization's identity develops over time as it adapts to both environmental and internal pressures, and what emerges is the collection of central and enduring attributes that make an organization unique and distinguishable from its competitors. Expressed through

policies, procedures, and behaviors, the organization's identity reflects the values and beliefs that lie at its core. Organizations are motivated to protect their identities and they do this by rewarding behaviors that will sustain a positive sense of self and reduce collective anxieties.

The effort to protect identity can become fixated on relieving anxiety, and when this happens, the identity itself takes on the qualities of narcissism (Duchon & Burns 2008). The extreme narcissistic organization becomes preoccupied with itself and its anxieties, and loses touch with its clients. Self-absorption becomes an everyday practice, and the organization uses *self-aggrandizement*, a sense of *entitlement*, and *denial* to project what has become an extreme narcissistic identity. Self-aggrandizement, entitlement, and denial replace rational, reality-based decision-making.

Duchon and Burns (2008) contend that extreme forms of organizational narcissism can harm organizations and even destroy them. An organization in the grip of extreme narcissism loses sight of the “reality” of its position in the marketplace and employs denial, self-aggrandizement, and a sense of entitlement to prop up its damaged sense of identity. It remains unclear as to whether NEMA performance is a manifestation of its narcissism.

Jarnagin and Sloan (2007) aver that behaviour in an organisation is determined by its culture than by directives from senior management. Moreover, most organisations find it impossible to implement any strategy that is inconsistent with its culture. The reality is that culture has a greater impact on an organisation's success than anything else management can do. Culture provides a pervasive context for employee actions.

Seel (2000) avers that culture is the *result* of all the daily conversations and negotiations between the members of an organisation. They are continually agreeing (sometimes explicitly, usually tacitly) about the ‘proper’ way to do things and how to make meanings about the events of the world around them. If you want to change a culture you have to change all these conversations—or at least the majority of them.



## 2.4 Organisational structure

Daft and Marcic (2007) aver that organizational structure should reflect the environment and should be congruent to specified strategies (form follows function). This implies that the organogram for any organization should be a reflection of its organizational culture.

Similar sentiments are held by Willcoxson and Millet (2000) who advocate for mainstreaming of organizational culture in the recruitment and training of personnel of any organisation. They aver that career development strategies adopted by organisations should reflect the strategy of the specified organisation.

Daft and Marcic opine that any organization needs to maintain a flexible and responsive posture towards the environment. They maintain that divisional structures promote differentiation because each division focuses on specific products and/or services.

According to Armstrong (2007), the structure of an organization could be regarded as a framework for getting things done. It consists of divisions, departments and formally constituted work teams into which activities related to particular processes are put together. The structure indicates who is accountable for directing, coordinating and defines management hierarchies i.e. who is responsible to whom, or what at each level in the organization. Armstrong (2007) defines an organizational structure as a “structure comprising all the tangible and regularly occurring features which help to shape members behavior”. Armstrong adds that ‘structures incorporate a network of roles and relationships and are there to help in the process of ensuring that collective effort is explicitly organized to achieve specified ends’.

Ghillyer (2009) holds the view that “a major part of an organization’s strategy for achieving its objectives deals with how the organization is structured. An appropriate structure will not guarantee success, but will improve the organization’s chances for success”. Apart from clarifying and defining strategy through delegation of authority and responsibility, an organization structure can either help or hinder strategy implementation. The proposed study is an attempt to establish how NEMA’s organizational structure influences its strategy implementation and ultimately its effectiveness.

Wright and Pandey (2008) report on their understanding of staff motivation by clarifying the mechanisms through which employer motivation influences employee attitudes which have a bearing on organizational performance. Wright and Pandey explicate the way organizational motivation and job satisfaction is mediated by the extent to which the employee perceives that his or her values are congruent with those of the organization in which they work. They opine that caution should be exercised when making claims regarding the effects of public service motivation and that emphasis should be placed on ways public sector organizations can foster employee–organization value congruence. Their study is however silent on the link between motivation and organizational culture. Wright and Pandey (2008) aver that public employees may work harder, perform better, and be more satisfied with their jobs, but only to the extent that they see a relationship between their public service motivation goals or values and those espoused by the work of their employing organization. If so, then person–organization value congruence should serve as an intervening or mediating variable that transmits the effect of public service motivation on job satisfaction.

Fernandezl and Moldogaziev (2010) opine that employee empowerment has been touted as a management approach that enables organisations to increase competitiveness, innovativeness, and responsiveness to clients. They add that in the public sector, empowerment is viewed as a means for improving the quality of public services and unleashing the creative talents of public employees. Fernandezl and Moldogaziev (2010) report on the empirical findings which indicate that simultaneously sharing power, information, resources, and rewards with employees improves effectiveness and productivity leading to innovativeness and increases employee job satisfaction. It might be useful to assess how power, information and resources are shared in NEMA.

Worley and Lawler (2009) opine that in an era when environments are changing faster and faster, successful organizations must be more agile and adaptable. Citing Capital One, a very successful financial services company, Worley and Lawler suggest that organizations should not “manage change” as if it were some unwanted intruder; and should not view change management as an afterthought to improve the chances of

getting some key resistors to “buy into” a new initiative. Instead, change should be integrated into the way organizations formulate strategies and restructure themselves.

Boyne and Meier (2009) investigate how performance of public organizations is affected by unpredictable changes in their external environment. They discuss the concept of environmental turbulence and its impact on organizational success and failure. They then develop arguments on the ability of managers to mitigate any negative consequences of turbulence by maintaining the structural stability of their organizations. Boyne & Meir highlight the influence of environmental turbulence on organizational performance but they do not spell out the opportunities and threats posed by environmental turbulence. My proposed study is to provide a more in-depth understanding of how NEMA responds to emerging opportunities and challenges occasioned by environmental turbulence (within the parameters of its organizational culture). What strategies does NEMA employ to ensure that it immune to unavoidable environmental fluctuations?

## **2.5 Knowledge Management**

Apart from its effect on the organogram, organizational culture may also affect knowledge management. DeLong and Fahey (2000) identify four ways in which organizational culture influences behaviours central to knowledge creation, sharing and use. The four ways include the definition of knowledge and which knowledge is worth managing, relationship between individual and organizational knowledge, social interaction and processes by which new knowledge is created.

Shaikh (2011) defines knowledge management as a concept in which organisations intentionally collect, organise, share and analyse their knowledge within the resources, documents and qualifications of employees. Skaikh (2011) posits that knowledge management ensures that "knowledge" is used as effectively and efficiently in achieving organisational goals. As a result, the knowledge management becomes essential factor in the creation and management of intangible asset of an organisation.

Mears (2003) posits that organizational culture has an effect on personnel reciprocal trust, openness, cooperation and time taken to help others. He avers that organizations must innovate or die adding that competitiveness comes from exploiting intellectual capital in ways that are more valuable and distinctive. Mears recommends that

organizations need to find ideas that can be developed quickly and cheaply and promote a strong team culture.

Nguyen and Mohamed (2010) investigate the relationship between leadership behaviors and knowledge management (KM) practices. They examine the influence of transformational and transactional leadership behaviors on KM, and the moderating effect of organizational culture on this relationship, in the context of small-to-medium sized enterprises (SMEs). Making reference to Bhatt (2001) Nguyen and Mohamed (2010) allude to the fact that an increasing number of organizations are turning to knowledge management (KM) as a key to leverage their distinctive core competencies in their pursuit of competitive advantage.

Leaders have an enormous impact on knowledge management practices within their organizations. According to Crawford (2005), leaders create the conditions that allow (or otherwise) participants to exercise and cultivate their knowledge manipulation skills, to contribute their own individual knowledge resources to the organization's pool of knowledge, and to have easy access to relevant knowledge. Castiglione (2006) complements Crawford and infers that leaders must attach a high value of knowledge, encourage questioning and experimentation through staff empowerment, building trust, and facilitating experiential learning on knowledge.

Milne (2007) posits that that knowledge sharing is the fundamental requirement of a knowledge-based organization. Some of the greatest challenges for organizations moving down the knowledge management path stem from well-established practices of hoarding knowledge, practices which, in the past, have been well rewarded. Employees' motivation was to hoard knowledge because of the competitive advantage that this would give them. Milne contends that the challenge now is to develop an organizational culture where sharing knowledge is the norm. In seeking ways to foster this culture managers are implementing incentive programmes in the belief that employees will be motivated to share their knowledge across the organization. Some organizations are investing large amounts of organizational resources towards this end.

Teng and Song (2010) posit knowledge sharing as a central concern in knowledge management. They provide a distinction between solicited knowledge sharing and

voluntary knowledge sharing and allude to the paradigm of cultural values being significantly related to effective knowledge transfer within the organization. Teng and Song explore how tasks, culture, technology and knowledge management processes affect the two types of knowledge sharing behavior (i.e. voluntary knowledge sharing and solicited knowledge sharing) in work units. Task characteristics (routineness), communication and inter-personal relations are considered critical drivers of knowledge sharing. Their findings are consistent with previous studies by Kelly and Jones (2001) which show that feeling of solidarity promotes members proactively engaging information processing activities.

Singh and Sharma (2011) analyze how the organizational culture and organizational learning impact on knowledge management. Singh & Sharma make reference to the work by Prusak (1997) and contend that a firm's competitive advantage depends on its knowledge, i.e. what it knows, how it uses what it knows and how fast it can know something new. They explicate some concepts relating to knowledge management, organizational culture, and organizational learning.

Fredricks (2011) highlights the importance of developing indices to monitor environmental justice policies. He brings to the fore benefits of monitoring effectiveness of policy initiatives and the need to determine whether funds are well spent and how best to achieve subsequent policy goals. In her article, Fredricks highlights challenges of quantifying progress towards policy targets and the inherent limits of using indicators. Fredrick's article does not take into account capacity limitations characterising some countries particularly those in sub-Saharan Africa. His proposed framework to aid the development of monitoring indices needs to be nuanced in tandem with the peculiarities of the different countries. NEMA needs to draw lessons from Fredrick's article and distil good practices in monitoring of environmental governance policies.

De Waal (2010) avers that "the scare resource of today is no longer capital or other tangible assets; it is the intangible resource of the knowledge, skills and mentality of the workforce". De Waal goes ahead to discuss what he considers characteristics of High performing Organisations. These characteristics include Processes, Human resource and Technology which are explicitly linked to achieving high performance. De

Waal looks at organisational management using various methods including the Balance Score Card and Six Sigma. De Waal's perception of today's organisational management is relevant to NEMA given the tacit need for NEMA to strengthen its internal processes and systems as well as its quest for performance-driven behaviour.

