

The Role of Organizational Communication in Linking Research to Economic Policy Formulation in Kenya

By Charles Owino

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Declaration

I certify that this work contains no material which has been accepted for the award of any other degree in my name, in any university or other tertiary institution, and to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree in any university or other tertiary institution without the prior approval of the University of Nairobi, and where applicable, any partner institution responsible for the joint-award of the degree.

This work was done under the guidance of Prof. Robert White and Dr. Hezron Mogambi at the University of Nairobi, Kenya.

Name: Charles O. Owino

Signature:.....

Date:.....

Certificate of Approval

In my capacity as supervisor of the candidate's thesis, I certify that the above statements are true to the best of my knowledge and hereby declare that this thesis is from the student's own work and effort, and all other sources of information used have been acknowledged. This thesis has been submitted with my approval.

Supervisor's name: Prof. Robert White

Signature:.....

Date:.....

Supervisor's name: Dr. Hezron Mogambi

Signature:.....

Date:.....

Dedication

This thesis is dedicated to the cherished memory of my father: The Late Sylvester Owino Ojow in recognition of his worth, and to all my ancestors — every bit of me is a little bit of you. It is also dedicated to all my invisible helpers, watching over and helping me from above. My father gave me the greatest gift anyone could give another person, he believed in me. His strong words of inspiration and encouragement in pursuit of excellence still linger on to date. He would constantly reminded us that education is key to life, and that the ultimate test of a man's conscience is his willingness to sacrifice something today to benefit in the future.

“Live as if you were to die tomorrow. Learn as if you were to live forever.” — Mahatma Gandhi (1869-1948)

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Abstract

The absence of vibrant communication strategies in most organizations in Kenya, and in particular government departments has significantly compromised the research-to-policy mechanism. Perception and explanations of science vary in different societies; however, it is still imperative to recognize that policy formulation is a complex political process anywhere in the world. Today's policy making takes place in a turbulent political, social and economic environment, consequently emerging trends, issues and events impose significant threats that unprepared organizational providers can only react to. Factors that would explain the gap between research and policy are diverse, and to an extent remain contested, although the dearth of information and communication plays a key role.

Data for this study were collected from 308 units using self-administered questionnaires and interviews. This included a sample of 69 economic researchers and 135 policy-makers in Kenya. Views from seven research institutes and 87 beneficiaries of public policies were also taken into consideration. A focus group discussion that involved ten persons drawn from the research, policy, civil society, donor community, beneficiary and the media concluded the data collection phase. A descriptive study research design was adopted, where the qualitative and quantitative data were analyzed by the use of descriptive statistics. Content analysis was used to analyze data collected from open ended questions of qualitative nature. The presentation is done using frequency and percentage scores in a tabular format. The interpretative framework for this work is derived from Weick's (2004) Organizational Information Theory that emphasizes the importance of human interaction as central to processing information.

This study focused on how the research and policy interface needs to be fashioned to provide a realistic role, relevance and contribution of the two most important stakeholders; that is researchers and policy-makers. The results indicate that the research and policy communities are worlds apart, and that stakeholders need to come together to try and bridge this communication gap at the local organizational and national policy levels. The conclusion drawn from the study is that there is very limited communication (information sharing) between the two communities at high levels; therefore a major strategic objective that ought to be pursued is to strengthen and formalize communication among researchers, planners and policy-makers. The recommendation is that all this warrants the design of an effective communication strategy at all levels of policymaking. Such a strategy would include all stakeholders who need to work together to understand the role, contribution and potential of each, and find ways and means of working for the improved welfare of the public. Details of the findings of the study are shared in Chapter four of this thesis.

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List of Abbreviations

ACBF	African Capacity Building Foundation
AERC	African Economic Research Consortium
AfDB	African Development Bank
AHPSR	Alliance for Health Policy and Systems Research
AIDS	Acquired Immunodeficiency Syndrome
ASIP	Agricultural Sector Investment Program
BOGs	Board of Governors
CAR	Centre for Applied Research
CBOs	Community-based Organizations
CODESRIA	Council for the Development of Social Science Research in Africa
COP	Conference of Parties
CGACS	Cereal Growers Association and Co-operative Societies
CHMT	County Health Management Team
CHSRF	Canadian Health Services Research Foundation
CIP	International Potato Center
CIRES	Centre Ivoirien de Recherche Economique et Social
CMOH	County Medical Officer of Health
CMS	Church Missionary Society
CNRA	Centre National de Recherches Agronomiques
CPE	Certificate of Primary Education
CRE	Christian Religious Education
CRF	Coffee Research Foundation
GRIPP	Getting Research into Policy and Practice
CSOs	Civil Society Organizations
CYMMIT	International Maize and Wheat Improvement Centre
DANIDA	Danish International Development Agency
DFID	Department for International Development
DFRD	District Focus for Rural Development
DHE	Directorate of Higher Education
DPC	Development Policy Centre
DPRU	Development Policy Research Unit
DRD	Directorate of Research Development
DSRs	Designated Smoking Rooms
DSS	Demographic Surveillance System
DTE	Directorate of Technical Education
EAC	East African Community
ECAPAPA	Eastern and Central African Programme for Agricultural Policy Analysis
EFA	Education For All
EPRC	Economic Policy Research Centre
ESRC	Economic and Social Research Council
FAO	Food and Agricultural Organization
FBOs	Faith-Based Organizations
FFS	Farmer Field Schools
FGD	Focus Group Discussions
FPEAK	Fresh Produce Exporters Association of Kenya
GDN	Global Development Network
GDP	Gross Domestic Product
GoK	Government of Kenya

GYTS	Global Youth Tobacco Survey
HCMCs	Health Centre Management Committees
HIV	Human Immunodeficiency Virus
HMBs	Health Management Boards
HMIS	Health Management Information System
ICC	Inter-ministerial Coordination Committee
ICIPE	International Centre for Insect Physiology and Ecology
ICRAF	Centre for Research in Agro forestry
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
ICT	Information Communication Technology
IDRC	International Development Research Centre
IDS	Institute for Development Studies
IEA	Institute of Economic Affairs
IESR	Institute of Economic and Social Research
IFPRI	International Food Policy Research Institute
IITA	International Institute Tropical Agriculture
ILO	International Labour Organization
ILRI	International Livestock Research Institute
IMCI	Integrated Management of Childhood Illnesses
INSM	Institut National de la Statistique Malgache
IPAR	Institute of Policy Analysis and Research
IRE	Islamic Religious Education
ISO	International Organization for Standardization
KACE	Kenya Agricultural Commodity Exchange
KARI	Kenya Agricultural Research Institute
KCE	Certificate of Education
KCPE	Kenyan Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KEMRI	Kenya Medical Research Institute
KESREF	Kenya Sugar Research Foundation
KETCA	Kenya Tobacco Control Alliance
KFC	Kenya Flower Council
KHPF	Kenya Health Policy Framework
KIE	Kenya Institute of Education
KIPPRA	Kenya Institute of Public Policy Research Analysis
KMA	Kenya Medical Association
KMFRI	Kenya Marine and Fisheries Research Institute
KNFAP	Kenya National Federation of Agricultural Producers
KNEC	Kenya National Examination Council
LATF	Local Authority Transfer Fund
LIA	Letter of Interim Authority
MDGs	Millennium Development Goals
MIWA	Mumias Information and Welfare Advances
MLFD	Ministry of Livestock and Fisheries Development
MOA	Ministry of Agriculture
MOH	Ministry of Health
NALEP	National Agricultural and Livestock Extension Program
NCST	National Council for Science and Technology
NEAP	National Agricultural Extension Policy
NEMA	National Environment Management Authority
NGOs	Non-government Organizations

NISER	Nigerian Institute of Social and Economic Research
NORAD	Norwegian Agency for Development Cooperation
NTFIC	National Tobacco Free Initiative Committee
ODI	Overseas Development Institute
OECD	Organization for Economic Cooperation and Development
PESTLE	Political, Economic, Sociological, Technological, Legal and Environmental
PRGF	Poverty Reduction and Growth Facility
PRIs	Policy Research Institutes
PRSP	Poverty Reduction Strategy Paper
PTCI	Programme de Troisieme Cycle Interuniversitaire
RAPID	Research and Policy in Development
RURU	Research Unit for Research Utilization
SACAs	Savings and Credit Association
SACCOs	Savings and Credit Cooperative Society
SANRM	Sustainable Agriculture and Natural Resource Management
SAP	Structural Adjustment Programme
SDC	Swiss Agency for Development and Cooperation
SHS	Second-Hand Smoke
SID	Society for International Development
SIDA	Swedish International Development Cooperation Agency
SISERA	Secretariat for Institutional Support for Economic Research in Africa
SPSS	Statistical Package for Social Scientists
SWAPs	Sector Wide Approaches
SWOT	Strengths, Weaknesses, Opportunities and Threats
SRA	Strategy for Revitalizing Agriculture
STI	Science Technology Innovation
TAPS	Tobacco Advertising, Promotion and Sponsorship
T&V	Training and Visit
TE	Technical Education
TEHIP	Tanzania Essential Health Interventions Project
TIC	Technical Inter ministerial Committee
TIQET	Totally Integrated Quality Education and Training
TRFK	Tea Research Foundation of Kenya
TSC	Teachers Service Commission
UPE	Universal Primary Education
UNESCO	United Nations Organization for Education, Science and Culture
WHO	World Health Organization
WHO-FCTC	World Health Organization Framework Convention on Tobacco Control

Chapter One

Introduction

This section attempts to examine how policy makers acquire information about economic research and why research findings in the field often don't seem to get through to them. It also describes the organizational environment in which dissemination of research information takes place, both to communicate more effectively within resource constraints and to look at investments targeting dissemination of research activities within organizations that will position them to influence events. It then discusses organizations/institutions that provide research information to policy makers and concludes with the statement of the problem.

1.1 Background to the problem and study

Although there is more or less enough research evidence to guide public policies, researchers often fail to meet the challenge of presenting their results in useful forms to facilitate their use by policy makers. On their part, many policy-makers are not familiar with the various sources of research evidence for their work because they rarely scan the environment as they formulate policies (Court & Young, 2006; Court, 2005). One of the major strategies for organizations, especially government agencies that are fed with policy research about changing situations or new policy challenges, is to constantly scan the environment for new information. Consequently, there should be a department or a person in every organization, and particularly government policy related organizations, who is continually scanning the environment to identify the need for better policy implementation of new policy challenges.

From literature on policy formulation in Kenya, many researchers observe that during preparation of development plans, the government rarely seeks expertise from research and policy institutions (Ayuk & Marouani, 2007); this is despite the fact that an all-inclusive participatory approach to an important process like budget formulation for instance, is important to enhance transparency. Yet integrating researchers, academics, media, and civil society in a process like this would be especially crucial.

Many research organizations in Kenya conduct research in different fields, but on the basis of available data and best practice elsewhere, more often than not they have limited vested stake in policy issues. This could be so because there may be a mismatch between the demand and supply of applied research. A lot

more seems to be known about how to improve the supply side than demand side, particularly in the policy sphere (Philips & Seck, 2004). In the absence of any demand, the status of analytical assignments focusing on research at the national level remains under-utilized. Thus, studies tend to become old literature, relegated to desk drawers or shelves, and if they are published, it is usually in journals that can only be accessed by academics. On the other hand, decision-makers are accustomed to functioning in a context of information scarcity, so they tend not to scan the environment or mobilize the scanty analyses that are available when formulating policies (Court, 2005). They are not likely to call upon policy researchers who would perhaps share their knowledge or a reflection with them on the expected or real outcome of the policy they are adopting.

Research results, chiefly those targeted at policy-makers, no matter how good they are, remain nothing better than worthless if policy-makers do not accept and act on them (Caplan, 1979). The issue of governance structure comes into play here, as some of these weak linkages could actually be calculated, particularly where policy-makers may not be keen to apply research evidence (Weiss, 1977). Indeed, several researchers have observed that policy-makers seldom use knowledge gained through research in formulating policies because the realities on the ground are a lot more complex (Neilson, 2001; Macleod, 2006). Thus, the use and propagation of key research findings in Kenya among researchers and lead decision makers does not seem to be apparent.

Theoretical literature surveyed focusing on how economic research is taken up, and empirical evidence reveals that policies in Kenya are made haphazardly, and there is need to develop an agreed method that is people-driven and informed by research that could deliver good outcomes while remaining politically insulated from interference by the changing governance regimes. Evidence show that many research results are not appropriately shared with policy makers in whatever way, and if shared, the information providers, namely the researchers may not be providing research which is useful for scanners of the environment, and ultimately the policy makers (Jeffreys et. al., 2007). It is by no means inevitable that a good supply of policy research would catch the attention of policy-makers, and eventually be utilized. In most investigations that have been conducted in this area in Kenya, none seems to focus on how the interaction between individuals and people in organizational contexts can help in reducing barriers to effectively communicate research outputs within organizations, and between organizations.

1.1.1 Current research and how research feeds into policy development

Although research clearly matters, there remains no very clear understanding of what, when, why and how research feeds into development of policies. And while there is extensive literature on the research-policy links in Organization for Economic Cooperation and Development (OECD) countries from disciplines as varied as economics, political science, sociology, anthropology, international relations and management, there has been much less emphasis on research-policy links in developing countries (Young & Court, 2005).

Policymaking is a complex process, reflecting historic patterns, institutional structures, operational legacies, cultural influences and international constraints. The policymaker's role is to suggest options for political decision-making. The supporting analysis may be prepared by analysts within the system or occasionally by consultants. Researchers can contribute most to the policy-formation process where complex issues require comprehensive frameworks or models to be developed or new empirical evidence to be analyzed. Both researchers and analysts need to understand from the outset that any given piece of research is unlikely to provide a 'silver bullet' solution, and that the key role of the researcher is to draw out the implications of the theoretical or empirical analysis for policy design or evaluation (Hearne & Watt, 2011).

For an African policy-maker, economist, development practitioner or student in the field of development, there is a general perception that indigenous economic research contributes only a little or not at all to policy design in Africa. This difficulty is closely related to the complex nature of the policy-research relationship (Ayuk, 2007). The intricacy of communicating complex evidence-based information to policy-makers has, therefore, generated substantial literature. Even before the current "information revolution," government staff in developed countries reported that they were awash with information, particularly when undertaking a new initiative. Thus, their job was to cut through the mass of information and make sense of it (Weiss, 1989). According to Caplan (1979), African policy-makers seldom use African-generated policy research when formulating policies. Thus, there is a growing desire to see development policy and practice informed by research and based on firm foundations of evidence. But effective research communication is challenging. As Waddell (2001) puts it, 'putting research to use' is a neglected part of the traditional research equation.

There is a broad consensus in the literature that successful communication between researchers and research-users is crucial for the effective utilization of research in decision-making in policy and practice.

Literature also shows that effective dissemination and the demand-driven aspect of research are correlated because communication channels transport messages, which leads to demand for new research (Fisher, Odhiambo & Cotton, 2003). Communication between researchers, research funders and research users can happen in many different ways due to the number of different research users, the variety of research producers (coming from different disciplines, ranging from policy oriented to more applied action research, working independently from each other in a fragmented research landscape) and the number of policy levels (local, national, regional, global).

Evidence from research is crucial in improving policies and services, yet it doesn't always get taken up into policy. Very few studies in Kenya provide insight on how researchers and communication specialists can engage with decision makers and ensure that research has the required impact. Research contributes to many outcomes, including creating spaces for public debate, contributing to changing laws and practices, influencing data collection, and changing behaviour through partnerships with civil society actors such as advocacy groups and journalists. Research can also help raise awareness of new issues, change attitudes and affect how health services are designed and targeted for instance, which in turn may affect the behaviour and practice of health workers.

Literature on policy-making models is already fairly large and still on the increase. Some impetus for this growth has come from activities such as those of the Global Development Network (GDN). While there have been a few studies focusing on the relevance of social sciences research in policy-making in Africa (Ajakaiye & Roberts, 1997; Sanda, 1981), there is a scarcity of work on the policy-making process with specific reference to sub-Saharan Africa. Young and Court (2005) observe that theoretical and case-study research as well as practical work carried out over the years by Overseas Development Institute's (ODI) research and policy development programme and the GDN project, bridging research and policy have led to the development of a practical approach designed to help remedy this "chaos of purpose and accident" and promote research-based development policies.

Studies have shown that political leaders often have a disjointed and unformulated perception of policy development and this leads to dysfunctional policy actions and a general lack of progress. There is no systematic follow-up of policy actions and reactions. Typically, policy changes are based on afterthoughts, uncoordinated inferences from developments in the policy arena and individual preferences because policy initiators, monitors and evaluators seem to work at cross-purposes. Thus, the knowledge base for meaningful policy articulation is disapproved and continually destroyed (Small 2005; Court, 2005; Court and Young 2006; Bero, 1998; Ayuk, 2007).

1.1.2 Organizational Information Theory and the framing of research to policy linkage

Organizational communication in today's organizations has not only become far more complex and varied, but more important to overall organizational functioning and success. The Organizational Information theory was employed in the theoretical approach to find out how research findings are typically shared and why research is not getting into the policy process. While research used to focus on understanding how organizational communication varied by organizational type and structure, the emphasis has increasingly turned to understanding how new communication technologies and capabilities can help bring about new and more effective organizational forms and processes (Tucker et al. 1996; Desanctis & Fulk, 1999). The various models available in this field provide a useful framework for investigating information processing and decision making procedures within organizations/institutions and where information could be breaking down during policy-making processes within groups.

Research is usually presented in form of information; accordingly this study tried to largely understand how research feeds into the policy process by espousing Karl Weicks (2004) Organizational Information Theory, which is fundamentally an organizational communication theory. This theory argues that the main activity of organizations is the process of making sense of equivocal information. Organizational members accomplish this sense-making process through enactment, selection, and retention of information. Organizations are successful to the extent that they are able to reduce equivocality through these means. Organizational information theory is thus about the complexity of information management within an organization and builds upon general systems theory and phenomenology.

A key component of Weick's theory is the information afforded by the organization's environment as seen in this theoretical framework, including the culture within the organizational environment, which can impact the behaviors and interpretation of behaviors of those within the organization. Thus, creation of organizational knowledge is impacted by each person's personal schema as well as the backdrop of the organization's objectives, and the organization must sift through the available information to filter out the valuable from the extraneous. Additionally, according to this theory the organization must both interpret the information and coordinate that information to "make it meaningful for the members of the organization and its goals." In order to construct meaning from these messages in their environment, the organization must reduce equivocality and commit to an interpretation of the message. The theory elevates the importance of communication within an organization and how communication can be utilized for increasing the productivity of an organization.

1.1.3 The concept of environmental scanning and the gathering of policy information

To gain a 'big' picture view of the environment one needs to analyze both the external and the internal context (Shoemaker, 1995). A PESTLE analysis would provide the external perspective, leading to an assessment of opportunities and threats. A PESTLE analysis is a method for reviewing the macro environment (external forces that impact an organization's ability to plan). It stands for: Political; Economic; Sociological; Technological; Legal and Environmental factors. These forces, although out of the organization's control, may have an impact on the success of any future plans. By considering them, an organization can change direction, build contingencies, identify new opportunities or do nothing at all: it is an important part in the strategic decision making.

The internal perspective can be determined by a review of strengths and weaknesses. The combination of an external focus with the internal perspective enables one to assess the opportunities and threats from outside the organization and the strengths and weaknesses from inside the organization. This is commonly referred to as a SWOT analysis (strengths, weaknesses, opportunities and threats). The usefulness of SWOT analysis is not limited to profit-seeking organizations. SWOT analysis can be used in any decision-making situation when a desired end-state (objective) has been defined. Examples include: governmental units, non-governmental organizations, and individuals. SWOT analysis may also be used in pre-crisis planning and preventive crisis management (Adams, 2005; Jyothi, Babu & Krishna, 2003; Robinson, 2003) or in creating a recommendation during a viability study or survey.

Probably the most general framework used to guide the collection and analysis of information is the stakeholder model of organizations (Porter, 2004). This model identifies the various groups of people who influence, and are influenced by the organization—including employees, regulators, society and owners/shareholders. The purpose of the organization is to provide value to each of these stakeholders, so it must understand the situation, needs and preferences of each group (Porter 2004; Middleton, 2003; Worrel, 1998). Many organizations have people who can be termed 'boundary scanners'— people who interact with the external environment, such as marketers, public relations staff and researchers. Part of their job has to be the search for relevant information for the organization — not just information for their own needs, but for others in the organization who do not have the same access to the outside world.

Knowing what is going on in the external environment is only part of the picture. Managers also need to have a deep knowledge of what is occurring in their own organizations (Adams, 2005). The first requirement is to understand the people who work in the organization – what their skills are, what motivates them, what their attitudes to work and the organization are, what their values are and what

cultural norms they observe. It is difficult to manage staff without knowing them. It is also a key management objective to retain the workforce, its special knowledge and experience.

Every organization has processes. These are the formalized task sequences used to carry out routine functions (Bryson, 1998). Without processes, you do not have an organization, but a collection of individuals. The efficiency and effectiveness of any organization is largely determined by the way their processes operate. Virtually any process can be improved and programs such as total quality management and benchmarking are aimed at process improvement. Unless you know what these processes are, you will have no idea how to implement the required changes. A great advantage of the quality standard; International Organization for Standardization ISO-9000 is that it requires organizations to document and measure their processes (Menon, 1999; Jyothi, Babu & Krishna, 2008).

The capabilities of an organization result from the performance of various organizational processes, the knowledge, skills and experience of staff and associated groups, combined with the resources which it has available — including equipment, finance, linkages to other organizations. In recent years many organizations have focused their efforts on what are termed their ‘core competencies’ (Hamel & Prahalad 1990) — things an organization does especially well in comparison to its competitors. It is these areas which give the organization its competitive advantage. The idea is that other activities — those not critical and where the organization does not have special expertise — can be outsourced to specialist contractors.

There are four stages of converting information into knowledge which can guide actions, but first we need to assess the information and decide if it is useful or not; combine information with other related information; analyze the combined information to see whether it means something for the organization; and pass the analysis to someone who is in a position to act upon it (Cameron, 1983; Christensen, 1997). The first stage — deciding if information is useful — is a critical one. This should encompass all parts of the organization, so relevant managers should be aware of what might be useful to the research and development (R&D) department.

The next step is filtering, to discard as much information as possible so that a manageable portion remains. As part of the assessment stage, also evaluate the reliability and accuracy of the information. Combining information depends on having access to a range of information across the organization. Many organizations have knowledge-based software systems which help the sharing and integration of information. The right skills and experience are required to analyze what they mean, such as a cross-

functional team. Finally, when the significance of the information has been assessed, it must be handed to the appropriate people to action (Conway & Mackay, 1994).

Knowledge assets are the accumulated organizational information, learning, and experience that reside in employees' heads, databases, policies, procedures and filing cabinets regarding technology and competitors (Choppin, 1996; Byrne, 1996). An organization's knowledge assets contribute to its competitive advantage so they have to be managed. Organizations need to know; what their knowledge assets are, where there are gaps in their knowledge, and how to manage and make use of these assets to get maximum return.

A number of organizations have appointed Chief Information Officers, who facilitate the collection and analysis of information from the external cultural environment. The external cultural environment includes the local culture. This means not only the national culture, but the truly local culture — as within a national culture there can be differences. The internal culture of an organization is greatly influenced by the external cultural environment — after all; the employees are mainly from the local area (Fahey, 1986; Navarro & Gallardo, 2003). However, organizations develop their own cultures. Often these cultures develop when the organization is being set up and they reflect the ideas of the founders (Robinson, 2003). A new manager who sets out to change the culture does so at his/her peril. There is usually a long entrenched tradition behind the culture and the organization has attracted people who fit that culture. There needs to be a very good reason to change the culture, and it has to be done with great care and sensitivity (Johnson & Scholes, 1993). The controls, systems and procedures that can be effectively used to manage the operations of an organization are influenced by the culture of the organization (Horn & Niemann, 1994).

1.1.4 Research and communication, Siamese twins?

Stimulating developmental impact depends on the production and uptake of relevant research outputs. This in turn depends on effective communication throughout the research design and uptake promotion processes (Vaughan & Buss, 1998). Recognizing this, today many research programmes are giving increasing attention to communication skills of researchers. This has been supported by substantial research on communication for development. Communication is indeed crucial in development – whether in the form of dissemination, guidelines, prescriptions, recommendations, advocacy, promotion, persuasion, education, conversation, roundtables, consultations, dialogue, counseling or entertainment (Hovland, 2003; Volmink, 2004; Saxe, 1996; Koenig & Guchteneive, 2005; Livyn et. al., 2006).

Sometimes, providing information is the most powerful approach available (Sankar, 2005; Backer, 1991). Ideally, information helps people to help themselves. Information is also the lever that people need to hold government accountable and to ensure transparency in participative and empowering processes (Hovland, 2005; Saunders, 2005; Mortimore & Tiffen, 2004). But, communication is often about more than providing information. It is about fostering social awareness within and outside organizations and facilitating public democratic dialogue (Plouffe, 2000; Rigby, 2005).

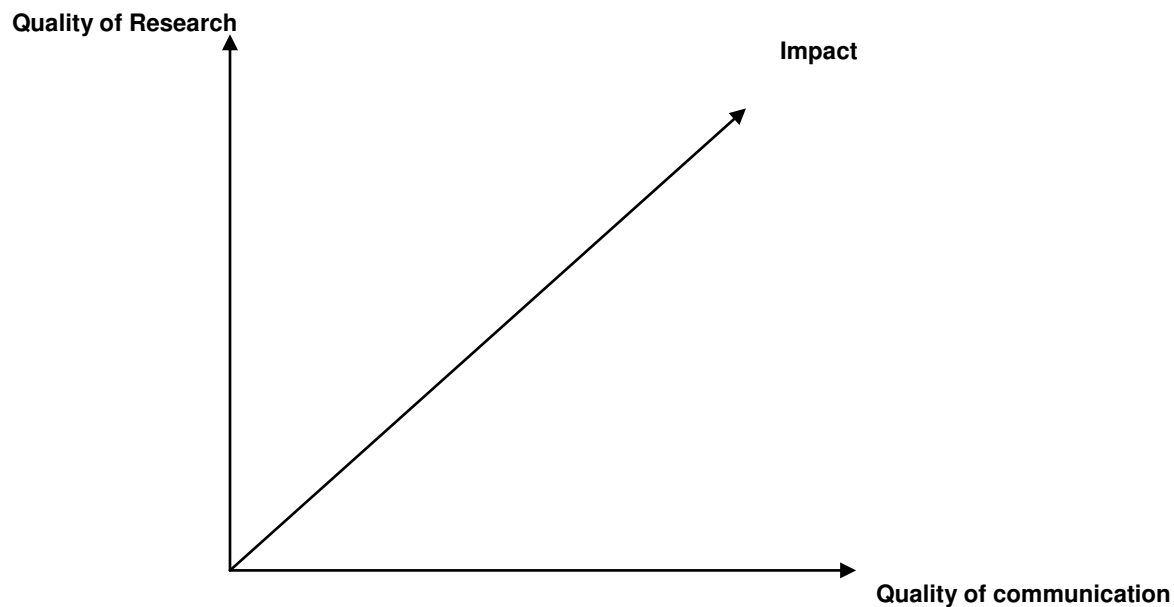
If communication is carried out correctly, it does not only benefit the recipient, it also benefits the sender. This facet of communication is often disregarded. Many people have a habit of thinking of communication as a process of teaching others – or of telling others everything we know (Porter & Hicks, 1995). Conversely, communication is also a process whereby the senders themselves can learn a lot. If we think strategically about the communication process, we can maximize our own benefits too. Modern communication though, is becoming more multipurpose by the day and the definition of the sender versus the receiver is becoming increasingly difficult, especially in dialogic settings.

We learn different things by using a range of communication activities, or by strategically choosing the communication activity that will give us quality and more relevant information in return. For example, by putting documents on the web, and tracking which of them are downloaded or accessed, it is possible to get a sense of which topics spark an interest in which networks (Scott, 2003; Postlethwaite, 1984). By hosting seminars or public meetings, it is also possible to get a sense of which research is regarded as credible, and which is not (Ajakaiye & Soyibo, 1994). By asking for feedback as part of our communication activities, it is possible to get a sense of the needs and frustrations of the target audience, and therefore of how we might increase the impact of our knowledge (Goering et. al., 2003; Larsen, 1980; Jaffreys et.al., 2007).

Quality communication consequently goes hand in glove with quality research, and it is important to note that good research begins with good information. To have quality research, accuracy is paramount, as well as the use of appropriate models and suitable data. Understanding the context-specific situation, for instance region, country or village, is also imperative. State-of-the-art research should ideally go hand in hand with modern communication. If the research is excellent, but the communication is poor, research results will be kept within an intimate group of researchers, and the public will not learn about them. If the research is substandard or lacks substance, but excellent communication exists, research results will be highly publicized, but the research will not have a positive impact. High quality research results that

are communicated well will have a major impact. Therefore, excellence in both areas is important for research to benefit those who need it. (See illustration in *Figure 1*).

Figure 1: Good research merits good communication



Source: Author, (2014)

1.1.5 Communication of research for policy formulation

At the most basic level, dissemination of research means the communication of research findings. This study, however, focused on policy engagement as a means to interacting with policy-makers to ensure take-up of research outputs. Most research findings appear only in academic peer-reviewed journals, read mainly by other academics and by the people who undertake the peer reviews. Derogating this activity was outside the scope of this study, indeed, it is the central lifeblood of academic endeavour; the undertaking of research, and the informing of others in the research community of findings so that theory and understanding of a subject continue to grow.

Communicating research findings in such a way that they inform decisions about policy or practice, or in a way that they are taken up, is fundamental. It can, however, be argued that there is a fine line between dissemination and implementation. The purpose of the dissemination of results is that they should be taken up and implemented to bring about changes. These changes can be both: in national and local policy and in national and local practice. Thus, the value of fostering linkages and active engagement between

researchers and policy-makers to ensure that research products are part of an ongoing dialogue cannot be over emphasized (Bardach, 1984; De Vibe & Hovland, 2002; Zukerman, 2001).

For purposes of dissemination and implementation, research findings can be grouped into two, those that add to or challenge understanding of issues, but do not suggest a need for immediate change in policy or practice, and those that call for radical overhaul of a particular policy (Stone, 2003; Crewe & Young, 2002; Feser, 2007). However, it is important to note that evidence for a change in practice or policy is built upon replication of results by different teams and in different places. Very few individual studies are by themselves adequate evidence for a change in policy or practice; nonetheless, they should stimulate prompt questioning of current practice.

It, therefore, follows that change in policy or practice should more often follow the communication of systematic reviews of areas which demonstrate that several individual studies point in the same direction, rather than dissemination of individual studies. This suggests that individual studies and systematic reviews should normally be disseminated differently. Individual studies should be disseminated to those who are likely to attempt replication or compile systematic reviews, while systematic reviews should be widely disseminated to practitioners or policy-makers who may be expected to change their practice as a result.

Typically, a discussion of research dissemination in many research organizations would normally focus on how and where journal articles can be published, and how one can obtain copies of reports and papers through the library system or other information services. These days, in-house researchers are usually encouraged to make their work available to the wider social services audience. The editors of journals know how much effort is needed to encourage in-house researchers to contribute. Behind the effort and the exhortation lies the unexpressed assumption that internal dissemination is happening and is non-problematic (Maxwell, 1998; Moody, 2000; Church, 2005). This view cannot be taken for granted given the way in which information is communicated in large, hierarchical, dispersed organizations.

1.1.6 Communicating research findings to influence policy formulation

Communicating results of research is a critical step in the research process, which is often overlooked or undermined because of inadequate attention to the need for strategic dissemination and knowledge translation (Hovland, 2005; Bero, 1998; Cherns, 1970). Not surprisingly, many valuable research results are under-utilized by segments of the public that need them most. Policy makers, government officials,

journalists, development planners, and members of the public need ready access to research results to inform their decisions.

Limited use of appropriate tools and channels by researchers to communicate their findings is probably the single biggest obstacle to the utilization of research findings in policy-making by Kenyan leaders. This is the problem that knowledge translation – a process through which research is brought to life – is meant to solve. Knowledge translation is the intersection between research and action through a communicative relationship that relies on partnerships, collaborations and personal contacts between researchers and the people who use research results to formulate policies (De Vibe & Hovland, 2002; De Vibe, 2002).

The International Development Research Centre (IDRC) has come up with an effective research communication principles toolkit known as the IDRC Knowledge Translation Toolkit. In this toolkit, Start and Hovland, (2004) observe that some of the factors that contribute to poor communication of research results include: researchers' narrow focus on peers through journals; policy-makers' aversion to research information; and the lack of incentives for evidence-based policy-making.

One important observation in literature is that when creating an effective dissemination plan, a researcher should consider the goals and objectives of the research. The goals should be specific and clearly communicated (Buonavista, 2003; Lawrence, 2006; Lavis et. al., 2003). They should also collaborate with existing relationships and networks as much as possible. Different methods can be considered for dissemination of research, such as written, electronic, verbal, and graphic mediums. If slides are to be used in the delivery of communication, they should be limited to the most important points.

Communicating research findings can be formal or informal, and can occur in a multitude of presentations. Some of the ways to promote and disseminate research findings include: publication of findings in scholarly journals, presentations at national or local professional conferences, written summary statements, poster presentations at local and national conferences, presentations at local unit meetings and at various committee meetings, presentations at journal clubs, dissertations, and presentation to targeted policy makers.

1.1.7 Communication problems in disseminating research findings

The fundamental argument in this study is that the traditional mechanisms, through which researchers disseminate their work, are prone to frequent communication breakdowns, and that much work, which

could potentially make valuable contributions to practice, is unfortunately lost within the tombs of academia. Using the well-known Shannon and Weaver (1949) communication model, this study analyzes three most important problems: the choice of dissemination channels, language barriers, and the alienation of academia from the policy-making arena.

Problems caused by divergent timescales and incentive structures of researchers and policy-makers lie at the centre of communication. On the one hand, the time-consuming nature of ‘pure’ research, not bound by time constraints, is difficult to integrate with the policy demands of politicians who are often compelled to work to very tight deadlines to produce short-term, tangible policy results. Policy-makers often struggle to stay apace of new scientific thinking, especially in terms of developing relevant policies and infrastructure to enable as well as regulate the implementation of scientific and technological advances (Bittner, 1996; Clark & Juma, 2002; Craig, 1999).

Shannon and Weaver’s (1949) model of human communication, though rather simplistic, provides a useful framework within which to reason about problems in communicating academic research findings to professionals. The three critical aspects of an effective human communication process are that: firstly, suitable communication channels are selected, with minimal background noise; secondly, the language of communication is intelligible to both parties; and thirdly, the participants in the communication come from similar environments, or at least have had adequate exposure to each other’s environments. In all three of these aspects, the means by which research findings have traditionally been relayed to practitioners are chronically impaired. Every one of these is now discussed in turn.

For many academics, the primary motivation to conduct research is personal survival (Moody, 2000), which necessarily means impressing those consumers, so to say, who have the greatest potential influence on one’s academic career prospects. There is really not much motivation to consider the needs of policy-makers as research consumers, even though they form the bulk of decision-makers in any society. Like buyers of any product, researchers should, therefore, be expected to shun publication channels that would not make their work accessible to these policy-makers.

Another critical precondition for successful human communication is the use of a commonly understood language. For research to be useful, it must also be usable. At present, the style and form of academic writing is impervious to most policy-makers (Glaser, 1983; Church, 2005; Mendizabal, 2007). Work that is highly relevant to pragmatic issues might be rejected as being irrelevant merely because it is presented in an inaccessible style (Robey & Markus, 1998). Very frequently, articles are littered with detailed statistics, formalized notations, jargon, arcane prose, and excessive references. The use of terse and

complex language serves only to confuse the message and lessens the likelihood that it shall be understood.