## **2.6 Coordination**

Bird and Kirira (2009) aver that NEMA has not effectively undertaken its coordination role with government ministries and other environmental governance actors. As a result, NEMA appears to have little authority for challenging sector policies that threaten environmental sustainability. Bird and Kirira add that consequent to lack of effective coordination, there is institutional rivalry between the various government environmental organisations. For example, Permanent Secretaries of some of the sectoral ministries identified in EMCA as key players openly admit not to be aware of what NEC does, nor do they attend its meetings. Such a situation means they are not involved in the formulation of environmental policies and therefore cannot be expected to implement them. Bird & Kirira opine that "under the present economic climate, with so much attention being given to securing high rates of economic growth, strengthening of NEMA's coordination role will require strong political backing. This underscores the urgent need for strengthening inter-agency coordination particularly in cases where several ministries and agencies have over-lapping mandates. Such a case involves the management of water catchments areas.

At least three ministries, namely, Environment, Forestry and Wildlife, and Water and Irrigation, are all responsible for the same environmental assets. In addition, the Ministry of Energy has some responsibility on account of the power generation function of these catchment areas. Such arrangements are recipe for conflicting mandates, overlaps, duplication and confusion regarding NEMA's specific role in environmental governance. NEMA needs to recalibrate its strategy to enable it meet the demands of an increasingly complex and dynamic environment.

Imperial (2005) opines that organizations often choose to work together because it is difficult or impossible to accomplish a task without collaborating. It is also possible that greater public value can be generated through joint action than can be achieved by working alone. Imperial (2005) adds that because information is often widely

dispersed, it is common to find collaborative efforts focused on reducing information asymmetries by developing common databases (e.g., geographic information systems), shared technical resources (e.g., computer models), integrated resource inventories, and other forms of data synthesis (e.g., annual reports, monitoring reports, etc.). Imperial refers to Bressers et al (1995) and notes that it is difficult for any one actor, or group of actors, to manage, or manipulate, the flow of problems and solutions onto the political agenda in the first place. Imperial catalogues advantages of collaboration including the elimination of information asymmetry through knowledge sharing and attainment of synergy by “bringing more expertise and ideas on the table”. Imperial’s document is however silent on the facilitators and inhibitors of inter-agency collaboration and that is why this study is necessary to ascertain as to why NEMA has not strengthened collaboration with other actors engaged in environmental activities in Kenya. The proposed study is to assess the effect of organisational culture on NEMA’s initiatives to forge new and different partnerships.

Kiringai & West (2002) affirm that budgetary resource reallocations require government to define national development priorities, usually by formulating a strategic plan that defines what the government intends to accomplish; The Mid Term Expenditure Framework (MTEF) improves the link between planning and budgeting by placing greater emphasis on the medium-term. One of the main goals of the MTEF approach is to introduce an output orientation in place of the prevailing focus on control of inputs. Resource allocations should be based on the ability of each agency to deliver specified goods and services that address long-term development objectives while maintaining an acceptable standard at the lowest cost. It is not very clear as to how the MTEF has impacted on NEMA’s performance.

Crook (2010) evaluates delivery of public services in sub-Saharan Africa following many decades of reform efforts and capacity building initiatives. He highlights lack of facilitation as one of the impediments to delivery of public service. My proposed study is to ascertain availability of the requisite resources (staff, equipment and vehicles) to enable NEMA execute its mandate.

Thompson and Mathys (2008) depict a balance scorecard approach as a means of translating an organization's vision into actions that support the desired organizational

performance. They portray the “Aligned Balanced Scorecard (ABS)” as a tool for developing high performance management systems and a way of connecting strategies for better organizational performance.

## **2.7 The relationship between variables and literature review**

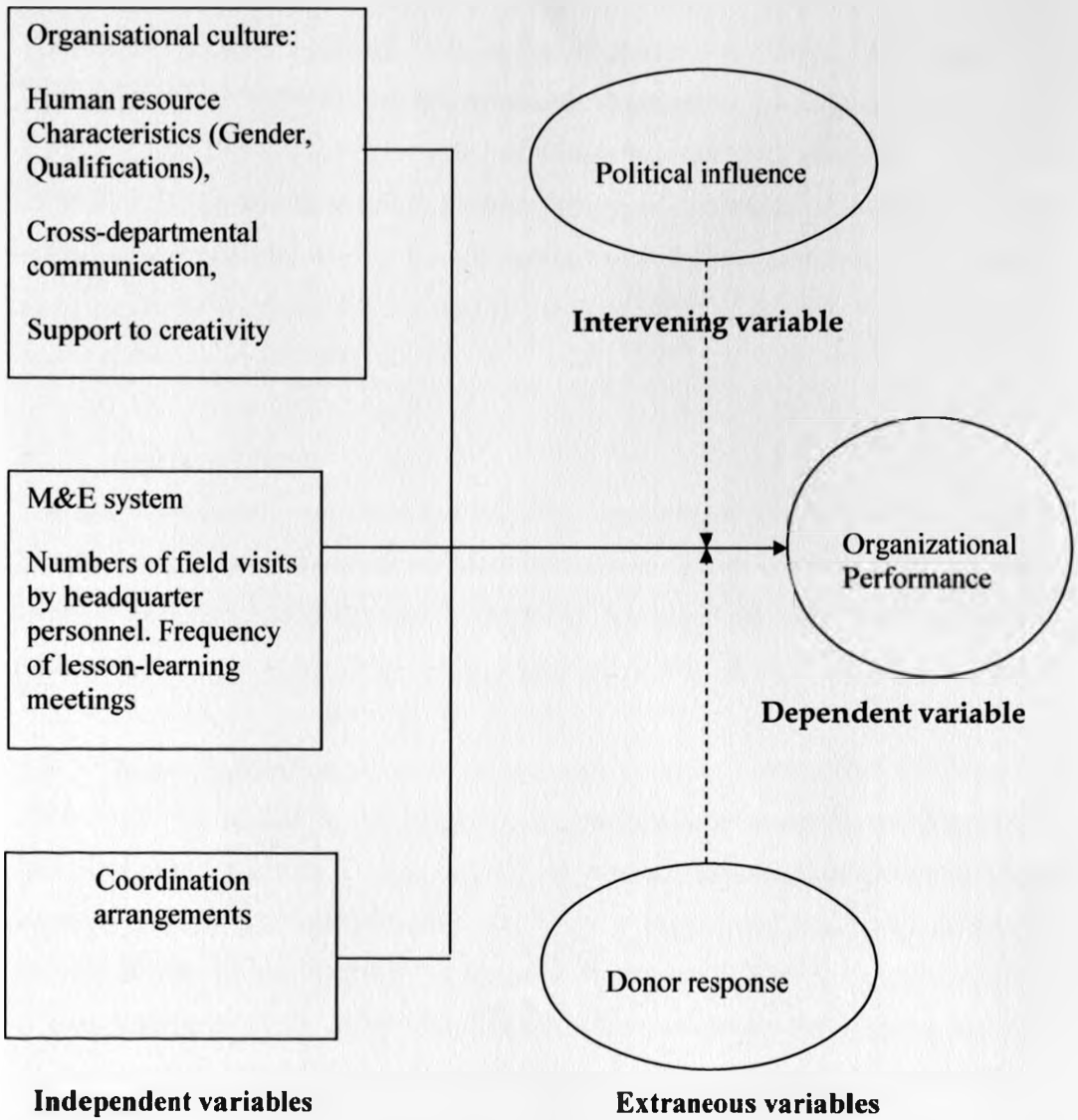
This study was conducted to investigate the relationship between organizational culture and NEMA’s performance. Organisational culture was operationalised by several variables including human resource characteristics, organizational values (freedom for personnel to speak their mind, creativity and innovativeness, talent management and communication). Organizational culture was the independent variable while NEMA’s performance was the dependent variable.

The basic tenet of Monitoring & Evaluation is to strengthen NEMA’s effectiveness in responding to challenges of environmental governance through evidence based programming. To enhance its performance, NEMA needs to be a continuously learning organization taking stock of current procedures, drawing lessons and distilling good practices. Against this background, this study was undertaken to gauge the relationship between NEMA’s M&E and the knowledge management system. Monitoring was defined as a continuous process which entails collecting and analyzing data in order to assess programme processes and results to provide corrective action and to facilitate evaluations. Staffing of NEMA’s M&E unit, budgetary allocations for the unit and number of field visits undertaken by headquarter personnel were considered as the indicators for Monitoring & Evaluation. Frequency of updating the knowledge repository, number of personnel contributing to the repository and percentage of personnel using the knowledge repository were considered indicators of knowledge management.

NEMA’s mandate is fairly broad and requires concerted efforts of multiple actors possessing diverse capabilities with each actor performing different but inter-dependent activities. For NEMA to attain its objectives, it needs to enhance its inter-organizational relationships through strengthened coordination. This study considered the relationship between coordination and NEMA’s performance with a focus on coordination arrangements between NEMA, Ministry of Environment and other lead agencies, NGOs and Civil Society Institutions.



Coordination was operationalized by various variables including joint programmes, number and/or frequency of coordination meetings, cross-training sessions, joint inter-agency analysis and the NEAP process. NEMA's performance was measured using EIAs, support to government ministries and level of collaboration with NGOs and civil society institutions.



**Figure 1: Conceptual Framework**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter provides the methodology used in the study including research design, sampling technique, data collection methods and data analysis. This study sought to assess the effect of various factors on NEMA's performance using qualitative and quantitative research methods. The sampling frame was limited to NEMA, UN Agencies, donors and the eighteen ministries specified in the first schedule of the EMCA (Annex I). A stratified sampling technique was employed with each department at NEMA being considered as a stratum. Similarly, ministries on the EMCA First Schedule were considered as strata. Disproportionate stratified sampling was applied to specified strata to capture the nuances characterising some elements of the sample for example the ministry of environment.

#### **3.2 Research Design**

The study was qualitative in nature and took a deductive approach entailing formulation of research questions. Data was collected in response to each of the research questions and was augmented by desk reviews of official documents and other pieces of written information.

#### **3.3 Target Population**

This study was limited to the NEMA head office which comprises the Directorate, Environmental Education, Compliance & Enforcement, Planning and Research, Legal services, Finance and administration plus Coastal Marine and freshwater. It did not include Provincial and District Environment Committees. NEMA headquarters was chosen because it is the nerve centre of environmental policy coordination and it is where organisational culture has the greatest impact when compared to its field offices. The study entailed face to face interviews with the NEMA leadership as well as senior officials from the 18 ministries specified in the EMCA first schedule. Other respondents in the study included 6 respondents from NEMA's development partners including UNEP, UNDP, UN Habitat, EU, USAID and Embassy of Denmark in Nairobi. Selection of development partners to be interviewed was based on the level of collaboration between them and NEMA. For example in 2006, Denmark, Sweden and

the Government of Kenya jointly initiated a five-year Environmental Program Support Project.