The third and last significant factor in the efficiency of human communication is the similarity between the “environments” of the sender and the beneficiary of a message, that is, the closeness of their respective backgrounds and cumulative experience. The greater the overlap in terms of common experience between participants in a communication process, the more effective the communication is likely to be (Ellis & McClintock, 1990). There is apparently a major disconnect between academia and policy-making, consequently researchers and policy-makers and even technocrats within government agencies have formed their own mutually independent communities, with minimal cross-membership and little formal or informal knowledge transfer. Glass (1997) posits that the academic picture of the industrial world (and vice versa) is both skewed and disdainful, and this is also applicable to the policy-making environment. Pike (2000), on the other hand, teasingly remarks that what is seen is a thriving software industry that largely ignores research and a research community that writes papers rather than software.

1.1.8 Common problems that impede dissemination of research

In most developing countries like Kenya, dissemination of research findings is hampered by a myriad of problems. One, there is the inadequacy of formal information centres such as libraries, and those that do exist lack current stock. A lack of funding and infrastructure makes web-based research difficult, while a low research training capacity means that researchers lack both skills and access (even to internally-generated) information resources (Kazmi, 1999). Two, there are few links to external sources of information to make up for skill, funding, resource and facility shortages in the developing world.

Research that is linked to appropriate dissemination strategies penetrates many spheres, including the policy-making arena. The most general approach evident in the literature on strategies for the communication and dissemination of research revolves around the concept of ‘two communities’ – researchers and research users – and how to close the gap between them (Ciupagea, 1999). A variety of different techniques of communication and dissemination is recommended in the literature, and in general these aim for researchers to enhance the distribution of their research.

Some of the common strategies that many authors point out and agree that need to be taken on board while designing communication strategies include: maximizing press and media exposure; widespread distribution of brochures and pamphlets; immediate advertising of research results; increasing the use of

internet and other electronic means of dissemination; publishing research papers; engaging with policy-makers through policy debates, especially on television, and holding open seminar presentations or discussion in other forums (Ciupagea, 1999; Jaber, 1999; Jumah 1999; Garrett & Islam, 1998; Timmer, 1998). Treating these techniques as a prescriptive list of dissemination strategies for researchers to follow, however, presents problems: It conceptualizes dissemination as a one-way flow from researchers to policy-makers, and not as an interactive and engagement process in which communication includes feedback and an understanding of the research needs of research users (Jaber, 1999).

Generalized lists of techniques to encourage the use of research often ignore the importance of targeting particular research-user groups with different dissemination strategies. Developing states face particular problems in regard to communication and dissemination, and may require different strategies. Dissemination here occurs in a social and political vacuum, when in reality it should not be so, further strategies that work well in one country may fail elsewhere. And according to Jan Isaksen, (1999), there are few governments that would like to have policy research findings appear in the media before they are disseminated within.

The Department for International Development (DFID) in Kenya is an example of one of the few donors that explicitly earmarks part of its research budget for communication, and this has proved successful in many of the projects they support. Centrally-funded research programmes are required to assign a minimum 10% of the budget to research communication, and they must also implement a quality-assured communication strategy. Many research programmes have done an admirable job of designing and beginning to implement a communication strategy – with the ultimate aim of improving access to and use of their research. Obviously, even better, more systematic use of research would lead to better development outcomes.

Thus, the DFID is now seen as a leader in facilitating and encouraging communication of research and has come up with a comparative advantage in this area. It has, therefore, been working with other donors to influence the way research is funded and implemented. In this respect, research communication is gaining prominence on the agenda of both donors and the global research community (Barnard et. al, 2006). A survey of funders, among them Swedish International Development Cooperation Agency (SIDA), International Development Research Centre (IDRC), Danish International Development Agency (DANIDA), Economic and Social Research Council (ESRC), Norwegian Agency for Development Cooperation (NORAD) and Swiss Agency for Development and Cooperation (SDC), illustrate the range of tools deployed. These include requiring researchers to produce communication plans and providing

guidance and expertise to assist them; requiring minimum expenditure on research communication; holding central budgets for communication; and funding non-project communication work.

The cross-sectoral nature of most problems in disseminating policy research means that it is difficult to persuade institutions to participate in discussions and negotiations when they perceive that it is not their ultimate responsibility (Church, 2005). Identifying the key players and securing their interest and commitment to participate is a major task for which traditional research teams may be ill-equipped (De vibe & Hovland, 2002). This study attempted to fill the knowledge gaps that would be preventing acceptance of what appears to be sound recommendations. Although it may be difficult to influence any actual policy change, the effort was still worthwhile, since economic and social welfare problems are becoming increasingly urgent and the subject is advancing rapidly.

1.1.9 Characteristic sources of public policy

Policy is a multi-layered process in that it involves contributions from a number of disparate sources. As a number of policy analysts observe, policy occurs over a number of levels and power is unevenly dispersed (Davis et. al, 1988; Fulcher, 1989; Ham & Hill, 1984). For this reason simplified top-down models of power and policy are viewed with caution as they can distort the power relations between policy levels (Davis et al, 1988). Scott (2000) proved that a relatively small group can challenge the giants and win. A multi-level analytical approach is useful in order to illuminate the different levels at which policy forms and why.

Public policy can be described as an attempt by the government to address a public issue. The government, whether it is state or federal, develops public policy in terms of laws, regulations, decisions, and actions. There are three parts to public policy-making: problems, players, and the policy (Fulcher, 1989). The problem is the issue that needs to be addressed. The player is the individual or group that is influential in forming a plan to address the problem in question. Policy is the finalized course of action decided upon by the government. In most cases, policies are widely open to interpretation by non-governmental players, including those in the private sector. It should be noted that public policy can also be made by leaders of religious and cultural institutions.

Economic research has the potential to influence policy-making in Africa and elsewhere in developing countries, and the degree to which policy makers rely on economic research in their decision-making has now come into focus (Ayuk & Marouani, 2007). Thus, the level of motivation for economists to feed the

policy debate needs to increase. Another thing that needs attention is how improved indigenous research-policy relationships can help strengthen democracies in Africa.

1.1.10 Organizations that engage in economic policy research in Africa

Policy research organizations are very important for the development of the African continent and should always seek to insert their ideas into the streams of activities in the contemporary policy-making process. This involves several players from the executive and legislative arms of government, the private sector, labour unions and civil society organizations. Despite recognition that there is an important role for research in policy decision-making in Africa, research input from organizations/institutions into the policy process is rather limited (Olomola, 2005).

The critical element in policy research and evidence-based decision-making is the existence and function of effective links among researchers, policy-developers and decision-makers. None of these three communities has placed enough emphasis on such linkages. Several decisions are still being taken without research input, and several research studies are being conducted without policy relevance (Olomola, 2005). Perhaps even worse there are policy-relevant studies done with considerable public investment that are not being utilized. There is also limited commitment by governments to situate existing policy-oriented research institutes into the mainstream of policy decision-making. The reliance on several parallel ad hoc channels has tended to create conflicts in the flow of ideas and has placed politics at the forefront of policy decisions. This tends to cause disenchantment among policy researchers, and in turn has adverse consequences on the supply of research output (Ayuk & Marouani, 2007).

Many professional organizations like research institutes and universities that produce research outputs in Kenya are basically very bureaucratic. The key difference between these organizations and a manufacturing organization for instance, is that professional organizations rely on highly trained professionals who demand control of their own work. So, while there is a high degree of specialization, decision-making is decentralized. This structure is typical when an organization contains a large number of knowledge workers, and this is why it is common in places like universities and research organizations.

The professional organization is complex, and there are lots of rules and procedures. This allows it to enjoy the efficiency benefits of a machine structure, even though the output is generated by highly trained professionals who have autonomy and considerable power. Supporting staff within these organizations typically follow a machine structure. However, the clear disadvantage with the professional structure is

the lack of control that senior executives can exercise, because authority and power are spread throughout the hierarchy. And this can make these organizations really hard to change.

A poor policy environment as a result of the Structural Adjustment Programme (SAP) years and the need to build a critical mass of qualified economists to spread economic research that can effectively feed the policy-making process led to the creation of a number of initiatives in Africa in the 1980s and 1990s (Ayuk & Marouani, 2007). It also led to strengthening economic capacity in the continent through economic research organizations like the African Economic Research Consortium (AERC), African Capacity Building Foundation (ACBF), Secretariat for Institutional Support for Economic Research in Africa (SISERA), Global Development Network (GDN), and Programme de Troisième Cycle Interuniversitaire (PTCI).

State actors generally own at least one policy research outfit, either as a department within a ministry or as an autonomous organization outside the government bureaucracy. Invariably all central banks have a research department. However, because of the precarious financial situation of these government branches and organizations, and also the dominant neo-liberal paradigm of the International Financial Institutions, they are constrained to do only surveillance/monitoring and evaluative research (Ayuk, 2007; Ajakaiye & Soyibo, 1994).

The surveillance/monitoring is designed to systematically and constantly track developments in the economy and society with a view to identifying potential opportunities and challenges well in advance of their emergence to allow for the design of appropriate policies and programmes that would effectively deal with the situation. The evaluative research is designed to analyze and evaluate the impact of specific policies and programmes against the background of the intended effects and identifying the unintended, but desirable effects, which should be consolidated, and unintended and undesirable effects that must be ameliorated (Ajakaiye, 1992; Ajakaiye & Roberts, 1997).

Economic research, whether or not it is done at the national or international level, for it to be useful and contribute to policy development and monitoring in poor countries, it must meet two major closely interdependent challenges. It must ensure the relevance and reliability of the data on which the analyses are based so as to guarantee the quality of these analyses, and must make wise and practical choices of methods and tools that take into consideration the limited availability of human and material resources (Sanda, 1981).

1.1.11 Structure of organizations that consume policy research in Kenya

In Kenya, many policy organizations and government departments consume policy research in different ways. But, first, it is important to note that organizational structure affects organizational action in two notable ways. One, it provides the foundation on which standard operating procedures and routines rest, and secondly, it determines which individuals get to participate in which decision-making processes, and thus to what extent their views shape the organization's actions. Organizations can be characterized by their distinctive structural attributes. For example, some organizations are best described as large, complex systems, with rigid rules and centralized hierarchies, while others are better characterized by their diffuse decision-making structures and responsiveness to, and flexibility in dealing with, specialized clientele.

Many organizations in Kenya that consume policy research would basically be categorized as Divisional Organizational Structures. This is basically a kind of organizational structure that is characterized by divisions inside an organization, based on the working of an organization. Divisions are actually made to facilitate large organizations, for instance government departments to operate efficiently. These divisions work independently on their jobs, taking strategic directives from the top management.

The Ministry of Information, Communication and Technology is given here as one example among the many ministries in Kenya that have this kind of structure. It has various departments, parastatals and other bodies. The role of management and support services department based at this ministry's headquarters is to formulate, co-ordinate and administer public policy for promotion and development of Information and Communications sector. It also offers support services. This department has various divisions that include administration, human resources, finance and accounts; economic planning, procurement, Aids control unit and public relations. These divisions perform different specialized duties that collectively ensure the smooth running of the ministry.

The administration division in this ministry, for instance is responsible for overall administration and management of the ministry's departments and supervision of the parastatals under its mandate. The division also includes transport services, office superintendent and general registry. The human resource management and development division interprets policies and provides services pertaining to human resource management and development to other departments and parastatals in the ministry. It deals with appointments, complement control, personnel records, discipline, salaries, staff training and development.

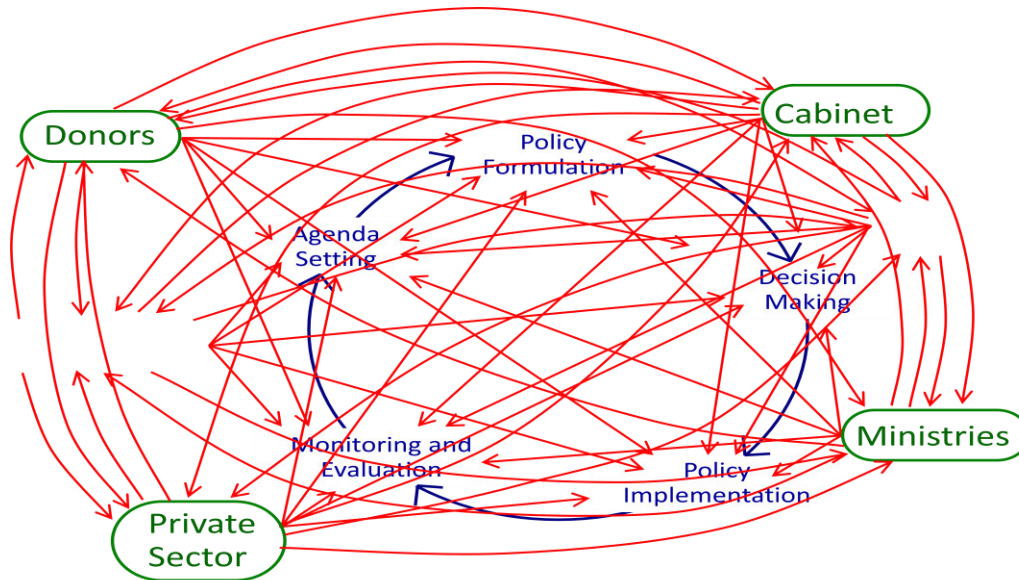
The central planning and project monitoring division, on the other hand, is responsible for micro and macro-economic policy, economic planning and analysis of development matters pertaining to the ministry. This includes assisting departments to prepare short and medium term plans in line with the ministry's strategic objectives, goals and mission. The division is also responsible for monitoring and evaluating the implementation of all the ministry's plans in liaison with the Ministry of Devolution and Planning. The ministry has other sections like internal audits, Information Communication Technology (ICT), Department of Information, as well as parastatals like Kenya Broadcasting Corporation, Kenya Film Commission, Postal Corporation of Kenya (Republic of Kenya, 1997).

1.1.12 The Policy Formulation Process

A policy established and carried out by most governments departments in Kenya goes through several phases from inception to conclusion. These stages include agenda building or setting, formulation, adoption or decision making, implementation, evaluation, and termination. In the model shown in Figure 2, it is evident that policy making is usually influenced by many parties including donors and the private sector, as well as the policy makers (cabinet and ministers). Even though the public is not covered in this model, they play a crucial role in policy development, and their interests have to be championed in some way, probably by their members of parliament.

In Kenya, the official institutional framework for public policy-making comprises the executive, legislature, judiciary, local authorities and political parties. In an effective setup, it is expected that these bodies interact with one another, and with various interest groups within civil society and private sector. It is through such interactions that well thought-out and effective public policies are expected to materialize (Odhiambo-Mbai, 1997). However, it is imperative to note that the executive usually formulates two categories of policy: developmental and regulative. The two common approaches used in formulating development policies are the formation of sectoral working groups or experts, and the appointment of a Presidential Committee or Commission. Within the Executive, the Ministry of Devolution and Planning has the primary role of formulating development policies as well as coordinating their implementation nationally.

Figure 2: Illustration of a typical policy-making process



Source: ODI, (2009)

This organizational structure extends further to the central and county regions. At the central or national level, the organizational structure is made up of the Cabinet, the Ministry of Devolution and Planning, and the Planning Units within the various ministries. It is important to note that policies that have immediate financial implications require input by The National Treasury. The provincial organizational structure is made up of various development committees, for instance at the sub-county level, there are the Development Committees in every sub-county. Kenya's competitive party politics usually provides an opportunity for a political party to convey its development policies and its subsequent election implies the approval of its public policies by the majority. This explains the similarity of development plans and party manifestoes in Kenya (Odhiambo-Mbai, 1997). The key contents of the manifestoes typically originate from the party supporters or the civil society.

It is imperative to note that public policy making not only involves the public bodies or public officials as policy actors; rather, private or non-official groups also play a very active role in policy making. This public-private interaction constitutes the structure of the political system within which policy actors influence the policy process. The structure of the political system greatly differs from the developed and developing countries. This makes the existing theories or models of public policy making derived from

the developed countries inadequate to explain the policy making process of developing countries like Kenya. The following section describes the elements of the policy process.

1.1.12.1 Agenda building

Prior to a policy being created, a problem must exist that is called to the attention of the government. The following are examples of a few economic and socio-political problems in Kenya that have called for policy formulation. Illegal immigration from neighbouring countries like Somalia has been going on for many years, but it was not until recently that enough people considered it such a serious problem that it required increased government action. Another example is security. When crime threats rise dramatically as has happened immediately after the 2013 general elections or is perceived to be rising steadily, it becomes an issue for policy-makers to address. Specific events can also place a problem on the agenda. The flooding of areas near the river Nyando and Nzoia in Nyanza province during rainy seasons raises the question of whether people should be allowed to build homes in a floodplain.

1.1.12.2 Formulation and adoption

Policy formulation essentially means coming up with an approach to solving a problem. Parliament, the executive, the courts, and interest groups may be involved. Contradictory proposals are often made. The president may have one approach to immigration reform, and the opposition-party members of Parliament may have another. Policy formulation has a tangible outcome: A bill goes before Parliament or a regulatory agency drafts proposed rules. The process continues with adoption. A policy is adopted when Parliament passes legislation, the regulations become final, or the Supreme Court reaches a decision in a case.

1.1.12.3 Implementation

The implementation or carrying out of policy is most often accomplished by institutions other than those that formulated and adopted it. A statute usually provides just a broad outline of a policy. For example, Parliament may mandate improved water quality standards, but the National Environment Management Authority (NEMA) provides the details on those standards and the procedures for measuring compliance through regulations. Successful implementation depends on the complexity of the policy, coordination between those putting the policy into effect, and compliance. Some studies have shown that once implemented, policies are difficult to terminate. When they are terminated, it is usually because the policy became obsolete, clearly did not work, or lost its support among the interest groups and elected officials that placed it on the agenda in the first place.

1.1.12.4 Evaluation and termination

Evaluation is basically determining how well a policy is working. People inside and outside of government characteristically use cost-benefit analysis to try to find the answer. In other words, if the government is spending so much money on a particular policy, are the benefits derived from it worth the expenditure? A cost-benefit analysis is usually based on hard-to-come-by data that are subject to different and sometimes contradictory interpretations.

One important point to note in the Kenyan policy formulation process is that at the top level, politics decide while at lower levels the rigidity of bureaucracies and the inertia of education and tradition decides, thus innovative ideas to change the way we do things may be just too much for most service delivery in the country. Consequently, research evidence needs to get to the policy making process at the parliamentary committee, parliamentary debates and within ministerial organizations for a good impact. However, it must be kept in mind that policy changes often depend on a whole new government coming in with its own policies.

1.1.13 A glimpse of the policies that have not worked well in Kenya

In sampling some of the laws, regulations and decrees that have been unsuccessful in Kenya recently, good examples would include the “*Michuki Rules*” on speed policy and seat belts for urban area public service vehicles, commonly known as *matatus* (Taxi or pro-poor mode of public transportation). The law was aimed at restoring public order and sanity in the public transport, especially the chaotic *matatu* sector. It came into effect in February 2004 and required all *matatus* and buses to install speed governors, passenger safety belts, operate in clearly defined routes, to carry a specified number of passengers and their drivers and conductors to be disciplined and to have a clean security record. Today the *matatus* have gone back to their errant ways.

One other example was a policy that came about in the form of a decree. This was the primary school milk programme, dubbed “*Nyayo Milk*” introduced by former president of Kenya, Daniel arap Moi in 1979 to boost health and diet of school going children. The programme was fully funded by the government of Kenya throughout the country, but has since been abandoned. Other laws like the Alcohol Control Act 2010, popularly known as “*Mututho Law*”, and another that was introduced for alcohol level detection to tame drunk drivers had failed, but the latter has since been revived with mixed results. The Law on noise and excessive vibration pollution control and air quality regulations more or less collapsed immediately after adoption.

1.2 Statement of the problem

The apparent disconnect between research and policy has been a major concern in many development strategy forums in Kenya. Today's policy-making process takes place in a changing political environment, and although the debate on the use of research results for policy decision-making and implementation processes is not new, its features have changed over time. The issue has gained greater prominence in recent decades following the major processes of world change in terms of policy formulation. These increasingly call for concrete evidence to support or challenge the innovations that are implemented in a variety of circumstances. However, the dissemination of and action on useful research findings in development policy-making and practice has been low despite the many volumes of research outputs that are churned out by knowledge-based organizations.

Available literature points to the fact that policy-making in many developing countries, including Kenya, remains largely ad hoc and does not fully use research based information. And this could partly be due to the poor communication strategies developed to link the research and the policy communities. It is, therefore, believed that developing appropriate communication skills among researchers and analysts would go a long way to bridge this gap (Squire, 2002; Gibson, 2003; Bogenschneider, 2000). Thus, the important role policy communication could have in enhancing the linkage between research output and policy-making process can hardly be overemphasized.

A preliminary survey done using secondary sources focusing on how research on economic policy issues is disseminated tends to support the above argument, that most policy formulation is primarily unstructured and leave limited room for research. A review of empirical evidence also shows that many research results do not reach policy makers to enable them formulate important policies effectively. Overall it can be deduced that the question is not whether research findings matter, but precisely how much it matters in the case of policy in different contexts to policy-makers who need information to help shape policy formulation. Ultimately this is an empirical question that available literature is yet to resolve satisfactorily.

1.3 Objectives of the study

This study broadly aimed at interrogating the role of communication in linking research to policymakers during policy formulation, and the process followed by Kenyan Government in coming up with national

and regional policies, taking due regard of the fact that it is through policies that governments pursue certain desired ‘outcomes’ to its people. Thus, researchers, research communicators, and other users of evidence research should now be able to get recommendations that would enable them to take advantage of available research results to leverage advocacy efforts aimed at better promoting public policies and actions grounded in research evidence.

The primary objective of the study was to examine the role of communication in disseminating research findings to policy makers. It also explored ways through which economic research outputs could more effectively contribute to effective policy-making process. The investigation focused on finding out precisely where, and why communication is breaking down between research output and policy formulation in the Kenyan context. In keeping with the above, the study focused on the following three key specific objectives:

1.3.1 Specific objectives:

1. To examine the role of communication in disseminating research to policy makers in Kenya.
2. To evaluate the extent to which policy-making processes draw upon economic research and communication skills located within and outside the formal policy-making structures.
3. To analyze how organizational providers source for innovative and adaptive information to address new challenges during policy formulation.

The study has made recommendations to guide and suggest ways in which government agencies and research institutes could work together to facilitate a more effective relationship between researchers, research outputs and the policy process. It is important to emphasize that this study did not assess the quality of research work or the effectiveness of particular policy-making bodies. It instead captured the personal views and experience of policy makers, senior government officials, researchers, academics, non-government organizations, civil society, media as well as members of the public about research feeding into policy-making process. Comments and observations were also gathered from meetings with select individuals considered to be opinion leaders.

1.4 Research Questions

1. What kind of communication strategies are currently being employed by researchers to engage policy makers while disseminating their research outputs?
2. To what extent do the current structures and principal features of a formal and informal policy decision-making process constitute a viable policy formulation framework?
3. Do policy formulators draw upon economic research and related professional knowledge located within and outside the formal policy-making structure?
4. What are some of the perceptions of policy makers, researchers and other stakeholders about the role of research in the policy-making process in Kenya?
5. What are the key factors that enable successful government departments to have good environmental scanning facilities for sourcing innovative and adaptive information to address new challenges while formulating public policies?

1.5 Significance of the study

This study broadens opportunities for policy input and dialogue. Research findings have been responsible for improvements in quality of life in many countries. Better use of research evidence in development policy-making can improve lives through more effective policies that respond to scientific and technological advances. Irrevocably, independent and strong research is a prerequisite for development policies that will have the desired outcomes.

Ideally, the main driving force for economic research, particularly applied economics is for use as an intermediate input for decision-making (Ayuk, 2007). Many potential contributions of research to policy have been studied and Weiss (1977) notes that research can influence the policy arena by feeding it with new ideas and concepts. However, the danger is that many policy-makers select only the ideas that are friendly with their policy discourse. Research also improves decision-makers' understanding of many policy issues, especially complex ones and researchers have the skills and time that policy makers lack to investigate in great depth issues behind policies. Also of note is that research has a strong positive effect on capacity building, which is a critical issue in Africa. Hass and Springer (1998) argue that research can contribute to and improve public decision-making process by reducing uncertainty. When policy makers want to launch a policy, they need to assess the risks and opportunities associated with the measures proposed. Public evaluations are devoted to this purpose.

Research findings in this study point out areas of weakness and help to mitigate the pressures of the policy making processes. This in the long run assists policy-makers to deliver policies with visible impacts. The suggestions provided are actionable and clearly connected to specific decision-making junctures in the policy-making process. One issue of importance is that evidence-based recommendations provide the necessary information to differentiate between various policy options. Strengthening linkages between researchers, policy makers raise awareness of ongoing research, and inform research agenda with the concrete challenges faced in policy and practice (Court, 2003; Small, 2005; Dukeshire, 2002). There has always been a desire to see development policy and practice informed by research based on firm foundations of evidence. But, effective research communication is challenging. Thus, policy-makers, researchers and other stakeholders need to work together to ensure that this happens. Conversely, gaps in communication prevent a coordinated approach. The most problematic are the gaps between the people who commission research, the people who conduct research, and the people who the research is meant to benefit.

Effective research communication can be quite challenging, but this study was worth undertaking because: The results fortify knowledge management and make evidence base more accessible to promote a culture of research use; the study findings will be shared broadly to promote dialogue and reflection on research outputs to help policy practitioners understand research findings in their own context and make use of what is relevant and encourage repackaging of research results for a wide range of audiences so that evidence is made accessible and relevant to local contexts. The research results will help in improving the networks that link researchers, policy - and decision-makers as well as assist in strengthening communication capacity among research partners and key stakeholders. Even if the research-policy relationship is treated from an economic viewpoint, the conclusions of this study are broader and can help in shaping the policy debate. Thus, the aim of this thesis was not just to contribute to pure academic or theoretical research, the outcomes from the study will become a major tool that would enable policy-makers to better design and implement public policy options, not only for economic, but also other areas for social gains.

1.6 The study framework

Knowledge about factors affecting the socio-economic wellbeing of individuals and communities can influence policy and improve their welfare. To ensure that research evidence on the determinants of wellbeing informs policy and decision-making, effective strategies for knowledge transfer and policy engagement are needed. Such strategies need to identify the research needs of decision-makers and to

engage them in using the results of research on the determinants of wellbeing. To identify a range of strategies for transfer of research knowledge, this study used organizational information theory that cascaded to the environmental scanning model to try and understand the operations of organization within their environments. Primary data was collected from 69 researchers and 135 policy-makers and policy practitioners. A total of 308 units were examined including 10 people who participated in a focus group discussion, seven research institutes and another 87 individuals, mainly beneficiaries of public policies. From a policy perspective, research is supposed to feed into decision-making and planning. However, few developing countries have been able to equip their technical officers with the resources and networks to be able to translate new research into policy relevant actions for key decision-makers.

The strategies used by researchers and research organizations were analyzed according to three criteria: target audience, that is who was engaged, timing (when during the research process did this engagement occur) and method (how was the target audience engaged). A scan of these research organizations, however, found that, although their target audiences varied, they shared the same goal—to have their research results and policy options attended to by those who would make practical use of them in policy and decision-making arena. Although there is more or less enough research evidence to guide public policies, researchers often fail to meet the challenge of presenting their results in useful forms to facilitate their use by policy makers. On their part, many policy-makers and practitioners are not familiar with the various sources of research evidence for their work.

The research-policy link is usually shaped by political context. The extent of civil and political freedoms in a country clearly makes a difference for bridging research and policy. The policy process and the production of research are themselves political processes, from the initial agenda-setting exercise through to the final negotiation involved in implementation. Political contestation, institutional pressures and vested interests matter greatly. So, too, the attitudes and incentive structures among officials, their room for manoeuvre, local history, and power relations greatly influence policy implementation (Kingdom 1984; Clay & Schaffer, 1984).

The framework adopted in this study emphasizes the importance of communications among policy-makers, researchers, practitioners, communities, networks and intermediaries like the media, campaigning groups, and communication processes have in effecting policy change. Some of the current literature focuses explicitly on various types of networks, such as policy communities and advocacy coalitions. While understanding remains limited, issue of trust, legitimacy, openness and formalization of networks

have emerged as important. Existing theories of communication though stress the role of translators and communicators in any policy process (Gladwell, 2000).

The Information Processing Model (Daft & Weick, 1984) provides some foundation for this study in that it furnishes the basis for conceptualizing entrepreneurs' scanning behavior as a correlate of organizational learning. Daft and Weick (1984) suggest a three-stage process for organizations to learn about the knowledge located outside their doors. First, scanning monitors the environment and provides data to the organization; second, interpretation provides meaning to the data gathered during scanning; and third, learning involves a new response or action based on the interpretation, and research on this model shows that scanning enhances innovation, improves organizational learning, decision making during policy process and performance (Choo, 1998).

In order to understand the importance of communicating research results, the study was anchored on organizational information theory and then environmental scanning model for deeper understanding. Environmental scanning is a fundamental mode of organizational learning during the policy-making process. It is thus imperative to briefly review Cyert and March's (1963) Organizational Learning Theory, Daft and Weick's (1984) Information Processing Model and SWOT analysis, which are extremely useful tools for understanding decision-making processes for all sorts of situations in organizations. SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. Environmental scanning as the generator of intelligence for the organization plays a critical role in organizational learning. For example, Stock, Greis, and Fisher (2001) argue that new product development is based in part on assumptions about the environment. If scanning provides information to validate or invalidate the assumptions, then scanning plays a critical role in new knowledge acquisition and learning.

According to the Organizational Learning Theory, organizations learn through interactions with their environments (Cyert & March, 1963). The process is considered cyclical in that the organization interacts with the environment, the environment then responds, and the environmental responses are interpreted by the organizational leaders who learn by updating their knowledge. These leaders also share the information with members of the organization, creating organizational memory in the form of shared beliefs, assumptions, and norms. This organizational memory then guides the leaders and organizational actions (Lee, Courtney, & O'Keefe, 1992; Argyris & Schon, 1978). Given the fact that leaders learn and share, there is no organizational learning without individual learning (Sinkula, 1994). Environmental scanning is an example of how organizations learn from the environment, and how they use the information or knowledge to make certain decision.

1.7 Limitation of the study

Although there are numerous studies targeting dissemination of research results to feed into the policy making process, this study focused on the role of communication in linking research to policy formulation in Kenya. This was motivated by the question; why are Kenyan policy makers not keen on using research to guide their policy decisions? Owing to limitations of time and financial resources, the study only covered some of the tools used for communicating research findings, did a survey on a group of policy-makers, researchers and had interviews with the civil society and other relevant stakeholders.

To keep the study within manageable proportions for rigorous investigation and maintain parsimony, focus was on the role of communication in policy debate and the theoretically driven rational issues that come with it. The findings relied on respondents' self-reported cross-sectional data, which may not reflect changing situations over time. The cross-sectional data would normally be affected by respondents' predisposition of any events that have happened in the past or by the mental position at the period of filling the questionnaire. Again the data were collected from a selection of policy makers, researchers, and policy practitioners in Nairobi and other parts of Kenya, this facilitated data collection and controlling diversity, but also limited the generalizability of the findings.

While acknowledging such limitations, this research exhibits an effective comprehension of the role of communication in linking research to policy formulation in Kenya. Accordingly the study authenticates the developed framework.

1.8 Definition of Key terms

- *Academic Journal*: is a peer-reviewed periodical in which scholarship relating to a particular academic discipline is published.
- *Communication Strategy*: communication strategy is the “what, who, why, when, how, and where” of conveying a message.
- *Dissemination*: making people aware of the findings of research.
- *Evidence-based research*: an unbiased approach and the combination of traditional research and factual evidence.
- *Focus group discussions*: a rapid assessment, semi-structured data gathering method in which a purposively selected set of participants gather to discuss issues and concerns based on a list of key themes drawn up by the researcher.

- *Knowledge translation*: the intersection between research and action through a communicative relationship that relies on partnerships, collaborations and personal contacts between researchers and the people who use research results to make policy.
- *Lobby*: promote an interest group's position to lawmakers.
- *Peer-review*: is a process of self-regulation by a profession or a process of evaluation involving qualified individuals within the relevant field.
- *Policy Brief*: is a concise, standalone document focussing on a particular issue requiring policy attention that explains and conveys the urgency of the issue.
- *Policy maker*: these are parliamentarians, permanent secretaries, government officials as well as those who play a key role in consultative bodies.
- *Policy making process*: involves agenda building, policy formulation, policy adoption, policy implementation, and policy review.
- *Policy*: translation of government's political priorities and principles into programmes, projects and actions to deliver desired changes within a given period of time, also is a course of action taken by a government which might require new legislation, the involvement and influence of various actors, political and otherwise, from the decision making to implementation.
- *Press Release*: is a written statement distributed to the media. It is a news story, written in third person that tries to demonstrate the newsworthiness of a particular person, event, publication or topic.
- *Researcher*: is somebody who performs research, which is the search for knowledge or in general any systematic investigation to establish facts.
- *Stakeholders*: is a party that can affect or be affected by the actions of another entity.

1.9 Summary

Many researchers observe that during formulation of policies and preparation of development plans, governments rarely seek expertise from research and policy institutions. Studies have shown that political leaders often have a disjointed and unformulated perception of policy development and this leads to dysfunctional policy actions and a general lack of progress. Typically, policy changes are based on afterthoughts, uncoordinated inferences from developments in the policy arena and individual preferences because policy initiators, monitors and evaluators seem to work at cross-purposes. The most problematic area as many schools point out, are the gaps between the people who commission research, the people who conduct research, and the people who the research is meant to benefit. Researchers often fail to meet the challenge of presenting their results in useful forms to facilitate their use by policy makers. On their

part, many policy-makers and practitioners are not familiar with the various sources of research evidence for their work. Research that is linked to appropriate dissemination strategies penetrates many spheres, including the policy-making arena. Thus, limited use of appropriate tools and channels by researchers to communicate their findings is probably the single biggest obstacle to the utilization of research findings in policy-making by Kenyan leaders. Other major factors that contribute to poor communication of research results include: researchers' narrow focus on peers through journals; policy-makers' aversion to research information; and the lack of incentives for evidence-based policy-making.

Communicating research findings in such a way that they inform decisions about policy or practice, or in a way that they are taken up, is fundamental. Consequently, the critical element in policy research and evidence-based decision-making is the existence and function of effective communication among researchers, policy-developers and decision-makers. The central argument in this study is that the traditional mechanisms, through which researchers disseminate their work, are prone to frequent communication breakdowns, and that much work, which could potentially make valuable contributions to practice, is unfortunately lost within the tombs of academia. Using the well-known Shannon and Weaver communication model, the study analyzed three most important problems: the choice of dissemination channels, language barriers, and the alienation of academia from the policy-making arena. The study also used organizational information theory to try and understand communication processes within Kenyan organizational providers. This theory argues that the main activity of organizations is the process of making sense of equivocal information.

To ensure that research evidence on the determinants of wellbeing informs policy and decision-making, effective strategies for knowledge transfer and policy engagement are needed because evidence-based recommendations provide the necessary information to differentiate between various policy options. Research can influence the policy arena by feeding it with new ideas and concepts. However, the danger is that many policy-makers select only the ideas that are friendly with their policy discourse. The critical element in policy research and evidence-based decision-making is the existence and function of effective links among researchers, policy-developers and decision-makers. None of these three communities has placed enough emphasis on such linkages, yet communicating results of research is a critical step in the research process, which is often overlooked or undermined because of inadequate attention to the need for strategic dissemination and knowledge translation.