### 3.4 Sampling procedure

According to Mugenda and Mugenda (2003), “for descriptive studies, 10% of the accessible population is enough”. In an effort to enhance precision and reduce the sampling error, the researcher considered a higher number of respondents. Out of 105 NEMA personnel at the headquarters, a sample population of 40 potential respondents was selected through a stratified random sampling technique using the Authority’s organogram and staffing table. Each of the seven departments of NEMA was considered a stratum. The target was to interview at least 5 individuals from each department (stratum). Fifteen (15) senior managers and twenty five (25) technical personnel were selected from a sample frame of 105 subjects. Departmental heads were purposively selected while other respondents were randomly selected. In cases where the departmental head was away, the officer in charge was interviewed. Respondents from the ministries were selected using the EMCA first schedule. A stratified sampling technique was employed and 18 respondents were purposively selected from a sample frame of 36 subjects drawn from the 18 ministries. Each ministry was considered as one stratum. Disproportionate stratified sampling was adapted to capture nuances characterizing specific Ministries such as the Ministry of Environment. The number of respondents selected from the Ministry of Environment was higher than the number of respondents from other ministries given that the Ministry of Environment is the parent organ of NEMA and is the lead agency for environmental programmes. Purposive sampling was employed in the selection of 4 respondents from UNEP and 2 each from UN HABITAT and UNDP. Similarly, purposive sampling was employed in the selection of 1 respondent from DANIDA and 1 respondent from USAID.

**Table 3.1 – Sampling matrix**

	Target Population	Sample Population
NEMA	105	40
Government Ministries	36	18
UNEP/UN HABITAT/ UNDP	06	04
Donors	08	02
Total	155	64

### **3.5 Methods of Data Collection**

Questionnaires were used to obtain information from NEMA, specified government ministries, UNEP and the donor community. Each item in the questionnaire was tailored to cover all the relevant information required to address specified objectives, research questions and hypotheses. Questionnaires had a mixture of closed and open-ended questions using a Likert rating scale of 1-5. Primary data was obtained through face-to-face interviews with NEMA personnel and staff of the eighteen ministries specified in the EMCA first schedule. Secondary data was obtained from NEMA's archives, journals and online resources. Questionnaires having both open-ended and closed questions were designed and pre-tested. Data was analysed using SPSS. Computations were carried out for mean, standard deviation and correlations. Variables will be categorized and scaled.

Efforts were made to minimize bias by avoiding leading questions and recall questions. Each research question or objective will be divided into specific investigative questions. The order and flow of questions was designed in such a way that they were logical to the respondents. Variables were identified about which data to be collected to answer each of the investigative questions. The background to the study (in Chapter 1) was used to formulate an introductory part explaining why respondents need to participate in the survey. Questionnaires were pilot tested to refine the questions and to enable respondents have less problems in answering the questions. Pilot testing also enabled me to assess the validity of the questions and likely reliability of the data that was to be collected. Respondents were contacted before the interview. Given that respondents for each organization were located in close proximity to one another, the researcher personally administered the questionnaires. This provided me the opportunity to seek clarification promptly.

### **3.6 Validity and reliability of the study**

To ensure adequate coverage, respondents were selected from a diverse sampling frame including policy makers, financiers, advisers and practitioners of environmental governance. Data sought from respondents was based on the objectives of the study and research questions. Questions focused on main elements of NEMA's organizational culture, human resource configuration, M&E, knowledge management, performance and. Human Selection criterion of respondents was based on familiarity with NEMA's

mandate and its operational landscape. The study considered seven variables including NEMA's organizational culture, M&E, knowledge management, coordination arrangements, NEMA's performance plus demand for NEMA's products and services.

### **3.6.1 Validity**

Borg and Gall (1998) define validity as the degree to which a test measures what it purports measure while Mugenda and Mugenda (2003) define validity as the accuracy or meaningfulness of the inferences which are based on research results. Taylor, Sinha and Ghosal (2011) define validity as the success of a method in probing and/or assessing what it sets out to probe or assess. To ensure validity of the survey, the questionnaire was developed in such a way that it was very clear and easy to use. Questions were designed in such a way that they were connected to the variables specified in the conceptual framework. Organisational Culture was measured using NEMA's Human resource characteristics (gender, qualifications), cross-departmental communication and support to creativity and innovativeness. NEMA's Monitoring & Evaluation system was measured by frequency of lesson-learning M&E meetings while knowledge management was measured using number of personnel contributing to the knowledge repository, regularity of updating the knowledge repository and uptake of the knowledge management products and services. Coordination was measured by the number of inter-agency meetings and other coordination platforms like participation in joint activities. Validity tests were conducted to ensure that the data collected was relevant to the objectives of the study and research questions. Construct validity was measured by comparing data obtained from the ministries, UNEP and donors with the results obtained from NEMA.

### **3.6.2 Reliability**

Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research instrument yields consistent results after repeated trials. Jopper (2006) defines reliability as the extent to which results are consistent over time and are an accurate representation of the total population under study. According to Taylor, Sinha and Ghosal (2011) reliability is a criterion that refers to the consistency of data stemming from the use of a particular research method. A measure is reliable to the extent that its iterated applications under the same conditions (by different researchers for example) yield the same result. Reliability was measured through consistency of research

findings. There were instances where information was sought more than once from respondents in the various departments particularly the M&E department, Education for Sustainable Development and the Planning and Research Department. Observations from the different respondents were compared for any inconsistencies.

### **3.6.3 Ethical Issues**

Efforts were made to ensure that the study does not present any risks to the respondents while taking cognizance of their right to privacy, freedom from coercion and the right not to reveal any information considered personal and/or intrusive. Participants provided responses based on their informed consent.

### **3.7 Operationalisazion of variables**

Organizational culture, coordination arrangements and Monitoring & Evaluation were considered the independent variables while political influence, donor response and UN interventions were considered extraneous variables that could influence NEMA's performance. NEMA's performance was defined by the quality of its products and services based on the number and frequency of requests from environmental actors.

**Table 3.2: OPERATIONALISATION OF VARIABLES**

<b>Purpose 1</b>	<b>To assess the effect of organisational culture on NEMA's Effectiveness</b>	
<b>Variables</b>	<b>Independent variables</b>	<b>Dependent Variables</b>
	<b>Organisational culture</b>	<b>NEMA's Performance</b>
<b>Indicators</b>	Human resource characteristics (Gender, Academic qualifications)	Number of field visits Joint programmes with Government ministries.
	Inter- /Intra- organisational communication	Cooperation with other actors
	Support to Creativity	
<b>Measurement</b>	Likert scale	Likert scale
<b>Data Collection</b>	Structured interviews using questionnaires	Structured interviews using questionnaires
<b>Data Analysis</b>	Frequencies, Cross tabulations	Frequencies, Cross tabulations
<b>Purpose 2</b>	<b>To assess NEMA's M&amp;E system on Knowledge creation and sharing</b>	
	<b>NEMA's M&amp;E system</b>	<b>Knowledge Management</b>
<b>Indicators</b>	Staffing levels of the M&E department. Frequency and regularity of lesson learning M&E meetings.	Number of personnel using knowledge management products and services. Ease of access to information
<b>Measurement</b>	Ratio scale	Likert scale, ratio scale
<b>Data collection</b>	Structured interviews using questionnaires	Structured interviews using questionnaires
<b>Data analysis</b>	Frequencies, Cross tabulations	Frequencies, Cross tabulations
<b>Purpose 3</b>	<b>To assess the influence of existing coordination arrangements on NEMA's performance</b>	
<b>Variables</b>	<b>Independent variables</b>	<b>Dependent Variables</b>
	<b>Coordination mechanisms</b>	<b>NEMA's Performance</b>
<b>Indicators</b>	Number of meetings with the Ministry of Environment per year. Programmes undertaken jointly. Rating of cooperation with environmental actors	Quality of NEMA's products and services. Receipt of requests and referrals from Government institutions and other actors.
<b>Measurement</b>	Ration scale, Likert scale	Ratio scale
<b>Data Collection</b>	Structured interviews using questionnaires	Structured interviews using questionnaires
<b>Data Analysis</b>	Frequencies, Cross tabulations	Frequencies, Cross tabulations



### **3.8 Methods of data analysis**

The questionnaire was designed in such a way that most questions yield measurable responses using interval or ratio scales. The responses were assigned numbers for ease of analysis. Raw quantitative data was edited and cleaned to ensure good quality and ready for analysis. It was then entered and analyzed using SPSS (Statistical Package for Social Sciences). Results were tested for mean, variance, standard deviation and correlation for specified items in the questionnaire to give an indication of how closely related or unrelated the variables were. Similarly, responses to open-ended questions were disaggregated into conceptual units (categorized) and numbers assigned to them. After categorization, secondary data was analyzed to determine its adequacy, consistency and usefulness in answering research questions. In cases where there was confusion regarding answers to open-ended questions, follow up interviews were made with the specific respondents seeking clarification and collecting the right data. In some instances, key messages from respondents were reported verbatim to validate other findings and draw verifiable conclusions.

Organisational culture was measured through human resource characteristics, intra-organisational communication and support to innovativeness and creativity. NEMA's performance was measured using its products/services to its clients within the framework of its mandate and how well the Authority met its stated mission, purpose, goals and objectives. Performance was gauged by the quality of NEMA's products and services. Customer satisfaction as contraindicated by the demand and repeat requests for NEMA products and services.

### **3.9 Summary**

This chapter provides an overview of the research methodology specifies the sampling technique to be adopted for the proposed study and stipulates the type of data required and possible sources of specified data. The chapter also deals with measurements, scaling techniques as well as decisions regarding data collection methods, processing, analysis and presentation of research findings. My findings have implications for future research given that the evidence highlights the importance if organisational performance.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND INTERPRETATION**

#### **4.1 Introduction**

This section comprises data analysis, presentation and interpretation based on the data collected from NEMA personnel and respondents from Government Ministries specified in the EMCA First Schedule. It provides overview of NEMA's organizational culture, monitoring & evaluation system, knowledge management practices and coordination arrangements. Sub-sections are based on the four aforementioned independent variables namely: Organisational Culture, Monitoring & evaluation, Knowledge Management plus Coordination. Organizational structure, human resource characteristics, support to creativity and innovativeness as well as its intra-organisational cooperation, communication and collaboration were considered as the metrics defining NEMA's organisational culture. Respondents included Directors, Deputy Directors, Principal Environmental officers, Senior Environmental, Environmental Impact assessment officers and Administration personnel. For purposes of this study, the Director General, Departmental Directors and Director were considered Senior Management. Principal environmental officers and Senior Environmental /Administrative Officers were considered as middle management. Non-administrative personnel below the rank of Senior Environmental officer were considered technical personnel.

##### **4.1.1 Response rate**

Out of 40 individuals selected for the study at NEMA, 35 were available and responded to the questionnaire thus giving a response rate of 87.5%. Out of the 18 potential respondents selected from Government ministries, 9 were available to provide responses to the questionnaire thus giving a response rate of 50%. All potential respondents selected from the United Nations and NEMA's bilateral partners were available for interview. A summary of the response rate is indicated in the table 4.1 below:

**Table 4.1 – response rate**

	Sample population	Population interviewed	Response rate
NEMA	40	35	87.7%
Government Ministries	18	9	50%
UN Organisations	04	04	100%
Donors	02	02	100%
<b>Total</b>	<b>64</b>	<b>50</b>	

#### 4.1.2 NEMA’s Human resource Characteristics by Gender category

Gender was considered as one the dimensions of organizational culture. The study looked at recruitment policy to ascertain the extent of gender sensitivity

**Table 4.2 Designations by gender**

Designation			Gender		
			Male	Female	Total
Senior Management	Count		4	0	4
	% within Designation		100.0%	.0%	100.0%
	% of Total		11.4%	.0%	11.4%
Middle management	Count		5	6	11
	% within Designation		45.5%	54.5%	100.0%
	% of Total		14.3%	17.1%	31.4%
Technical personnel	Count		13	7	20
	% within Designation		65.0%	35.0%	100.0%
	% of Total		37.1%	20.0%	57.1%
Total	Count		22	13	35
	% within Designation		62.9%	37.1%	100.0%
	% of Total		62.9%	37.1%	100.0%

From the findings of the study, all (100%) senior managers who responded to the questionnaire were male. There was a very slight difference between the proportion of female middle managers (54.5%) and male counterparts (45.5%). Out of the 35 respondents interviewed, 37.1% were female which is indicative of NEMA’s human resource policy. This is consistent with Kenya’s constitution which provides for at least 30% of key positions to be held by women.

### 4.1.3 Qualifications of NEMA personnel

Respondents' designations were cross-tabulated with education level to establish whether academic qualifications were considered as a critical factor in the recruitment of NEMA personnel.

**Table 4.3 Academic qualifications of NEMA personnel by designation**

Designation		Highest level of Education			Total
		Bachelors degree	Masters Degree	PhD	
Senior Management	Count	0	1	3	4
	% within highest level of Education	.0%	5.0%	100.0%	11.4%
Middle management	Count	1	10	0	11
	% within highest level of Education	8.3%	50.0%	.0%	31.4%
Technical personnel	Count	11	9	0	20
	% within highest level of Education	91.7%	45.0%	.0%	57.1%
Total	Count	12	20	3	35
	% within highest level of Education	100.0%	100.0%	100.0%	100.0%

From the findings, it can be concluded that NEMA personnel are highly educated with 75% of senior management holding PhDs and 57.2% of the respondents having Masters' degrees. Out of the 20 respondents who had Master's degrees, 50% were part of middle management, 45% were technical personnel and 5% were from the senior management category. Out of the 12 persons with bachelor's degrees, 91.7% were technical personnel and only one (8.3%) held a management position. From the findings, it can be concluded that NEMA is endowed with highly qualified personnel who were recruited on merit as evidenced by the relationship between designation and qualifications.

### 4.1.4 Support to Creativity and Innovativeness

Supervisory encouragement and support to innovation were considered as indicators of NEMA's organisational culture. The study sought to establish the extent to which management supports creativity. Respondents were asked if they were encouraged to think and behave creatively.

**Table 4.4 Perceptions of NEMA personnel on organisational support to creativity.**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very strongly	18	51.4	51.4	51.4
Don't know	13	37.1	37.1	88.6
Not encouraged	4	11.4	11.4	100.0
<b>Total</b>	<b>35</b>	<b>100.0</b>	<b>100.0</b>	

Out of the 35 respondents, 51.4% indicated that NEMA personnel were strongly encouraged to think and behave creatively, while 37.1% did not know whether NEMA had a policy of encouraging its personnel to think and behave creatively and 11.4% indicated that NEMA personnel were not encouraged to think and behave creatively. These findings were cross-tabulated with 'Designation' to establish the relationship between seniority and freedom to think and behave creatively.

**Table 4.5 – Encouragement to think and behave creatively by designation**

		Designation			Total
		Senior Management	Middle Management	Technical personnel	
Are NEMA	Very strongly	11.4%	20%	20%	51.4%
Personal encouraged	Don't Know	0	8.6%	28.6%	37.2%
To think and behave	Not	0	2.9%	8.6%	11.4%
Creatively?	encouraged				
<b>Total</b>		<b>11.4</b>	<b>31.4%</b>	<b>57.2%</b>	<b>100%</b>

The highest proportion of respondents who did not know whether NEMA personnel were encouraged to think and behave creatively was technical personnel who constituted 28.6%. Similarly, the highest proportion of respondents who indicated that NEMA personnel were not encouraged to think and behave creatively was technical personnel who constituted 8.6%. All the 4 senior managers (100%) indicated that NEMA personnel were very strongly encouraged to think and behave creatively. Out of the 35 respondents, 20% from the middle management category affirmed that NEMA personnel were very strongly encouraged to think and behave creatively while 8.6%

from the same middle management category did not know whether NEMA personnel were encouraged to think and behave creatively. This implies that the majority of the middle management category indicated that NEMA personnel are encouraged to think and behave creatively. From these findings, we can conclude that there is a relationship between designation and the freedom to think and behave creatively.

#### 4.1.5 NEMA’s mandate

The study sought to establish respondents’ understanding of the Environmental Management Coordination Act (EMCA) and NEMA’s mandate.

**Table 4.6- Perceptions of NEMA’s mandate**

	Frequency	Percent	Valid Percent	Cumulative Percent
Coordination	15	42.9	42.9	42.9
Supervision	18	51.4	51.4	94.3
Legislation				
Advise to Government	1	2.9	2.9	97.1
Research & analysis	1	2.9	2.9	100.0
Total	35	100.0	100.0	

Findings of the study indicate out of the 35 respondents, 51.4% considered supervision and enforcement of environmental legislation as the core function of NEMA while 42.9% indicated that NEMA’s core function was coordination and one respondent (2.9%) indicated provision of advice to government as NEMA’s core function. Another 2.9% indicated that research and analysis were the core function of NEMA.

#### 4.1.6 Intra-Organisational Cooperation and Communication

Intra-organizational cooperation, communication, level of information sharing and collaboration were considered as the key elements of organizational culture. Respondents were asked to provide a rating of NEMA’s cross-departmental cooperation and communication.

**Table 4.7 NEMA's cross-departmental cooperation and communication.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Average	17	48.6	48.6	48.6
	Good	12	34.3	34.3	82.9
	Poor	6	17.1	17.1	100
	Total	35	100.0	100.0	

Out of the 35 respondents, 48.6% indicated that the cross departmental cooperation and communication was average while 34.3% indicated that NEMA's cross-departmental cooperation and communication was good and 17.1% indicated that NEMA's cross-departmental cooperation and communication was poor. This information was cross-tabulated with designation as indicated in the table below;

**Table 4.8 - Rating of NEMA's cross-departmental cooperation and communication cross-tabulated with Designation**

		Designation				
		Senior Management	Middle Management	Technical personnel	Total	
Rating of NEMA's cross-departmental cooperation and communication	Good	Count	3	4	5	12
		% of Total	8.6%	11.4%	14.3%	34.3%
	Average	Count	1	6	10	17
		% of Total	2.9%	17.1%	28.6%	48.6%
	Poor	Count	0	1	5	6
		% of Total	.0%	2.9%	14.3%	17.1%
Total	Count	4	11	20	35	
	% of Total	11.4%	31.4%	57.1%	100.0%	

Out of the 4 senior managers, 3 indicated that NEMA's cross-departmental cooperation was good and 1 indicated that it was average. None of the senior managers indicated that NEMA's cross-departmental cooperation and communication was poor. Out of the 11 respondents of the middle management cadre, 4 indicated that NEMA's cross-departmental cooperation and communication was good while 6 indicated that it was average and 1 indicated that it was poor. Out of the 20 technical personnel, 5 indicated that NEMA's cross-departmental cooperation and communication was good while 10

indicated that it was average and 5 indicated that NEMA’s cross-departmental cooperation and communication was poor. Technical personnel provided the highest proportion of respondents who indicated that NEMA’s cross-departmental cooperation and communication was poor. From these findings, we can conclude that there is a relationship between seniority and cross-departmental cooperation and communication.

#### 4.1.7 NEMA’s Performance

One of the variables used to measure NEMA’s performance was the number of visits undertaken by headquarter personnel over a three-year period (2009 – 2011).

**Table 4.9 - Number of visits by HQ personnel to Provincial Environment Offices**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Number of visits in 2009	35	.00	10.00	86.00	2.4571	2.85269
Number of visits in 2010	35	.00	9.00	89.00	2.5429	2.60478
Number of visits in 2011	35	.00	9.00	81.00	2.3143	2.38588
Valid N (listwise)	35					

The highest mean was 2.5429 recorded in 2010 and the lowest mean was 2.3143 recorded in 2011. The highest standard deviation was 2.85269 recorded in 2009 while lowest standard deviation was 2.38588 recorded in 2011. These mean values could be interpreted as the average number of trips made by each respondent during the reporting period. Field visits are required for support to the field offices, supervision and monitoring of ongoing projects as well as following up on Environmental Impact Assessments and Environmental Audits. Given that NEMA is supposed to be a field-driven organization, an average of 3 field trips per year for each respondent is rather low.



**4.2 Effect of NEMA's Monitoring & Evaluation system on Knowledge Management**

Respondents were asked how if the Authority had a system for Monitoring and Evaluation. Respondents were also asked if M&E products were feeding into the knowledge repository.

**Table 4.10 Perceptions of NEMA personnel on the existence of the M&E unit**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	33	94.3	94.3	94.3
	No	1	2.9	2.9	97.1
	Don't Know	1	2.9	2.9	100.0
Total		35	100.0	100.0	

Out of the 35 respondents, 94.3% affirmed NEMA having a Monitoring & Evaluation unit while 2.9% indicated that NEMA did not have a monitoring & evaluation unit. One respondent (2.9%) did not know whether the Authority had a monitoring and evaluation unit. This information was cross-tabulated with knowledge creation and distribution.