Some of the common strategies that numerous authors point out and agree that need to be taken on board while designing communication strategies include: maximizing press and media exposure; widespread distribution of brochures and pamphlets; immediate advertising of research results; increasing the use of

internet and other electronic means of dissemination; publishing research papers; engaging with policy-makers through policy debates, especially on television, and holding open seminar presentations or discussion in other forums. However, the key to penetration of research into the policy arena is the use of a commonly understood language. For research to be useful, it must also be usable. At present, the style and form of academic writing is impervious to most policy-makers and it is not communicated well.

Chapter Two

Literature Review and Theoretical Framework

This chapter is about the careful review of literature to identify, evaluate and interpret all available studies relevant to particular research questions raised earlier. The review is done to summarize the existing evidence concerning research uptake and the role of communication in translating and disseminating research outputs to inform policy making process. The theoretical framework for analyzing the research to policy link is discussed in this section. The chapter also goes further to discuss the numerous theories that guide the analysis of communication of research findings to policy makers as well as identify any gaps in current research to provide a framework for appropriately positioning new research activities like this one.

2.1 Organizational Communication and environment

This study finds support in the organization theory as the grand foundational philosophy for testing the upper range model. Modern organization theory is rooted in concepts developed during the beginnings of the Industrial Revolution in the late 1800s and early 1900s. Of importance during that period was the research of German sociologist Max Weber (1864-1920). Weber believed that bureaucracies, staffed by bureaucrats, represented the ideal organizational form. Weber based his model bureaucracy on legal and absolute authority, logic, and order. In Weber's idealized organizational structure, responsibilities for workers are clearly defined and behavior is tightly controlled by rules, policies, and procedures.

Today, many managers in government agencies where policies are formulated are faced by an overload of information. A key skill they need is the ability to filter information to identify what is relevant to their organizations (Adams, 2005). They also need to analyze information to understand its significance and to communicate it to those who need to act on it. Such effective knowledge management can give an organization a competitive advantage (Hughes, 1994). A major aspect of the organization's external and internal environment is culture, to which managers have to be sensitive. Everyday managers are required to make decisions, and unless they have relevant and accurate information about the environment in

which they are operating, these decisions would probably be based on guesswork and intuition (Ansoff, 1994).

There is a place for intuition in management, but it does not replace adequate and timely information. In the past, managers were able to assess their information needs based on previous experience, but with the rapid technological changes in recent times, this is no longer the case. There are limits on the types of information that can be collected and there are ways of collecting information which are illegal or unethical. There are basically two kinds of information a manager needs; information for the short term (operational information) and information which relates to longer-term plan (strategic information) (Bell, 2000). We can classify these kinds of information further; critical data which is directly related to the organization's immediate operations and general background information which helps managers understand and interpret external events and situations. There are various information-gathering frameworks which help organizations identify the key issues and compile and analyze the critical data.

Acquiring knowledge of the strategic environment is critical to formulate plans, policies and strategies for an organization. An organization's environment consists of the conditions, circumstances and influences which affect the organization's ability to determine its strategic direction and develop strategic objectives (Garner & Calderon, 2004). A successful organization must therefore be able to scan, analyze and interact with its environment. To respond effectively in the ever-changing, turbulent operating environment, public-sector organizations and government departments must understand their external and internal contexts so that they can link the two (Bryson, 1995). The environment outside the organization should be explored to identify economic, political, social, and technological threats and opportunities to the future of the organization.

To develop a strategic plan and set the future direction of an organization or develop human resource programs to support its growth, leaders need to know what is going on within the organization, in the society, and they need to know how technological developments will affect operations. An environmental scan provides the framework for collecting information about factors relevant to the decision-making process, and can help management make decisions that take advantage of existing opportunities and avoid pitfalls. There are two elements to the scanning process though: these are internal and external assessments (Adams, 2005).

Conducting a comprehensive environmental scan can be a challenge; a great deal of information is available from many sources, and finding the information that is relevant to the specific issues at hand can be time-consuming. In addition to the information available from government agencies and non-governmental organizations, there are other excellent sources of information. A wealth of information is available—the challenge comes in finding what is most appropriate for a specific organization's needs (Mercer, 1998), which this study has attempted to explore.

Because of increased globalization, rapid technological changes, and increased competition, government organizational providers are facing new and unexpected challenges. These changes have increased the quality and quantity of information needed for decision making (van de Heijden, 1996). To meet this need and to obtain up-to-date information for decision making, organizations must increasingly acquire and use information from outside the environment, and the best way of acquiring and using outside information is through environmental scanning. There are various models that focus on environmental scanning as a primary mode of learning that enhances the policy-maker and researchers' knowledge and success in formulating public policies. Some of these models examine how information is collected from the external environment, what organizational learning occurs, and how the organizational learning leads to improved problem-solving (Fahey, 1986).

2.1.1 Organizational learning in a policy making environment

This concept of organizational learning involves elaborating organizational members' aptitude to think collectively in new and rich ways that promote synchronized activity. The subject of organizational learning has grown in importance since the late 1980s as contemporary organizations recognized that one of the primary strategies for acclimatizing to a rapidly changing policy making environment is to learn from their accomplishments and disappointments, as well as think strategically about their expectations (Garvin, 1994).

Peter Senge (2006) is conceivably the strongest advocate of organizational learning. From his viewpoint, dialogue is a form of communication that cultivates high-quality collective thinking and is guided by several principles. One is that inquiry and advocacy must be balanced, this means that individuals must ask questions that challenge existing assumptions and beliefs, while concurrently engaging with advocacy by stating opinions and taking action. Inquiry without advocacy can lead to interrogation, while advocacy without inquiry can lead to dictating. His second impression is that tacit assumptions and beliefs should be brought to the fore. Often we pay attention to certain rudiments of a situation and draw conclusions

about the situation based on our implied supposition and beliefs. While our perceptions and actions may make sense to us, their implicit nature may make it hard for other people to understand why we act in a particular way in a situation.

Consequently, many authors agree that conversation works on making the tacit assumptions and beliefs that people use to form impressions and take actions explicit within the discourse. It is critical to be open to the views and feelings of others; therefore, it is imperative to suspend certainty about the best way to understand a situation and what counts as appropriate actions and be open to new ideas. Suspending beliefs also means that one is keen to make one's beliefs and opinions clear to others, this is unequivocal in the works of Senge, Kleiner, Ross, Roth, and Smith, (1999) as well as Gephart, Marsick, Van Buren, and Spiro (1996).

More importantly, a safe space for dialogue ought to be created during policy formulation. To reveal one's thoughts and positions necessitates trust in the other person. A lack of trust and feeling that one's proclamation may be used against them can create an unsafe space. When people feel they can trust each other and that they are safe when revealing their opinions, they are more likely to talk openly about their thoughts (Senge, 1996).

In a nutshell, what learning organizations do is set staff free. Hellen Rheem (1995) emphasizes that employees no longer have to be passive players in the equation; they learn to express ideas and challenge themselves to contribute to an improved work environment by participating in a paradigm shift from the traditional authoritarian workplace philosophy to one where the hierarchy is broken down and human potential is heralded. Learning organizations foster an environment wherein people can "create the results they truly desire," and where they can learn together for the betterment of the whole.

Watson (2002), however, argues that organizational learning has proven to be a somewhat elusive concept to grasp, and therefore its practical implementation has also been difficult. There are various positions on what is understood by the term "learning" and there is a lack of synthesis of theoretical and empirical investigations. He argues that the conception of "learning" in the organizational learning literature has received insufficient attention and that this has largely contributed to the lack of clarity in the concept of organizational learning.

Organizational learning can be applied in a policy-making environment in several ways. Common (2004) discusses the concept of organizational learning in a political environment to improve public policy-

making. He details the initial uncontroversial reception of organizational learning in the public sector and the development of the concept with the learning organization. Definitional problems in applying the concept to public policy are addressed. He notes that a recent research in the United Kingdom's local government concludes with the obstacles for organizational learning in the public sector as: overemphasis of the individual; resistance to change and politics; social learning is self-limiting, that is individualism, and political "blame culture".

2.1.2 Organizational Communication

The literature on communication generally acknowledges that the basic function of communication is to affect receiver knowledge or behavior by informing, directing, regulating, socializing, and persuading. Neher (1997) identifies the primary functions of organizational communication as: Compliance-gaining; leading, motivating, and influencing; problem-solving and decision-making; conflict management, negotiating, and bargaining. Neher (1997) and Rogers (1976) emphasize the social and organizational functions of organizational communication as a whole rather than focusing on the functions of specific communication exchanges. Thus, they combine the functions of informing, directing, and regulating into the broader category of behavioral compliance. They also give greater emphasis to the role of communication in managing threats to organizational order and control, identifying problem solving and conflict management, negotiation, and bargaining as key functions of organizational communication.

Myers and Myers (1982) combine similar functions into a higher level common function and provide a particularly succinct and clear version of the functions of organizational communication. They see communication as having three primary functions: Coordination and regulation of activities – This function of communication has changed the most over time. In traditional bureaucratic views of the organization, prescription – clearly communicating behavioral expectations and the behavioral consequences associated with complying or not complying with these expectations—and monitoring are considered to be the basis of organizational order and control. This function of organizational communication was seen as involving fairly proceduralized, rule-oriented, one-way, top-down communication (Beein, 1989; Deetz, 2001).

Tasks in many organizations have become more complex, less routine and repetitive, tightly coupled, and interactive (Perrow, 1986) and, as such, the traditional bureaucratic view of organizational communication is no longer sufficient. Activities of this nature require dynamic, reciprocal, lateral communications between routine and non-routinized workers, two-way, vertical communications between

normal staff and managers. Communication as a means of coordination and regulation becomes more important, complex, and difficult.

The socialization function of communication is stressed in the human relations perspective of organizations, which asserts that capturing the hearts and minds of organizational members is necessary to effectively coordinate organizational action in the pursuit of collective organizational goals (Burgoon, et. al, 1994; DeFleur, et. al 1993; Devito, 1994; Schwartz, et. al, 1981). Communication directed at socializing organizational members focuses on articulating and reinforcing organizational values and aligning individual goals with organizational goals (Small, 2005). It is directed at establishing an appropriate organizational culture and climate. This form of communication cannot be one-way or top-down. It must occur reciprocally between organizational leaders and organizational members.

The organizational communication literature is increasingly addressing the importance of communication in promoting innovation as well as control and coordination. Communication to promote innovation is associated with strong communication within and beyond the organization (Redding, 1972). This approach focuses on the functional goals of organizational communication, rather than on the near-term outcomes of particular acts of communication, such as to make a decision, to persuade, or to resolve a conflict. The more specific functions of precise acts of communication or sets of communication exchange (decision making, informing, persuading, negotiating, and problem-solving) are subsumed into each of the three higher-level functional objectives (Macleod, 2006).

2.1.3 The role of communication in policy decision making within organizations

Successful decision-making strategies emerge from decision making processes where individuals and organizations seek out and process information effectively in situations of uncertainties. Hence, decision success requires a keen strategic understanding of external influences, capacity to process the information and characteristics of the decision itself. While this study specifically focused on organizational information theory and environmental scanning concept as an aid for policy decision making process, the first question to arise concerns whether the decision characteristics influence the quality of decisions made and the extent of environmental scanning behavior of the decision maker. Secondly, will the extent of scanning done give rise to quality decision making? And does the information processing capacity enhance the relationship between environmental scanning and quality decisions?

Decision characteristics that comprise a decision task include: complexity, difficulty, familiarity and ambiguity of the decision, and time pressures may affect the amount of information required to resolve the decision taken. Therefore, to make quality decisions in a highly competitive environment today, decision makers in any organization need to devote a significant amount of information to managerial decision making (May & Mumby, 2005). Environmental scanning is one tool in an organization's arsenal that can be used to gain this understanding. This is especially helpful when a decision is complex and requires a large body of information. Getting the right information to the right person at the right time to produce the right processed information is of critical importance (Putnam, 1990). Thus, the adaptation of technology, skills and knowledge synthesis within environmental scanning is important.

Absolutely rational decision making requires information gathering and information processing beyond the capabilities of any organization. In practice, organizational decision making departs from the rational ideal in important ways depending on: the ambiguity or conflict of goals in the decision situation (goal ambiguity or conflict), and the uncertainty about the methods and processes by which the goals are to be attained (technical or procedural uncertainty). In the boundedly rational mode, when goal and procedural clarity are both high, choice is guided by performance programmes (March & Simon, 1993). Thus, decision makers 'simplify' their representation of the problem situation; 'satisfy' rather than maximize their searches; and follow 'action programmes' or routinized procedures. In the process mode (Mintzberg, et al. 1976), when strategic goals are clear, but the methods to attain them are not, decision making becomes a process that is highly dynamic, with many internal and external factors interrupting and changing the tempo and direction of the decision process.

In the political mode (Allison & Zelikow, 1999), goals are contested by interest groups, but procedural certainty is high within the groups: each group believes that its preferred alternative is best for the organization. Decisions and actions are then the results of the bargaining among players pursuing their own interests and manipulating their available instruments of influence. In the anarchic mode, also known as the Garbage Can model of decision making, (Cohen et al., 1972), when goal and procedural uncertainty are both high, decision situations consist of independent streams of problems, solutions, participants, and choice opportunities arriving and leaving. A decision is then taken when problems, solutions, participants, and choices coincide. When they do, solutions are attached to problems and problems to choices by participants who are present and have the interest, time and energy to do so.

The role of communication in mediating participation programme outcomes and effectiveness as both an important theoretical and practical concern is important. Communication is an integral part of

participative process in organizations, (Monge & Miller, 1998), and evidence shows the effects of various types of participation or involvement programmes (Marshall & Stohl, 1993; Stohl, 1989). There is evidence that the nature of communication within and outside the organization crucially affects the nature of the participation programme implemented (Lawler, 1991; Margulies & Black, 1987; Miller, 2003; Pacanowsky, 1988; Stohl, 1987; Wagner & Gooding, 1987).

The prevalence of work on forms and effects of employee participation has been done by scholars outside of the communication discipline, especially organizational behaviours, management, industrial and organizational psychology, and business administration researchers, who clearly endorse a managerial orientation (Jablin & Putman, 2001). Thus, it is hardly surprising that the literature produced by these researchers primarily focuses on how effective these participation programmes are in furthering management's goals.

Participation programmes in organizations vary according to degree or level of influence, content and social range. The degree of participation (level of influence) falls somewhere in these areas: no participation by employees; consultation, where managers receive input from employees, but make the decision themselves; and full participation, where employees and management vote as equals on decisions. The content of participation refers to the types of decisions with which employees might be involved, including routine personnel functions, the work itself, working conditions and company policies (Locke & Schweiger, 1979). The sort of people involved in a participation programme matters greatly, this is known as social range. For instance in some cases only certain individuals or groups may be involved in decision making, but under certain circumstances, all members of the organization may provide input into the process (Dachler & Wilpert, 1978). Programme dynamics along any or all of these dimensions may affect the outcomes of a particular programme.

Taking part in decision-making gives employees the opportunity to learn more about the organization and its policies, which may ultimately enhance decision quality and productivity (Jablin & Putman, 2001). It may also help employees develop more accurate perceptions of reward contingencies in the organization (Miller & Monge, 1987; Monge & Miller, 1988). However, Miller and Monge (1986) emphasize that cognitive explanations assume participation must be in areas where employees are interested and knowledgeable to have concrete effects on productivity and satisfaction.

A number of researchers suggest that the form of participation may affect the outcomes of employee involvement programmes (Cotton, 1993; Cotton et al., 1988; Cotton et al., 1990; Guzzo, Jette, & Katzell,

1985; Jones, et al. 2004). In a major review of 91 empirical studies examining participation in decision making, Cotton et al., (1988) found that different forms of employee participation have different effects on satisfaction and productivity. Leana et al., (1990) criticized Cotton et al., claiming that their classification system was flawed, their reporting of the results of several studies was inaccurate, and that they omitted relevant studies from their analysis. Leana et al. (1990) also noted that several of the studies by Cotton and colleagues confused participative decision making (PDM) with other involvement programmes like quality circles.

Many reviews, even those that are critical of the research conducted by Cotton and colleagues, suggest that the form or type of employee participation may differentially affect outcomes, such as satisfaction and productivity (Beekun, 1989; Jablin, & Sias, 2001; Leana et al., 1990; Magjuka, 1989; Magjuka & Baldwin, 1991). Moreover, Leana et al. (1990) suggest there may be important intervening processes that influence how participation in decision making affects outcomes, and Cotton and colleagues (Cotton et al., 1988; Cotton et al., 1990) argue that researchers should consider contextual variables and the process through which the participation programme operates.

2.2 Communication, Research and Policy interface

This section focuses on the packaging of research results for communication to different audiences as an important linkage between research and policy. Policy influence is usually affected by how it is communicated. The sources and conveyors of evidence, the way the messages are packaged and targeted can all make a real big difference.

2.2.1 Communicating research results to shape and enrich policy process

There is a broad consensus in the literature that successful communication between researchers and research users is crucial for the effective utilization of research in decision-making for policy purposes and practice (Hovland, 2005; Nutley, Percy-Smith, Solesbury, 2003; Stone, 2002, Graham, 2004). Communication between researchers, research funders and research users can occur in a number of different ways. Given the high number of different research users, a variety of research producers (coming from different disciplines, ranging from very much policy oriented to more applied action research) and the different levels in the policy and practice domains where communication of research

happens, it would be prudent to design better and more effective ways of communicating (Nutley, Percy-Smith, & Solesbury, 2003).

However, successfully communicating the results of research has to take into account that there cannot be one way of communicating research that fits all settings. Many different dimensions might have to be taken into account when assessing entry points of research in policy practice: First, the dissemination activities through which research knowledge is distributed needs to be taken into account; second, the institutional linkages between the different stakeholders have to be considered as they are important for the emergence of routes for disseminating research; and third, the political and practitioners context for research use will influence where and how research can be used successfully in policy and practice (Huberman, 1995; Lynn, 1978; Lewig, et. Al., 2006).

There is one group of intermediating actors influencing the dissemination as well as the linkages between research, policy and practice. Because the interaction between researcher, policy-maker and practitioner is constrained by a number of factors, intermediaries can help to connect the research and decision-making domain (Ellis & Trappes-Lomax, 2003). Thus, knowledge brokering is becoming an important service in this field to secure well-informed decision-taking. A knowledge broker is a person who examines disseminated information and knowledge for clients and prepares a usable, targeted synthesis for their consumers. Knowledge brokering involves informing, linking, match-making, engaging, collaborating and building adaptive capacity, while policy entrepreneurs are storytellers, networkers, engineers and fixers.

Researchers often face time and capacity constraints in realizing active dissemination, translating research results in brief – or at least less complex information – develop and evaluate resulting policy options as well as engage adequately with policy makers (Nutley, Walter, Davies, 2007). Thus, intermediaries may be needed to connect the research and research users' domain. This role can be played by knowledge brokers to connect research with policy and with practice.

It is significant to note that entry points in policy and practice are important; these are those channels through which research results cannot only reach their users, but also influence decisions. Consequently, an entry point to policy and practice is not only defined through the dissemination pathway used, but also through other factors like institutional structures and external influences or personal attitudes of the individuals involved in decision-making processes (Court, Hoveland, & Young, 2005; Zuckerman, 2001). The dissemination pathways through which research knowledge is distributed are many and wide-ranging

including the different media or types of outputs produced by a research programme like official reports, policy briefs, executive summaries, press releases, manuals, trainings, flyers, articles, conferences, television, radio, in-service-training and many others.

The routes research takes are shaped by the forms of dissemination to and within an organization. The literature on this area shows that the personal communication, personally or through networks, is the most important route for transmitting research into policy and practice, as well as social learning through peers (Nutley, Walter, & Davies, 2007). It also has to be kept in mind in this regard that dissemination can be effective through different communication channels at different stages and for different purposes.

A research communication strategy, which should form part of the research activity for easy uptake, can comprise active as well as passive dissemination activities. Passive knowledge dissemination is mainly untargeted, including unplanned ad hoc forms of communication, or disseminating (explicit) knowledge through publication in academic journals, whereas active dissemination is characterized by tailoring research findings to a target audience and a dynamic flow of information from the source to increase the uptake of research in policy making (Nutley, Percy-Smith, & Solesbury, 2003).

The institutional links between the different stakeholders, researcher, research-users and research-funders, influence which route research findings take to reach their potential user. These links can be the physical access to research in libraries or database, the ad-hoc or institutionalized links for knowledge exchange between researchers and policy makers, or through intermediaries such as knowledge brokers and formal and informal networks (Birdsall, 2005).

In the political context, the incentives to ongoing capacity building to access and use research are important (Court & Young, 2006). Facilitation approaches are based on change management and learning theories which say that support for removing the barriers for change is needed. These approaches might involve professional development activities so that decision-makers can improve their capacities to access and use research by themselves. Incentives to ongoing capacity building can also be set by funding of learning partnerships between researchers and research users.

Knowledge derived from research provides a firm basis for engagement with policy analysts associated with economic issues. However, several economic research derived findings contradict accepted beliefs (Buenavista, 2003). This means that political sensitivity is required during policy engagement, and a commitment to persistent lobbying for change in policies and practices. A number of challenges face

those aiming to influence economic policy. Firstly, it is not easy to communicate scientific results, such as those of economic work in forms that can be understood by policy shapers easily. It is particularly also difficult to influence policy-makers when new evidence counters accepted beliefs and practices. Secondly, where giant development projects are at stake, the livelihoods and reputations of large numbers of officials could be affected. Thirdly, turning interest from stakeholders into new policies is a long-term challenge in countries that do not easily form and use cross-sectoral task forces or integrate scientists into policy forming teams (Birdsall, 2005).

The importance of effective communication is unanimously emphasized in recent work on research-policy dynamics. Two main aspects of communication are highlighted: one is appropriate dissemination of results; the other is paying attention to ongoing communication and dialogue throughout a research effort (Stone, 2002; Askew, Matthews & Partridge, 2001; AHPSR, 2004; IDRC, 2004; Court, Hovland & Young, 2005). Effective research dissemination includes: distillation of research findings, the use of plain and clear language rather than academic style (implying a reduced methodological and theoretical content), using a range of formats appropriately tailored to different audiences, using multiple media channels; and paying attention to timing. Given the important role of communication, communication training for researchers could be a valuable addition to their skills (Stone, 2002; Askew, Matthews & Partridge, 2001).

Rewarding research-informed decision-making might increase the decision makers' awareness for research and encourage active accessing and using of research. An example is the "Pay-for-performance-schemes in the health sector in Mali. A Canadian Health Services Research Foundation (CHSRF) study in Mali points in the same direction. It assesses the influence of context for developing countries' policy-makers and concludes that accountability of political decision-makers is a decisive factor for the degree of research uptake by policy makers in developing countries, (Albert, Fretheim, & Maïga, 2007).

In the United Kingdom for instance, there is a sophisticated research department within Whitehall which is on hand to inform British policy making. However, not all governments have this facility at their beck and call. In India, around half of the government's legislators look to a private organization to fill this gap. The organization works with Members of Parliament (MPs) to do impartial, background research on all topics in order to improve the quality of decisions on specific bills. The most important factor in the first few years for the organization was building up trust with the policy-makers. They did this in three ways: first by presenting credible, non-partisan research that met an expressed need; second by presenting

complex information in ways that is legible and readable in length and simplicity; and third by responding to the sometimes alarmingly short deadlines which were imposed.

Research informing policy in Uganda is done differently. Esteemed researchers work with the Parliament of Uganda to advise the Members of Parliament on issues that relate to science and technology and physical infrastructure. These professionals including lawyers and economists form part of the Library Research Department. Ordinary researchers have a number of opportunities to both access and inform Ugandan policymakers. Calls are made through the media for researchers to meet MPs at various committees on a whole range of issues, and they are free to submit memos and share their points of view with the legislators.

Interest in evidence-based policy and practice has grown in development circles. Recent studies exploring the factors that affect the influence of research on policy suggest that there is both the potential to negotiate and communicate more effectively in policy networks on the one hand, and a pressing need to address the dominance of policy making processes by powerful elites on the other (Court & Young, 2004; Small, 2005; Crewe & Young, 2002).

2.2.2 Translation of evidence into appropriate policies

A flurry of recent work has sought to understand the factors that affect the influence of research on policy. These studies identify a common set of issues and challenges and draw attention to a gap between research and its role in influencing policy (Stone, 2002; AHPSR, 2004; Graham, 2004; Court, Hovland & Young, 2005). There is a broad consensus on the importance of communicating research results effectively and on the need to more effectively link researchers and policy makers in an ongoing dialogue about both research results and research priorities. At the same time, questions of power and politics complicate any neat relationship between the clearer picture of economic challenges that is promised by research and scientific enquiry, and the enlightened policy measures which would hopefully flow from such knowledge.

The acknowledged gap in flows of research information has led to initiatives such as the appropriately titled ‘Getting Research into Policy and Practice’ (GRIPP) – a collaboration of research programmes concerned with operations and health systems research – and the Global Development Network (GDNet), which devotes particular attention to supporting southern researchers and research institutions to raise the

profile of southern based research, and provide greater scope for 'home-grown' policy for developing and transitional countries (Graham, 2004).

Researchers, policy-makers, civil society organizations (CSOs) and practitioners in capacity development often live in very separate worlds. Their dynamics, values and ways of handling evidence are very different. As a result, research-based evidence is often only a minor factor when policies for development are formulated and practices shaped (Stone, 2002). Those involved in gathering evidence – researchers and increasingly non-government organizations (NGOs) and community-based organizations (CBOs) – are convinced that the ability of policies and practices to combat a problem like poverty can for instance be substantially enhanced if research is given more attention.

There are various capacities required for making evidence based policies and practices for development a reality. Obviously the ability to conduct solid research and analyze the findings correctly are core capacities which, in the case of many NGOs and CBOs, require strengthening. But, evidence itself is not enough. Other capacities are needed to drive the message home. Researchers must know and understand key stakeholders in the policy-making process. They need to grasp and adapt to the dynamics of the political debate and bring to the fore relevant evidence at the right time. Another crucial capacity is the ability to communicate in a language that policy-makers can understand. Since the early 1990s, a number of NGOs that focus on international trade policies have developed such capacities and have been able to influence trade policies in a very significant way (Graham, 2004).

Multiparty democracies are more conducive for research institutes and Civil Society Organizations (CSOs) to engage in advocacy on the basis of researched evidence than are autocratic and oligarchic regimes. Rijit Sengupta (2010) explains how, in the well-established democracy of India, a CSO has already developed second-generation tools and methods that lead to enhanced capacity to share research findings with Indian parliamentarians and to influence policy-making. The new approach focuses much more on proper timing, choice of topics, good communication and the process is well aligned with the way the political agenda evolves.

The introduction of multiparty democracy in East and Southern Africa is much more recent. Research institutes and CSOs are still coming to grips with evidence-based approaches to advocacy. In these regions, work by a large group of researchers, including Nicola Jones, et.al (2010), shows that good practices are emerging. However, evidence also indicates that there are a number of critical capacity gaps that need to be addressed, including research and analytical capacity, the ability to share and

communicate knowledge, leadership credibility and accountability. A group of Latin American organizations has also identified a very similar mix of key personal capabilities and organizational capacities that CSOs need to have in place in order to be successful in influencing policy with research based evidence, Gala Díaz Langou (2010) elaborates on this in her journal article on influencing policy.

The processes that mediate between the generation and use of knowledge play a crucial role in the link between knowledge and policy. Work on research communication highlights making messages short and easy to understand, and adapting them to audiences' mindsets. Critics, however, suggest these principles may result in the 'wrong kind of influence'. Interaction and exchange is important, and this requires stimulating interaction and collaboration in order to take on board the contextual nature of knowledge and the complexities of its use. Social influence and persuasion, which is also an important element in disseminating policy research explains social factors such as face-to-face communication and how social networks spread messages through peer influence. However, sustaining real long-term links between knowledge and policy may require intermediary organizations.

Phasing of research so that findings from individual studies feed progressively into the framework of larger questions requires stakeholders to agree on priorities and funding agencies to stay the course and engage on a sufficiently large scale. Such research and policy shaping should be carried out as part of a wider long-term strategy. The research framework itself needs to be flexible, to deal with inter-country institutional particularities and to extract and communicate global lessons effectively.

The failure of researchers to link evidence to policy and practice produces evidence that no one uses, impedes innovation, and leads to mediocre or even detrimental development policies. To help improve the definition, design, and implementation of policy research, researchers should adopt a strategic outcome oriented approach (Young & Mendizabal, 2009). The cause of this is the weak rapport between their investigations and recommendations and the real world of policy making. In the meantime, practitioners just get on with it. A non-linear analytical and practical framework to enrich policy with research is missing.

Studying the theory would have decision makers know what kinds of research—that have already delivered results—can help them make the right choices (Squire, 2002). It would have them base these on the best experience and knowledge available. Yet, reality begs to differ: poor research circulates and is acted upon while good research is ignored and disappears. One cannot just transport research to the policy sphere. In a world shaped by complexity, policy-makers have to deal with the pros and cons of policy

decisions daily. Various interrelated factors interact dynamically to determine what sort of evidence, namely, information indicating whether a belief or assertion is true or valid, is likely to be adopted by policy-makers who some see are driven by the Five S's of speed, superficiality, spin, secrecy, and scientific ignorance (Moody, 2000; Feser, 2007).

The political context of research must be acknowledged, both in terms of opportunities to influence policy processes and in terms of how research evidence may be used for political purposes. Therefore, in highly politicized policy environments, independent and credible research and policy decisions become particularly important (De Vibe, 2002). The way we understand how research findings feed into policy and practice is decisive for the development of successful interventions.

Many view research utilization as a linear process where the credibility and relevance of research, and how the message is packaged and communicated, are central. However, in reality research utilization is better characterized as an incremental process whereby negotiations and power struggles are central. The research utilization process can be understood as the interaction of competing interest groups, actors and networks, policy narratives and discourses (Mendizabal, 2007). Accordingly, policy change is determined by how facts within specific networks are understood, and research can be viewed as specific forms of knowledge that are carried forward by particular people and institutions. Policy diffusion and knowledge translation are dependent both on those transferring and those adopting the new policy or research findings, and to what degree "the system" is ready for the new policy or idea.

The need to strengthen linkages between researchers and policy makers is a common theme in recent work on research-policy dynamics. A strategic evaluation of public policy research supported by the International Development Research Centre (IDRC) concluded it is important to encourage close interaction between researchers and policy makers during the design and conduct of the research, as well as during dissemination of the results (IDRC, 2004). The most successful networks bring together a wide cross-section of researchers, decision makers, non-governmental organizations (NGOs), and affected stakeholders, and encourage relationships that last beyond a particular research project (IDRC, 2004).

2.2.3 Policy-making structures in organizations

Many countries in Africa are experiencing a transition in governance and policy structures in diverse ways. This is bound to have an effect on the content of economic policies as well as the process through which policy development occurs. It is not uncommon for the mandate of a ministry to change

periodically, particularly when ministers or governments change. These changes may include: creation of super-ministries, typically combining finance, national development planning and functions such as national statistics. There may also be a major transition in political leadership, an appointment of one new minister, permanent secretary, central bank Governor, or creation of new national policy/research centres. Fine (1990) documents a number of features that are common to the policy-making landscape. Generally, the dominant roles in economic policy played by the ministries of finance (or super ministries) and central banks and national planning commissions appear to be declining as a major instrument of public policy development in most countries.

Public policy refers to the actions taken by a government — it is a set of decisions that are intended to solve problems and improve the quality of life for its citizens. Public policies are usually developed by officials within institutions of government to address public issues through the political process. When it comes to creating public policy, policy-makers are faced with two distinct situations according to Lindblom (1968). The first situation, and the ideal one, is for policy-makers to jointly identify a desirable future condition, and then create policies and take actions to move toward that desired future state, monitoring progress to allow for necessary adjustments. The alternative and less desirable situation occurs when policy-makers are unable to reach a consensus regarding a desirable future condition, possibly because of an unstructured communication process. In this latter instance, policy-makers try instead to pull back from present situations judged as undesirable, even though no consensus exists about the preferred alternative.

In the policy-making process, the needs of policy-makers and researchers often are different. Policy-makers usually focus on the short-term (commonly, the time until the next election), and on actions that will have tangible results and outcomes, while minimizing risks. In contrast, researchers are interested in the long-term, in deferring action until understanding has been gained, and in recognizing the nature, extent, and magnitude of uncertainty (Court and Young, 2005). Thus, the policy-maker normally is interested in the simple rather than the complex, the concrete rather than the abstract, and the immediate rather than a distant result.

According to Davies (2005), in practice, research evidence is considered through the lens of policy-makers' experience, expertise and judgment, contextual pragmatics, available resources and the policy context, along with the habits, values and traditions of policy-makers, and the influence of lobbyists and pressure groups. Increasing the usage of evidence in policy-making therefore requires a communication approach that is informed by an understanding and engagement with these influences. Too often, the linkages between research and policy-making are viewed as a linear process, in which research findings

are critically analyzed and the best option implemented into policy (Young and Court, 2004). In reality, the integration of evidence into policy decision-making is a complex process of multiple, frequently competing and/or intertwined sets of influences in which evidence plays just one of many roles.

Policy-making and implementation also involves interaction and conflict among individuals and groups who struggle for power, representing different viewpoints and interests (Kingdom, 1984). All forms of political involvement potentially involve citizens with public policy. These actions operate to influence policy-makers via the activities of linkage institutions – interest groups, political parties and elections, and the media. Important to note though, is that in real life, policy making process takes a more or less cyclical progression. It begins with agenda setting with recognition and definition of a significant public problem and an organized call to a government action. In response, the legislative and bureaucratic machinery of government may formulate, adopt and implement a strategy for addressing the problem. Analysis of policy effectiveness in turn often reveals shortcomings in formulation or implementation, or new problems to add to the policy agenda.

Within policy making structures, it is important to understand the policy cycle. The policy cycle is a concept that has been developed out of the science of analyzing policy and is based on an understanding that, under normal circumstances, a distinction can be made between the different phases (see the schematic illustrations in the Appendix 1) in the policy-making process, that is, the decision-making process that leads to the implementation of authoritative values.

2.2.4 Are Researchers from Mars and policy makers from Venus?

The relationship between policy makers and researchers is not always an easy one. There will always be important occupational and cultural differences between the two (Graham, 2004) and it has been suggested that they may have unrealistic expectations of one another. Where one group feels nobody listens, the other feels their opposite number has little to say (Stone, 2002).

Networks and linkages have been identified as important, both for enhancing influence and legitimacy. A key aspect of legitimacy is whether research is perceived to link the perspectives and realities of poor people to potential ‘pro-poor’ policies, and if so, what systems of accountability link the generation of research to poor constituencies. Studies of ‘policy networks’ show that for governments and policy makers prevailing issues of concern and current ways of framing and understanding problems are influenced by ‘policy communities’ (Court, Hovland & Young, 2005).

In the economic field these networks may be made up of “practitioners (economics professionals), researchers or commentators (economic or financial journalists), business companies, any interest groups and members of government. The process is not consensual however, and competing coalitions advocate different interests (Walt, 2004). At the same time, individual ‘champions’ or ‘policy entrepreneurs’, such as the ‘connectors’ and ‘salesman’ play important roles in the way ideas and information circulate and have influence in these networks (Court, Hovland & Young, 2005; Walt, 2004).