**Table 4.11 Availability of the knowledge creation and distribution system cross-tabulated with perceptions of the M&E unit**

			Has NEMA got a Monitoring & Evaluation unit?			Total
			Yes	No	Don't Know	
Has NEMA got a system for knowledge creation and distribution?	Yes	Count	20	0	1	21
		% of Total	57.1%	.0%	2.9%	60%
	No	Count	7	1	0	8
		% of Total	20%	2.9%	.0%	22.9%
	Don't know	Count	6	0	0	6
		% of Total	17.1%	0%	0%	17.1%
Total		Count	33	1	1	35
		% of Total	94.3%	2.9%	2.9%	100%

Out of the 35 respondents interviewed, 60% indicated that NEMA had a system for knowledge creation and distribution while 22.9% indicated that the authority did not have such a system and 17.1% indicated that they did not know whether such a system existed in NEMA. Out of the 8 respondents who indicated that NEMA did not have a system for knowledge creation and distribution, 7 (87.5%) indicated that NEMA had a Monitoring & Evaluation unit while 1 (12.5%) indicated that NEMA did not have a Monitoring & Evaluation unit. All the 6 respondents who did not know whether NEMA had a system for knowledge creation and distribution affirmed NEMA having a Monitoring & Evaluation unit. From these findings, we can conclude that there is no relationship between Knowledge Management and M&E.

#### 4.2.1 The link between Monitoring & Evaluation with Knowledge Management

Respondents were asked about providing inputs to the knowledge repository and utilization of products and services from the knowledge repository.

**Table 4.12 Number of staff regularly contributing to the knowledge repository**

	Frequency	Percent	Valid Percent	Cumulative Percent
0	13	37.1	37.1	37.1
1-3	1	2.9	2.9	40.0
4-6	8	22.9	22.9	62.9
7-9	13	37.1	37.1	100.0
<b>Total</b>	<b>35</b>	<b>100.0</b>	<b>100.0</b>	

Out of the 35 respondents, 37.1% indicated that that between 7-9 personnel were contributing to the organizational knowledge repository and an equal proportion of respondents (37.1%) indicated that the number of NEMA personnel contributing to the knowledge repository was zero. 22.9% indicated that between 4-6 personnel were contributing materials to the knowledge repository. The least proportion of respondents (2.9%) indicated that 1-3 personnel were contributing material to the knowledge repository while another 37.1% of the respondents indicated that the number of NEMA personnel contributing to the knowledge repository was zero. This means that the maximum number of personnel providing content for the regular updating of the knowledge repository was nine (9).

**Table 4.13: Usage of material from the knowledge repository**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	15	42.9	42.9	42.9
	1-25	16	45.7	45.7	88.6
	26-50	2	5.7	5.7	94.3
	51-75	2	5.7	5.7	100.0
	Total	35	100.0	100.0	

Out of the 35 respondents, 45.7% indicated that 1-25 NEMA personnel were utilizing material from the knowledge repository while 42.9% indicated that there were no NEMA personnel utilizing material from the knowledge repository and 5.7% indicated that between 26-50 personnel were utilizing material from the repository. Another proportion of 5.7% indicated that between 51-75 personnel were utilizing material from the knowledge repository. From these findings, we can deduce that the knowledge management section has not marketed itself sufficiently within the organization thus the low uptake of knowledge management products and services.

**Table 4.14: Access to the knowledge repository**

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Easy	11	31.4	31.4	31.4
Slow internet speed	16	45.7	45.7	77.1
Spasmodic and unreliable	8	22.9	22.9	100.0
Total	35	100.0	100.0	

Out of the 35 respondents, 31.4% indicated that it was very easy to access information from the knowledge repository while 45.7% expressed disappointment over the slow internet speed and 22.9% indicated that access to the knowledge repository was spasmodic and unreliable. The situation has been compounded by the challenges of accessing information from the repository as indicated in the Table 4.13 above.

**4.3 Effect of coordination arrangements on NEMA’s performance**

In this study, I examined how coordination influences NEMA’s performance. The level of information sharing within and outside the authority, inter-agency coordination and collaboration plus shared analysis and joint planning were considered as the key elements of coordination. NEMA’s performance was gauged by its quality of service plus quantum of requests and referrals from government ministries and other organizations engaged in environmental programmes. Cross-departmental communication and collaboration was cross-tabulated with ‘cooperation among environmental actors to see if there is a relationship between intra-organizational cooperation and collaboration with external stakeholders.

**Table 4.15 - Rating of NEMA's cross-departmental cooperation and communication cross tabulated with rating of cooperation among environmental actors**

		Rating of NEMA's cross-departmental cooperation and communication			
		Poor	Average	Good	Total
Rating of cooperation among environmental actors with NEMA	Good	33.3%	52.9%	50.0%	48.6%
	Average	50.0%	29.4%	50.0%	40.0%
	Poor	16.7%	17.6%		11.4%
Total		100.0%	100.0%	100.0%	100.0%

Out of the 35 respondents, 48.6% indicated that cooperation among environmental actors was good while 40% indicated that cooperation among environmental actors was average and 11.4% indicated that cooperation was poor. Findings of the study also indicate that out 50% of the respondents who indicated that cross-departmental cooperation and communication was good also affirmed cooperation among environmental actors being good. Similarly, 52.9% of the respondents who indicated that cross-departmental communication and cooperation was average affirmed that cooperation among environmental actors was good. In the second column of table 4.15, it was observed that 29.4% of the respondents indicated that both cross-departmental cooperation and cooperation among environmental actors were average while 17.6%

indicated that cooperation among environmental actors was poor. From these findings, we can conclude that there is no relationship between NEMA's intra-departmental cooperation and communication and inter-organizational cooperation among environmental actors.

#### 4.3.1 Meetings with Ministry of Environment

Meetings with the Ministry of Environment were considered as one of the coordination mechanisms available to NEMA given that they provide the necessary forum for interaction with various environmental actors and other stakeholders. During the study, respondents were asked to provide information on the frequency of their meetings with NEMA.

**Table 4.16 meetings with the Ministry of Environment by Designation**

		Designation			Total		
		Senior Management	Middle management	Technical personnel			
Frequency of meetings with the Ministry of Environment	Fortnightly	Count	2	0	2	4	
		% of Total	5.7%	.0%	5.7%	11.4%	
	Monthly	Count	2	3	7	12	
		% of Total	5.7%	8.6%	20%	34.3%	
	Quarterly	Count	0	7	6	13	
		% of Total	0%	20%	17.1%	37.1%	
	Annually	Count	0	1	5	6	
		% of Total	.0%	2.9%	14.3%	17.1%	
	<b>Total</b>		<b>Count</b>	<b>4</b>	<b>11</b>	<b>20</b>	<b>35</b>
			<b>% of Total</b>	<b>11.4%</b>	<b>31.4%</b>	<b>57.1%</b>	<b>100%</b>

Out of the 35 respondents, 11.4% affirmed attending meetings fortnightly while 34.30% indicated that they attend meetings on monthly basis and 37.1% indicated that they attend meetings every three months. Findings of the study also indicate that 17.1% of the respondents attended meetings once a year. As can be gleaned from the first column of table 4.15, out of the 4 senior managers interviewed, 2 attend meetings every two weeks while another 2 attend meetings every month. Similarly, out of the 11

middle cadre managers, 8.6% attend meetings at Ministry every month while 20% attend meetings every three months and 2.9% indicated attending meetings once a year. Out of the 20 respondents of the technical personnel category, 34.3% indicated attending meetings every month while 17.1% attending meetings every three months and 14.3% indicated attending meetings once a year. Findings of the study also indicate 5.7% of technical personnel participating in meetings every two weeks. From these findings, we can conclude that there is a relationship between seniority and frequency of attending meetings. Participation of technical personnel in fortnightly and monthly meetings could be attributed to the fact that technical personnel usually accompany senior managers to some of the meetings to provide technical information whenever necessary. The study also considered the purpose of meetings with the Ministry of Environment and mineral resources.

**Table 4.17 Purpose of meetings with the Ministry of Environment**

	Frequency	Percent	Valid Percent	Cumulative Percent
Programme Management	16	45.7	45.7	45.7
Budget and administrative issues	3	8.6	8.6	54.3
Coordination, Information Sharing & Joint Planning	16	45.7	45.7	100
<b>Total</b>	<b>35</b>	<b>100.0</b>	<b>100.0</b>	

Findings of the study indicate 45.7% of the respondents attend meetings with the Ministry of Environment to discuss issues related to coordination, information sharing and joint planning. Similarly, another 45.7% of the respondents indicated that meetings with the Ministry of Environment served as a forum for deliberating on issues deliberate on issues regarding environmental programme management while 8.6% of the respondents indicated that the purpose of participating in meetings with the Ministry of Environment was to ensure regular consultations and reporting on budgetary and administrative matters.

### 4.3.2 Joint Programming with Government ministries

Respondents were asked if they ever participated in any joint programming activities with Government ministries.

**Table 4.18: Feedback on joint programming with government ministries**

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	28	80	80	80
No	7	20	20	100.0
Total	35	100.0	100.0	

Out of the 35 respondents, 80% affirmed NEMA undertaking joint programming activities with government ministries while 20% indicated that NEMA did not have any programming activities undertaken jointly with the ministries. This

**Table 4.19 – Joint activities with the Ministries by category**

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Agriculture, livestock, biodiversity and related fields	9	25.7	25.7	25.7
Research & Education	4	11.4	11.4	37.1
MEAs & other legal issues	7	20.0	20.0	57.1
Budget process, NEAP and other coordination processes	8	22.9	22.9	80.0
N/A	7	20.0	20.0	100.0
Total	35	100.0	100.0	

Out of the 35 respondents, 25.7% indicated that jointly undertaken activities included agriculture, livestock, biodiversity and related fields while 22.9.3% indicated that the budget process, the NEAP and other coordination processes were the activities undertaken jointly with the ministries. Out of the 35 respondents, 20% indicated that

implementation of Multilateral Environmental Agreements and other legal issue were the activities undertaken jointly with the ministries while 11.4% indicated Research and Education as the activities undertaken jointly. Respondents who affirmed participating in joint programme activities with Government ministries indicated that NEMA assists government ministries in authoritatively providing answers to questions raised in parliament on environmental issues. They further reported that NEMA works with Government authorities on technical issues such as quarries and mines.

### 4.3.3 Requests from government Ministries

Out of the 35 respondents, 26 (74.3%) affirmed conducting joint analysis with government ministries, NGOs and Civil Society Institutions while 25.7% indicated that they did not participate in joint analysis with government ministries, NGOs and civil society institutions. This information was cross tabulated with 'Requests from Government departments'.

**Table 4.20- Receipt of requests from Government departments cross-tabulated with joint Analysis**

			NEMA's participation in joint analysis with government ministries		
			Yes	No	Total
Receipt of requests from Government Departments.	Yes	Count	23	1	24
		% of Total	65.7%	2.9%	68.6%
	No	Count	3	8	11
		% of Total	8.6%	22.9%	31.4%
Total	Count	26	9	35	
	% of Total	74.3%	25.7%	100.0%	

Out of the 35 respondents, 26 (74.3%) affirmed participating in joint analysis with government ministries while 24 (68.6%) affirmed receiving requests from government departments. There was no significant difference between the number of persons who affirmed conducting joint analysis with government ministries and the number of respondents who affirmed receiving requests from government ministries. Conversely, 9 respondents (25.7%) indicated that they did not participate in joint analysis with government ministries. This proportion of respondents compares very favourably with



the 11 respondents (31.4%) who indicated that they did not receive any requests from government ministries. From these findings, we can conclude that there is some relationship between conducting joint analysis with government ministries and receipt of requests from government ministries. Receipt of requests from government ministries was then cross-tabulated with designation.

**Table 4.21 Requests from Government departments by designation**

		Designation			Total	
		Senior Management	Middle management	Technical personnel		
Do you ever receive requests from Government Departments?	Yes	Count	4	7	13	24
		% of Total	11.4%	20.0%	37.1%	68.6%
	No	Count	0	4	7	11
		% of Total	.0%	11.4%	20.0%	31.4%
Total		Count	4	11	20	35
		% of Total	11.4%	31.4%	57.1%	100.0%

Out of the 24 respondents who affirmed receiving government requests, 4 are senior managers, 7 are middle managers and 13 are technical personnel. The high proportion of senior managers receiving requests could be attributed to the fact that all correspondence to the authority is addressed to the Director General who in turn re-routes it to the Departmental Directors. The proportion of technical personnel receiving requests from government departments is higher than that of middle management. This could be attributable to the fact that most of the parliamentary queries are handled by technical personnel because they are the ones in direct contact with the field. In addition, Environmental Impact Assessments are usually handled by technical personnel. From the observations, we can conclude that there is a link between receipt of government requests and designation.

**4.3.4 Inter-Agency Coordination**

Respondents were asked to name designated officials for coordination with environmental actors and other stakeholders.

**Table 4.22 – Focal points for inter-agency coordination**

Designation	Frequency	Percent	Valid Percent	Cumulative
				Percent
Director	20	57.1	57.1	57.1
Deputy director	3	8.6	8.6	65.7
Principal Environmental/ Planning Officer	8	22.9	22.9	88.6
Director General	4	11.4	11.4	100.0
Total	35	100.0	100.0	

Out of the 35 respondents, 57.1% indicated that departmental Directors were the designated officials in charge of coordination with external environmental actors while 8.6% indicated that Deputy Directors were in charge of coordination with external actors. Among the 35 respondents, 22.9% indicated that Principal Environmental Officers and/or Planning officers were in charge of coordination with external and actors while 11.4% indicated that the Director General was the one in charge of coordination with external environmental actors. The differences in response are a reflection of the different coordination arrangements obtaining in NEMA (ranging from strategic coordination, policy coordination through operational coordination).

#### 4.4 Quality of NEMA's services

One of the variants of NEMA's performance was the quality of its services. NEMA personnel were asked to give a rating of the quality of NEMA services.

**Table 4.23 – Rating of NEMA's services by NEMA personnel**

	Frequency	Percent	Valid Percent	Cumulative
				Percent
Good	25	71.4	71.4	71.4
Fair	9	25.7	25.7	97.1
Unsatisfactory	1	2.9	2.9	100.0
Total	35	100.0	100.0	

Out of the 35 respondents, 71.4% indicated that the quality of NEMA’s services was good while 25.7% indicated that the quality was fair and 2.9% indicated that the quality of NEMA’s services was unsatisfactory. These findings were compared with the data from the ministries.

**Table 4.24: Rating of NEMA’s services by personnel from the ministries**

	Frequency	Percent	Valid Percent	Cumulative Percent
Good	4	44.4	44.4	44.4
Fair	5	55.6	55.6	100.0
Total	9	100.0	100.0	

Out of the 9 respondents interviewed from the ministries, 55.6% indicated that NEMA’s performance was fair while 44.4% indicated that NEMA’s performance was good. No respondent from the ministry indicated that NEMA’s performance was unsatisfactory. The proportion of respondents in NEMA who indicated that the authority’s performance was good (71.4%) is higher than the proportion of the respondents from the Ministries who affirmed NEMA’s performance being good (44.4%). The proportion of respondents in NEMA who indicated that the Authority’s performance was fair is (25.7%) is less than the proportion of respondents from the Ministries (55.6%) who affirmed NEMA’s performance being fair. The difference between the proportion of respondents from NEMA and the ministries who indicated that the Authority’s performance was fair is 29.9% (55.6-25.7). One reason for the divergent opinions could be attributed lack of shared understanding of NEMA’s mandate. This is evidenced by the concerns raised against NEMA’s operations as indicated in the table below:

**Table 4.25: Concerns regarding NEMA's operations**

Complaint	Frequency	Percent	Valid Percent	Cumulative
				Percent
Breaches of Environmental legislation	4	11.4	11.4	11.4
Conflict of mandates	15	42.9	42.9	54.3
Service provision / EIA related issues	14	40.0	40.0	94.3
Lack of visibility	2	5.7	5.7	100.0
Total	35	100.0	100.0	

Out of the 35 respondents, 42.9% indicated that most of the complaints received were regarding conflict of NEMA's mandate with mandates of other institutions while 40% indicated that complaints received were about processing of EIA reports. Among the 35 respondents, 11.4% indicated that complaints received about NEMA were regarding breaches of environmental legislation while 5.7% indicated that most of the complaints were regarding NEMA's lack of visibility. Respondents from the Ministries gave examples of construction on wetlands, noise pollution and vehicle pollution as areas where NEMA had not done enough to ensure compliance. NEMA's role in the rehabilitation of the Nairobi River was sighted as one example where NEMA acted ultraviresly. Some of the respondents opined that cleaning of the Nairobi River should have been the responsibility of the Ministry of Environment through Nairobi City Council and not NEMA. Out of the 35 respondents, 31.4% indicated that due to under-funding, the authority could not recruit the requisite number of personnel and could not procure or upgrade office equipment. 45.7% of the respondents indicated that due to under-funding, the number of field visits was limited and implementation of Multilateral Environmental Agreements (MEAs) and other routine operations were also restricted. 14.3% of the respondents indicated that publication of the Status of the Environment (SOE) report and Public Information activities would not be undertaken as planned due to under-funding. 8.6% of the respondents indicated that initiatives of the authority to strengthen coordination were hampered by under-funding.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The purpose of this chapter is to provide an overview of the findings of the study, offer some elaboration on key observations, draw conclusions and make recommendations in response to research objectives and questions specified in Chapter one. The study provides insights into the role of organizational culture, knowledge management and coordination on organizational effectiveness.

#### **5.2 Summary of Findings**

The summary of findings was distilled from data analysis based on the objectives of the study.

##### **5.2.1 NEMA's Organisational Culture**

Out of the 35 respondents interviewed, 42.8% constituted the management cadre which is a reflection of NEMA's personnel configuration and a manifestation of its organizational culture. Research observations indicated that NEMA's organizational structure was "top heavy" with very many managers and few subordinate personnel. The Authority has eight departments with several reporting layers thus rendering the organization overly bureaucratic. While 100% senior management affirmed being encouraged to think and behave creatively, 50% of the technical personnel did not know whether NEMA staff were encouraged to think and behave creatively. This could be construed to imply that managers were talking to one another but the information was not cascading to the lower ranks. This observation could be attributed to hierarchical nature of NEMA and the temptation to maintain the status quo. Findings of the study also indicate that the Authority (NEMA) has supervisory organs including the National Environmental Council and the NEMA Board which influence its strategic direction and decision making. This has constricted the operational space and has denied technical level personnel the requisite latitude of freedom to think and behave creatively. The current shape and form does not support efficient implementation of NEMA's mandate.

### **5.2.2 Effect of NEMA's M&E system on Knowledge Management**

In this study, the researcher examined how M&E influences knowledge management given that M&E and knowledge management are complementary activities. Out of the 35 respondents, 94.3% affirmed NEMA having a monitoring & evaluation unit while 60% of the respondents affirmed NEMA having a system for knowledge creation and distribution. This means that 34.3% of the respondents who are aware of NEMA's Monitoring & Evaluation unit do not know of NEMA's system for knowledge creation and distribution. The department responsible for knowledge management has not marketed itself enough. The organization has shared folders and intranet. However, it was observed that these services were not fully utilized by NEMA personnel. Inadequate uptake of knowledge management services could be attributed to the inadequate cross-departmental communication and cooperation highlighted under paragraph 4.1.6. From these findings, we can conclude that there is no relationship between Monitoring & Evaluation and knowledge management.

### **5.2.3 Coordination arrangements available to NEMA**

NEMA uses various collaboration platforms to enhance its interaction with its stakeholders. During this study, meetings and execution of joint activities were considered as coordination variants at NEMA. Findings from the study indicate that out of the 35 respondents, 37.1% affirmed attending meetings at the Ministry of environment every three months while 34.3% indicated that they participated in meetings at the Ministry every month. Out of the 35 respondents, 17.1% affirmed attending meetings at the Ministry once a year and the same proportion (17.1%) indicated that they had never participated in any meeting with the Ministry of Environment. All senior managers affirmed attending meetings at the Ministry of Environment at least once a month. The proportion of technical personnel (45%) attending meetings on monthly basis was higher than that of middle cadre managers (27.3%). The proportion of technical personnel attending meetings at the Ministry could be attributed to the fact that technical personnel accompany senior managers to meetings to provide clarifications on any technical matters that might arise during the meetings. Findings of the study indicate that meetings with the Ministry of Environment are in three broad categories namely; strengthening coordination, information sharing and joint planning, programme management plus budgetary and administrative issues. It was also reported that senior managers (Directors and Deputy

Directors) are the ones designated to attend coordination and programme management meetings. Apart from meetings with the Ministry of Environment, NEMA also serves as the secretariat for the National Environmental Council (NEC) and the National Environmental Action Plan (NEAP) Committee.

To gauge the effect of coordination on NEMA's performance, receipt of requests for technical support was cross-tabulated with NEMA's participation in joint analysis with government ministries. Out of the 35 respondents, 65.7% affirmed receiving requests from government departments as well as NEMA's participation in joint analysis with government ministries. There was no significant difference between the number of persons who affirmed conducting joint analysis with government ministries (74.3%) and the number of respondents who affirmed receiving requests from government ministries (68.6%). Requests received from government ministries include responses to Parliamentary queries, clarifications on Environmental Impact Assessments (EIAs), technical advice on Multi-lateral Environmental Agreements and secondment of personnel. NEMA assists government ministries in authoritatively providing answers to questions raised in parliament on environmental issues. In addition, NEMA sits on various boards such as the Agriculture board and the National Forestry Authority ensures mainstreaming of environmental issues in government programmes. From these findings, it was concluded that there is some relationship between coordination and receipt of requests from government ministries.