Given the power of elites to dominate policy making, it is important to find appropriate ways to promote networking that counter-balance the power of prevailing policy networks. This may imply support for the decentralization, both of research funding and policy initiatives and a need to strengthen work at the research–practice boundary and the tradition of critical enquiry beyond formal academic research programmes. Patrick Chabal (2008) presents the example of decentralization policies and notes that despite mounting evidence that decentralization does not always contribute to poverty reduction, it is still often zealously and uncritically embraced by policy-makers and practitioners in capacity development. Innovative programmes have shown it is possible to use the local generation of evidence to help set local priorities (Chetley, 2003). Ultimately, greater respect for the learning processes of different development actors on the ground, and supporting and sharpening their critical capacity and ability to control their local environment, may be as important as attending to the interaction of policy-makers and researchers, who share a common distance from the everyday concerns of development’s ‘beneficiaries’.

2.2.5 Explaining the link between research and policy

To determine whether or not research is a significant input into policy-making process in Africa, it is first important to look at the main paradigms that have been advanced to try to define and describe the link between economic research and policy design. First, is the class, purist and knowledge-driven model, which suggest that research generates knowledge, which leads to a policy decision in a linear sequence (Hanney et. al, 2003). This positivist or technicians approach assumes that researchers find solutions for developmental problems and policy-makers simply have to implement them. However, such knowledge–driven research faces many challenges in Africa, where we know that there is a limited capacity and funding levels of research institutions are low. This model also fails to take into account the fact that some policies are driven solely by politics. It also does not take into consideration that research has to be disseminated to reach target recipients for up take purposes. Where political considerations are the over-riding concern, some have cast doubt on the usefulness of research as an input for decision-making tool

and some cynics like Hass and Springer (1998), who hypothesize that if everything boils down to questions of politics, then why bother to conduct research?

The second paradigm is the problem-solving, engineering or policy-driven model. This begins with the identification of a problem by the client, that could be the government, and the researchers' role is to identify and assess alternative solutions (Hanney et. al, 2003; Gewirts, 2003). Although this model also follows a linear sequence, it takes into account the interaction between suppliers and demanders of policy research (Caplan, 1979). The bi-directional flow of information ensures that the research community undertakes research that is relevant and in response to the actual needs of government. This model subsumes that mechanisms are in place for this two-way exchange of information. In African context, however, the fact is that social scientists rarely have the solution for policy problems. They can contribute to policy process by helping policy-makers understand the problems and show the possible effects of various policy scenarios, but they cannot determine what the best choices are because these choices depend on other factors that researchers do not control (Gewirts, 2003). A variation of this model, the social interaction model, includes a set of interactions between researchers and a diverse group of users and stakeholders other than the government. The move from research to policy is not linear in this configuration.

The third paradigm focuses on the enlightenment function of research (Weiss, 1977; Hanney et.al, 2003). It posits that research is more likely to be useful through the gradual "sedimentation" of insight and theories as well as perspectives. For African economic research institution, this means having the ability to explore second-generation problems and issues, a research exercise for which funds are difficult to find. Finally, Hanney at.al (2003) have described the tactical paradigm in which research is used when there is pressure for action to be taken on a specific issue and policy-makers respond by communicating that they have commissioned research to examine the matter. This type of commissioned work usually provides the political system with some time to reflect, and thereby, avoiding irrational policy-making.

Rich (1997) characterizes the use of research results in the following stages, viewed from a process perspective: information pick-up, processing, and application. Kirkhart (2000) proposes the development of an integrated theory of influence, enabling the impact of research or evaluation to be assessed, by replacing the category, "use" with its more restricted meaning, "influence", defined as the "capacity or power of persons or things to produce effects on others by intangible or indirect means". The integrated theory of influence has three dimensions: source, intention, and timing. Source relates to the initial cause of a process of change. Sources can arise either in the evaluation process (process-based) or the results

(results-based). The result-based are oriented towards increasing understanding among the actors, changing their sense of the values they believe in and developing new relationships, dialogues, and networks. Influence is seen in terms of three categories of temporal dimension: immediate (during the study), end-of-cycle, and long term.

Patton (1997) identifies a typology of use that stresses processes rather than products to include: enhancing shared understandings, especially about results; supporting and reinforcing the program through intervention-oriented evaluation; increasing participants' engagement, sense of ownership, and self-determination; and program or organizational development. Meanwhile, Forss et al. (2002) expand on the previous proposal by identifying five types of process-related use: learning to learn; developing networks; creating shared understanding; strengthening the project; and boosting morale.

Weiss (1979) is cited in the literature as having pioneered the identification and description of seven models to illustrate how research is used in policy formulation or how it functions as a guide for the decision-making process. From those models, analytical categories that enable this knowledge to be extended are defined. Trostle et al. (1999) summarize these models in three basic approaches: First is the *rational approach*, this includes the models that Weiss calls "*knowledge driven*" and "*problem-solving*", representing the conventional manner of thinking about this relationship: the policy process is inherently rational, with research results being used when they exist and decision-makers calling for research when it is needed; second, the *strategic approach* groups the models Weiss calls "*political*" and "*tactical*" and views research as a kind of ammunition in support or critical of certain positions, prompting or delaying policy action; and third, the *enlightenment* or *diffusion approach*, comprising Weiss' three remaining models – "*interactive*", "*enlightenment*", and "*intellectual enterprise*" – and stressing that both the research and decision-making processes take place in parallel with a number of other social processes and thus play several different roles.

Traditionally, the link between research and policy has been viewed as a linear process, whereby a set of research findings is shifted from the "research sphere" to the "policy sphere", where it has some impact on policy-makers' decisions (Young & Court, 2005). At least three assumptions underpinning this traditional view are now being questioned. First, the assumption that research influences policy is a one-way process (linear model); second, the assumption that there is a clear divide between researchers and policy-makers and, third, the assumption that the production of knowledge is confined to a set of specific findings (the positivistic model). Literature on the research-policy link is now shifting away from these

assumptions towards a more dynamic and complex view that emphasizes a two-way process between research and policy shaped by multiple relations and reservoirs of knowledge.

In the existing literature, policy making has been viewed from a variety of approaches like the rational approach, incremental approach, mixed scanning model, group theory, elite theory, pluralist theory and political system model. Of these approaches, it is popularly believed that Easton's (1965) 'Political System Model' can be employed to explain the policy making process of developing countries. Easton's (1965) 'political system' model views the policy process as a 'political system' responding to the demands arising from its environment. The 'political system' as defined by Easton (1965) is composed of those identifiable and interrelated institutions and activities in a society that make authoritative decisions (or allocations of values) that are binding on society. He explains that the environment provides inputs to the decision process/political system in the form of demands and supports. Inputs into the system are provided through outside interests, particularly from pressure groups, consumer groups and interest groups. These environmental inputs are converted through the political system into outputs or policies.

There are several classifications of models for the policy-making process, but the following classification by Merilee Grindle and John W. Thomas (1991) is always considered pertinent: the linear model and the iterative, interactive model. The *linear model* has been variously referred to as rational, comprehensive or stages model (Grindle & Thomas, 1991). A variant of this model has also been called "incrementalist" or the "muddling-through" model. According to Ajakaiye (1992), the basic premise of this model is that policies, like drugs, have three types of effects (intended and desired; unintended and desired and unintended and undesired). Therefore, the primary goal of policy formulation is to arrive at the most efficient policy or battery thereof that will maximize the first two effects and minimize the last one. Thus in this model, decisions are made sequentially, that is identify the problem, articulate plausible alternative policies, select the most efficient one for implementation, implement chosen policy and evaluate the effects, impact or outcome of the intervention. It should be mentioned that it is the last stage of this model that qualifies it as a policy-making process rather than an activity, for even the most effective policy that is efficiently implemented will inevitably have certain undesired effects.

The *iterative interaction model* of policy-making: This model assumes that as a policy initiative moves through the stages in a linear decision-making process, several actors are involved and their actions determine the fate of the policy at any of the stages. It has the agenda-setting stage, solution stage, implementation and evaluation stage. During each of these stages, at least three groups of actors are at work, these include the government policy-makers and implementers (made up of politicians in power

and the bureaucrats), the special interest groups outside government (encompassing politicians not in power, business interest organizations, labour unions and sundry interest groups), and the international donor community (Ajakaiye, 1992).

As seen from the literature, available or existing paradigms are not sufficient to fully appreciate the link between research and policy-making process, thus the position in this study on the debate is that there is need for a more specific model that would fully take into account all the particular phenomena at play. Highlighting communication strategies, approaches, paradigms and tactics that are being used successfully to bridge the research-policy link and citing examples of good policy or decision making processes and instances are therefore a part of this study.

2.2.6 Some success stories about the impact of evidence-based policy making

Research-based evidence can contribute to policies and practices that have a dramatic impact on peoples' lives. One example is the Tanzania Essential Health Interventions Project (TEHIP). This was a joint initiative between the Tanzania's Ministry of Health and Canada's International Development Research Centre, on testing how and to what extent evidence can guide decentralized planning for health. In Africa, 80% of the burden of disease comes from premature death. The burden of disease is the total future life years lost due to premature death and disability. Since most people die at home or outside of health care facilities, information gathered at these facilities gives an incomplete picture of a population's health problems and outcomes. Moreover, birth and death registration is virtually non-existent in much of sub-Saharan Africa. In such cases, a sentinel demographic surveillance system (DSS), which collects data through regular monitoring at the household level, can track the burden and causes of mortality, and thus permit estimation of the burden of disease.

In this study, the results of household disease surveys were used to inform the development of health services focusing on the most common conditions, especially those affecting mothers and young children. Armed with such evidence, planners can select cost-effective health interventions that address the prevailing burden of disease. For example, Integrated Management of Childhood Illnesses (IMCI, 2004), a health strategy that targets children under five, can address five leading causes of death: malaria, pneumonia, diarrhea, measles and malnutrition. In Rufiji District in Tanzania, the DSS has shown that these "top five" account for 34% of the total population's burden of disease. This study contributed to a 43% and 46% reduction in infant mortality in two districts of rural Tanzania between 2000 and 2003.

The study also shows that public health researchers can advise policy-makers on the relative benefits of public health policy alternatives based on research results. Evidence on what works in public health continues to grow as more research studies and systematic reviews are completed. Systematic reviews provide the strongest basis for making policy decisions because they are based on an independent and thorough review of results from multiple research studies. By summarizing research findings, the reviews minimize the weaknesses associated with a single study and avoid heavy reliance on results from a few studies.

Another example is the Decentralized Livestock Services in the Eastern Regions of Indonesia Project, in which a careful combination of pilot field-level projects, institutional research and proactive communication contributed to a 250% increase in farmer satisfaction with livestock services. Success stories quoted in Department for International Development's (DFID, 2003) new research strategy include a 22% reduction in neonatal mortality in Ghana by having women begin breastfeeding within the first hour after birth, and a 43% reduction in deaths among HIV positive children using a commonly available antibiotic.

The other area where interventions have had an impact resulting in new policies as well as changed practices is tobacco use. The World Health Organization (WHO, 2006) Framework Convention on Tobacco Control has focused on tobacco use as the world's leading cause of preventable morbidity and mortality, in recognition of which an increasing number of governments including Kenya are taking strong action against smoking in public. One more example is human immunodeficiency virus (HIV) and its manifestation as acquired immunodeficiency syndrome or AIDS, a case in point of how a disease, after some 30 years, managed to get to the top of the political agenda, receiving an unprecedented amount of funding and concomitant action, resulting in a decline in new infections. These and other case studies from around the world illustrate the complexity of engaging with policy processes. However, there is no simple blueprint for what will work. What works in one context may not work in another.

The implications of this are that engaging with policy requires more than just research skills. According to Simon Maxwell (2010), if researchers want to be good policy entrepreneurs, they also need to synthesize simple, compelling stories from the results of the research. They need to be good networkers to work effectively with all the other stakeholders involved in the process, good engineers to build programmes that can generate convincing evidence at the right time and political 'fixers' who know who is making the decision and how to get to them. Or they need to work in multidisciplinary teams with others who have these skills.

2.3 The Organizational Information Theory

Managing large amounts of information is one of the leading challenges for organizations. Organizational Information Theory was developed as an approach to describe the process by which organizations collect, manage, and use the information that they receive.

2.3.1 *Theoretical perspectives*

Karl Weick's (2004) Organizational Information Theory, which guided the middle range theory testing of this study, provides the framework for exploring how organizations make sense of the information that is essential for their existence. Organizational Information Theory draws from other theoretical perspectives that explain the processes that organizations undergo to receive input from others. Specifically, Weick (2004) emphasizes the importance of human interaction as central to processing information; thus, communication is the central focus of his theory. The primary idea is that organizations are not simply structures, but are instead continually transforming and changing entities, created by their members. By making the process of reducing equivocality central to his theory, Weick (2004) emphasizes the importance of communication to the ability of organizations and their members to achieve goals.

The theory's utility is underscored by its focus on the communication process. Organizational Information Theory focuses on the process of communication rather than on the role of communicators themselves. This is of great benefit to understanding how members of an organization engage in collaborative efforts with both internal and external environments to understand the information that they receive. The theory has inspired thinking and research in negotiation (Putnam, 1989), public discourse (Robichaud, 1999), and organizational learning (Weick & Westley, 1996). Charles Bantz (1989) observed that in terms of Weick's influence on research overall, "it is not surprising that a variety of scholars picked up the organizing concept directly from Weick or integrated into their on-going research" (p. 233). Weick was clearly influential, thereby making Organizational Information Theory a heuristic theory.

The prevailing criticism of Organizational Information Theory pertains to Weick's belief that people are guided by rules in an organization. Yet, Tom Daniels, Barry Spiker, and Michael Papa (1997) note that "we puzzle and mull over, fret and stew over, and generally select, manipulate, and transform meanings to come up with an interpretation of a situation" (p. 52). In other words, people may have little concern with the communication rules in their work environments. Individuals are not always so conscious or precise in

their selection procedures, and their actions may have more to do with their intuition than with organizational rules.

An additional criticism of Organizational Information Theory is that it looks at organizations as static units in society (Taylor & Van Every, 2000). These researchers challenge Weick's view by noting that "at no point are inherent contradictions in organizational structure and process even remotely evoked" (p. 275) in his research. Taylor and Van Every (2000) believe that organizations have ongoing tensions and these need to be examined in light of Weick's theory.

Weick's work has, however, inspired other scholars including yours truly to apply his theory in examining various aspects of how organizations communicate in an attempt to make sense of the information they receive. He has provided researchers and practitioners with an excellent beginning in understanding the importance of communication in organizational activities. Organizational Information Theory will remain an influential theory in organizational behavior because organizations are marked by the process by which they collect, manage, and use information, all of this dependent on communication.

Figure 3: Flow of organizational information:

[-- Information → Sense-making → Coordination → Decisions]

Source: Weick, (2004)

During searching, sense making in organizations that have good scanning facilities is based on formal, systematic scanning that is aimed at determining the objective facts of what is happening in the external environment (Weick, 2000). This systematic scanning should be both action-driven and belief-driven. Data gathering about the environment is relatively intense and involves intrusive actions such as polls, surveys, and focus groups. Following data collection, interpretation is likely to be belief-driven, where the organization or government department extrapolates from past experience and construct meanings from current beliefs. Developing and working with explicit knowledge is the essence of searching. Measurement, modeling, forecasting, trends analysis, and other formal, quantitative methods are utilized to discover the true condition of the external environment (Tuggle & Gerwin, 1980; Weick, 1995). Overall, the modus of learning in searching is for the organization to invest resources in collecting

information about and analyzing the environment, and then to adjusting actions in the light of this new knowledge (Vandenbosch, & Huff, 1997).

2.4 The concept of environmental scanning and its application in policy formulation

Information environment is a core concept in understanding how organizations process information. Every day, we are faced with thousands of stimuli that we could potentially process and interpret. Environmental scanning is a systemic futures methodology that was developed by Francis Joseph Aguilar in 1967 (Preble, 1978; Preble et al, 1988; Thomas, 1980) about information gathering. Marien (1991) argues that scanning the environment is one of the fundamental tasks of futurists and futures studies. Environmental scanning, as the name implies, and the way it is defined in this study refers strictly to the process of scanning the environment. That is the systematic review of literature and other modes of communication to determine emerging issues. This theory guided the middle range theory testing in this study.

In his ground-breaking work on environmental scanning, Aguilar (1967) defined the concept as the way in which management gathers relevant information about events occurring outside the organization in order to guide its future course of action. It is the search to identify trends that create opportunities and pose challenges to the continued success of the organization (Costa and Teare, 1994). According to Pearce, Chapman, and David, (1982), environmental scanning is the radar that informs the pilot of conditions which are likely to be encountered. In general, scanning is done to accomplish two broad sets of goals: first, to understand external forces on the organization; and second, to see threats and opportunities and avoid surprises. In the case of this study, scanning is done by government departments' corporate organizations and research institutes to source information on adapting to new challenges. Realized together, these should improve the accuracy of planning efforts and help to plot future courses of action.

Aguilar (1967) described scanning as undirected viewing, conditioned viewing, informal search, and formal search. Fahey, King, and Narayanan (1986) viewed scanning as irregular, periodic, and continuous, while for Jain (1984) scanning is classified as primitive, ad hoc, reactive, and proactive. Morrison, Renfro and Boucher (1984), simplified the different types of scanning into two groups—active and passive scanning. Terry (1977) argues that environmental scanning has three foci. The first is the immediate environment (of current and immediate concern to the organization), the second is the probable environment (not of immediate concern to the organization, but likely to be in the future) and the

third is the possible environment (weaker signals on the radar screen, which might turn out to be a seagull or a super tanker).

As Morrison, Renfro and Boucher, (1984) put it, scanning includes both looking for specific information (searching) as well as looking at information that could impact the organization (viewing). It ranges from a casual conversation to a formal research program. Information can be obtained from many sources, including publications, partnerships with researchers or policy-makers, collaborations with academic institutions and research organizations as well as government agencies.

Environmental scanning can broadly be divided into two groups. These are passive and active scanning (Masini 1993; Renfro & Morrison 1984). Passive scanning is ongoing scanning at an almost unconscious level. No specifications are made with regard to resources or criteria for scanning and decisions made on this type of scanning activity are usually ad hoc. Active scanning on the other hand, involves a much higher level of attention with information sources being scanned specifically for their expected contents. The criteria is also different with active scanning in that specific questions are asked by the scanner such as whether this item or issue has relevance to the organization or community and whether it's likely effect justifies following it more closely.

Since environmental scanning is about information gathering, agents with government departments concerned with policy formulation and those in corporate organizations and research institutes monitor the environment to identify changes that might affect their organization, and turn that information into knowledge. Scanning in small organizations rely more on personal sources such as close associates, friends, and family (Smeltzer, Fan, & Nikoliason, 1988; Schafer, 1991). Personal sources are considered more credible and trustworthy than published written information (Schafer, 1991). Also, they use more informal methods, such as person-to-person networking, and telephone networking (Brush, 1992; Mohan-Neill, 1995), and focus more on information directly relevant to decisions at hand (Brush, 1992; Choo, 1998).

Scanning is also more than gathering information. It is the process of using environmental information in decision making (Lester & Waters, 1989). It is a means of improving the organizational ability to deal with a rapidly changing environment (Jain, 1984). The external environment of the organization refers to both its task environment (competition, customers and suppliers), and general environment (economic, regulatory, technological, and socio-cultural factors).

Organizations' knowledge is critical to building sustainable competitive advantage in the 21st century (Lerner & Almor, 2002; Anand, Glick, & Manz, 2002). Because of increased globalization, rapid technological changes, and increased competition, organizations and even government departments are facing new and unexpected challenges. These changes have significantly increased the quality and quantity of information that organizations must consider when making decisions. Organizations, therefore, must process and learn from the information, and use the new knowledge for improved decision making. According to Inkpen, (1998), new knowledge is the key resource for creating a sustainable competitive advantage.

Despite the importance of the decision makers' knowledge for new project success, many are faced with a capability gap because of the discrepancy between their current knowledge and the information that is relevant to the current dealing environment. To deal with this capability gap and to have the most up-to-date information for decision making, organizations, and more so government agencies that work on formulating policies, must increasingly acquire information from outside their surroundings, and one essential way of acquiring and using outside information is through environmental scanning.

Most studies on environmental scanning have been done with large organizations and government agencies (Lang, Calantone, & Gudmundson, 1997), while those done with small organizations focused mainly on scanning practices (Gudmundson, Tower, & Hartman, 2001). Scanning allows the organization to learn from the environment; and individual and organizational learning enhances the organization's knowledge, and contributes to its success. The purpose of this study was to contribute to the discussion by examining the role of environmental scanning and organizational success in terms of obtaining the relevant information for innovation and formulating economic policies in Kenya.

Environmental scans are now a recognized and valuable tool in economic decision making. The environmental scan method—particularly if designed in consultation with an information specialist—provides evidence for policy and decision-making, and program planning. The diversity of sources and types of data gathered in environmental scans has resulted in effective planning and program implementation in various sectors (Porter, 2004). Environmental scanning is a tool that can be used to systemize knowledge. It can therefore guide organizations and projects, leading to evidence-based solutions to economic and other issues. For the purpose of this study, environmental scanning was considered as a way in which organizations learn from the environment and use the new knowledge for problem solving.

2.4.1 Importance of environmental scanning during policy formulation

Environmental scanning is generally viewed by many scholars as a prerequisite for formulating effective policies (Dollinger, 1984). The actual process of scanning the environment and gathering new ideas can, and should, be done by just about everyone who wears a management hat in an organization or government department. This would typically range from line managers all the way up to the president. Many larger organizations assign one or more employees to a formal scanning role. They then summarize the collected information so that the appropriate managers can make decisions (Bryson, 1988). Also, scanning can be done informally by various people looking outside of daily operations and communicating their findings to the decision makers through conversations and emails.

The frequency with which scanning is done can be described in three manners: ad hoc, scheduled, or continuous. Ad-hoc scanning is reactive and is usually done as a response to a failure in performance. Both scanning on a scheduled basis and continuous scanning are proactive. These types of environmental scanning are not necessarily done to address a specific need or crisis, but rather are done to keep up with what is on the horizon in the organization's environment at large (Boyd & Fulk, 1996). Although continuous scanning has the ability to keep an organization current and provides a steady stream of new ideas, it requires a constant dedication of often limited resources. It is important to remember that there is an infinite supply of ideas in the world; only those ideas that will move the organization closer to achieving its goals should be considered (Horn, et al. 1994).

In addition to acquiring information from outside the organization, time needs to be set aside to digest the meaning of the information in relation to the organization. Some information will energize and make you want to hit the floor running, but without careful reflection you may make changes in your operations that you will later regret. Reflection does not have to involve incense and chime music, reflection is simply absorbing what you have actually uncovered. Often, the process of reflection will involve conversing with other managers and listening to their reactions and thoughts. Obviously, some issues and information will not reveal their true relevance (and value) immediately. It is important to take in the ideas, sift through them, and then determine if the ideas can be applied to (or will affect) the policy process. More than likely, the more complex the ideas gathered the more reflection will be required to digest their meaning.

If an organization is not scanning the environment and implementing new ideas from outside their operations, they may be missing out on unforeseen opportunities. Another danger of not looking outside the organization is that one's sense of how to resolve some issues and one's sense of good and bad

performance may be severely altered (Garner, et.al, 1998; Zuckerman, 2001). Knowing one's operations is important, but knowing and implementing relevant ideas from the broader environment will help gain new insight and help move them towards improved effectiveness.

Nearly all managers would say that they already engage in some level of informal scanning, and this is certainly a good thing. But, experts believe that more formalized programs are necessary if an organization seeks to truly understand the external forces, threats, and opportunities it faces. Without such an understanding of what the future holds, a government department formulating policies or an organization's leader will have lowered odds of being prepared to take advantage of any opportunities (Robinson, 2003).

While scanning may be used to look far out into the hazy future, it can be based on concrete observations about future events that are likely to impact on government operations. The challenge may then be how to take what has been seen in the scans and apply it to planning efforts. So naturally, one of the factors that greatly increase the value of scanning is incorporating it as part of the overall planning process during policy formulation (Subramanian, Nirmala & Harper, 1993). While this may be difficult at first, it is absolutely critical.

Research shows that environmental scanning is linked with improved organizational or government performance. Dollinger (1984) analyzed the performance of small organizations and found that intensive boundary spanning (measured by number of contacts with outside constituencies) was related to good performance. Newgren, Rasher, and LaRoe (1984) compared performance of organizations that practiced environmental scanning with non-practicing ones and the results showed that scanning organizations significantly outperformed non-scanning ones.

Apart from the influence on general performance, environmental scanning is positively related to innovation performance. If an organization is good at acquiring new knowledge and articulating existing knowledge with new knowledge or accessible knowledge in a different way, this organization will be good at producing innovations. Further the better the organizational learning process, the greater the capacity to develop innovations (Therin, 2002).

2.4.2 Environmental scanning as organizational information seeking tool

Scanning as a form of information behaviour is composed of information needs, information seeking, and information use. In the context of environmental scanning, information needs often refer to the focus and

scope of scanning, particularly the environmental sectors where scanning is more intense. Information seeking has been examined in terms of the sources that are used to scan the environment as well as the organizational methods and systems deployed to monitor the environment. Finally, information use is usually looked at in relation to decision making or equivocality reduction.

An organization processes information to make sense of its environment, to create new knowledge, and to make decisions (Choo, 1998). Sense making is induced by changes in the environment that create discontinuity in the flow of experience engaging the people and activities of an organization. People enact or actively construct the environment that they attend to by bracketing experience, and by creating new features in the environment (Weick, 1995). Organizational sense making can be driven by beliefs or by actions (Weick, 1995).

In belief-driven processes, people start from an initial set of beliefs that are sufficiently clear and plausible, and use them as nodes to connect more and more information into larger structures of meaning. People may use beliefs as expectations to guide the choice of plausible interpretations, or they may argue about beliefs and their relevance when these beliefs conflict with current information. In action-driven processes, people start from their actions and grow their structures of meaning around them, modifying the structures in order to give significance to those actions. People may create meaning to justify actions that they are already committed to, or they may create meaning to explain actions that have been taken to manipulate the environment.

An organization possesses three kinds of knowledge: tacit knowledge, explicit knowledge and cultural knowledge. *Tacit knowledge* is the personal knowledge that is learned through extended periods of experiencing and doing a task, during which the individual develops a feel for and a capacity to make intuitive judgments about the successful execution of the activity. *Explicit knowledge* is knowledge that is expressed formally using a system of symbols, and may be object-based or rule-based. Knowledge is object-based when it is represented by using strings of symbols (documents, software code), or is embodied in physical entities (equipment, substances). Explicit knowledge is rule-based when the knowledge is codified into rules, routines, or operating procedures. *Cultural knowledge* consists of the beliefs an organization holds to be true based on experience, observation, reflection about itself and its environment (Welch & Welch, 2008).

Over time, an organization develops shared beliefs about the nature of its main operations and core capabilities. These beliefs then form the criteria for judging and selecting alternatives and new ideas, and for evaluating projects and proposals. In this way an organization uses its cultural knowledge to answer

questions such as: What kind of an organization are we? What knowledge would be valuable to the organization? And what knowledge would be worth pursuing? Organizations continuously create new knowledge by converting between the personal, tacit knowledge of individuals who develop creative insight, and the shared, explicit knowledge by which the organization develops new innovations (Nonaka & Takeuchi, 1995).

2.4.3 Environmental scanning and its role in enhancing performance of organizations

Several studies suggest that environmental scanning improves organizational performance. Miller and Friesen (1977) analyzed eighty-one detailed case studies of successful and failing organizations, and categorized them according to ten archetypes – six for successful and four for unsuccessful ones. The study found that the intelligence-rationality factor, which comprises environmental scanning, controls, communication, adaptiveness, analysis, integration, multiplexity, and industry experience, was by far the most important factor in separating the successful organizations from the unsuccessful, accounting for more than half of the observed variance.

The environmental scanning and intelligence activity in all but one of the successful archetypes was judged to be ‘substantial’ or ‘concerted,’ whereas the intelligence effort in the failing organizations were described as ‘poor’ and ‘weak.’ Miller and Friesen (1977) observed that: One fact is particularly worth noting. That is that the highest intelligence/rationality score amongst the failure archetypes is lower than the lowest intelligence/rationality score amongst the successful models. The intelligence factor discriminates perfectly between failing and successful archetypes. (Miller & Friesen, 1977).

Newgren et al. (1984) compared the economic performance of twenty-eight United States of America (USA) corporations that practiced environmental scanning with twenty-two non-practicing firms. Performance was measured over a five-year period (1975-1980) using the firm’s share price/earnings ratio, normalized by industry. Data analysis showed that scanning firms significantly outperformed non-scanning firms. The average annual performance of the scanning firms was also consistently better than the non-scanning firms throughout the period. The study concluded that environmental scanning and assessment have a positive influence on organizational performance.

West (1988) examined the relationship of organizational strategy and environmental scanning to performance in the USA food service industry. Data were collected from sixty-five companies over the period 1982 to 1986. Strategy was classified according to Porter’s (1985) typology of product differentiation, low-cost leadership, and niche focus. The study found that strategy and environmental

scanning had a substantial influence on the firm's return on assets and return on sales. High-performing organizations in both differentiation and low cost strategies engaged in significantly higher scanning activities than low-performing organizations in those two strategic groups. Daft et. al's, (1988) study of scanning performed by chief executives found that executives of high-performing organizations (those with higher return on assets) increased the frequency, intensity, and breadth of their scanning as external uncertainty rose.

Subramanian et. al., (1993) and his associates studied scanning and performance in USA Fortune 500 companies and found support for a relationship between performance, measured by profitability and growth, and advanced scanning systems: firms using advanced systems to monitor external events showed higher growth and profitability than firms that did not have such systems. Subramanian led another study of over 600 hospitals of the American Hospital Association, which concluded that hospitals with the more sophisticated scanning functions performed significantly better than hospitals which used less advanced or basic methods to monitor the environment (Subramanian et.al, 1994). The sophisticated scanners scored high in their ability to obtain information and their ability to use the scanning information in the strategic planning process. These hospitals performed better in terms of occupancy rates and per bed expenditures.

Ptaszynski (1989) examined the effect of the introduction of environmental scanning in an educational institution. The study found that scanning had a positive effect on the institution in these areas: communication, shared vision, strategic planning and management, and future orientation. The most significant effect was that scanning provided a structured process which encouraged people to regularly participate in face-to-face discussions on planning issues. As a result, the organization was able to develop a number of strategic options that could be used proactively to cope with external change.

The best discussion of how post-secondary institutions implement environmental scanning is found in Pritchett (1990). Pritchett discusses how three institutions, a public doctoral-granting university, a comprehensive university, and a two-year college; use environmental scanning in the planning process. Two institutions use an ad hoc environmental analysis committee appointed by the president. At the other institution, the committee is directed by the planning and budget office and consists of experts and community representatives. Pritchett (1990) found common patterns in how the environmental scanning activity developed in these institutions. New presidential leadership and active governing boards were critical in two institutions; reductions in state appropriations and enrollment declines were influential at all three. In all institutions, presidential recognition and support for the formal scanning process were essential elements of the planning process.

The benefits of scanning are not solely economic or financial; it can also be applicable in preparation for a major policy shift. In an in-depth case study of environmental scanning at the Georgia Center for Continuing Education, in the United States of America, Murphy (1987) concluded that scanning is an important component of the organization's strategic planning process, and improving the Center's ability to react to and implement change in response to external factors. Furthermore, scanning has also contributed to increased communication among the line and staff personnel of the organization, and greater employee involvement in the decision making process. However, there is some evidence to suggest that models describing environmental scanning activities in developed countries fail to adequately explain and predict the information-processing activities in developing countries (Kiggundu, Jorgensen & Hafsi, 1983).

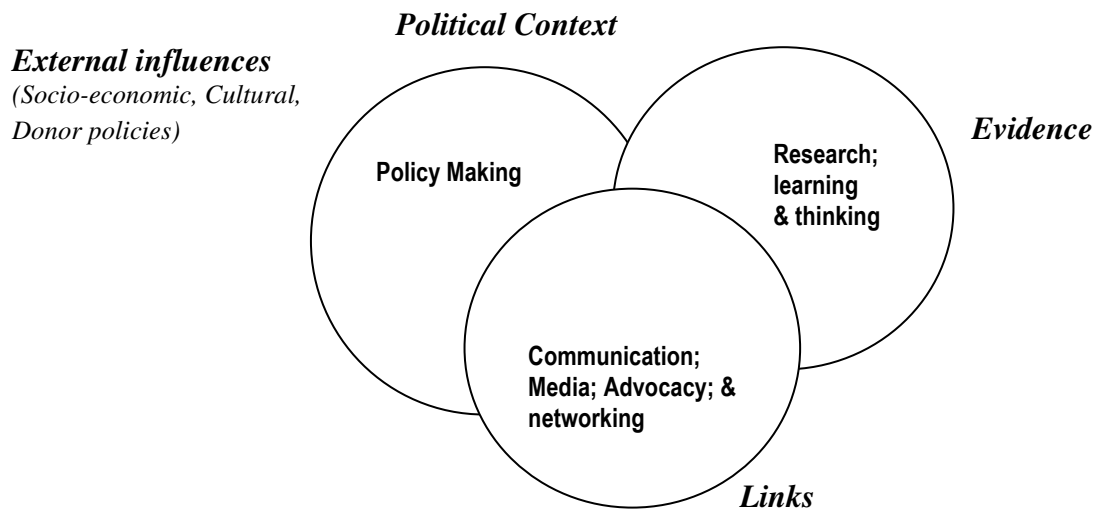
2.5 The framework for communicating research

Hovland and Start, (2004) came up with an interesting framework for understanding the link between research and policy, commonly known as the Research and Policy in Development (RAPID) framework within an organizational environment. This framework was used as a frame of reference in this study to appreciate the flow of organizational information and how research is communicated between the two communities, that is the research and the policy community.

2.5.1 The RAPID framework

Organizational information theory adopted for this study is relevant and important because organizational providers need quality information to cope with environmental uncertainty and improve their decision making. Environmental uncertainty stems from the complexity of the environment and dynamism, or the frequency of changes to various environmental variables. The RAPID programme is aimed at improving the use of research and evidence in development policy and practice through research, advice and debate. Hovland and Start, (2004) posit that research-policy links are dramatically shaped by the political context. Figure 4 is an illustration of the RAPID model.

Figure 4: The RAPID model



Source: Hovland and Start, (2004)

The policy process and the production of research are in themselves political processes from start to finish. The key influencing factors in this framework include: The extent of civil and political freedoms in a country; political contestation, institutional pressures and vested interests; the attitudes and incentives among officials, their room for maneuver, local history, and power relations. In some cases the political strategies and power relations are obvious, and are tied to specific institutional pressures. Ideas circulating may be discarded by the majority of staff in an organization if those ideas elicit disapproval from the leadership (Hovland & Start, 2004).

Their findings and experience suggest that the quality of the research is important for policy uptake. Policy influence is affected by topical relevance and, as importantly, the operational usefulness of an idea; it helps if a new approach has been piloted and the document can clearly demonstrate the value of a new option. A critical issue affecting uptake is whether research has provided a solution to a problem. The other key set of issues here concern communication. The sources and conveyors of evidence, and the way new messages are packaged (especially if they are couched in familiar terms) and targeted can all make a big difference. The key message is that communication is a very demanding process and it is best to take an interactive approach. Continuous interaction leads to greater chances of successful communication than a simple or linear approach.

In a nutshell, their work emphasizes the importance of links; of communities, networks and intermediaries (for example, the media and campaigning groups) in affecting policy change. Some of the current literature focuses explicitly on various types of networks, such as policy communities, epistemic communities, and advocacy coalitions. While systematic understanding remains limited, issues of trust, legitimacy, openness and the formalization of networks have emerged as important. Existing theory stresses the role of translators and communicators (Hovland & Start, 2004). It seems that there is often an under-appreciation of the extent and ways that intermediary organizations and networks impact on formal policy guidance documents, which in turn influence officials.

A synthesis of the RAPID experience emphasizes the impact of external forces and donors actions on research-policy interactions. While many questions remain, key issues here include the impact of international politics and processes, as well as the impact of general donor policies and specific research-funding instruments. Broad incentives, such as the Poverty Reduction Strategy Paper (PRSP) process can have a substantial impact on the demand for research by policymakers. Trends towards democratization and liberalization and donor support for civil society are also having an impact.

Much of the research on development issues is undertaken in the northern hemisphere, raising concerns of relevance and beneficiaries' access to the findings. A substantial amount of research in the poorest countries is funded by international donors, which also raises a range of issues around ownership, whose priorities, use of external consultants and perceived legitimacy. As policy processes become increasingly global, this arena will increase in importance. Although evidence clearly matters, there has been very limited systematic understanding of when, how and why evidence informs policy. This framework has been used extensively in research and advisory work, including:

- i. To analyse major policy events like the adoption of Poverty Reduction Strategy Programmes (PRSPs);
- ii. The development of an ethical charter by humanitarian agencies; animal health policies in Kenya;
- iii. The Sustainable Livelihoods Approach; to analyze 50 summary cases studies as part of Phase I of the Global Development Network Bridging Research and Policy Project (Court and Young, 2003);
- iv. To structure literature reviews focusing on communications issues, knowledge management, the role of Civil Society Organizations, and how networks work;
- v. In a study of research-policy interaction in HIV/AIDS in developing countries;
- vi. In evaluations of the impact of internal policy papers on bilateral donor policy;

- vii. And in workshops and seminars with researchers, practitioners and policymakers in Botswana, Morocco, India, Moldova, Kenya, United Kingdom and United States of America.

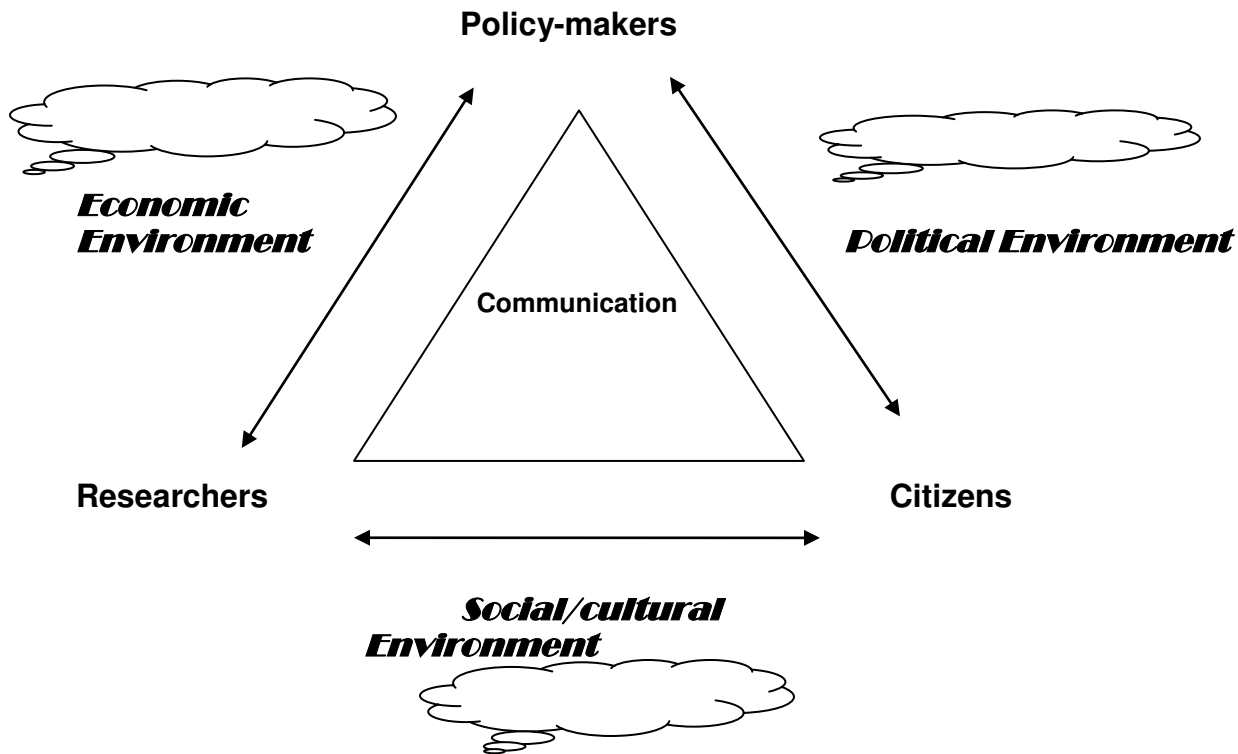
2.5.2 Construction of the empirical model linking research to policy process

Literature reveals that there is limited systematic understanding of the links between research and policy in international development. This study conceptualizes an analytical framework with four key areas: Researchers (evidence), Policy-makers (political context), Citizens (beneficiaries) and Communication (the link). It also considers external influences, the environment, institutional links and knowledge brokers. The model shown in Figure 5 illustrates the pilot empirical model in this study that demonstrates the utilization of research and evidence in development policy and practice.

Works based on the findings in developing countries around the world point out five key issues that characterize many developing countries: troubled political contexts; problems of research supply; communication/dissemination; external interference; limited environmental scanning and the emergence of civil society as a key player (Hovland & Start, 2004; Young, J. 2005). Despite these challenges, two institutional models seem to be particularly effective in the utilization of research and evidence; these are think tanks and regional networks.

The empirical model for getting research into policy making process in this case is characterized by research products, content and design; political context, policy-makers and their perception about research outputs; practitioners who implement policies and the underlying process and organizations that produce research as well as government agencies that consume these research findings. This empirical model can be seen as a first step in the direction of a generic model for communicating research to aid policy making process in Kenya. Although the model may be consistent with the results of past studies, its specific predictions were investigated in the context of Kenya as a metric for assessing consumption of research findings by the policy community and how these findings are communicated.

Figure 5: The conceptual framework



Source: Author, (2014)

2.5.3 The framework adopted for getting research into policy process

This conceptual framework was used to as a frame of reference in the empirical stage of the study. The framework served several purposes: identified who would and would not be included in the study; described what relationships may be present based on logic, theory and/or experience; and provided the opportunity to gather general constructs into intellectual “bins.” The conceptual framework served as an anchor for the study and is referred to at the stage of data interpretation.

This conceptual model that was then tested in this study was developed on the basis of a comprehensive literature review and an extensive consultation process, which began in March 2007. These consultations involved many experts in the field of development and organizational communication, economics, senior policy makers in Africa, organizations that produce economic research outputs, a wide range of researchers, practitioners and representatives from Kenya and different countries across sub-Saharan Africa. Individuals as well as institutions working on strengthening the link between research and the policy making process were consulted. Participation in annual senior policy seminars organized by the

Africa Economic Research Consortium (AERC) since 2004 also informed this process. Ultimately, several individuals and institutions actively contributed to the process by way of consultations and forums held between March 2007 and February 2011.

The literature search and discussions concluded that an appropriate theoretical framework needs to be applied and systematic analysis of the research–policy–practice processes are required in order to enhance understanding of research utilization (or lack thereof) in low and middle income country settings like Kenya. By investigating the relationship between research evidence and the development of policies in different settings, including the values placed on research and the conditions under which policy-makers will demand (certain kinds of) research, the process can be better understood and subsequently the evidence – policy linkages can be strengthened (Adams, Hwa-Kee, & Lin, 2001).

Ideally in many developing countries, the factors that define major courses of national action fall into three overlapping areas: the political context, the evidence, and the links between policy and research communities, with external influences (Hovland & Start, 2004). This framework holds explanatory power and it provides clear, yet flexible guidance as to what researchers need to know, what they need to do, and how they should go about it. It suggests that research-based and other forms of evidence are more likely to enrich policy and then, hopefully, practice if it fits within the political and institutional limits. Also the pressures of policy makers count as well as how the findings resonate with their assumptions. Sufficient pressure thus needs to be exerted to challenge policy makers (Lavis et. al., 2003; Koenig & Guchteneire, 2005).

Also, if the evidence is credible and convincing, if it provides practical solutions to pressing policy problems, and if it is packaged to attract the interest of policy makers and researchers, it is likely to be considered during the policy process. Besides if policy makers share common networks, trust one another, and communicate effectively, the policy making process is likely to be smooth. In brief, by making more informed, strategic choices, researchers can maximize the chances that evidence will impact policy and practice.

If we accept that research, policy and practice are part of a shared process, then the production of ‘good’ research on its own is not sufficient. Research designed and produced without regard for gaps, policy priorities and an awareness of the political environment may result in limited resonance and uptake, and consequently limited benefits for stakeholders. This is not to deny the crucial role of research in challenging dominant paradigms and discourses. What it does suggest is that research aimed at

influencing policy and practice needs to be consultative from the early stages of design, rather than solely at a later point of dissemination. Thus, for any meaningful uptake of policy research, it is crucial to engage policy-makers at different stages of a research project, but more so at the start and the end (Larkin & Larkin, 1994; Haggins et. al., 2005). Communication planning at the start of a project, either in form of a separate document or built into the project proposal could be very instrumental in this case, and the communication strategy can be reviewed and revised during the project's lifespan.

Studies from low and middle-income countries show that research has the highest impact when it is of high quality and based on good empirical data and simple analysis. One facilitating factor for producing high-quality research could be long-term collaboration with an international research institute (Almeida, & Bascolo, 2006). Cross-country comparisons are viewed as particularly useful, and it is a plus if the research is perceived as independent. Preferably the interventions should have multiple outcomes, for example targeting both barriers and facilitators, or operating at different levels in society (Brehaut & Juzwishin, 2005).

Literature also documents that research should be carried out with appropriate collaborators, so that the research can be used to build consensus for change among stakeholders. Furthermore, those presenting the research should carry authority in order to make an impact (Lynch, 2005; Cernada, 1982; Glover, 2002). It is widely believed that if research findings are presented by, for example, an organization such as the World Bank, African Development Bank, the World Health Organization (WHO), or in leading journals, they tend to be trusted. In other words, there are a number of issues beyond the actual research that affect research utilization – many of them relating to context. Consequently, the reason why specific research interventions work and others do not must be investigated in each specific case; some of these were attempted in this study, even if some general characteristics for successful research utilization can be identified.

Personal contact between researchers and policy-makers during the research, and the production of research briefs focused on the needs of decision makers, could also result in a higher rate of success. Research should be timely and balance immediate with long-term issues to increase its usefulness to policy-makers. The key issue that is emerging about policy-making is that it is crucial that researchers and policy-makers trust each other. Researchers must gain the trust of policy-makers by relating to them, learning their views, exchanging ideas with them, going out into the field and talking to stakeholders. Policy-makers on the other hand must be dedicated to transparent and accountable governance in order for the seeds of researched evidence to land on fertile soil. Some studies have also suggested having a

policy advisory committee for research projects to guide researchers in the identification and formulation of policy questions (Moody, 2000; Garret & Islam, 1998). Other literature postulates that being aware of the policy questions; it would be easier to identify the entry points for the research that will facilitate uptake by policy-makers (Bardach, 1984).

Using research to support the capacity building of policy-makers has become popular in the recent past, however, one thing is clear: creating better links between research and policy will require innovation and thinking outside of the box. The standard model for communicating development research to policy makers has long been to host a workshop. As part of this model, decision-makers are introduced to countless conceptual frameworks and receive guidance on the latest development interests. It's typically a one-way knowledge sharing process, which rarely results in practical change and 'workshop fatigue' is a real issue. Researchers looking to support capacity building and influence policy should, therefore, try new approaches if they want to demonstrate real change. And, economic policy-making involves more than just dialogue; it takes into consideration a number of institutions and individuals who can be described as key influencers.

It does appear then that research projects and programmes are more likely to be successful when they focus on current policy problems and have clear objectives; engage closely with policy-makers throughout the process, from identifying the problem, undertaking the research itself and drawing out recommendations for policy and practice from the results; understand the political factors which may enhance or impede uptake and develop appropriate strategies to address them; invest heavily in communication and engagement activities as well as the research itself and build strong relationships with key stakeholders. Individual champions and opponents frequently play a major role, as does serendipity – or chance.

Given that research institutes and government departments operate within the realm of an organizational setup, if possible policy decisions should not be made devoid of scanning the environment. It is, therefore, instrumental to bring in this theory of organizational information and the important concept of environmental scanning and its benefits during policy formulation. Many organizations, including government agencies espouse this impression, and thus organizational providers that are able to carefully monitor external information by having persons who can gather, peruse and read to examine externally generated information are likely to succeed if they have skilled and reliable human resources (Dollinger, 1984).

Most colleges and universities for instance operate an irregular or periodic system, focusing on the task environment (Daft & Weick 1984). These levels require less resource commitment from the institution, but they only address the immediate need for information about the external environment. The requirements of these levels can be satisfied through several means. A quick way of getting started on this would be to interview major decision-makers regarding their view of the most critical trends and developments that could affect policy decisions.

Establishing a continuous scanning system requires more effort and resources. First, it would be important to secure a resource commitment from the senior official responsible for planning (Choo & Auster, 1993). At a minimum, a continuous scanning system requires a professional to devote half of their time to the enterprise. Further, a continuous scanning program requires a number of scanners who agree to rigorously and systematically review specific information resources. Assuming that resources are secured, the next step would be to recruit and train officers to perform active scanning (Hambrick, 1979; Yasai-Ardekani & Nystrom, 1996).

Organizational culture is very important in environmental scanning; this is basically a pattern of beliefs and expectations shared by the organization's members. These beliefs and expectations produce norms that powerfully shape the behaviour of individuals and groups in the organization (Schwartz & Davis, 1981). Brown (1990) developed a bridging concept, "information conscious culture", meaning cultures which demonstrate considerable awareness of the value of information and sophistication in their information behaviour and systems.

This empirical model for linking research to policy connects to the theoretical framework in which interaction between researchers and policymakers is an important condition for the use of research data in any public policy. The model suggests a set of propositions that were tested empirically.

2.5.4 Theoretical propositions for communicating research to aid policy formulation

Units of analysis: Policy makers; researchers; intermediaries (communication/media); research institutes; parliament deliberations; donor community/NGOs; conferences/workshops/seminars; report/publications; formal and informal links; communities, networks (policy community/advocacy coalitions/civil society); campaign groups; senior government officials/personnel/policy practitioners/implementers; beneficiaries/citizens/the public;
Policy process: Problem definition; option formulation; solution selection; policy design; implementation; Monitoring & Evaluation

The political context, the evidence, and communication between policy and research communities

- i. If researchers adopt good communication strategies for disseminating their research findings to policy makers, there is a likelihood that their research will feed into the policy making process.
- ii. If the research output fits within the political and institutional limits, and resonates with the policymakers' assumptions, it is likely to be taken up and used as guide in the process of policy formulation.¹
- iii. If the evidence is credible and convincing, provides practical solutions to pressing policy problems, and is packaged to attract the interest of policy makers and researchers, it is likely to be considered during the policy making process.²
- iv. If policy makers share common networks and communicate effectively, the policy making process is likely to be smooth and successful.³
- v. The more informed the policy makers, the better the strategic choices they will make, researchers can maximize the chances that evidence will impact policy and practice if they are dealing with an enlightened group of people.⁴
- vi. If research is designed and produced without regard for gaps, policy priorities and an awareness of the political environment, then it may result in limited resonance and uptake. Gaps in the research do note where one can make their mark by suggesting ways forward or theories of their own, or merely just pointing out that research is incomplete in any given area. Political environment may be national and international political factors that can affect policy decisions.⁵
- vii. If research is aimed at influencing policy and practice, then it needs to be consultative from the early stages of proposal, rather than solely at a later point of dissemination.⁶
- viii. If research results are of high quality and based on good empirical data and simple analysis, then it is likely to have the highest impact.⁷

1. Sufficient pressure should be exerted by campaign groups and other stakeholders to challenge those who are reluctant to new ideas. Building strong relationships with key stakeholders, as well as individual champions and opponents frequently play a major role. This proposition deals with the dimension of communication about organizational information.

2. The evidence can be packaged in policy briefs, reports, executive summaries, and flyers. This proposition deals with the dimension of communication about information dissemination.

3. Networks include professionals like economists, political scientists, sociologists, public administrators, medical doctors, engineers among others. Some professional outfits are so organized that they have well established secretariats which plan workshops, seminars and other related events where policymakers and researchers convene to discuss topical issues. This proposition deals with the dimension of communication about information sharing.

4. A strategic choice refers to the process of selecting one option for implementation and leaving out others. For positive results, this choice must conform to the strategic intent, the capabilities and resources necessary for the success need to be made available. This proposition deals with the dimension of communication about information management.

- ix. If researchers mount workshops/conferences to discuss their output, then their policy suggestions are likely to be taken up.⁸
- x. If organizational providers carefully scan external information by having persons who can read and peruse what is gathered out there, then they are likely to make use of research outputs.⁹
- xi. If organizational providers continually scan the environment to see the need for better policy implementation of new policy challenges, then they are likely to perform better in terms of policy formulation.¹¹
- xii. If quality decisions are to be made by leaders in a highly competitive environment today, then these decision makers are likely to share similar traits and devote a significant amount of information to managerial decision making.¹²

2.5.5 Key data gathering instruments used in the study

Key informants interviews: Qualitative interviews were carried out with a wide-range of stakeholders (policy makers, policy practitioners, researchers, citizens, civil society, and the media) who have first-hand knowledge about innovation, operations and context. These community experts provided particular knowledge and understanding of the problem. They also provided insight on the nature of problems and gave recommendations for solutions. They similarly gave different perspectives on every issue. This was done through the use a structured questionnaire and face to face interviews.

An interview guide designed to concentrate more on getting historical descriptive accounts of episodes of policy oriented research in which all the key variables or propositions were inserted was used to obtain information from respondents. The guide assisted in getting information on why some organizational providers have been so successful as well as helped to try and find out some of their general traits. All these results were coded later on. This gathered much more rich data than a generic questionnaire would.

10. Culture is basically a pattern of beliefs and expectations shared by the organization's members. Formal information cultures tend to stick to traditional information infrastructures, but where no information culture exists, like in most government agencies, little investment is made in information infrastructures. This proposition deals with the dimension of communication about organizational culture.

11. They carry out this environmental scanning exercise to be in communication with the research environment. Environmental scanning is one tool in an organization's arsenal that can be used to gain this understanding. This proposition deals with the dimension of communication about information gathering.

12. To obtain up-to-date information for decision making, organizations must increasingly acquire and use information from outside the environment, and the best way of acquiring and using outside information is through environmental scanning. Managers in properly run organizations cannot do without this. This proposition deals with the dimension of communication about information gathering.

Focus Group Discussion: A small group of 10 people drawn from the policy sphere, research institutes, practitioners, media, beneficiary of public policies, donor community and civil society was interviewed together to explore in-depth opinions, similar or divergent points of view, or judgments about getting research into policy, as well as information about their behaviours, understanding and perceptions about the role of research in policy formulation and why communication is important. Focus group discussion is a quick and reliable way to obtain common impressions from diverse stakeholders. The method was chosen because of its efficient way to obtain a high degree of range and depth of information within a short time. Even though it can be hard to analyze responses, if moderated by a trained facilitator the results are always meaningful.

Case Studies: This involved a comprehensive examination through cross comparison of cases to obtain in-depth information with the goal to fully understand different sets of policies, that included health, agriculture, education, and housing by tracing the policy making process in each one of them. It looked at comparative successful and unsuccessful case histories — successful where research seemed to be taken up during the process and why, and unsuccessful where research was notoriously ignored during the process and where there were disastrous results in terms of problem solving. This method was chosen because it is useful to fully explore factors that contribute to successful use of research to guide policy formulation.

Qualitative case studies afford researchers the opportunity to explore or describe a phenomenon in context using a variety of data sources. It allows the researcher to explore individuals or organizations, simple through complex interventions, relationships, communities, or programs (Yin, 2003) and supports the deconstruction and the subsequent reconstruction of various phenomena. This approach is valuable for research to develop theory, evaluate programs, and develop interventions because of its flexibility and rigor. A case study, as a form of qualitative research, can inform professional practice or evidence-informed decision making in policy realms. A case study was chosen for this study because the case is the decision making of policy makers, but the case cannot be considered without the context, the government, and more specifically the ministries and policy making settings. It is in these settings that decision making skills are developed and utilized. It would be impossible to have a true picture of policy decision making without considering the context within which it occurs.

2.6 Summary

This study finds an anchor on the organization theory as the grand foundational philosophy for testing the upper range model. Modern organization theory is rooted in concepts developed during the beginnings of the Industrial Revolution in the late 1800s and early 1900s. Of importance during that period was the research of German sociologist Max Weber (1864-1920). The literature on communication generally acknowledges that the basic function of communication is to affect receiver knowledge or behavior by informing, directing, regulating, socializing, and persuading. Organizational Information Theory, which guided the middle range theory testing of this study, provides the framework for exploring how organizations make sense of the information that is essential for their existence. There is a broad consensus in the literature that successful communication between researchers and research users is crucial for the effective utilization of research in decision-making for policy purposes and practice. The failure of researchers to link evidence to policy and practice produces evidence that no one uses, impedes innovation, and leads to mediocre or even detrimental development policies.

Using research to support the capacity building of policy-makers has become popular in the recent past, however, one thing is clear: creating better links between research and policy will require innovation and thinking outside of the box. The standard model for communicating development research to policy makers has long been to host a workshop; however, 'workshop fatigue' has become a real issue. Packaging of the research results for communication to different audiences is an important linkage between research and policy. Policy influence is usually affected by how research is communicated, topical relevance and the operational usefulness of a particular research output. The sources and conveyors of evidence, the way the messages are packaged and targeted can all make a real big difference. Thus, for policy take up and implementation to succeed, the process needs to be guided by a comprehensive and detailed communication strategy.

Chapter Three

Methodology

This chapter covers the following major components of the study's methodology: purpose, research design, approach, and instrumentation as well as data collection procedures. Philosophical considerations and positions underlie all of the natural and social sciences. And philosophical foundations and their emergent issues have a profound impact on methodology and empirical practice. Consequently, design decisions depend on philosophical perspectives or assumptions, such as the very fundamental decision to employ a qualitative or quantitative design.

According to the philosophical underpinnings, all research is based on assumptions about how the world is perceived and how we can best come to understand it. Without theory there is nothing to do, scientifically, Hargreaves (1996). Of course, nobody really knows how we can best understand the world, and philosophers have been arguing about that very question for at least two millennia now. So all this study did was to look at how most contemporary social scientists approach the question of research.

The broad objective of this study was to examine the role of communication in linking research findings to policy makers in Kenya. The study explored ways through which economic research outputs could more efficiently contribute to effective policy-making process in the country, thus the investigation focused on finding out exactly where and why communication is breaking down between the research and policy communities during policy formulation. Three key objectives of the study were stated as follows:

1. To examine the role of communication in disseminating research to policy makers in Kenya.
2. To evaluate the extent to which policy-making processes draw upon economic research and communication skills located within and outside the formal policy-making structures.
3. To analyze how organizational providers source for innovative and adaptive information to address new challenges during policy formulation.

3.1 Research methodology

This study adopted a qualitative research method: a survey methodology was applied to sample researchers and policy makers, and a comparative case study approach was espoused to look at a few case histories of successful and unsuccessful policies in Kenya. A qualitative approach was adopted to explore

the process of policy formulation in Kenya because it fit the bill. The survey was carried out with a range of researchers, policy stakeholders and research institutes in the country. Key informants' interviews with front line professionals were carried out. There was also a review of documents of some of the key events in the policy and decision making processes on chosen organizational providers that included the health, agriculture, education, and housing departments. A focus group discussion to obtain additional information was conducted; this was done essentially to help validate some of the data collected. Using an iterative approach, a thematic analysis of the data was undertaken.

3.1.1 Research design

A survey study approach was adopted to obtain information from 69 researchers, and 135 policy makers/policy practitioners. Seven research institutes were also sampled purposively for the study. These sample sizes were determined using a method that was developed by Fisher et.al. (1983). In this method a purposive sampling procedure was used to ensure proportional representation of researchers and the various levels of policy makers ranging from ministers to members of the county assembly as well as the beneficiaries of public policies. Data collection was undertaken using structured questionnaires and administered through e-mail contacts and on one-to-one or face-to-face interviews. This qualitative research approach was selected to collect data and to systematically analyse because it factually and accurately captures the characteristics of existing phenomena. The other research paradigms that were used within this qualitative approach included a historical case study of four policy processes, which attempted to shed light on the phenomena looked at by studying case examples. A historical descriptive account of episodes of policy formulation was studied. Additionally, stakeholders were asked to describe or write their experience about how information is obtained from the environment and used within organizations when policies are being formulated.

Broadly, the phenomena that were looked at in this study included policy-making process, uptake of research outputs, understanding the reasons why policy makers shun uptake of research and the communication processes used during dissemination of research findings among others. Primary and secondary data was used to qualify if there is indeed some disconnect between economic policy research and the policy-making process in Kenya. The methodology involved identification of the research site; precisely the selection of the people and the organizational providers to do the study to facilitate explanation of high-low comparisons. It also entailed the categorization of the target populations, purposive sampling of respondents, testing and administration of a study-specific questionnaire and analysis of both primary and secondary data.

3.1.2 Case study

The study considered a comparative case study approach, by reviewing the organizational providers which seem to be innovative and have the best scanning tools as well as those which seem to have the worst, and how they obtained new research information to aid decision making during policy-making processes in the Kenyan context. It considered different sets of policies among them health (ban of tobacco use in public places in Kenya), education (challenges of the 8-4-4 education system), agriculture (ineffective extension services) and housing (unsuccessful housing policy in Kenya) by tracing the policy making process in each one of them. Then looked at a comparative successful and unsuccessful case histories — successful where research seemed to be getting into the process and why, and unsuccessful where research notoriously did not get into the policy process, and where there were disastrous results in terms of problem solving and why. This method excels at bringing an understanding of complex issues or objects and can extend experience or add strength to what is already known through previous research, (Yin, 2002).

Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Researchers have used the case study research method for many years across a variety of disciplines. Social scientists, in particular, have made wide use of this qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods. According to researcher Robert K. Yin (1984) the case study research method is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.

Suffice to say that case study methodologists argue that asking just a few basic questions about a case can improve the value of the study considerably. First, what is it a case of (George & Bennett, 2004), is it, say, an example of health policy implementation failure, of effective transfer of a health policy from one country to another, of health policy network influence on agenda setting, of the influence of political factors on health policy evaluation and so on. Sometimes cases may be clearly identifiable at the start of the study; sometimes they may be constructed or re-constructed during the course of the research as the analysis reveals their defining characteristics (Ragin & Becker, 1992).

It is important to note that the process of clarifying ‘the case’ enables one to specify a body of knowledge to which they may make a contribution, in this case the disconnect between research and policy making

process and some of the reasons why this is happening. This case was a useful one to study because it provides and offers direction that would form part of a working solution to the problem of access to research outputs. The study suggests a set of policy prescriptions on surmounting the research–policy gap, and proposes recommendations that apply well beyond the selected cases.

As previously mentioned, the choice to use a case study approach was because of the wish to gain a deeper understanding of the cases. Qualitative interviews were administered to key persons involved in the initial design and implementation of the selected policies; these were often structured or sometimes non-standardized interviews. This kind of tool puts a lot of demands on the researcher to make methodological decisions on the spot during the interviews regarding which questions are to be asked, and which to elaborate upon and how to guide the interview, but it was still useful in this study because of its fit.

This type of design is better suited for a case study, since it is always possible to obtain very case specific information that later can benefit the analysis by providing depth and better insight. Case studies were also considered suitable because the phenomenon under study is multifaceted. In this case, the aim was to explain, understand and describe occurrences. And since this research chose the case study as one of the approaches, it was possible to not only consider the insight each respondent who had a chance to clarify some of the cases in answering the research questions posed, but also compare them with other views, both within Kenya, and where a variety of literature exists. This enabled the study to identify particular similarities or differences, thus taking individual realities and even cultural differences into consideration.

3.1.3 Interviews

Interviews were conducted based on interview guides that were shared with researchers, and policy makers. This was mainly done to better understand the workings of organizational providers/institutions and policy development processes. Most of the interviews took about 30 minutes and were recorded on the questionnaires. Some chose to fill in the questionnaires and returned them online. Each interview was transcribed for clarity. For the research institutions, a combination of purposive and snowball sampling was used to select key informants, based on their success in terms of leadership in evidence based policy research.

An iterative approach to data collection through face-to-face or telephone interview technique was used. Analysis was done with themes and issues emerging from early interviews explored further in later

interviews. For the snowball technique mainly adopted for the research institutes, the recruitment of further respondents stopped once it was felt that data saturation had been reached. The respondents were selected purposively, and trained enumerators (all college graduates) were used to administer the questionnaires. The enumerators were recruited and thoroughly prepared for this task. The training covered the objectives of the study, the survey instruments and interviewing techniques. They were also instructed on how to address and approach subjects in an ethically acceptable manner.

Pre-testing of the questionnaire was done in the field by randomly identifying some of the policy makers, researchers and the data analysed before the real data collection took place. This provided a chance to make appropriate changes on the structure of the questionnaire where necessary. The pre-testing was done as an opportunity to re-train the field assistants. This procedure was also used to ensure the quality of data collected. The careful training of the enumerators, close supervision during the actual data collection, and daily checks was done to guarantee consistency, completeness and clarity of the completed questionnaires.

With the key informant technique, informants are asked to do the summarizing for the researcher and to think in terms of their organization, so the sampling of informants was based on informant's successful career, perceptions and expertise with respect to the desired organizational measures, rather than obtaining a representative sample of a universe of members. Informants were selected because of their thorough knowledge of the area of inquiry and their ability to articulate it. Thus, an interview was used to guide with thematic questions, where the topics of the interview and the order in which they were brought up was structured, and the questions were more suggestions than exact formulations, and mainly open for follow-up and narrative in nature. This means that the respondents had more freedom to speak from personal experience. Some questions were asked that were not in the interview guide, with the researchers clarifying or deepening the information gathered from previous questions.

Data was gathered from multiple informants for each of the constructs under the study. Informants reported on the organization's external relations and internal structural characteristics. And to avoid the biases of self-report, measure some of the key variables, for instance the measures of innovation, from records of the organization were attempted. However, this approach is time-consuming, expensive and requires extensive pre-survey contact with each organization. Whereas the gains in terms of reliability and validity might well be worth the costs of this approach, a strong commitment in terms of resources is needed.

3.1.4 Focus group discussion

This study also employed focus group discussion as one of the data collection methods. However, this was mainly used to clarify information collected by the other methods and to corroborate issues. This is a rapid assessment, semi-structured data gathering method in which participants were chosen through purposive sampling to discuss issues and concerns based on a list of key themes. The qualitative research technique was originally developed to give marketing researchers a better understanding of the data from quantitative consumer surveys (Kumar, 1987). As an indispensable tool for marketing researchers (Kruger, 1988; Krueger & Casey, 2000), the focus group discussion has become extremely popular because it provides a fast way to learn from the target audience (Debus, 1988).

Marketing and media studies have shown that the focus group discussion is a cost-effective technique of eliciting views and opinion of prospective clients, customers and end users, (Kumar, 1987). In many fields, focus groups have been used to obtain insights into target audience perceptions, needs, problems, beliefs and reasons for certain practices. This method was used to evaluate the perceptions of policy makers, researchers and other professionals on the perceived weak linkage between research and economic policy formulation in Kenya.

The discussions were made as informal as possible among 10 participants. The whole process was guided to make sure everyone who had something to say was given a chance. In fact, participants were encouraged to respond directly to the comments others made. Anyone with questions or issues they did not understand was requested to raise them. Each person was there to ask questions, listen, and everyone had an opportunity to share. If by any chance at one point in time the debate seemed to be stuck on a topic, a participant was interrupted. And if any particular person was not saying much, they were called on directly, but advised that if this was done, they should not feel bad about it as this would just be one way of making sure everyone's perspective was obtained and opinion was included. Participants were encouraged to feel free to speak openly and honestly.

Everyone's remarks were recorded on a flip chart and electronic devices. All these responses were aggregated in the report. The participants were requested to allow digital recording of the discussion, so that none of their comments was missed. The record was used mainly as backup copy. Participants were assured that no one outside of the room where the discussions were conducted would have access to these records and that these would be destroyed after transcription and the report had been written.

The main issues that were explored in the discussion revolved around knowledge, attitude and practice and how to communicate research findings to policy makers to influence policy formulation. The other purpose of this FGD was to get some sort of consensus on issues.

3.1.5 Data collection

Data collection is an important aspect of any type of research study. It starts with determining what kind of data is required followed by the selection of a sample from a certain population. In this study, questionnaires and interviews were used as instruments for collecting data from the selected sample.

3.1.5.1 Ethics

Integrating ethics into the entire research process, from selecting the research problem to carrying out research goals and interpretation and then reporting research findings, is critical to ensuring that the research process is guided by ethical principles beyond informed consent. Michael Patton (2002) observes that an important step beyond securing informed consent lies in the researcher engaging in self-reflexivity by asking several questions. This study adapted Patton's (2002) list to include a range of research inquiries that include: why the researched participated in this project; if conducting this research put an people at risk; reasonable promises of confidentiality that were fully honored; access to the data; push for data; and respect and sensitivity.

Informed consent, which covers a range of procedures that must be implemented when the study includes human subjects, was observed. All respondents in the study were informed about the nature of the research project, and their consent was obtained prior to their participation in this study. This information was contained in an informed consent letter that each respondent in the study needed to acknowledge; by doing so, respondents indicate that they had read the letter and agreed to participate in the research project. The informed consent letter does several things including letting the respondents know about the project and what role they will play in it. The letter was detailed enough to make the participant informed about the specific nature of the project, including any potential risks.

3.1.5.2 Sampling procedure and primary data sources

A sample frame was used to delineate the primary data sources for the survey. The frame was a list of elements of the population with appropriate contact information. A list of current policy makers and their

addresses was obtained from Kenya Government offices and the National Assembly website. This included institutions like the office of the President, Deputy President, all Government Ministries and their functions, the Senators, the Governors, the Members of Parliament, the Public Service Commission, Independent Electoral and Boundaries Commission, Exchequer and Audit Department, National Assembly, State Law Office, the Judiciary and Members of the County Assembly. The study used purposive sampling to select a group from the 1,846 policy makers, and practitioners from the categories of Governors (47), Senators (67), and Members of parliament (185), Women Representatives (47) and Civic Ward Representatives (1,500). This particular research study generally focused on a very rare group of people, that is policy makers/practitioners, and using purposive sampling was the best way to track them down. Also out of 67 research institutions, seven were purposively sampled for the study. These were KARI, KEMRI, KIE, KIPPRA, IEA, IDS and IDRC.