#### **5.2.4 Effect of NEMA's performance on demand for technical advice**

Assessment of NEMA's performance was based on number of field visits, quality of its products and services as well as demand for technical advice. Out of the 35 respondents, 71.4% indicated that the quality of NEMA's services was good while 25.7% indicated that the quality was fair and 2.9% indicated that the quality of NEMA's services was unsatisfactory. This information was juxtaposed with data from 18 respondents from the ministries. Out of the 18 respondents, 55.6% indicated that NEMA's quality of products and services was fair while 44.4% indicated that the quality was good. No respondent from any of the ministries indicated that the quality of NEMA's products and services was unsatisfactory.

The variance between the proportion of NEMA personnel and that of respondents who affirmed the quality of NEMA products and services being good is 27% (71.4% – 44.4%). This difference could be attributed to lack of shared understanding of NEMA’s mandate, high performance expectations from the stakeholders and perceived ineffectiveness of NEMA’s ‘Compliance and Enforcement’ mechanisms. Some of the respondents from the ministries accused NEMA of jurisdictional overlapping and undertaking activities outside its remit. Respondents from ministries cited examples of ‘Cleaning the Nairobi River’ and Enforcement of noise pollution as activities outside NEMA’s mandate. Respondents from the ministries opined that these are issues that should have been handled by the Ministry of Environment through Nairobi City Council and not NEMA. Respondents from the ministries also queried the rationale of NEMA having enforcement officers whose functions could be effectively handled by the Police. Respondents from the Ministries cited examples of long turn-round time of EIA reports, construction on wetlands, noise pollution and vehicle pollution as areas where NEMA has not done enough to ensure compliance owing to its capacity limitations. It should however be noted that the EMCA empowers NEMA to serve as the “watchdog” of government environmental regulations. Its main activities entail supervision, coordination and enforcement; functions which are resisted by most organizations and individuals. Out of the 35 respondents, 71.4% indicated that the quality of NEMA’s services was good while 25.7% indicated that the quality was fair and 2.9% indicated that the quality of NEMA’s services was unsatisfactory.

### **5.3: Discussions**

#### **5.3.1 Organisational culture**

Findings of the study indicate that NEMA is well endowed with highly qualified personnel who were recruited on merit. From the findings, it was observed that there was some relationship between designation and the freedom to think and behave creatively. The highest proportion of respondents who did not know whether NEMA personnel were encouraged to think and behave creatively was technical personnel. These findings are contrary to the suggestion by Farooq (2012) who posits that “innovation is critically important for organizations because it is a primary source of competitive advantage”. Research findings also suggest that cross-departmental communication in NEMA is not very good particularly with technical personnel. This is contrary to the recommendation by Yates (2006) who makes reference to Watson



Wyatts's research and avers that "companies with highly effective internal communication practices produce superior financial results and enjoy greater organizational stability".

### **5.3.2 Monitoring & Evaluation**

Findings from the study indicated that there was no relationship between Monitoring & Evaluation and knowledge management. This is contrary to the postulation by Kusek and Rist (2004) who consider good M&E systems as "a source of knowledge capital". Kusek and Rist (2004) aver that good M& E systems "enable governments and organizations to develop a knowledge base of the types of projects, programs, and policies that are successful, and, more generally, what works, what does not, and why". Kusek and Rist (2004) posit that M&E systems can provide continuous feedback in the management process of monitoring and evaluating progress toward a given goal. In this context, they promote organizational learning. Kusek and Rist (2004) aver that results-based Monitoring and Evaluation (M&E) is a powerful public management tool that can be used to help policymakers and decision makers track progress and demonstrate the impact of a given project, program, or policy. Kusek and Rist (2004) apply definitions of the OECD (2002) and consider monitoring as a continuous function that that uses the systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives". Kusek and Rist (2004) aver that statistical capacity is an essential component of building results based M&E systems. Findings of this study are also contrary to the view held by Tatiana Baquero and William Schulte (2007) who define Knowledge Management as "the process of leveraging information and knowledge embedded in people, documents, processes and organizational practices to achieve better, faster and more innovative products and services". NEMA will need to embrace postulations by Tunc F Bozbura (2007) who making reference to Wong (2005) opines that " Knowledge has become one of the most important driving forces for business success" and that "Organizations are becoming more knowledge intensive, hiring minds more than "hands", and the needs for leveraging the value of knowledge are increasing".

### **5.3.3 Coordination Arrangements**

Findings of the study indicated that there was no relationship between NEMA's intra-departmental cooperation and communication and NEMA's cooperation with external environmental actors. These findings are consistent with the views held by Bird and Kirira (2009) who posited that "NEMA has not effectively undertaken its coordination role with government ministries and other environmental governance actors". Bird and Kirira (2009) opined that due to lack of effective coordination, there was institutional rivalry between the various government environmental organisations and cited the example of some Permanent Secretaries of ministries identified in EMCA openly admitting not to be aware of what NEC does. Findings of the study also indicated that there was a relationship between coordination activities and receipt of requests from government ministries. These findings are consistent with the opinion held by Imperial (2005) who explicates that "organizations often choose to work together because it is difficult or impossible to accomplish a task without collaborating". It is also possible that greater public value can be generated through joint action than can be achieved by working alone. Imperial (2005) adds that "because information is often widely dispersed, it is common to find collaborative efforts focused on reducing information asymmetries". Imperial outlines advantages of collaboration including the elimination of information asymmetry through knowledge sharing and attainment of synergy by "bringing more expertise and ideas on the table".

### **5.3.4 NEMA's Performance**

The fourth objective was to assess the effect of NEMA's performance on clients' demand for its services. NEMA's performance was gauged by perceptions of NEMA personnel (internal assessment) and feedback of the respondents from Government ministries (external assessment). Out of the 35 respondents from NEMA, 71.4% indicated that the Authority's performance was good. This proportion compares very favourably with the 68.6% who affirmed receiving requests from Government ministries. These findings suggest there is a link between quality of NEMA's services and demand as evidenced by the proportion of respondents affirming receipt of requests from NEMA's clients. These findings are consistent with the suggestions by Cong V.K and Rundus M.J (2003) who make reference to Schonberger (1986) and (Cobb) and argue that the "use of Total Quality Management practices has a synergistic impact on organizational performance". Out of the 18 respondents from the ministries, 44.4%

indicated that NEMA's performance was good. The variance between proportion of NEMA's respondents and those from the ministries who indicated that NEMA's was good is 27%. This variance could be attributed to information asymmetry and lack of shared understanding of NEMA's mandate as evidenced by the complaint made against NEMA. Respondents from the Ministries gave examples of construction on wetlands, noise pollution and fuel emissions as areas where NEMA has not done enough to ensure compliance. This is consistent with Kaynak H (2003) who opined that the levels of performance measured vary among various studies. Kaynak (2003) makes reference to Samson and Terziovski (1999) and Das et al. (2000) and avers that some studies operationalise performance at operating level while others measure performance at multiple levels. Although there were some conflicting findings, overall, the study documents examples of demand for NEMA's services in various areas including drafting responses to parliamentary queries, providing feedback on Environmental Impact Assessment reports and providing guidance on the implementation of Multi-lateral Environmental agreements (MEAs).

#### **5.4 Conclusions**

From the findings of the study, it can be concluded that NEMA is endowed well qualified personnel who were recruited on merit. However, ineffective communication between the various departments has undermined its capability to effectively leverage its intellectual capital. Findings of the study also suggest that there was no relationship between Monitoring & Evaluation and Knowledge management. However, uptake of knowledge management products was observed to be low due to inadequate communication between the various departments of NEMA. Findings of the study also indicated that there was a relationship between coordination mechanisms and NEMA's receipt of requests from government ministries. From the study, we can also conclude that there was a link between clientele satisfaction and the demand for NEMA's products and services.

## **5.5 Recommendations**

**5.5.1** NEMA needs to enhance its vertical and horizontal communication to strengthen its performance.

**5.5.2** Being a field-driven organisation, NEMA should endeavour to undertake more field trips to obtain a better appreciation of the emerging environmental challenges in the country.

**5.5.3** To enhance uptake of knowledge management products and services, the Information Technology (IT) department needs to market itself sufficiently among the other departments.

**5.5.4** To ensure shared understanding of NEMA's functions and appropriate management of clients' expectations, NEMA needs to embark on a more aggressive sensitization programme.

## **5.6 Areas for Further Research**

This study did not establish the effect of Political influence on NEMA's organizational structure and its work processes. However, NEMA's programmes depend on timely availability of adequate financial resources. Additionally, NEMA's budget is submitted by the Ministry of Environment. NEMA's activities are also informed by the relevant legislation for example the EMCA and the Roads Act. Findings of the study also indicated that the director General and the Board members of NEMA are political appointments. There therefore is need for further research to ascertain the impact of Political influence on NEMA's funding mechanisms, organizational architecture and its programme implementation.

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**APPENDIX I**

**EMCA FIRST SCHEDULE (s.4 (1) (b), 29(1)(c), (3)(b), 37(1)(b))**

**Agriculture.**

**Economic Planning and Development.**

**Education.**

**Energy.**

**Environment.**

**Finance.**

**Fisheries.**

**Foreign Affairs.**

**Health.**

**Industry.**

**Law or Law Enforcement.**

**Local Government.**

**Natural Resources.**

**Public Administration.**

**Public Works.**

**Research and Technology.**

**Tourism.**

**Water Resources.**

**APPENDIX II**  
**QUESTIONNAIRE I**

**For NEMA Human Resource Officer**

1. Number of other organisations worked for before joining NEMA
- i) None
  - ii) One
  - iii) Two
  - iv) Three
  - v) Four or more

**Section II – NEMA’s Organisational Culture**

2. Are ALL NEMA personnel informed of what is expected of them?  
Yes  NO

3. How are they informed?

Information flow by staff category

Information Source	Personnel category	Number
Executive Director		
Through inter-office circulars		
Human Resource Briefing		
Immediate supervisor		
Colleagues/Peers		

4. How many staff are currently working with NEMA?
5. How many staff have left the organisation since 2008?
6. How many new staff have been recruited since 2008?
7. Do people voluntarily come in early and leave late?  
YES  NO
8. How would you rate absenteeism in NEMA?  
Very significant  Significant  Normal  Minimal   
Very minimal
9. How would you rate NEMA personnel’s freedom to speak their mind?

Very Free  Free  Limited freedom  Restricted

10. How often do staff members come up with new ideas?

Frequently  Occasionally  Sometimes  Rarely

11. Do you have a reward and recognition program in place for staff exhibiting exemplary performance?

Yes  NO

12. If so, how many have received such accolades since 2008?

2009 .....

2010.....

2011 .....

13. What do staff like most about NEMA? Besides the pay check

.....  
.....

14. How does senior management communicate with staff?

Meetings

Memos

E-mail/Phone

15. How often do senior staff meet with other NEMA personnel?

Weekly

Fortnightly

Monthly

Quarterly

Annually

Other (please specify)

.....

**Section II**

**For NEMA Programme Personnel**

1. What is your age                      25 – 35, 36- 45, 46 – 56, Above 56
2. Sex
3. What is your highest level of Education – ‘O’ levels, ‘A’ level, Diploma, Bachelor’s Degree, Master’s Degree, Ph D, Other  
(please specify) .....
4. What is your designation (job Title) in NEMA?  
.....
5. For how long (in years) have you worked with NEMA?  
.....
6. Number of other organisations worked for before joining NEMA
  - i.     None
  - ii.    One
  - iii.   Two
  - iv.    Three
  - v.     Four or more
7. Given your mandate and related tasks, are you satisfied with your current staff levels?    Yes                       No
8. If not, how many more staff do you need? .....
9. In which areas of specialisation? .....

**Section III – NEMA’s Organisational Culture**

10. Are ALL NEMA personnel informed of what is expected of them?

Yes  No

11. How are they informed? Information flow by staff category

Information Source	Personnel category	Number
Executive Director		
Through inter-office circulars		
Human Resource Briefing		
Immediate supervisor		
Colleagues/Peers		

16. How does information flow across departments?

.....  
 .....

17. Are there any Standard Operating Procedures for cross-departmental cooperation?

Yes  NO

18. How would you rate NEMA’s cross-departmental cooperation and communication?

- 0-20%
- 20-40%
- 40-60%
- 60-80%
- 80-100%

19. How free are you make decisions on behalf of NEMA?

.....  
 .....

20. What kind of decisions are middle cadre and lower cadre staff allowed to make?

.....  
 .....

21. Do you ever receive any complaints or concerns from ministries?

Yes  No

22. If so, what are the complaints about?

.....  
.....

23. How does information flow from the ministries to technical personnel down the NEMA hierarchy?

.....  
.....

24. How often do you share your feelings with other colleagues?

.....  
.....

**Mandate Implementation**

25. Have you ever heard of the EMCA is? Yes  No

26. If yes, how did you know about it?

i) Office briefing

ii) Media

iii) Other

27. From the EMCA, what do you consider to be NEMA's core functions?

a) .....

c) .....

d) .....

28. How often do NEMA personnel exchange information on organizational goals and objectives?

.....  
.....

29. Are NEMA personnel encouraged to think and behave creatively?

Very strongly  strongly  not sure  NOT encouraged

30. If YES, what incentives are there to reward innovative performance?

.....  
.....

31. In the last three years, how many times have you visited your District Environmental Officers?

- a. 2008 .....
  - b. 2009 .....
  - c. 2010 .....
32. How many EIAs has your section handled during the last three years?
- a. 2008 .....
  - b. 2009 .....
  - c. 2010 .....

**Organizational Performance**

33. What does NEMA do to make sure that its clients are satisfied by the services provided?

.....  
 .....

34. How many customer-focussed activities are you engaged in?

.....  
 .....

35. In the last three years, how many visits have you made to the ministries to find out what support they require?

- 2008 .....
- 2009 .....
- 2010 .....

36. If none, what are the reasons for not visiting the ministries?

.....

37. Do you conduct any staff surveys to assess feedback from the ministries?

Yes  No

38. If yes, how often do you conduct these surveys?

- Monthly
- Quarterly
- Biannually
- Annually

39. How often do you assess ministries requirements?

- Monthly
- Quarterly
- Biannually
- Annually

40. How do you monitor changes in the requirements of ministries?  
 .....  
 .....
41. How many staff retreats have you had since 2005?  
 2008 .....  
 2009 .....  
 2010 .....
42. What were the issues covered at each of these retreats  
 2008.....  
 .....  
 2009.....  
 .....  
 2010.....  
 .....
43. How often do you meet with your donors in a year?  
 Every month   
 Quarterly   
 Biannually   
 Once a year
44. Do you know what delights your clients?  
 Yes  No
45. If yes, what is it that delights your clients?  
 .....  
 .....
46. What support do you require to enhance your work?  
 .....  
 .....
47. Have you had reason to review your programmes?  
 Yes  No
48. If YES, how many times have you reviewed your programmes since 2007?  
 2008 .....  
 2009 .....  
 2010 .....



49 During the last five years, have you had enough funds for all your projects?

Yes  No

50 If NOT, what do you think are the reasons for inadequate funding?

.....  
.....

51 How would you rate the quality of NEMA's services?

Very Good  Good  Fair  Unsatisfactory  Very unsatisfactory

**Monitoring & Evaluation**

52. Has NEMA got a Monitoring & Evaluation unit?

Yes  No

53. If not, what are the reasons for not having a Monitoring and Evaluation unit?

.....  
.....

54. If yes, what has been the proportion of the M&E budget when compared with the entire NEMA budget for the past three years?

2008 .....

2009.....

2010.....

55. How many staff are in the unit? .....

**Lesson Learning & Knowledge Creation**

56. Has NEMA got a system for knowledge creation and distribution?

Yes  No

57 How many lesson learning /M&E meetings have you held since 2007?

.....

58 How often is the knowledge repository updated?

.....

59 How many staff are regularly contributing material to this repository?

.....

60. How many staff are using the acquired material from the repository?

.....

61 How easy is it to access information from this repository?

.....  
62 Number of Communities of practice where NEMA is a member .....

.....  
63. Number of knowledge repositories created .....

.....  
**Coordination Arrangements**

67 Do you have any activities undertaken jointly with government ministries?

Yes  No

68 If yes, please specify the activities by ministry

.....  
.....

69 Have you ever participated in any cross-training session organised jointly by NEMA and a government ministry?

Yes  No

70 Does NEMA ever carry out joint analysis with government ministries?

Yes  No

71 Does NEMA ever carry out joint analysis with NGOs and other Civil Society Institutions?

Yes  No

72 How often do you have meetings with the Ministry of Environment?

Fortnightly

Monthly

Quarterly

Every six months

Once a year

73 What is the purpose of these meetings?

.....  
74 How often does NEMA meet with the NEC

Fortnightly

Monthly

Quarterly

Every six months

Once a year

75 What is the purpose of these meetings?

.....  
.....

76 How does NEMA use of information technology to link with other environmental actors

.....  
.....

77 How would you rate cooperation among environmental actors with NEMA?

Very good  Good  Average  Poor  Very Poor

78 How would you rate NEMA's role in the formulation of the NEAP

Very significant  Significant  Average  Minimal

Very minimal

79 How would you rate NEMA's role in the implementation of the NEAP?

Very significant  Significant  Average  Minimal

Very minimal

**Demand for Technical advice**

80 Do you ever receive requests from Government departments?

YES  NO

81 If yes, what is the nature of the requests?

.....  
.....

82 How many requests did you receive during the past one year?

.....  
.....

83 If the answer to question 94 is no, what do you think are the reasons for not receiving requests from government?

.....  
.....

84 Do you ever receive feedback on the support you provide to your clients?

YES  NO

85 Do you ever receive repeat requests?

Yes  No

86 Do you ever receive any organisations referred to you for assistance?

Yes  No

**Appendix III**

**Questionnaire for Ministry Personnel**

1. What is your age

- 25 –35
- 36- 45
- 46 – 56
- Above 56

2. Sex.....

3. What is your highest level of Education?

- O- levels,
- A- level,
- 1<sup>st</sup> Degree,
- Master’s Degree,
- Ph D,

Other (Please specify) .....

4. What is your designation (Job Title) in the Ministry?

.....

5. How long (in years) have you worked with Ministry?

.....

6. Number of other organisations worked for before joining Ministry

- i. None
- ii. One
- iii. Two
- iv. Three
- v. Four or more

7 How often do you meet with NEMA?

- Monthly  Quarterly  Biannually  Annually

8 What is the level of participation at these meetings?

- Senior Management/Policy level  Technical officers

9 What is the purpose of these meetings?

.....

.....

- 10 How many projects has the ministry undertaken since 2007?  
 2008.....  
 2009.....  
 2010.....
- 11 Of the above projects, how many are being executed jointly/in collaboration with NEMA?  
 2008.....  
 2009.....  
 2010.....
- 12 Has the ministry got environmental officers in all the provinces /Districts?  
 Yes  No
- 13 How often does the NEC meet?  
 Monthly   
 Quarterly   
 Biannually   
 Annually
- 14 What is the level of participation at the NEC?  
 Senior Management/ Policy level   
 Technical level
- 15 Who is responsible for the establishment of environmental cells (units) in other ministries?  
 Ministry of Environment   
 Respective ministries
- 16 How does information flow from the environmental cells to other units within the ministry and vice versa?
- 17 How often do you exchange information with NEMA?  
 Weekly   
 Fortnightly   
 Monthly   
 Quarterly   
 Other (specify).....
- 18 How would you rate the performance of NEMA?  
 Very good  Good  Satisfactory  Unsatisfactory

19 What are the reasons for the rating you have given?

.....  
.....

20 What do you think are the areas where NEMA needs strengthening?

.....  
.....

**Appendix IV**

**Questionnaire for respondents from Donor Representatives & UN Agencies**

- 1 How long have you been collaborating with NEMA?  
.....  
.....
- 2 In what area are you collaborating with NEMA?  
.....  
.....
- 3 Do you have any projects which you are jointly implementing with NEMA?  
Yes  No
- 4 If yes, please specify the projects  
.....  
.....
- 5 What is the dollar value of each of the specified projects?  
.....  
.....
- 6 What is the implementation status of these projects?  
.....  
.....
- 7 How would you rate NEMA's overall performance in the joint projects?  
Very good  Good  Fair  Poor  Very poor
- 8 What do you think are the reasons for this performance rating?  
.....  
.....

**Appendix V**  
**Letter of Introduction**

22<sup>nd</sup> December 2011  
The Director General,  
National Management  
Environmental Authority (NEMA),  
NAIROBI.

Dear Sir,

**RE: REQUEST TO CONDUCT A SURVEY AT NEMA**

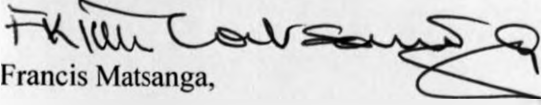
My name is Francis Matsanga, a student at the University of Nairobi pursuing a Master of Arts degree course in Project Planning and Management. I intend to undertake a study on “Factors Affecting Organisational Performance” with a focus on NEMA. The decision to select your organisation was premised on the critical role it plays in environmental governance.

The study will cover four main areas namely: Organisational Culture, Monitoring & Evaluation, Knowledge Management and Coordination arrangements. A questionnaire for the proposed study is herewith attached for your quick reference. I am certainly mindful of the sensitivity of the information being sought and I wish to assure you that all the information gathered will be treated in the strictest confidence. In addition, I plan to hold a debriefing session with your senior management at the end of my study.

The purpose of this letter is to solicit your approval for me to undertake this study at your organisation, to be accorded access to relevant documents and to allow your personnel to participate by administering the questionnaire.

Thank you in advance for your support.

Yours faithfully,

  
Francis Matsanga,