3.1.5.3 Purposive sampling as used in this study

This is usually a selective or subjective sampling, a type of non-probability sampling technique that focuses on sampling techniques where the units that are being investigated are based on the intelligent judgment of the researcher. The goal of purposive sampling in this case was not to randomly select units from the population to create a sample with the intention of making generalization from that sample to the population of interest, but to focus on particular characteristics of the population that was of interest, which would best enable answering the research questions. The sample that is usually studied in this manner is not always representative of the population, but for researchers pursuing qualitative or mixed methods research designs like this one, it is not considered to be a weakness. Rather, it is a choice, the purpose of which varies depending on the type of sampling technique that is used.

Maximum variation sampling technique was used to capture a wide range of perspectives relating to the issue of interest, precisely why research is not getting into policy process and locating the point of breakdown of communication along the chain. This was done to search for variation in perspectives, ranging from the perspective of parliamentarians, senators, governors, members of the county assembly, communication experts and civil society. These units, it was envisaged would exhibit a wide range of attributes, behaviours, experiences, incidents, qualities, situations, and so forth. The basic principle behind maximum variation sampling is to gain greater insights into a phenomenon by looking at it from all angles. This can help in identifying the common themes that are evident across the sample.

From a total population of 1,846 policy makers, using this method 180 respondents were selected and only 135 took part in the research through surveys. This was a response rate of 73%, which is considered high enough. The process of selection continued with as many policy makers as possible until a theoretical saturation was reached. Data collection and preliminary analysis on research institutes however continued until our research concerns were clear and theoretical framework no longer changed. This is the saturation point and it is at this juncture that we determined the sample size. This was repeated throughout the study.

The second list was that of researchers, this list was obtained from the African Economic Research Consortium (AERC), which has a data base of network members who participate in AERC research activities. AERC is a public not-for-profit organization that was established to advance economic policy research and training in sub Saharan Africa. It is a leader in policy-oriented economic research on the African continent, and has huge a database of researchers. Using the same method, 100 active researchers who have participated in AERC activities in the last five years were selected randomly from the data base of 2,517 researchers and 69 of these took part in this study. This gave a non-response rate of about 30%, which is ideal for a good research outcome. The third list was for research institutes and out of 67, ten were approached and seven ended up in the sample giving a response rate of 70%.

The study took cognizance of the many advantages of carrying out purposive sampling. The people who were selected for the sampling were selected randomly, but with a particular purpose already in mind. Some of the advantages involved here are that: those people who were unsuitable for the sampling study or who did not fit the bill were eliminated, so only the most suitable candidates remained. Thus, the most appropriate people were selected for the study, and this process becomes a lot less time consuming. With fewer time constraints and a more accurate subject, the cost for carrying out the sampling project was greatly reduced. The results of purposeful sampling were expected to be more accurate than those that would have been achieved with an alternative form of sampling.

As previously stated, the methods used for collecting primary data were qualitative in nature, precisely questionnaires, interviews and semi-structured interviews. These interviews were conducted at corporate, governmental and quasi-governmental offices. All the interviews were recorded using a notebook, Dictaphone and a laptop, to facilitate transcribing and to be able to use correct quotes from the respondents. During the interviews, notes were taken for key statements that would need emphasis, and as a base for reflection for later empirical processing and analysis.

The questionnaires were sent in advance to the respondents to give them adequate time to prepare for the interviews. Everything possible was done to make respondents' answers to be as spontaneous as possible, in order to get open and honest feedback. The respondents were also informed how long the interviews would take and that they had the option to remain anonymous. Thus, there are no names in the empirical part of this thesis, with probably only the position of the respondent being mentioned in some cases. Although this means a loss of some perspectives for the analysis and conclusions, it was important to do.

After conducting the interviews, the recordings were played, and then compared to notes that were taken; thereafter the most important answers to the research questions were compiled. After this compilation, a document was sent back to some of the respondents for verification. This was done in order to eliminate the possibility that there might have been any misinterpretation of the information given; another reason was to give the respondents the possibility to see if they might have accidentally disclosed classified information that they in retrospect would have wanted the study to withhold from the final empirical presentation. Once the validations of the respondents were received, such information that they did not want disclosed in the final thesis was removed, then a translation of the empirical data commenced. The empirical material was further condensed and structured, and the empirical presentation made in line with the theoretical framework.

All the respondents were informed that the information collected during the interviews and presented in the compilation sent out to them, would not be published verbatim in the final thesis, and no additional information would be added either, since this would entail a second round of validation. All interviews were conducted in English, because this is the language of instruction for a majority of respondents, and this made them be able to speak as openly and freely as possible about their experiences and thoughts on the topic.

3.1.5.4 Secondary sources of data

Other data was collected from documents that provided insight into policy processes in Kenya. These included both formal policy documents and other official documents such circulars. This was collected from organizational providers, research institutes and leading think tank organizations, to understand how decisions are made at various levels and work is organized.

3.1.6 Data analysis, interpretation and presentation

Different strategies were employed to analyze the data collected in each phase of the research process. This section deals with how data analysis was performed in the publication and in the summary part of the thesis. Langley's (1999) strategies for analyzing qualitative process data was used as the main source of reference.

In order to manage the large data set generated, a multi-layered approach to data analysis was used. Analysis began with the data generated from the interviews. Each transcript was read and annotated to identify preliminary themes. These themes would reflect issues arising from the interviews, surveys and document analyses. A joint seminar between the data collectors and a section of interviewees to discuss broad themes emerging across the data was held, thus devising a preliminary coding scheme to guide further thematic analysis.

As in any other qualitative study, the data collection and analysis in this study occurred concurrently. The type of analysis that was engaged depended on the type of data that was collected. Yin (2003) briefly describes five techniques for data analysis: pattern matching, linking data to propositions, explanation building, time-series analysis, logic models, and cross-case synthesis. We reviewed various types of these analyses to determine which approach would be most appropriate and settled on linking data to propositions.

Yin (2003) notes that one important practice during the analysis phase of any study is the return to the propositions; there are several reasons for this. First, this practice leads to a focused analysis when the temptation is to analyze data that are outside the scope of the research questions. Second, exploring rival propositions is an attempt to provide an alternate explanation of a phenomenon. Third, by engaging in this iterative process the confidence in the findings is increased as the number of propositions and rival propositions are addressed and accepted or rejected.

3.1.7 Linking data to propositions as a technique for data analysis

Objective 1 and 2: The propositions were helpful as they do in any case studies, but in some cases they were not always present. Since the case study proposal included specific propositions, this increased the likelihood that the study would be able to place limits on the scope and increased the feasibility of completing the project. The more a study contains specific propositions, the more it will stay within

feasible limits. The propositions came from the literature, personal and professional experience, theories, and generalizations based on empirical data.

The study came up several propositions to guide the research, but each had a distinct focus and purpose. These propositions later guided the data collection and discussion. Each proposition served to focus the data collection, determine direction and scope of the study and together the propositions formed the foundation for a conceptual framework. It should be noted that propositions may not be present in exploratory holistic or intrinsic case studies due to the fact that the researcher does not have enough experience, knowledge, or information from the literature upon which to base propositions (Miles & Huberman, 1994; Stake, 1995). In quantitative approaches to experimental studies, propositions can be equated with hypotheses in that they both make an educated guess to the possible outcomes of the experiment/research study. The study avoided the common pitfall for the novice case study researchers, which is to include too many propositions and then later find that the number becomes overwhelming as these must be returned to when analyzing the data and reporting the findings.

Likert scale: In these two objectives, the study also used the Likert scale by ascribing qualitative value to qualitative data to make it amenable to statistical analysis. Numerical values were assigned to each potential choice and a mean figure for all the responses computed at the end of the evaluation. Likert scales usually have five potential choices (strongly agree, agree, neutral, disagree, strongly disagree), but sometimes go up to ten or more. The final average scores that were obtained represented the overall level of attitude toward the use of research during policy formulation.

3.1.8 Narrative strategy

Objective 3: The narrative strategy of data analysis was used in this study to look at the four case histories that were on focus. The narrative strategy has its origins in the works of ethnographers. Langley (1999) argues that the construction of a detailed story from raw data is, at least to some extent, part of all process research. For Eisenhardt (1989), the narrative strategy is part of within-case data analysis, in which the researcher prepares detailed write-ups for each (research) site (or case). This Study involved construction of a detailed story from some raw data. Eisenhardt (1989) argues that although these write-ups are mere descriptions, they are still central to the generation of insight. These descriptions helped to cope with the enormous volume of data at an early stage of the analysis process. Traditionally, narratives are rich at the level of detail and convey a high degree of authenticity, which is often not economically possible to achieve with larger sample sizes. Thus, since we were examining just a few cases, this method was better suited.

3.1.9 Cross case analysis

Cross-case analysis was considered in analyzing data for all the objectives. This is a research method that facilitates the comparison of commonalities and difference in the events, activities, and processes that are the units of analyses in case studies. Despite a plethora of case studies in the social science literature, few are known to inform practitioners or policy at a broader level. In this study, cross-case analysis was adopted so that knowledge from cases can be put into service for broader purposes. A cross-tabulation easily gives a basic picture of how two variables inter-relate. It also helps in searching for patterns of interaction. Obviously, if certain cells contain disproportionately large (or small) numbers of cases, then this suggests that there might be a pattern of interaction.

Formal and informal decision making process do exist, particularly during policy formulation, thus cross-case analysis in this study allowed the delineation of a combination of factors that may have contributed to the outcomes either positive or negative. It also allowed the study to construct an explanation as to why one case was different or the same as others, thus making sense of puzzling or unique findings. Cross-case analysis also allowed for comparison of cases from one or more settings, communities, or groups. This provided an opportunity to learn from different cases that would assist in gathering critical evidence to shape or modify policy.

3.1.10 Form of data presentation

The study presents the results of statistical analyses in the form of tables using simple descriptive statistics, frequencies and percentages. Excel can perform a variety of statistical procedures, both basic and advanced; however, spreadsheet programs are not specifically designed for more complicated analyses, the reason why this study used a more specialized statistical software package, the Statistical Package for the Social Sciences (SPSS) 20 to analyze data.

3.1.11 Validity and reliability of data

Any divergence from initial expectations was scrutinized; of course personal notes kept from the beginning of the project were referred to, to see how far the data had moved from initial assumptions. These included extensive quotations from field notes, transcripts of interviews, and other available notes taken at every stage of the study. The study looked for convergence with other sources of data, making comparisons with the literature.

Random checks on other research data, such as archival data, recordings (video and audio) were done as well as independent checks with more than one person involved in the research. Another important aspect of validation is member checks, which entailed going back to those researched at the completion of the study, and asking them if the information was accurate or needed some corrections or elaboration on constructs. A relatively short narrative description was prepared for each case studied. These descriptions were sent for review to persons involved in the cases, including a foreword for explaining the work being done. This was done in order to ensure that all comments and corrections would be directed to the interviewee.

For recorded data, multiple listening by different people was done; this was listening to audio records and reviewing transcriptions. Here, it is important to note that high reliability may suggest a systematic bias at work in data, a bias shared for instance by multiple researchers or across observations by the same researcher. This is why many qualitative researches emphasize validity rather than reliability; as documenting what occurs in an accurate manner may still reveal inconsistencies. As qualitative researchers are fond of saying, “you never cross the same river twice,” because it’s never the exact same water, and the banks are never exactly the same because of erosion and other factors.

3.2 Description of the study concepts and respondents

This section describes the concepts used in the study and the respondents of this study. The respondents were policy makers, policy practitioners, researchers, beneficiaries of policies (citizens), and representatives of research institutes. These groups of respondents were the ones who are knowledgeable enough to answer the problems posed in the present study. They answered the questionnaire that the data collectors shared with them which supplied the information that was needed for this study.

3.2.1 Communication

Communication: In this study, communication is looked at as the process of transferring information from a sender to a receiver with the use of a medium in which the communicated information is understood by both sender and receiver. Communication, when carried out appropriately, does not only benefit the recipient, it also benefits the sender. This aspect of communication is often overlooked. We tend to think of communication as a process of teaching others – or of telling others everything we know (Porter & Hicks, 1995). However, communication is also a process whereby the senders themselves can learn a lot. If we think strategically about the communication process, we can maximize our own benefits

too. Modern communication though, is becoming more versatile by the day and the definition of the sender versus the receiver is becoming increasingly difficult, especially in dialogic environments.

3.2.2 Policy

Policy: A policy is a statement of a government's intentions, priorities and usually action plan in a specific area, such as economic, health, agriculture, education, housing, and the private sector development. A policy is thus a principle or protocol to guide decisions and achieve rational outcomes. A policy is a statement of intent, and is implemented as a procedure or protocol. Policies can assist in both *subjective* and *objective* decision making. Policies to assist in subjective decision making would usually assist senior management with choices that must consider the relative merits of a number of factors before making decisions and as a result are often hard to objectively test. The term may apply to government, private sector organizations and groups, as well as individuals. Presidential executive orders, corporate privacy policies and parliamentary rules of order are all examples of policy. Policy, therefore, merely guides actions toward those that are most likely to achieve a desired outcome.

3.2.3 Policy maker

Policy maker: A policy maker is defined in this study as a person responsible for or involved in formulating policies, especially in politics. This is the individual in government or an institution who participates in the formulation, articulation and implementation of national policy and sets the plan pursued by a government or business. Policy makers are usually important and influential people whose actions and opinions strongly influence the course of events. They are usually members of a government department, or a legislature who is responsible for making new rules and laws. They will be people who decide what an organizational provider or government policies will be, thus have the authority to set the policy framework. Persons responsible for making policy, especially in governments often make the right decision for the wrong reason. The category of policy makers that this study focused on included Governors, Senators, Members of Parliament (including those nominated and women representatives), Ward Representatives (as part of the Members of the Country Assembly) and practitioners in various government departments (the policy practitioner would be charged with the duty of interpreting government policy and research findings for the public).

3.2.4 Senator

Senator: The Senate is the upper house of the Parliament of Kenya. The Senate was first established as part of Kenya's 1963 Constitution. After being abolished in 1966, it was re-established by the 2010 Constitution. The Senate consists of 47 senators directly elected by their counties, 16 women nominated

by the political parties according to their relative strength in the Senate elections, two members to represent the youth, and two members to represent persons with disabilities. The roles of the Kenya Senate under the new constitution are: Debate and approve county bills; determine the allocation of national revenue to be distributed according to the counties; represent the interests of the counties at the national level, and consider and determine the resolution of impeachment of the president or his/her deputy.

3.2.5 Governor

The **Governor** is elected to their position at the county level and they are in charge of the county executive: The county executive is charged with the responsibility of exercising executive power at the county level, implementing laws for administration of the county as well as carrying out other executive functions of the county. The county executive gives the people an opportunity to be more actively involved in lawmaking. The county executive is led by a governor who is directly elected by the people at the county level. The appointment of the county executive members is placed under the mandate of the governor, and approval is subject to the county assembly. The county Government, has since replaced the provincial administration, and constitutes of a county assembly and county executive. The responsibilities of the county assembly include: Exercising the powers of enacting laws at the county level; acting as an oversight instrument on the county executive; and approval of plans and policies for smooth operation and management of resources and county institutions. Even at county level, democratic principles are observed. The people elect the members of the county assembly at Ward level. All the same, additional slots are reserved for nominations. This ensures that membership is well distributed by gender, marginalized groups and persons with disability. The county assembly is headed by a county Speaker who by law is not supposed to be a member of the assembly. Every county government is expected to decentralize its services and coordinate its functions in order to efficiently serve the interests of the people of Kenya at the local level. Currently the Kenya devolved government consists of 47 counties representing the initially recognized districts and each one of them forms a county government.

3.2.6 Kenya's policy making organ

Kenya's Policy making organ: Kenya's central government is structured through the constitution with administrative and policy making powers being distributed to its three arms namely Executive, Legislature and Judiciary.

3.2.6.1 The Executive

Executive: Being by far one of the most crucial arms, it consists of the following primary members: President; Deputy President; Cabinet Secretaries; Attorney General; Director of public prosecutions. Headed by the president of the republic, the executive is guided by an underlying framework of laws. The laws require the president to appoint between 14 and 22 cabinet secretaries reflecting ethnic and regional diversity. Appointments of cabinet secretaries and other key positions such as that of the attorney general, secretary to the cabinet, high commissioners, consular representatives and ambassadors are vested in the president subject to approval by parliament.

3.2.6.2 The Legislature

The **Legislature:** The Legislative branch constitutes of the following: An upper house – the Senate: Each of the 47 counties has a Senator; a senator is elected by the voters; the total number of Senators are 60; the senate presides over presidential impeachment hearings (article 145) and a lower house – the National Assembly: each constituency (290 the number gazetted by Independent Electoral and Boundaries Commission in October 2012); majority of the Members of National Assembly are directly elected by voters; there are Women’s Representative Members of Parliament elected from each county – therefore guaranteeing a minimum of 47 women MPs in the National Assembly; the total number of MPs are 347, and votes to investigate and impeach the president (article 145)

According to the new constitution, the Legislature is held responsible for advocating for the people’s interest in law making. In addition to that, it is vested in two houses - the national assembly and the senate. The adoption of the new constitution adds an interesting twist to law making. This is because the old constitution exclusively placed the law making process in the hands of parliament. The specific roles of the national assembly are: Members of the national assembly are obligated to represent their constituents and all the special interests within their respective constituencies; enactment of legislation for both county and national government; approval or disapproval of revenue allocation presented by the senate, determining the national distribution across the counties; check the conduct of the executive and other state officers and if necessary initiate the process of removal of president, deputy president and other state officers and exercise oversight over state organs and approve the state of emergency and declaration of war.

3.2.6.3 The Judiciary

The **Judiciary:** this arm of government mainly centers on the Kenyan Judicial system. The Kenyan Judicial system adheres to a hierarchical system, with The Supreme Court being the highest organ,

followed by the Court of Appeal, High Court, Magistrate's Courts and other Subordinate Courts. The chief justice is the president of the judiciary and is appointed by the president subject to the approval of the National Assembly. The Supreme Court, being the highest judicial organ, has the following key functions: Mandated to hear and determine presidential election disputes, if they occur; attend to the appeals arising from the Court of Appeal; the high Court, on the other hand, attends to criminal and civil cases as well as supervising the administration of justice in other lower ranking courts.

3.2.7 Policy Research

Policy research: This study is focused on policy research and defines the same as a social scientific research whose main intended audience is non-university groups. However, sometimes the results may in practice also interest academic audiences. In this kind of research, attempts are made to apply social scientific findings to the solution of problems identified by a client, who in this case would be the government. Policy research may be descriptive, analytical, or deal with causal processes and explanations; it may evaluate a new or existing policy programme, describe examples of best practice, measure social change, develop projections on the basis of large-scale modelling exercises, or consist of large-scale experimental research in real-life settings running for years and even decades. Most policy research espouses a multi-disciplinary approach and avoids narrow disciplinary jargon. Thus, policy research is rarely explicitly sociological, even if sociology contributes more than any other discipline to the theoretical foundations, design, and methodology of a study. In principle, policy research will focus on actionable or malleable social factors to a greater extent than theoretical research.

3.2.8 Policy Analysis

Policy analysis: Policy analysis is defined in this study as determining which of various alternative policies will most achieve a given set of goals in light of the relations between the policies and the goals. However, policy analysis can be divided into two major fields. Analysis of policy is analytical and descriptive, that is it attempts to explain policies and their development. Analysis for policy is prescriptive that is it is involved with formulating policies and proposals (e.g., to improve social welfare). The area of interest and the purpose of analysis determine what type of analysis is conducted. Policy Analysis is frequently deployed in the public sector, but is equally applicable to other kinds of organizations.

3.2.9 Researcher

Researcher: This study defines a researcher as a scholar who will in time through learning and experience, demonstrate specialized knowledge or expertise, conceptual and intellectual capacities such as the ability to identify and frame key problems, to think critically and analytically, and to generate and communicate interesting and original insights. A researcher also has academic skills such as the ability to produce scholarly high-quality written work and research papers - clearly composed so that the argument, and the evidence that supports it, can be grasped by the intended audience (whether specialist or more general, a conference delegate or a reader with time to reflect). A good researcher has research skills such as the ability to use sources effectively, to gather and organize information, to analyze text, data and theory. Researchers in this study were drawn from various public universities including University of Nairobi, Egerton University, Moi University, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, and Maseno University.

3.2.10 Other speakers

3.2.10.1 Civil society: The civil society is specifically those members (non-governmental and community-based organizations) who are engaged in public policy issues and the media who may help to shape policy opinion and energize a response.

3.2.10.2 The donor community: This includes United Nations agencies, bilateral donors and international NGOs that are involved in public policy issues at national and international levels.

3.2.10.3 Elected representatives: These are basically beneficiaries of the public policy outcomes at both national and local levels; they are important users as they influence both policy and programming.

3.2.10.4 Government officials: These are technical staff at national and sub-national levels (counties and sub-counties) who are directly involved in public policy issues, planning, interventions or monitoring.

3.2.10.5 Local government authorities: these are authorities that are responsible for the day-to-day management of problems and public policy issues.

3.3 Target ministries/Research Institutions

This section describes the functions of selected ministries that this study looked at to give a pique at what really happens in various government departments in Kenya. The study sampled the ministries of finance, health, agriculture, education and housing. Senior policy makers in these ministries were interviewed,

including directors and heads of different sections, policy practitioners and policy analysts. Besides, Senators, Governors, Legislators and Members of the County Assembly also took part in this study.

3.3.1 *The Treasury (Ministry of Finance)*

The Ministry of finance is charged with the responsibility of formulating financial and economic policies. It is also responsible for developing and maintaining sound fiscal and monetary policies that facilitate socio-economic development. This responsibility makes the Ministry strategic and central to the country's economic management, as all sectors of the economy look upon the Ministry to create an enabling environment in which they can operate effectively and efficiently. The Ministry regulates the financial sector, which is central to the development of the country and on which all other sectors depend for investment resources. Another strategic responsibility of this Ministry is the management of revenues, expenditures and borrowing by the government. The Ministry must ensure that it mobilises adequate resources to support government programmes and activities. Consequently, the Ministry has the task of developing sound fiscal policies that ensure sustainable budget deficits. In addition the Ministry must ensure that government expenditure is within the revenue collected to reduce domestic borrowing, which tends to cause negative ripples in economic management.

The Ministry coordinates government ministries/departments in the preparation of the annual national budget. It is the responsibility of the Ministry to initiate and guide all ministries/departments to prepare their ministerial budgets. It also provides accounting, auditing, information technology, insurance, pensions, procurement, clearing and forwarding, and divestiture services among others to other government ministries/departments. This Ministry has established an elaborate network through its conventional departments, and sector institutions, to effectively deliver on its mandate.

3.3.2 *The Ministry of Health*

The Ministry of Health sets policies, develops standards, and allocates resources for health care services; however, in accordance with the decentralization scheme, the county is the level at which most management takes place. There are more than 5,000 health facilities in Kenya. The government oversees 42% of health centers, Non-Governmental Organizations (NGOs) run 15%, and the private sector operates 43%. The government operates most hospitals, health centers, and dispensaries, while the private sector operates nursing homes and maternity facilities catering for higher income clientele. Since achieving independence from Great Britain in 1963, Kenya has worked to improve the health of its nearly 40 million people, more than half of whom live in rural areas. By the late 1980s Kenya had more than quadrupled the number of health facilities serving its growing population; extended life expectancy from 40 years to 62 years; and improved child survival rates.

At headquarter level, the Ministry of Health is responsible for setting policy, coordinating activities of Government and non-governmental organizations, managing the implementation of policy changes regarding Government services such as user charges, and monitoring and evaluating the impact of policy changes. The Ministry's mandate is to formulate policies, set standards, provide health services, create an enabling environment and regulate the provision of health service delivery. At the county level, the roles of the County Medical Officer of Health (CMOH) and members of the County Health Management Team (CHMT) are to act as a strong intermediary between the central Ministry and sub-counties and to oversee the implementation of health policy including maintenance of standards of quality, performance, coordination, regulation and control of all health services in the public and private sectors in their areas of jurisdiction. The Ministry's focus today is to enhance the regulatory role of Government in all aspects of health care provision. This will only be achieved by strengthening the Ministry's policy-making role, strengthening the county tier of the health system, extending the role of Sub-county Health Management Boards (SHMBs), empowering local facilities through Health Management Boards (HMBs) and Health Centre Management Committees (HCMCs) to develop and manage health services, and build the capacity of sub-counties in modern management and planning methods.

The presence of so few health personnel in Kenya can make it difficult for the government to carry out adequate disease surveillance, maintain accurate statistics regarding disease outbreaks, and report relevant findings to neighboring countries and international organizations. To improve its information gathering and to better track its progress in meeting the health-related Millennium Development Goals, Kenya has developed a Health Management Information System (HMIS) and is currently working with international partners to improve its capacity to provide timely and relevant data regarding the country's health situation to policymakers and other stakeholders.

3.3.3 Ministry of Education

The Ministry of Education, Science and Technology is responsible for providing education to its citizens (Ministry of Education, 2008). The ministry's tasks include employment of teachers for government schools, distribution of learning resources, and implementation of education policies. The education sector takes up about 30% of the government's annual expenditure accounting for the largest share of the annual budget. However, much of the expenditure goes toward higher education and teacher training. University education falls under the Ministry of Education, Science, and Technology. The ministry's mandate includes Science Technology Innovation (STI) Policy, Research development, research authorization and coordination of Technical Education (TE). The ministry currently operates with three technical directorates and one SAGA; namely; Directorate of Research Development (DRD), Directorate

of Technical Education (DTE), Directorate of Higher Education (DHE) and the National Council for Science and Technology (NCST).

Policy priorities of the ministry include: Strengthening the National STI standing and its competitiveness; Improving the quality, relevance, equity and access to higher education and technical training; Promoting evidence based policy making and national development; Encouraging private sector participation in STI and technical education; Enhancing capacity of the national STI system towards demand driven STI, quality higher education and technical education services as well as effective use of existing talents and facilities; Promoting excellence, creativity, innovation and investment in STI, higher education and technical education

Among other roles, the higher education ministry is responsible for improving the quality, relevance, equity and access to higher education and technical training and to enhance the capacity of the national STI system towards demand driven STI, quality higher education and technical education services (Ministry of Higher Education, Science, and Technology, 2009). The Ministry is responsible for several sectors in education including: Early Childhood Development and Pre-Primary Education; Primary Education; Special Needs Education; Secondary Education; Teacher Education (Primary Teacher Education, Diploma Teacher Education, and In-Service Training Program); University Education; Non-Formal Education and Adult Education; and Technical and Vocational Education and Training. This Ministry focuses on certain priority areas, notably attaining Universal Primary Education (UPE) by 2015 within the context of the wider objective of the UNESCO/World Bank initiative Education for All (EFA) (Ministry of Education, 2008; UNESCO, 2006).

The Kenya Institute of Education (KIE), a semi-autonomous governmental agency, is responsible for educational research and development of the curriculum. KIE is focused on providing quality, relevant and affordable educational and training programs in response to a changing social, economic and technological environment. The initiatives are met through continual research, evaluation, assessment and the monitoring processes (Kenya Institute of Education, 2009). KIE works closely with the Kenya National Examination Council (KNEC), the examining body responsible for developing and examining national exams at various levels of learning including the Kenya Certificate of Primary Education (KCPE) and Kenya Certificate of Secondary Education (KCSE) (Kenya National Examination Council, 2008).

The Teachers Service Commission (TSC) is responsible for teacher recruitment, human resources services, and place of government employed teachers (Ministry of Education, 2008). KIE is responsible for: conducting research and evaluation in education and training; designing and developing curriculum for all levels of education and training below the university level; developing learning resources,

including books, manuals, and multimedia resources; conducting in-service training of teachers and trainers on new curriculum and trends in education and training; conducting dissemination programs for education administrators, evaluators, book publishers and other stakeholders; carrying out evaluation of books to assess their suitability; and developing on consultancy basis, programs for schools, colleges, organizations and technical training institutions.

Kenya has always placed education as a priority at all levels, promoting it as a key indicator for social and economic development. At independence there were fewer than 900,000 Kenyan children attending primary school, but by 1992, the number had grown to 5.53 million (UNESCO, 2008c). At independence there were 6,056 primary schools and 891,000 students enrolled in school. By 1990, there were over 14,690 primary schools, about five million students, and 200,000 trained teachers. The teacher/student ratio in 1991 and 1992 was reported to be 1:31. Further, proportion of girls in school had grown to about 50% (UNESCO, 2008). Despite a high attrition rate in secondary school, enrolments at this level have steadily been growing because of the implementation of some good policies.

3.3.4 The Ministry of Agriculture, Livestock and Fisheries

The Ministry of Agriculture had its origin in the year 1903 as the Ministry of Agriculture, Animal Husbandry and Water Resources. The function of Agriculture is further enabled under the Agriculture Act (CAP 318). Since independence the Ministry has undergone mergers, splits and regroupings with the closely related functions of Livestock Development, Fisheries, Water, Cooperatives and Environment. Despite these transformations, the core activities of the Ministry of Agriculture have always included Formulation of Policy, Promotion of Technology, Provision of Extension and Regulatory Services for agriculture development. Up to the year 2003, the Ministry responsible for Agriculture had the functions of cooperative development, livestock development, veterinary service, fisheries development and rural development. In 2003 the above functions were again split into four ministries. While such transformations have had merits, they often entail the challenges of: Administrative costs of adjustment; difficulties in reallocating resources, disruption of effective planning and implementation of programmes and possibilities of duplications of operations.

This is the Ministry responsible for food security and efficient service delivery is the yardstick upon which performance is measured. The Ministry's Service Charter provides the basic guidelines on it interacts with its customers with regard to its core values, functions, services, customers rights and their commitment to efficient service delivery to Kenyans. The Charter serves to inform its clients, stakeholders and the public about the standard and the type of service they can reasonably expect when dealing with the staff.

The mandate of the Ministry of Agriculture is to promote and facilitate production of food and agricultural raw materials for food security and incomes; advance agro-based industries and agricultural exports; and enhance sustainable use of land resources as a basis for agricultural enterprises. It is led by a Cabinet secretary, with his deputies; there is also a principle secretary, then the technical department which incorporates land and crop management; agribusiness and marketing; policy as well as external relations. There is also the department of extension and training, plus finance, which includes accounts and administration and human resources that comprise procurement, human resources management; public relations and administration. There is a link with the county government administration in the 47 counties in the country. Most Kenyan ministries are organized in this manner.

3.3.5 Ministry of Lands, Housing and Urban Development

The Ministry of Lands, Housing and Urban Development is responsible for providing policy direction, national standards and coordination of all matters concerning lands, housing and urban development. The ministry is responsible for putting in place policies and initiating laws that ensure sustainable land management promote sustainable housing for all and foster orderly urban development in the country. The Ministry of Housing has been in existence, though as different departments of various ministries that implemented housing policies at different times. This can be traced from the 1960's, 1970s and the 1980s.

In the 1980's there existed the Ministry of Housing and Social services, which later became the Ministry of Housing. Between 1990s and 2004, Housing was together with Roads and Public Works as the Ministry of Roads, Public Works and Housing. In 2004, Housing was moved to the Ministry of Lands and Settlement and the new ministry was named Ministry of Lands and Housing. Despite the inconsistency in placement of the key docket of housing, the core functions of the departments that currently constitute the Ministry of Housing have remained the same. In December 2005, following Government reorganization, the Ministry of Housing was re-established.

The Government through the Ministry of Housing has put great emphasis on the improvement of Housing. This has mainly been influenced by the fact that improvement in housing stock is a strategically important social and economic investment. In addition, well-planned housing and infrastructure of acceptable standards and affordable cost with essential services accords dignity, security and privacy to the individual, the family and the community. Besides this social function, housing is also an investment and good contributing both directly and indirectly towards poverty reduction through employment generation, raising of incomes, improved health and increased productivity of the labour force. Therefore, it is Government's long term strategy to improve livelihoods of Kenyans through facilitation of access to affordable and adequate housing in sustainable human settlements. The achievement of this goal will

contribute to the realization of housing agenda as propagated by the constitution of Kenya 2010 and Vision 2030. This will be attained through: development of and access to affordable and adequate housing; enhanced access to affordable finance for developers and buyers; approval of housing sector incentives; enhanced research and development in Appropriate Building Materials and Technologies; and pursuit of targeted reforms to unlock the potential of the housing sector.

3.3.6 Research institutions

Respondents drawn from seven research institutes agreed that these institutions can do a lot more to support better engagement with policy makers in the country. They demonstrated that they value policy research and argued that by including policy engagement in the criteria for promotion in say under pro-bono headings can be a starting point. The government is also encouraged to signal support through a positive attitude towards postgraduate research and teaching programmes in policy areas. A majority of them have put mechanisms in place to ensure that their systems and intellectual property contracts do not hinder the development of policy research in Kenya.

3.3.6.1 Kenya Agricultural Research Institute (KARI)

At the Kenya Agricultural Research Institute (KARI), decisions and actions are consistently based on a set of clear principles. The institutional core values guide actions at all levels when choices are not clear or when there is a gap between intention and reality. KARI espouses and integrates a holistic approach to research. It recognizes that integration and team work across levels, disciplines, gender, timeframes and space, is critical in increasing productivity, commercialization and competitiveness of the agricultural sector. This is because of the complex inter-linkages of the different components of the agricultural product value chains. The organization remains focused on integrated research for development by ensuring that all research activities undertaken or promoted are demand-driven. KARI has built and maintained a culture that is based on impact of research and other knowledge roles. The institute encourages scientific excellence, creativity and flexibility. They insist that all research work and recommendations made to stakeholders emanates from sound evidence based on rigorous scientific findings of the highest quality possible. KARI pursues meaningful and productive partnerships, and team work so as to ensure synergies that have a direct bearing on finding innovative solutions to major agricultural sector problems.

3.3.6.2 Kenya Medical Research Institute (KEMRI)

Kenya Medical Research Institute (KEMRI) has grown to become a regional leader in human health research, and currently ranks as one of the leading centres of excellence in health research both in Africa

as well as globally. In its commitment to meeting the health challenges, KEMRI has consolidated its research activities into four main programmes: infectious diseases; parasitic diseases; epidemiology, public health and health systems research; and biotechnology and non-communicable diseases. Its mandate includes among others to liaise with relevant bodies within and outside Kenya to carry out research. They also cooperate with other research organizations and institutions of higher learning on matters of relevant research and training and collaborate with the Ministry of Health, the National Council for Science and Technology (NCST) and the Medical Sciences Advisory Research Committee in matters pertaining to research policies and priorities.

3.3.6.3 Kenya Institute of Education (KIE)

The Kenya Institute of Education (KIE) specializes in educational research and curriculum development for all levels of education and training below the university. KIE also produces learning resources such as books, manuals, video and audio cassettes, CDs, diskettes and charts. The institute conducts in-service training of teachers and trainers on new curricula and trends in education and training.

3.3.6.4 Kenya Institute for Public Policy Research and Analysis (KIPPRA)

The Kenya Institute for Public Policy Research and Analysis (KIPPRA) is an autonomous public institute that conducts objective research and analysis on public policy issues with the goal of providing advice to policy makers. KIPPRA provides advisory and technical services on public policy issues to the Government, government agencies, and other stakeholders. The institute also collects and analyses relevant data on public policy and disseminates its research findings to a wide range of stakeholders through workshops/conferences, internal seminars, research papers, policy briefs, and the Kenya Economic Report. KIPPRA has been developing and maintaining research resources and databases on public policy and related issues, and avails these to the Government, the private sector and academic institutions. The institute also provides research backup to policy makers including members of parliament.

3.3.6.5 Institute of Economic Affairs

The Institute of Economic Affairs (IEA-Kenya) is a think-tank that provides a platform for informed discussions in order to influence public policy in Kenya. IEA's mandate in public affairs is centrally based on economic affairs. However, this should be understood to include the social and political realms within which the national economic policy is formed, implemented, monitored and accounted for.

3.3.6.6 *The Institute for Development Studies (IDS)*

The Institute for Development Studies' (IDS) mandate portrays the role of institute as being slightly different from that of a teaching faculty. The institute is a multipurpose and multidisciplinary organization that focuses on social and economic issues of development in Kenya and the rest of Africa. It undertakes research and training in collaboration with other social science departments at the University of Nairobi. The institute provides a facility which enhances intellectual stimuli between local and visiting scholars. It also offers a variety of professional consultancy services to various government ministries, regional and International development agencies, voluntary bodies and the general public in Kenya.

3.3.6.7 *International Development Research Centre (IDRC)*

International Development Research Centre's (IDRC) obligation is to initiate, encourage, support and conduct research into the problems of the developing regions of the world and into the means for applying and adapting scientific, technical and other knowledge to the economic and social advancement of those regions.

Basically this section has introduced the concepts and speakers who answered the research questions that the study posed. In the next chapter, their answers are presented in a systematic manner. The answers are then interpreted carefully in the section that follows, before a conclusion is drawn from the perspective of the theorist and propositions that guided this study.

Chapter Four

Findings and Discussion

This chapter covers the following key components of the study: data analysis, data interpretation and presentation of the results. The section examines, categorizes, and tabulates the evidence to address the initial propositions of this study. In the analysis of the results the study indicates whether these results confirm, totally or in part, the original expectations or predictions. For each hypothesis, it is indicated whether it was supported and why, and any limitations inherent in the research procedures is discoursed. The implications of these limitations have for the conclusions drawn from the results are also discussed. The findings of several hypotheses were interrelated and discussed together while explaining their relationships. A previously developed theory is used as a template with which to compare the empirical results.

4.1 Data Presentation

The main aim of this study was to attempt to prove that communication plays a fundamental role in disseminating research findings to Kenyan policy makers as they formulate public policies. It looked at why research does not seem to get into the policy making process. The study also attempted to validate the conceptual model that was presented earlier through qualitative research that was conducted with policy makers and researchers. Through this process key insights were garnered about researchers, the processes by which policy-makers source research, and features of the policy environment. Participants in a focus group discussion also shed some light on the validity of the conceptual model. This chapter therefore presents the research findings and discussion on the role of communication in linking research to policy formulation in Kenya.

The first section is on communicating research to policy makers so as to influence policy formulation. It deals with researchers' habits and preferences with regard to dissemination of their research outputs, and whether or not the message they are communicating is timely, useful, and easy to consume by policy makers. Broadly the phenomena that were looked at included policy-making process, uptake of research outputs, understanding the reasons why policy makers shun research and the communication processes used during dissemination of research findings. The section also looks at why some government departments have not been successful in policy development and why evidence-based policy making is

sporadic. The section looks at environmental scanning and why some organizational providers are successful. This is based on results of interviews with heads of research institutes and selected government departments. The profiles of some of these institutions were sought and work environments explored to better understand the workings within these organizations and their policy development processes.

The other sections generally focus on policy making processes with emphasis on formal organizations and government departments that have high regard for evidence-base policy and take research into consideration while formulating policies, and the casual, which have no regard at all for policy research. The chapter also looks at the factors affecting the process of research getting into policy. The rest of the sections present details of these processes and their impact factors. The whole structure of this chapter is organized as follows:

- Section 4.1 Data presentation
- Section 4.2 Communicating research findings and policy makers' uptake of the research outputs
- Section 4.3 Findings on policy makers' habits and preferences
- Section 4.4 Research to policy communication
- Section 4.5 Key findings and emerging knowledge from the study

The results and some discussions are presented simultaneously in this chapter. These are supported by the interview transcriptions, observation notes and document review notes, which were collected in the field at every stage of the data collection process. In the tables, the valid percent is what is considered. It is important to note that for any given question on a survey, some people will not respond. This can vary from a small handful of say 3% to quite a large number of say 30%. The fourth column, valid percent, excludes all the people who are "missing" because they did not answer the question and indicates, among those people who answered, what the percentages are.

4.2 Communicating research findings and uptake

This section deals with how data on research communication was analyzed and presented. The questions used for data collection were both structured and open ended. The responses were coded by identifying themes, common phrases and key word for coding purposes. When coding data, Chamraz (2003) suggests some keys issues that should be taken into consideration. For instance the questions; what is going on and

what are people doing are very important. Also significant is what the person is saying and what these actions and statements mean. Besides, how the structure and context in place serve to support, maintain, impede or change these actions and statements is crucial. Then following several notable prior studies like El Sawy (1985) and Ghoshal (1988), data were analyzed using simple descriptive statistics, frequencies and percentages.

The study first made sense of data which was in narrative form by identifying key themes and concepts while keeping the variation in respondents' answers. Also important at the same time was sorting the data into meaningful categories that would aid comparison between respondents and the identification of commonalities. Coding was done by highlighting key words and phrases in the text and labeling them with a code word. The codes were pre-identified by the research questions. Codes were initially descriptive, that is they summarized what the text said, but needed to subsequently become analytical by representing our thinking on why what was occurring in the data might be happening. These codes were then cut and pasted onto a master list to allow easier analysis across responses. The data was then fed into a Statistical Package for Social Scientists (SPSS) version 20 for analysis. This is a predictive analytics software programme, with which one can predict with confidence, what will happen next so as to make smarter decisions, solve problems and improve outcomes.

4.2.1 Empirical results

The results of the finding are presented in two parts. The first part has the results of researchers trying to reach policy makers with their research outputs, while the second part discusses the results of policy makers trying to access policy research to enable them formulate good policies, and the sort of problems they face during this process. Before this empirical data was collected, a research method was carefully designed to ensure the accuracy, quality and integrity of the data because it is clear that if there could be flaws in the way that empirical data is collected, the research would not be considered valid. These results were summarized and are now presented below using descriptive statistics.

4.2.1.1 Communicating research results

The objective in this particular case was to examine the role of communication in disseminating research findings to policy makers for influencing policy formulation in Kenya. This section reflects on what the theory led us to suppose and which were expressed in the hypotheses and how data was logically linked to

the propositions. These are actually summaries of the present state of the theory as established from the literature review. Thus, in this specific case on communicating research to policy makers by researchers, the proposition was that “if researchers adopt good communications strategies for disseminating research findings to policy makers; there is a likelihood that research will feed into the policy process.”

The study hypothesis that was being tested was “good communication strategies lead to research feeding into policy process.” In our theoretical framework, it was established that researchers prefer communicating through publications, mainly research papers and policy briefs if the output is targeted to policy makers, and this has proved to be very effective, even though many a times the key audience of research is usually the academia. The results of these findings tally with our proposition as can be seen in Table 1 below. Thus, the overall conclusion is that the hypothesis is confirming the original stance, and there is consequently no need for suggesting alternative hypotheses on the basis of all the data looked at, both quantitative and the interviews that were conducted.

Table 1: How have you been communicating/disseminating your research results in the past?

	Frequency	Percent	Valid Percent	Cumulative Percent
Seminars	18	26.1	32.7	32.7
Media	5	7.2	9.1	41.8
Publications	23	33.3	41.8	83.6
Valid Face to face	5	7.2	9.1	92.7
Library	2	2.9	3.6	96.4
Audio	2	2.9	3.6	100.0
Total	55	79.7	100.0	
Missing System	14	20.3		
Total	69	100.0		

Source: Computed from survey data by author

Several observations can be made from Table 1: The first is that most researchers tend to use publications to communicate their research findings. Publications have the highest frequency; that is 33% of the total observations. Second is that researchers also use seminars 32.1% to communicate their findings, these are mainly policy seminars aimed at policy makers, who are invited to participate in dissemination workshops where the researchers share some of their findings. These two modes of communicating research results

dominate; however, there are other methods adopted by some researchers as well, like mainstream media (print and electronic) 9.1%.

There are countless media outlets interested in economic research stories. Free media coverage can be an easy way to get results out to as many people as possible. For instance the use of local newspapers, television and radio outlets can be very useful. Face-to-face 9.1% and media are nonetheless not very popular modes of communication with researchers. Other researchers send their findings to libraries (3.6%) or use audiovisuals (3.6%). It is important to note though, that press releases offer one of the most efficient and effective ways to disseminate information, particularly to the media and other organizations. Timing of press releases must be carefully orchestrated if they are to make any impact. However, it was noted by respondents that most journals do not permit release of a manuscript's content in advance of publication. Nonetheless, simultaneous release of information to media is important so that the communication is timely and newsworthy. This would certainly increase the likelihood that a story will be written for public consumption.

The study noted that these traditional mechanisms whereby academic researchers disseminate their work are prone to numerous communication breakdowns, and that much work which could potentially make valuable contributions to practice is haplessly lost within the vaults of academia. The findings indicate that refereed academic journals and conferences are the two main publication outlets for academic research, and journal articles are most highly regarded in academic promotion and tenure decisions. One issue to stress is that the principal channels through which research findings are published are not targeted at or sought out by policy practitioners and this is a major problem that can be linked to absence of scanners of the environment, who would ideally look around for any new information that would benefit the policy making process.

The study found that preference towards scholarly academic journals as a publication channel has at least two communicational disadvantages. Firstly, because of the dishearteningly low acceptance rates of journals, there is a high level of atrophy. In academia, much promising but "poorly written work" may never be published because many researchers respond to journal rejections by abandoning a paper rather than reworking it. If one were to seek out a root cause for these communication channel problems, an obvious direction in which to point the finger of blame would be towards institutionalized academic reward mechanisms. It is the onus of academics to distil relevant, practical knowledge from the

cumulative body of academic research, and in due time communicate that knowledge to policy makers and policy practitioners.

One of the possible silver linings in today's dark clouds is the growing numbers of young Kenyan academic researchers prepared to engage in policy debates. This is following on from decades of almost no engagement with a younger generation of researchers. With the increasing number of policy think tanks in the country, one can be hopeful that this will translate over time into increased research across the full range of policy issues. However, the relationship between the research and policy communities will depend on the networks linking the individual researcher(s) and policymaker(s). The two communities are still much smaller in Kenya compared to other countries, particularly in the more developed world, thus such networks should emerge naturally.

One model to facilitate research-policy linkage and exchange would be the use of workshops, conferences, symposia, and meetings. In order to advocate for the use of evidence for policy among policy makers, capacity builders need to understand them and their priorities including their political agenda, their individual passions and goals, their time constraints and their preoccupation with re-election. The study noted that there is a tendency for researchers and research intermediaries to focus their communication efforts on elected representatives and appointed officials, but to ignore the crucial role that technocratic staff-play in making and influencing policy. In addition, the functions of the legislature and the executive are frequently conflated and there is relatively little understanding of the role that evidence can play in the scrutiny process. Thus, those who seek to support evidence informed policy making need to thoroughly understand policy making processes.

The findings also reveal that researchers can increase the accessibility of policy-relevant research to policymakers by providing non-technical summaries or abstracts of research findings, for instance via research bulletins, policy briefs, web pages and blog postings. In terms of other ways of engaging policy makers, respondents noted that while the individual, rather than the institution, is the driver on the research side, the opposite is the case on the policymaking side. The individual policymaker can do very little to promote greater engagement with the research community without institutional endorsement. Consequently, the culture towards research within a government department or agency has a major influence on the behaviour of its policymakers. So, a lot still needs to be done to stimulate greater engagement with the research community.

According to some respondents, government libraries should embrace the use of information and communications technology; that is the need to have good telephone network (digital telephone) internet, email and World Wide Web. Internet, which has turned the world into a global village, needs to be fully embraced in Kenya. The answer for efficient information provision and use for government decision making lies in information and communications technology, and the sooner the government invests heavily in this area, the better for the country's development. Moreover the policy maker needs to be educated through seminars and conference to enable them to be conversant with how to use e-libraries and the importance of information in decision making. This would enable them to know more about the importance of research in policy making, and national development and thereby work towards equipping libraries with modern equipment as researchers supply outputs.

The issue of libraries also came up strongly is the focus group discussion. Participants stressed that libraries should not be ignored, and librarians should be frequently trained to enable them cope with recent development in information retrieval, storage and dissemination. Improvement of the knowledge of librarians in the government services and other sectors of the country's economy would help in effective information management.

In view of the fact that information management aims principally at making the right kind of information available at the right time in appropriate medium, the use of trained manpower and information technology for processing, packaging and organization of information is considered very essential. Also adequate interlibrary lending facilities should be jointly established by government libraries, academic and research libraries, public and special libraries in Kenya. The various libraries should engage in resource sharing as no single library is capable of meeting all the needs of its clientele. Information and communication technology (ICT) must play a major role in this integration process.

From the study and the discussions generated during data collection, three main themes can be identified on how to communicate research effectively for policy influence: first, the importance that research and knowledge are produced, packaged and communicated by researchers and intermediaries who know the local context, needs and capacities of policy makers; second, communication and planning of research requires strategic thinking and appropriate timing; and finally, involving policy makers in the initial planning stages of research projects increases the likelihood of the research being used.

4.2.1.2 *Effectiveness in dissemination of research findings*

This section was meant to test the hypothesis “effective dissemination of research findings smoothens policy making process” following the proposition that if policy makers share common networks with researchers, and communicate effectively, then policy making process is likely to be smooth and successful. The results below reveal that dissemination of research by researchers has been very effective, but the take up of these results has been rather measured going by interview results from some of the policy makers and policy practitioners based in various sectors of the government, and who are meant to benefit from these research results. Thus, what the theory led us to suppose, and which were expressed in the hypotheses as summaries of the present state of the theory is not confirmed, consequently, the study did not reject it, but rather suggested alternative hypotheses on the basis of the data. These hypotheses would include “effectiveness in dissemination of research findings is only real and would rely heavily on the take up of these findings and eventual use during policy formulation”; “dissemination of research findings will only be effective if the style and form of academic writing is not impervious to most policy makers” or “an effective dissemination plan orients toward the needs of the audience” among others.

Table 2: How effective has the dissemination of your research been?

	Frequency	Percent	Valid Percent	Cumulative Percent
Very effective	25	36.2	42.4	42.4
Effective	11	15.9	18.6	61.0
Valid Relatively effective	13	18.8	22.0	83.1
Not effective	10	14.5	16.9	100.0
Total	59	85.5	100.0	
Missing System	10	14.5		
Total	69	100.0		

Source: Computed from survey data by author

With regard to effectiveness of communicating their research findings, there was a positive result from the respondents indicating that the mode of communication adopted was working for most of the researchers, with 42.4% of them saying it was very effective. Others were not very optimistic, noting that their communication has only yielded 22.0% effectiveness, which according to our measure in this study is relatively effective. For those that considered the communication to be effective (18.6%), it showed that whatever findings they came up with, they got something out to policy makers. For other researchers it was just not effective at all and 16.9% of the respondents thought the communication was not working.

One critical prerequisite for successful human communication is the use of a commonly understood language for effectiveness, and that for research to be useful, it must also be usable.

The study discovered that at present, the style and form of academic writing is not quite enticing to most policy makers. Sometimes work that is highly relevant to pragmatic issues might be rejected as being irrelevant merely because it is presented in an inaccessible style. Too often, articles are littered with detailed statistics, formalized notations, jargon, arcane prose, and excessive references. The use of terse and complex language serves only to obfuscate the message and lessens the likelihood that it shall be understood. Much of the blame for this problem lies with academic writing style guides, or the absence thereof. To be effective in reviewing academic articles, criteria such as presentation, professional style, and tone are typically treated as being of low priority. Another key factor in the effectiveness of communication is the similarity between the “environments” of the sender and the recipient of a message, – that is, the closeness of their respective backgrounds and cumulative experience. The greater the overlap in terms of common knowledge between participants in a communication process, the more effective the communication is likely to be.

Communicating research findings and policy makers’ uptake of the research outputs is very important to formulation of quality policies in Kenya. Policymaking is, however, complex reflecting historic patterns, institutional structures, operational legacies, cultural influences and international constraints. Researchers who took part in this study, thus tended to agree that the policymaker’s role is to bring forward options for political decision-making. The supporting analysis should then be prepared by analysts within the system or occasionally by consultants, but these will depend highly on information that comes through to them from researchers. Here scanners of the environment would play an integral role of searching the environment to establish what is new and can be used as an input during policy formulation.

Key Characteristics of an effective dissemination plan ideally orients toward the needs of the audience, using appropriate language and information levels. It should include various dissemination methods: written text comprising illustrations, graphs and figures; electronic and web-based tools; and oral presentations which can be made at community meetings and scientific conferences. Leveraging existing resources, relationships, and networks fully is also very important. Often a neglected afterthought in busy research schedules, the dissemination of key findings upon project completion is a crucial step in research. Researchers agree that to be most effective, dissemination strategies need to be incorporated into

the earliest planning stages of a research study. The first priority in any dissemination plan is returning results to study participants. Dissemination to any other stakeholder group must take place following this first step.

The researchers proposed some specific recommendations to ‘policy entrepreneurs’ who want to have a significant impact on the policy making process. These proposals include: knowing their audience; including major stakeholders since the beginning of the project; setting policy influence objectives in the research proposal, and choosing the right (strategic) timing for dissemination.

However, the greatest challenge the researchers pointed out was wishing to engage in policy research in the scale and nature of the issues, which require multi-person and increasingly multidisciplinary teams. While the social sciences are moving towards more team-based research, the tradition of the single scholar is still strong in Kenya, as is the tradition of the single discipline. Moving to multidisciplinary teams takes time and effort; especially if programmes in the higher education system are highly specialized.

4.2.1.3 *Key audience for research outputs*

The hypothesis in this case was “the main audience targeted by policy research is usually policy makers.” However, it turned out that most researchers actually tend to target their research outputs to academia. These are peers who would do reviews on their work and propose that their findings can be published in some leading journals for wider dissemination. The frequency table does not support the guiding hypothesis; however, it does give some indications of major agreements.

Table 3: Who is the key audience to your research outputs and how do they perceive the messages?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Policymaker	16	23.2	26.7	26.7
	Academia	18	26.1	30.0	56.7
	Government	8	11.6	13.3	70.0
	Public	12	17.4	20.0	90.0
	Donors	6	8.7	10.0	100.0
	Total	60	87.0	100.0	
Missing	System	9	13.0		
Total		69	100.0		

Source: Computed from survey data by author

It clearly transpires from results in Table 3 that the key audience for research outputs is usually academia 30.0%, and not policy makers 26.7% as had been anticipated in this study. The difference in response is not much though, but tells a story. According to the results, a lot of policy oriented research certainly reaches policy makers, but the bulk of those interviewed for this study were economic policy researchers, who basically carry out economic research. The public 20% also counts as key audience when it comes to communication of research results. Unfortunately, there still appears to be a major disconnect between academia and the policy community, as researchers and policy makers have formed their own mutually independent communities, with minimal cross-membership and little formal or informal knowledge transfer.

Notably, the study found that while academics bemoan the absence of policy makers from their conferences and lament that their work is being ignored, policy makers on the other hand complain that academia is failing them. However, an impoverished future for both the academic community and the professional community in Kenya is not anticipated, if the two work together. The reality is that policy practitioners are quite capable of devising their own solutions without recourse to academia, only that they come up with unworkable policy prescription as these do not benefit from empirical findings and hence not evidence based. The inverse is interesting, academia does not and cannot exist within a void; however, in many ways it has shut itself away.

The respondents agreed that the gap between policy makers and policy researchers need to be narrowed, and one way of doing this, is for the two communities to spend more time together in most activities including events such as policy seminars, national policy workshops, and the researchers be rewarded in one way or another for maintaining their technical skills. Academia has the potential to make valuable contributions to practice through the development of tools, methods, and techniques, but rarely is this potential realized. The two communities can be brought closer together by allowing and encouraging academics to take sabbatical leave or career breaks within government departments.

4.2.1.4 *Type of information needed by policymakers*

The proposition was that “if the evidence is credible and convincing, provides practical solutions to pressing policy problems, and is packaged to attract the interest of policy makers and researchers, it is likely to be considered during the policy making process”. This is the proposition that was tested in this case, and it turned out that indeed, policy makers tend to prefer what is credible; this can be seen in the analysis below. The frequency table supported the guiding hypothesis, thus indicating major agreements. Table 4 shows that credible information is much more important to policy makers compared to other types of information, on average 25% of the researchers who took part in this study agreed that policy makers should be provided with credible information to guide policy formulation.

Table 4: What kind of information do policy makers need the most to act upon research results?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Timely	3	4.3	5.4	5.4
	Relevant	3	4.3	5.4	10.7
	Credible	14	20.3	25.0	35.7
	User friendly	10	14.5	17.9	53.6
	Actionable	11	15.9	19.6	73.2
	Impactful	13	18.8	23.2	96.4
	Others	2	2.9	3.6	100.0
	Total	56	81.2	100.0	
Missing	System	13	18.8		
Total		69	100.0		

Source: Computed from survey data by author

Indeed many policymakers and governments need timely, accurate information to develop and implement policies. Policy makers also prefer impactful (23.2%) and actionable (19.6%) information that can shape policy making. The packaging of information is also very crucial, as user-friendly (17.9%) information is considered more palatable to complicated econometric presentations cherished by many young researchers. This has only aided the creation of a barrier between the research and policy making communities. And as regards language barrier, many respondents observed that there have been calls to revise norms for style and tone so that presentations are shorter, use simple language in so far as is possible, and anchor concepts in realistic examples so as to create appropriate contextual frames.

The study revealed that for policy making to be effective, there must be accurate planning, and planning begins with the gathering of relevant data and information on the proposed project. The information or data available determines whether the decision taken will be feasible or not. Information is therefore very important for proper planning as it is capable of provoking action or inaction in a recipient. Research is also seen as an input which reduces the level of uncertainty in an individual or organization in decision process, and policy makers always need new information in the performance of their official duties.

4.2.1.5 *Role of research in policy making process*

The proposition: ‘If research is designed and produced without regard for gaps, policy priorities and an awareness of the political environment, then it may result in limited resonance and uptake.’ Gaps in the research denote where one can make their mark by suggesting ways forward or theories of their own, or merely just pointing out that research is incomplete in any given area. Political environment may be national and international political factors that can affect policy decisions. In this case the frequency table supported the guiding argument indicating major agreements. Policy research is actually meant to inform policy process.

Table 5: Generally what do you think should be the role of research in policy making process?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Inform policy	38	55.1	61.3	61.3
Provide solutions	14	20.3	22.6	83.9
Make recommendations	3	4.3	4.8	88.7
Policy options	2	2.9	3.2	91.9
Others	5	7.2	8.1	100.0
Total	62	89.9	100.0	
Missing				
System	7	10.1		
Total	69	100.0		

Source: Computed from survey data by author

The role of research in policy making process is very important and many respondents in this study confirmed that informing policy (61.3%) is key (See Table 5). Research should also not only provide solutions to problems (22.6%), but as well make recommendations to policy makers (4.8%) and provide good policy options (3.2%). Today’s tough decisions need to be grounded in evidence if they are to command respect, acceptance and support. The respondents concurred that the research community can contribute to this process so that evidence-informed policymaking can become a reality. And for new initiatives or major changes in the direction of policy, researchers can provide additional independent, critical reviews of empirical evidence – both national and international. This may simplify the policymaker’s decision or may complicate it by drawing out elements that could otherwise have been ignored. But, it emerged that unless analysis and research are publicly available to inform the programme for government process, their ability to inform policy is quite limited. This means that unless political parties indicate and communicate the policies they are considering well in advance, the required analysis and research are unlikely to be available.

One institutional factor that was discovered in the study is that the impact of the use of research was felt more where there is a balance in analytical expertise between the civil service and the wider public service. Whereas in Kenya policy details are mainly designed by specialists within government departments, we note from literature that in other countries the specialist knowledge become fragmented across a growing number of specialist agencies, and in some cases within private sector consultancies. However, the study discovered that many government departments still have little specialist knowledge or resources to analyze and develop policy. This further reduces the likelihood of research being used, with the research agenda falling between agencies and departments. This often leads to potential for

duplication and omission, a problem that can be reduced in the future if departments implement coherently their data and research strategies.

The findings suggest that multiple forces converge to create context-specific pathways through which research enters into the policy making environment. Depending on the policy under consideration, the government department may call upon an intricate combination of actors for sourcing evidence. While proximity to a decision making core does have advantages, it is not the position of the organization within the network, but rather, the qualities that organization possesses that enable it to be rooted. A few factors were conjectured in this study to look at the level of influence; these include reputation, capacity, quality, and quantity of connections to decision makers. In addition to this, the policy environment was also expected to influence the uptake of research.

It also emerged from the study that the reputation of the research organization is important in increasing its influence. The engagement of decision makers with academic institutions of repute was said to confer greater legitimacy upon the former's work. Similarly, having known experts on decision making committees gives their work importance and legitimacy. Research capacity was found to be important for increasing the level of influence as evidenced by the investments made by several government departments to strengthen in-house research capacity. Further, emphasis needs to be placed on capacity building for knowledge translation.

Among the other factors that appeared to increase influence of research institutions was creating a culture of evidence among policy makers. This typically occurred because of the close ties between policy makers and research institutions. As regards legislation, key informants had mixed views about the utility of legislation for influencing research institutions beyond serving as a mechanism to create new institutions. Our findings indicate that this influence of research institutions occurs in a variety of ways and in many of the component areas of various issues. In some, particularly relating to economic policy, research institutions and research enjoy a high degree of effect in policy making. In other areas, like governance or human resources, research institutions have low influence. These factors that assist organization to influence policy making – quality of connections, quantity of connections, capacity, and reputation were all found to be important in the study.

Creating a culture for research among decision makers also strongly emerged as a critical requirement in many organizations, particularly government agencies. This suggests important ways in which research institutions can be encouraged to achieve greater influence. Indeed, there is a clear need for more research to better understand these issues for furthering knowledge translation in Kenya.

4.2.1.6 *Types of communication products*

The guiding argument in this case was that “policy briefs best display and deliver researchers messages to policy makers”. This is clearly presented in the table below, thus the overall conclusion is that the hypothesis is confirming this argument based on the data and interviews. Many policy makers who took part in the interviews prefer policy briefs because they do not have much time to peruse detailed research papers and book length volumes that may be of particular interest.

Table 6: What kinds of communication “products” best display and deliver your messages?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Policy briefs/publications	43	62.3	78.2	78.2
	Presentations	3	4.3	5.5	83.6
	Audio-visual	3	4.3	5.5	89.1
	Meetings	4	5.8	7.3	96.4
	Media	2	2.9	3.6	100.0
	Total	55	79.7	100.0	
Missing	System	14	20.3		
Total		69	100.0		

Source: Computed from survey data by author

The highest percentage of the respondents (78.2%) use policy briefs/publications to communicate their research products, (7.3%) meetings while 5.5% use audio-visual, another 5.5% prefer presentations and 3.6% use the media. Those who favor meetings had personal contact with the professionals who could provide the information policy makers needed in government establishments, in other words the policy makers went to professional civil servants and those in private sector who could provide the information they needed. Most of the respondents who were interviewed indicated that all the sources of information listed above are useful to them. For better communication, some researchers confessed that in some cases they produce separate editions of journals and conference proceedings; one intended for a scholarly audience, and another, targeted towards policy makers, giving a synopsis of the key findings and their

possible application to practice. Research results are often utilized to advocate for legislative and policy change at local, state, and national levels. The study found that not many advocacy groups and legislators look to current research trends and information to make decisions.

The information targeted at policy makers is often presented in the form of a policy brief and outlines the rationale for choosing a particular policy alternative or course of action in a current policy debate. The study found that common audience for a policy brief is not interested in the research/analysis procedures conducted to produce the evidence, but are interested in potential solutions based on the new evidence. Thus policy briefs should be just that—brief and concise—and should focus on how new evidence has implications for a particular policy. Distributing a regular newsletter summarizing study findings is also an ideal way to update study participants and participating agencies. While such newsletters can involve a fair amount of work, the dissemination benefits are well worth the effort.

There were some very positive findings in the study though, for example the policy briefs that were shared by researchers were described as ‘well structured’ and accessible. However, overall the understanding and awareness of available research is low. One respondent concluded that “many important aspects of a balanced and evidence based discussion of the issues at hand are never addressed” while another stated “members are not clear about what the debate is about and therefore frequently digress to talking about irrelevant matters.”

There was consensus by a large number of respondents that in the process of providing those information sources, quality should be the watchword, since information is usually as good as its source. The findings here indicate that the respondents use more than one type of information source. Researchers, particularly the young ones actually use electronic methods to package and promote their work in new, non-traditional, practitioner-friendly forms such as reports, briefs, and papers. Some researchers also said that they use blogs. Blogging can be a highly useful way to communicate research and foster online discussion. Blogs are basically simple Web sites that enable the researchers to post entries in chronological order, with the most recent displayed first. These entries can comprise text, images, video, and links to other blogs. They observed that these blogs are interactive because readers can post comments, enabling an online dialog. Also, blog software enables them to do keyword-tagging and categorization of entries that can be used to search for previous entries by topic.

4.2.1.7 *Opportunities to communicate research*

The proposition here was that “if research is aimed at influencing policy and practice, then it needs to be consultative from the early stages of proposal, rather than solely at a later point of dissemination and there have to be opportunities for communicating the findings”. The frequency table below supports this guiding argument indicating major agreements. Researchers indeed get opportunities for disseminating their research results.

Table 7: Does the work of like-minded organizations or ministries, etc., present any opportunities for disseminating your research results?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	53	76.8	91.4	91.4
No	5	7.2	8.6	100.0
Total	58	84.1	100.0	
Missing System	11	15.9		
Total	69	100.0		

Source: Computed from survey data by author

Table 7: show that there are indeed opportunities out there for researchers to communicate their findings, with 91.4% of the respondents observing that yes; they get a chance to share their research results with the stakeholders and the general public. Only 8.6% said that they did not quite get an opportunity to share their results. Ideally the first step in the public policy process is usually the identification of a problem and if research findings about the problem are shared at this stage, then there are high chances that the policy that will be formulated will be a good one. This step involves not only recognizing the existence of an issue, but also in-depth study of the problem and its history. This stage of the process involves determining who is affected and this can only be known if there are research studies about this particular problem, how aware the public is of the issue, and whether it is a short or long-term concern.

Another key question that this study grappled with centers on whether altering public policy can effect change. Answers to such a question would give policy makers a gauge for which policy changes, if any, are needed to address the identified problem and what research findings are available to help shape the formulation of the policy. The unfortunate result from these findings is that rarely do Kenyan policy makers consult research when designing policies despite efforts researchers make to reach them with their

findings. Thus, researchers should capitalize on the various opportunities to communicate research results to share findings with policy makers as much as possible. In view of these communication problems, a wholesale revision of academic evaluation mechanisms may be necessary; because at present there is little direct incentive for academics to consider the needs of policy makers as consumers of their research.

The respondents noted that sensible improvements to up communication of research would be to give greater weighting to professional experience and competency in technical skills where appropriate, and to encourage and reward applied teaching methods that demonstrate the practical utility of academic theories. It would also be important to give more recognition to publications in peer-reviewed books and practitioner-oriented outlets. Academic writers should use more fluid and open styles, perhaps following the example of those few journals which are held in high regard, not just by academia, but also by policy makers. Reviewing criteria for journals and conferences should be revised to place greater emphasis on presentation and understandability, particularly with regard to statistical or mathematical content.

Section 4.3 Researchers' habits and preferences

4.3.1 *Empirical results*

The main objective in this section was to evaluate the extent to which policy-making processes draw upon economic research and communication skills located within and outside the formal policy-making structures. The hypothesis was that “policy makers rarely refer to research during policy making process in Kenya”, and it emerged that indeed, policy makers in Kenya tend to make decisions ad hoc and on the spur of the moment. Research is rarely used during policy formulation. The other hypothesis was that “use of research improves the quality of policies in the country” and results from focus group discussions and elsewhere show that quality of policies improve with the use research, particularly well done research. The study also tested preference of locally done research compared to those done by foreigners, and for sure, a good number of policy makers would prefer to use research done by local researchers, because of close proximity to the general problems that face the community, and local researchers are well placed to understand these problems better.

4.3.1.1 *Use of research findings by policy makers in the past three months*

The guiding argument here was that “policy makers rarely use research findings to inform policy making process”. The overall conclusion is that this hypothesis was confirmed on the basis of the quantitative

data as can be seen in the table below. The results of the interviews that were carried out with a wide range of policy makers also confirm this position.

Table 8: Have you used at least one research finding in the past three months to inform policy making process

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	54	40.6	40.9	40.9
No	78	58.6	59.1	100.0
Total	132	99.2	100.0	
Missing System	1	0.8		
Total	133	100.0		

Source: Computed from survey data by author

Table 8 shows that a majority of policy makers just go ahead and formulate policies without due regard for research, with 59.1% saying no they have not used research to inform policy process in the last three months while 40.9% said yes, they used research outputs during policy formulation. In theory, ‘‘evidence based policy making’’ should work well. Researchers produce evidence, which policy makers then use for decisions. In return, policy makers provide scientists with evidence requirements and resources for research. The approach has an intuitive, commonsense logic. However, this study found that even technocrats implementing policies rarely carried out research to assess the needs of the people. Neither did they carry out pilot implementation phases to test the efficacy of new policies. This lack of evidence has contributed to significant mismatches between the priorities identified by the people and those prioritized by the technocrats. This situation is exacerbated by high levels of ‘leakage’ of government funds – a problem identified by both the people and the technocrats themselves.

It also emerged from the study that research-evidence is often used opportunistically to back up pre-existing political decisions or opinions, and yet use of evidence is not only important for the development of policy, but also for its implementation. There is need for better tools and methodologies which can be used to assess the extent to which policies are based on evidence. The use of expert reviews of policy outputs has been used in a number of studies, and some further development and sharing of this methodology would be beneficial for the Kenyan society.

The study also found that in some cases the lack of evidence-literacy amongst policy makers is symptomatic of a poor culture of enquiry in the wider society. There is a strong positive correlation

between research use and level of education, where those policy makers whose level of education is high tend to use research more than those who did not attain post graduate university degrees. It is worse for those who do not have any university degree. Some policy makers believe that schools and universities are not instilling critical thinking skills in their students (although this was a hypothesis which many put forward rather than a proven fact). Supporting training of teachers and lecturers so that they pass on a more investigative approach to their students may be a long-term approach to supporting evidence-informed policy making.

Furthermore, it emerged that there is a significant discrepancy between policy makers’ perceived ability and their actual ability in the area of consumption of research. Given that many institutions and training providers use self-assessment as a major tool for assessing capacity, it seems likely that capacity gaps are frequently underestimated, thus the need to generate ‘more synergies’ between different platforms, to promote the use of evidence among policy makers, to strengthen researchers’ influencing skills, and to achieve sustainability of linkages is called for. There is also the need for involvement of those who were most affected by policies in advocacy efforts – for example building the capacity of civil society organizations representing marginalized groups to demand policy change.

4.3.1.2 *Staunch users of research findings*

The frequency table does seem to support the original guiding hypothesis which states that “policy makers are not staunch users of research findings” thus indicating major agreements with the state of the theory at present. According to theoretical literature and many recent studies, policy makers have been found to ignore research findings while formulating policies, even very important ones.

Table 9: Do you consider yourself a staunch user of research findings?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	64	48.1	48.5	48.5
No	68	51.1	51.5	100.0
Total	132	99.2	100.0	
Missing System	1	0.8		
Total	133	100.0		

Source: Computed from survey data by author

Many policy makers do not consider themselves staunch users of research findings. Table 9 shows that 51.5% of those who took part in this study did not consider themselves as staunch users, while 48.5% said yes they did. The bulk of those who said yes were basically policy practitioners. The study noted that a dearth of clear, relevant and reliable research evidence, and difficulty finding and accessing it were the main barriers to the use of research. Access to research, managerial and organizational resources to support finding and using research were all important factors that were looked at.

For research findings to reach policy makers and policy practitioners, institutions and formal organizations themselves have an important role to play because the whole process is about communications and decision making skills. For example, decision-making bodies often have formal processes by which to consult on and take decisions. Participation of organizations can help research to be part of a decision, but many study participants saw the influence of vested interest groups and lobbyists as an obstacle to the use of evidence.

The production of guidelines by professional organizations was also noted in the review as a possible facilitator of evidence use by policymakers; however, in cases where the organization was itself regarded as not being influential this was not the case. Whether true or not, these perceptions can damage an organization's ability to change practice or policy, on the other hand, institutions can make a positive difference by providing clear leadership to champion evidence-based policy. It still remains to be seen how influential these organizations will be, and whether they succeed in changing the stereotypes and behaviours of both policy-makers and academics. And critically, whether relationships brokered in this way can transcend the traditional 'expert advice' model of research mobilization to encompass evidence that aims to be an accurate view of the totality of current knowledge on a problem.

A good relationship between researchers and policymakers is also considered very important, and would go a long way to help the process of research use. This was a common finding; it is known already from other studies that policymakers often prefer to get information and advice from friends and colleagues, rather than papers and journals. In our everyday lives, we seek advice from friends and colleagues; we don't trust people who have been wrong before, or who seem to be biased – or with whom we just don't get along. Exactly the same applies to the process of policymaking and, in our experience, in the process of research collaboration. Negative stereotypes abound on both sides, and this study found that personal experiences, judgments, and values were important factors in whether evidence was used or not.

The study observed that policymakers and researchers have different pressures, working environments, demands, and needs. Their career paths and incentive structures are very different. Policymakers tend to have a broader definition of evidence than that usually accepted by academics. Academic researchers, understandably, tend to think of ‘evidence’ as academic research findings, while policy-makers often use and value other types of evidence, for example, use of informal evidence such as local data or tacit knowledge. To facilitate use of evidence, timely access to good quality and relevant research evidence is imperative. However, the terms ‘making policy’ and ‘using evidence’ are both really not easy to understand. These are not simple, linear processes – nor are they repeatable, predictable cycles of events.

Policy makers who participated in this study noted that they are guided by some core principles, these are: politicians and public servants are accountable to the public; elites, in politics and the private sector, do not have the right to pursue their interests without constraints; government bureaucratic and decision processes must be open, accessible, and transparent, and being responsive to public concerns and individuals and communities affected by projects have the right to information regarding proposed developments; the right to challenge the need for, and the design of, projects; and the right to be involved in planning and decision-making processes. Observations on the barriers between research and policy will always remain mixed though. Although researchers generally have consistent views on this subject, they will not necessarily be different from the views expressed by policy makers.

Some policy makers, more than others fear that independent research and external discussion on economic policy options will serve only to provide opportunities for political criticism. There is a concern that alternative policy options, which may be supported by research and open policy discussion, will undermine political authority. One barrier preventing researchers from contributing more substantially to policy decision-making is that policy makers’ needs are often driven by rapidly changing political, economic or social circumstances. Common examples can be offered of policy decisions taken in the absence of supporting research and, in some cases, in contradiction with the policy direction suggested by available research.

Some respondents noted that when senior decision makers in an institution lack capacity to understand research, they are unlikely to value research use, and are therefore unlikely to introduce policies which incentivize evidence-informed decision making. Additionally, they may not choose to employ members of staff who are qualified to understand research, in part because they don’t value research or are fearful to employ people who are more knowledgeable than they are. Another perspective which emerged during

the interviews was that low levels of evidence-literacy in policy making institutions reflected low levels of evidence literacy more broadly in society. In particular, respondents blamed the school and university system for relying on outdated teaching approaches and failing to instill a culture of enquiry in their students.

Thus, despite several decades of work on evidence-based policy, the goals of improving research uptake and promoting greater use of research within policy making are still elusive. There is therefore need to strengthen policy makers’ capacity for improved policy formulation and development. From the data, indicators suggest that many policy makers have low abilities to find, understand and use research.

4.3.1.3 *Number of publications referred to while formulating a policy*

The guiding argument here was that “policy makers rarely refer to publications on policy while formulating public policies” and the frequency table indicates real major agreements with this hypothesis. According to many policy makers who were interviewed, a lot of policy processes are usually ad hoc, and their defense was that sometimes there is limited time to wait for research results or commission a study and wait for the findings before a decision is taken.

Table 10: In a typical day, how many publications on policy research do you refer to while formulating a particular policy?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
2 or less	73	54.9	68.2	68.2
3-4	18	13.5	16.8	85.0
5-6	6	4.5	5.6	90.7
7-8	8	6.0	7.5	98.1
9 or more	2	1.5	1.9	100.0
Total	107	80.5	100.0	
Missing				
System	26	19.5		
Total	133	100.0		

Source: Computed from survey data by author

From Table 10 it is clear that many policy makers do not make reference to scientific findings while formulating policies. In a typical day, 68.2% of the policy makers who took part in this survey refer to two or less published research findings while participating in the designing of a policy and 16.8% refer to

between three and four published research work. Very few just 1.9% refer to nine or more publications while involved in a policy making process. Even though it is common knowledge that scientists speak their own language that normally consists of at least some Greek letters and mathematical symbols, and their language often requires “translation” before it can be understood by non-scientists, or even scientists in a different field, this is not an excuse for policymakers not making reference to published work during policy formulation.

Policy makers observed in the study that scientists often stamp a standard clause at the end of their research publications, “in summary, this study indicates that more research is needed.” This is, of course, both exculpatory and self-serving, and may be construed to mean that “if I get more money I might be able to give you a better answer.” Researchers observed that policy makers on the other hand speak their own language that normally consists of acronyms, which in turn are defined by other acronyms. Communication is often for a closed audience and driven by unpublicized political agendas. They often include multiple signatures (or no signatures) at the end of the reports they prepare, and then stamp “confidential”. The study also established that indeed a good number of policy practitioners and some policy makers do conduct research; however, it is rare to see their findings published in scientific journals, if released at all.

It also emerged from the study that policy makers work to a different time scale — and for them time is everything. Answers are always needed instantly and the timetable often has precedence over the quality, as they must have prompt and firm opinion to look credible. This is reflected in the classic policy makers’ joke, “I have made up my mind, don’t confuse me with the facts.” Policy makers usually have short tenure managing projects, and will move on quickly to other files to build up their repertoire of expertise in a wide variety of different areas.

Thus, the incompatibilities between researchers and policy makers are very real ones. If researchers and policy makers are to work together, they must know each other’s strengths and weaknesses, as well as likes and dislikes. There are a number of key issues that must therefore be addressed. The study found out that researchers and policy makers often lack trust and respect for the respective parts that they play. Researchers have a lack of respect for those who are not scientists—science is an exclusive club, and researchers live in a culture that reveres scientific ideals. They often consider their research to be cutting edge, to be reviewed only by their peers, and find it difficult to conduct “directed” research. They resent

the power of policy makers to control research funding and the frequent misuse that is made of scientific data to fulfill a political policy agenda.

Policy makers too resent the arrogance of researchers, the seeming self-fulfillment of much of their research, and their tunnel perceived vision approach to the world. They often view research input as untimely, less than relevant, and impossible to understand or contextualize. This is well described in the “Two-Communities Theory” of Norman Caplan (1979), which postulates the existence of two camps (researchers and policy makers) that lack the ability to take into account the realities or perspectives of one another.

The respondents suggested that exchanges of personnel between the two communities should be promoted and welcomed; however, this might take some time to develop in Kenya. Meanwhile, working closer together would help establish a clearer understanding of roles, interests and the requirements of researchers and policymakers. This would allow more productive interactions, thereby enhancing benefits and reducing potential tensions. It would also help in turn to foster commitment on both sides, thus building a meaningful research agenda, which would see researchers producing policy outputs (published reports) and academic outputs (peer reviewed papers). Interactions with policymakers could stimulate research into new issues and, when linked to pilot studies involving multidisciplinary teams, could generate significant new research possibilities.

There is one large risk though in this whole engagement process, that is the researchers lose, or are perceived to lose is their independence by engaging with the policymakers. To avoid this, it is suggested that an open and transparent process is adopted. As part of this process, policymakers would provide inputs to the research that seek to inform and improve the analysis rather than influence the conclusions. Similarly, researchers would engage with the policymakers’ inputs and with standard peer-review processes. But the researchers must retain their right to publish the policy research and commit to it being placed in the public domain so society at large can examine the findings.

4.3.1.4 Use of evidence based approach and quality of policies

“If research results are of high quality and based on good empirical data and simple analysis, then it is likely to have the highest impact,” this was the guiding argument in this case and the frequency table below supported this argument demonstrating major agreements. Even though many policy makers avoid research, they do not totally disregard the findings. The many policy makers who took part in the interviews agree that research findings indeed, increase the quality of policies that they formulate on almost a daily basis. The benefits of research and how it is communicated to policy makers cannot therefore be gainsaid.

Table 11: Using research findings increases the quality of policies that are eventually formulated: Do you strongly agree, disagree, neutral, agree or strongly disagree?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly disagree	5	3.8	3.9	3.9
Disagree	7	5.3	5.4	9.3
Neutral	5	3.8	3.9	13.2
Agree	48	36.1	37.2	50.4
Strongly agree	64	48.1	49.6	100.0
Total	129	97.0	100.0	
Missing System	4	3.0		
Total	133	100.0		

Source: Computed from survey data by author

As can be seen from Table 11, the majority of respondents 49.6% strongly indicated that they need research to formulate quality polices. In the performance of their official duties, 37.2% of the respondents agreed that research findings increase the quality of policies. Very few (3.9%) strongly disagree that research findings increase quality of policies, meaning that even those policy makers and practitioners who do not use research are in agreement that if research findings are considered during policy formulation, there are higher chances of ending up with high quality policies.

The response here shows that policy makers, practitioners and senior civil servants need research in the performance of their official duties, more so during policy making process. Researchers have responded by providing them with the right kind of research findings they need for the performance of their official

duties effectively, but most of them just seem to snub this and go ahead to make policy decisions that are not hinged on any evidence.

Policy makers observed in this study that the research community could help overcome this problem of disengagement by producing statistically valid examples to illustrate findings. Otherwise, an unpopular finding coming from high-quality research can be immediately trumped by an unrepresentative anecdote, as most people are not in a position to judge the difference between the representative and unrepresentative anecdote. Research findings could be more informative if researchers, having undertaken robust analysis, improve how they present research to the policy makers and the wider public. While it is challenging to simplify without being misleading, it would also assist other professionals like journalists in providing good material for the general public.

The respondents also felt that many researchers do not have sufficient understanding of the policy process and the many factors which may influence decision-making. Even where research is available to support a particular policy option, peripheral factors may result in a decision which, in effect, ignores the arguments of available research. There is also a feeling among policy makers that researchers do not always recognize the social or political factors which may have a bearing on political decision-making. Thus, policy makers usually express frustration that external researchers do not always respect confidentiality associated with involvement in government work.

Some policy makers see researchers as unwilling to conform to certain “rules” that should govern participation in policy-related research, such as refraining from publicly releasing full or partial findings or releasing proprietary data to third parties including the media. They as well view academics as interested only with theoretical or philosophical issues and do not see universities as able to provide value-added in policy development. Despite these weaknesses in the links between research and policy, evidence shows that institutional boundaries are reasonably permeable.

What must undoubtedly be emphasized is that governments are responsible for making policy decisions to improve the quality of life for individuals and the population. Using a scientific approach to investigate all available evidence can lead to policy decisions that are more effective in achieving desired outcomes as decisions would be based on accurate and meaningful information. Respondents observed that evidence based decision making requires a systematic and rational approach to researching and analyzing available evidence to inform the policy making process. It helps people make well informed decisions

about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation. Evidence based decisions can produce more effective policy decisions, and as a result, better outcomes for the community.

The study noted that when evidence is not used as a basis for decision making, or the evidence that is used is not an accurate reflection of the ‘real’ needs of the key population(s), the proposals for change are likely to produce ineffective outcomes, and may even lead to negative implications for those they are seeking to benefit. As a result, the evidence based approach to decision making has gained momentum in recent years as it strives to improve the efficiency and effectiveness of policy making processes by focusing on ‘what works.’

Indeed the advantages of using an evidence based approach to policy making has been discussed by many researchers (Argyrous, 2009; Banks, 2009; Othman, 2005; Taylor, 2005), with some common arguments emerging to support its application throughout the policy making cycle. In summary, these studies point out that using evidence based approach to policy making can:

- i. Help ensure that policies are responding to the real needs of the community, which in turn, can lead to better outcomes for the population in the long term;
- ii. Highlight the urgency of an issue or problem which requires immediate attention. This is important in securing funding and resources for the policy to be developed, implemented and maintained;
- iii. Enable information sharing amongst other members of the public sector, in regard to what policies have or haven’t worked. This can enhance the decision making process;
- iv. Reduce government expenditure, which may otherwise be directed into ineffective policies or programs which could be costly and time consuming;
- v. Produce an acceptable return on the financial investment that is allocated toward public programs by improving service delivery and outcomes for the Kenyan community;
- vi. Ensure that decisions are made in a way that is consistent with our democratic and political processes which ought to be characterized by transparency and accountability.

On the demand side, results show that policy makers complain that academics can be very hard ‘to do business with’ or that they are too slow, or lack an appreciation of the ‘real world’. There may be some validity in these perceptions, though these may also reflect an unrealistic view of how much time is needed to do good research; and perhaps a lack of planning. Possibly also a desire for greater ‘predictability’ in the results than many academics would be willing to countenance.

But it was clear from the findings that some decision-makers still source evidence from researchers in a variety of ways - leveraging personal networks, accessing peer reviewed publications, developing formal linkages with national statistics agencies, academic, or independent research institutions, or by assembling expert committees for a well-defined task. They did not confirm that the quantity of connections were important for accessing research during policy making, however, the quality of linkages appeared important. High quality linkages include those where researchers are involved in policy making or where research institutions are part of the decision making body.

4.3.1.5 *Use of research and quality of decision-making*

The general theoretical argument here was that communication is very important, and that high quality research if communicated well to policy makers would go a long way to improve the quality of decisions that are made. Thus, “use of research improves the quality of decision making process” worked out as the guiding hypothesis for this case and the frequency table below supports this guiding hypothesis demonstrating major agreements.

Table 12: Using research outputs improves the quality of decisions: Do you strongly agree, disagree, neutral, agree or strongly agree?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Strongly disagree	3	2.3	2.3	2.3
Disagree	5	3.8	3.9	6.2
Neutral	7	5.3	5.4	11.6
Agree	51	38.3	39.5	51.2
Strongly agree	63	47.4	48.8	100.0
Total	129	97.0	100.0	
Missing				
System	4	3.0		
Total	133	100.0		

Source: Computed from survey data by the author

The results on use of research outputs to improve the quality of decisions are presented in Table 12, and 48.8% of the respondents strongly agree that using research findings actually improves the quality of some of the decisions policy makers take. Still 39.5% agree that indeed policy makers should use research outputs to improve the quality of their decisions. Only 2.3% strongly disagree that research improves the quality of decisions made by policy-makers and policy practitioners.

However, what this study noted, and this needs to be emphasized, is that in considering the use of evidence, policy makers should consider the difference between a process that uses independent, comprehensive and rigorous analysis of the evidence to inform policy and a process based on the selected use of external reference points (either research or policy) without any rationale. Thus, making the correct decisions is very important, for instance adopting a policy because it ‘seems to work well’ in a different environment is not prudent, especially when the policy setting is different. The effectiveness of such a policy should have been fully evaluated before being considered for adoption.

In the notes taken from the fields interviews, it was observed that in spite of these conflicting perceptions, which researchers and policy makers have of one another, virtually everyone agreed that there is need for researchers and policy makers to communicate and interact more frequently, particularly at the national level. Both researchers and policy makers apparently know that there is need for some strategy to reduce the gap in their interaction. What needs to be done to close this gap is to identify institutions and organizations that can be seen as important bodies, which might assist in this process.

The other matter of concern that came out clearly is the quality of data available, which has always been an issue as policy makers plan to take major decisions. The need for arranging easier access for researchers to obtain the data from government departments and anywhere else should be addressed at all levels. The two communities (researchers and policy makers) agree that encouragement of collaborative research is desirable, and efforts to involve people from across institutional boundaries – universities, policy/research centres, central banks and ministries are desirable. It is also important to note that the trend towards greater involvement of civil society groups in policy consultation is upward. However, this study observed that there may be concerns that many civil society groups have relatively little understanding of policy issues, particularly those that relate to economic problems.

Whereas the individual, rather than the institution, is the driver on the research side, the opposite is the case on the policymaking side. The individual policymaker can do very little to promote greater engagement with the research community without institutional endorsement. Consequently, the culture towards research within a department or agency has a major influence on the behaviour of its policymakers. So, anything that might help to stimulate greater engagement with the research community is significant.

4.3.1.6 Preference between locally done researches to those by foreigners

The frequency table below supported the guiding argument signifying key agreements. The controlling argument was that “policy makers tend to prefer locally done research to those done by foreigners”, why they don’t use these research outputs even when it is communicated to them in good time at the point when they are formulating public policies is another matter altogether. Many African policy and research institutions, and a number of them are based in Kenya, have adequate capacity to undertake evidence based research, but the utilization of the findings has always been an issue.

Policy makers who were interviewed confessed that research uptake has always been a challenge. Most policy makers do not utilize the findings and evidence from research either due to the lack of, or limited capacity, this can be technical, institutional, or even financial to translate the research findings into practice, especially if it entails transformation in policy direction. Fear of change has also led to some policy makers maintaining the status quo at any cost for many years.

Table 13: I prefer locally done research to those done by foreigners: Do you strongly disagree, disagree, neutral, agree, or strongly agree with this statement?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Strongly disagree	6	4.5	4.7	4.7
Disagree	13	9.8	10.1	14.7
Neutral	31	23.3	24.0	38.8
Agree	18	13.5	14.0	52.7
Strongly agree	61	45.9	47.3	100.0
Total	129	97.0	100.0	
Missing				
System	4	3.0		
Total	133	100.0		

Source: Computed from survey data by the author

In Table 13 the results also show that policymakers prefer locally produced research, but what was also gathered in the field is that they can directly access externally produced research, whether national or international. They are similarly able to commission research very effectively. Policy makers who strongly agree that they prefer locally produced research accounted for 47.3% of the respondents. Those who remained neutral accounted for 24%, while those who strongly disagreed constituted 4.7% of the respondents.

It emerged from the study that a further attraction to researchers' undertaking policy research can be the access to data sets that are within government departments and agencies. There are numerous examples where these data, appropriately anonymised, have been used by Kenyan and other foreign researchers in the past. The new *eGovernment* strategy is increasing the pace of development of departmental interconnections and, together with good data and research strategies, these should increase the benefits of research, especially on cross-cutting issues, and give greater assurance that resources for policy research are productively and coherently spent in the country.

The respondents agreed that availability of data enhances the possible synergies between academic and policy research. While researchers typically focus on the quality required for journal articles, policy research needs to be just as robust as academic research, and requires a much greater investment in institutional knowledge. Some policy research in Kenya is subject to peer review, with organizational providers or government departments and agencies sending out draft reports to independent researchers for comment.

Those interviewed for this study converged on the fact that by having a system-wide service, which includes agencies in the wider public sector, skilled resources can be moved readily across departments and agencies. Thus, policymakers can directly access externally produced research, whether national or international, and are able to commission research very effectively. They have suggested that putting much of policy documents into the public domain via their websites would really help, and this is a policy that should be adopted by many government departments.

4.3.1.7 *Participation in policy formulation with research*

This section starts with the presentation of the frequency table with an indication of the guiding argument on the case. The hypothesis that was being tested is stated as "policy makers cannot participate in formulating any policy without being armed with relevant research". However, the frequency table below did not support this hypothesis, thus indicating some elements of disagreements.

In Table 14, the results did not strongly support the hypothesis that policy makers just go ahead and participate in formulation of policies without being armed with relevant research as only 9.4% strongly agreed to this statement. A big percentage of the respondents remained neutral (37.5%), which was quite amazing, nonetheless what is strange is that many policy makers (23.4%) disagreed with the fact that they

consult research and a similar percentage (23.4%) agreed that they cannot actually participate in formulating any policy without being armed with relevant research.

Table 14: I cannot participate in formulating any policy without being armed with relevant research: Do you strongly disagree, disagree, neutral, agree or strongly agree?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Strongly disagree	8	6.0	6.3	6.3
Disagree	30	22.6	23.4	29.7
Neutral	48	36.1	37.5	67.2
Agree	30	22.6	23.4	90.6
Strongly agree	12	9.0	9.4	100.0
Total	128	96.2	100.0	
Missing				
System	5	3.8		
Total	133	100.0		

Source: Computed from survey data by the author

During public policy formulation, it is clear now that the identification of the problem comes first. We also know that this process involves determining who the programme is bound to impact and how much information they have about the issue that is now the problem. If these questions are answered well, it gives the policy makers a measure for which policy changes need to focus. The unfortunate result from the findings is that rarely do many policy makers consult research when designing policies, despite efforts researchers make to share their findings. It is our bet that a lot of those who remained neutral in this study fall more in the category that rarely uses research while formulating policies.

After identifying and studying the problem, many of the policy makers interviewed said that a public policy solution is usually formulated and adopted. This step in the public policy process should preferably be marked by discussion and debate between government officials, interest groups, and individual citizens over how best to address the issue. The general purpose of this step is to set clear goals and list the steps to achieve them. The formulation stage needs to include a discussion of alternative solutions, potential obstacles, and how to measure the effects of the policy change. In Kenya, policy formulation and adoption is usually led by the Cabinet Committee of the government.

Another crucial stage in the public policy process is the implementation of policy changes. If the policy maker did not obtain sufficient information about the policy they were formulating, even implementation

becomes a big issue. Defining the agencies and organizations involved, and distributing responsibilities to each is very important at this stage, and to be successful, this phase usually requires agency communication and cooperation, sufficient funds and staff, and overall compliance to the new approach. The respective ministries are usually responsible for implementing public policy changes.

When it comes to evaluation, again respondents agreed that it is crucial that this whole idea was informed by research. Good evaluation should typically be an ongoing one. While the importance of this step has not always been emphasized in Kenya, modern policy makers often incorporate tools for evaluation into the formulation stage. This final step usually involves a study of how effective the policy change is in addressing the original problem, and often leads to further public policy manipulation. This part of the process is generally implemented through a cooperative effort between policy managers and independent evaluators, and these agencies need information.

4.3.2 Correlation coefficient

The correlation coefficient is undoubtedly the most common statistic used in research involving inferential analyses, providing background information regarding relationships among variables of interest prior to or following a more complex statistical analysis. It helps to determine both the magnitude and direction of pairwise variable relationships. The sign of the coefficient tells us whether the relationship is positive or negative, whereas the numerical part of the coefficient indicates the magnitude of the correlation. Correlation coefficient, symbolized as r , is a numerical summary of a bivariate relationship and can range from -1.00 to $+1.00$. This study used correlation coefficient to analyze some of the variables in the data to establish both the extent and direction of their relationship.

4.3.2.1 Use of research and how it resonates with policymakers

“If the research output fits within the political and institutional limits, and resonates with the policymakers’ assumptions, it is likely to be taken up and used as guide in the process of policy formulation;” this was the proposition settled on in this case following the theoretical framework developed for the study.

Table 15: Correlations

		Use of research	Resonates with policy maker
Use	Pearson Correlation	1	.342**
	Sig. (2-tailed)		.000
	N	132	125
Resonates	Pearson Correlation	.342**	1
	Sig. (2-tailed)	.000	
	N	125	125

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Computed from survey data by the author

There is a natural human tendency in all of us to prefer empirical studies whose results accord with our prior beliefs. This is also common with policy makers; they tend to prefer research findings that resonate with their beliefs. This means they can relate to the findings literally or figuratively, and subsequently take these up for use when formulating policies. In Table 15, the correlation estimates for use of research if it resonates with a policy maker is weak, but positive ($r = .342, p < .01$), thus there is a direct relationship between two measured variables indicating that policymakers tend to use research findings that resonate with their ideals. It is therefore clear from the study that Kenyan policy makers would go with research that resonates with them. It is also obviously known that relatively few research and consulting projects are commissioned without some expectation that the reports may assist in upholding a certain viewpoint.

Policy makers mentioned that they are more likely to focus on an issue if it has been highlighted as a priority by the president. In some cases, research was used to back up pre-determined policy positions. Policy makers also mentioned that they are driven by personal factors, including their own ethical stance and professional ambition. However, pressure to use research evidence sometimes comes from external actors (including international organizations) or from the public.

A number of respondents pointed out that while parliament, and in particular the elected representatives within, are often the focus of efforts to disseminate research findings, they are in fact rather weak influencers of policy, since policy is made by the executive. This kind of policy is officially scrutinized by the parliament; however the extent to which this happens varies considerably.

The study found that policy makers are often more informal in their assessment of information, even that of a quantitative nature. They look for important information based on quick reflections of reality for policy making, for example, poll results, opinion surveys, focus groups in marginal electorates, anecdotes, and real life stories. They operate on a different hierarchy of evidence — their levels of evidence may range from any information that establishes a fact or gives reason for believing in something to available body of facts or information indicating a belief or proposition is true or valid.

Still sticking with research that resonates with policy makers, it was evident that with respect to the production and use of evidence, an issue is whether research is a “retail store”— that is, whether researchers can and should cater to the needs of policy makers or not. It was apparent that policy makers are frustrated because researchers cannot give them a quick and simple answer. Researchers on the other hand are upset because the required data may not exist, or they do not know the answer or want to admit problems with their studies, or they cannot explain their complex findings in a simple language.

From the interviews carried out, it was clear that policy makers tend to believe that much of the research being conducted is pointless, which might probably be right as the motivation on the part of the researchers is often scientific curiosity and the desire to publish. The nub of the issue in using evidence differently lies in the differences in decision making requirements. Not only might scientific evidence conflict with values and beliefs of policy makers, but the policy maker uses evidence in the battle to control problem definition and policy solutions. Policy makers thus, look for evidence to support their claims, and consequently systematic bias occurs in the way that policy makers look for and use data.

Another important finding is that policymakers seeking empirical evidence on social policy interventions often find themselves confronted with a mountain of academic studies that are potentially relevant to the question. Without some systematic way to sort through the evidence, there is a risk that analysts will become mired in the research or simply cherry-pick those studies that support their prior beliefs.

Naturally, decision-making in the real world does not always allow the luxury of neatly sorting all the available research papers into a hierarchy. In some cases, policymakers must spread their attention across a broad range of issues, or rapidly arrive at a solution. Yet even in such cases, a hierarchy of evidence can be used as a rule of thumb, for example by helping to choose between two studies that arrive at different conclusions. In instances where decisions must be made in the absence of high-quality evidence, the use

of a hierarchy may prompt more rigorous evaluation methodologies, laying the groundwork for a better evidence base.

In the focus group discussion, participants also emphasized the importance of including policy makers in the design phase of research projects. This strategy was felt to be useful in tailoring the research to policy makers' needs, but also as a means to secure early 'buy-in' from policy makers so that they would be more inclined to consider results when they emerged. Some participants suggested that policy makers can be invited to sit on research advisory boards so that their inputs are sought throughout the research process.

4.3.2.2 *Use of research and environmental scanning*

“The more informed the policy makers, the better the strategic choices they will make” and researchers can maximize the chances that evidence will impact policy and practice if they are dealing with an enlightened group of people. This was the guiding proposition in this case. The correlations table below did not support the guiding argument, thus indicating major disagreements. Theoretically, information derived from environmental scanning is increasingly being used to drive the strategic planning process by business and public-sector organizations in most developed countries (Engledow & Lenz, 1985). There is research evidence to show that environmental scanning is linked with improved organizational performance.

Table 16: Correlations

	Use of research	Scanning of the environment
Use		
Pearson Correlation	1	-.372**
Sig. (2-tailed)		.004
N	132	59
Scan		
Pearson Correlation	-.372**	1
Sig. (2-tailed)	.004	
N	59	59

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Computed from survey data by the author

However, the practice of scanning by itself is insufficient to assure performance – scanning must be aligned with strategy, and scanning information must be effectively utilized in the strategic planning process. An important effect of scanning is to increase and enhance communication and discussion about future-oriented issues by people in the organization. Coupled with the availability of information on external change, scanning can induce strategic, generative organizational learning (Elenkov, 1997).

In Table 16 the correlation estimates on use of research and environmental scanning to obtain new information is weak and negative ($r = -.372, p < .01$) denoting an inverse relationship. The conclusion drawn here is that there could be environmental scanning going on, but there is less research being taken up as a result of this during policy formulation. But, if the sheer volume of research was not daunting enough, today's research would be more accessible than ever before. Given that most journals can be accessed electronically, one can no longer make the excuse that a highly pertinent article has been overlooked solely because a hard copy was not available in the library. In addition, many research papers now receive wide circulation prior to being published in a peer-reviewed journal, which creates its own challenge for the consumers of academic research. Similar trends are evident in other social sciences, with the number of journals and articles rapidly increasing in various disciplines.

While scanning the environment, using an evidence hierarchy can help avoid such selective use of research, and simplify the task of classifying large bodies of literature. Ultimately, this should help ensure that 'evidence-based policy' means identifying the best evidence where it is available, and using the most rigorous evaluation tools to improve the quality of the evidence base in the long-run.

Some policy practitioners observed that one way to sift through the available evidence is to devise an evidence hierarchy, borrowing from the approach commonly used by medical researchers. Another consideration in the case of published studies is that policymakers may also wish to give more weight to research that is published in more highly-ranked journals. Although journal rankings are not a perfect guide to the quality of an individual article, those studies that use rigorous methodologies are more likely to find their way into the best journals. Policy makers who took part in this study observed that in most topics, they cannot hope to thoroughly read all the available studies.

4.3.2.3 Use of research and staunch users of research findings

The hypothesis in this case was that “there is a relationship between use of policy research and staunch users of research findings. Overall, on the basis of data presented and interviews conducted, there are indications the hypothesis confirms this basic argument, thus, there is no need of rejecting or suggesting alternative hypotheses in this case.

Table 17: Correlations

		Use of research	Staunch user of research findings
Use	Pearson Correlation	1	.858**
	Sig. (2-tailed)		.000
	N	132	132
User	Pearson Correlation	.858**	1
	Sig. (2-tailed)	.000	
	N	132	132

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Computed from survey data by the author

Most policy makers avoid research finding while formulating policies for one reason or another, but solely because they want to make decisions quickly. There was a very strong positive correlation between use of research findings and staunch users of research outputs ($r = .858, p < .01$), meaning that the more we have staunch users of research, the more we can get research into policy process. The goal of policy makers is to obtain popular support. Thus, to them their key activity is to put out fires (that is, to manage political crises—while many would seek to be more proactive than this, solving crises is what they may end up doing most of the time).

The study reveals that they are more interested in broad issues, for example, solutions that can be generally applied to a wide variety of problems. Political correctness is a key driver. The target in the policy world is “policy, practice, and people”. Because of the complexities of policy making, and the amount of meetings and briefings, they have very little time to consider original scientific publications. Their specialty is reading “bullet points”.

Respondents who advocate for evidence-informed policy making argued that the depth and quality of knowledge used by policy makers influence the effectiveness of policies. Today, the uptake of research evidence in the policy making process is on the front burner of global discourses on approaches and strategies for development. It is therefore not surprising that international development agencies and other research funders are placing increasing emphasis on the need to communicate research evidence to policy makers. This has resulted in a flurry of activities aimed at supporting the communication of research evidence to policy makers.

Researchers and policy makers have different goals, attitudes toward research findings, languages, perception of time, and career paths. This study found that important issues affecting their working together include lack of mutual trust and respect, different views on the production and use of evidence, different accountabilities, and whether there should be a link between research and policy. Some of the respondents went ahead to suggest solutions that included providing new incentives to encourage researchers and policy makers to work together, using knowledge brokers, making organizational changes, defining research in a broader sense, re-defining the starting point for knowledge transfer, expanding the accountability horizon, and finally, acknowledging the complexity of policy making.

Section 4.4 Research to policy communication

4.4.1 The need to appreciate research in a policy process

From the Focus Group Discussions (FGD), the study reveals that there is an obvious clash between any government's acceptance of the need for good evidence and the political 'need for speed'. But respondents who took part in this study argue that the facts are that detailed research, involving data gathering and the testing of evidence, can't be done overnight. As already noted, in some cases the necessary data will not be available 'off the shelf' and may require a special survey. In other cases, data needed for programme evaluation might only be revealed through pilot studies or trials with the programme itself.

It was discovered that much policy analysis, as anyone in the public service will know, actually occurs behind closed doors. A political need for speed, or defense against opportunistic adversaries, is often behind that. But no evidence is immutable. If it hasn't been tested, or contested, we can't really call it

‘evidence’. And it misses the opportunity to educate the community about what is at stake in a policy issue, and thereby for it to become more accepting of the policy initiative itself.

Researchers can contribute most to the policy-formation process where complex issues require comprehensive frameworks or models to be developed or new empirical evidence to be analyzed. Both researchers and analysts need to understand from the outset that any given piece of research is unlikely to provide a ‘silver bullet’ solution, and that the key role of the researcher is to draw out the implications of the theoretical or empirical analysis for policy design or evaluation.

The premise of disseminating research information is to facilitate its use for policy and programmatic decision-making. Collecting information to document the results of the dissemination efforts allows researchers to assess whether the communication objectives were achieved and how research findings were used. Documenting data use is important information to illustrate that research can improve decision-making and positive experiences using data also helps to grow demand for quality information. Lastly, it also came out clearly from the interviews that the assessment of information use can assist in the identification of best practices in communicating data and research utilization.

It emerged from the group discussions that a major failing of the Kenya government, and probably in many other developing countries, has been in not generating the data needed to evaluate their own programmes. In particular, there has been a lack of effort to develop the baseline data essential for before-and-after comparisons. As an aside, we should note that quite often even the objectives of a policy or programme are not clear to the hapless reviewer. Indeed, one of the good things about having reviews is that they can force some clarification as to what the objectives of the policy should have been in the first place. However, there is an opportunity, under the new county governments, to fund the evidence base that we need to compare policy performances across the country, and thereby to devise better national policies where national approaches are called for.

4.4.2 Role of development partners in research

The study shows from the focus group discussions that researchers generally agree that the role of donors in supporting the use of local researchers is extremely important. Donors are seen as too ready to overlook local research capacity in favour of expatriate researchers. Thus, there is a perception that donors are generally more interested than governments in drawing on external, independent research. Conversely, governments are seen as guarded in seeking input from local researchers, particularly those

based in universities. Access to data too, is generally problematic, either because it does not exist or because it is closely guarded for political reasons. Policy makers are also seen as uninterested in utilizing external researchers, and indifferent or unwilling to take the long-term view of issues or incorporate research findings into policy decisions.

The risk in this situation is that overseas studies will be resorted to inappropriately, as a substitute for domestic studies. Sometimes this is akin to the old joke about the fellow who loses his keys in a dark street, but is found searching for them metres away under a lamp post, because there is more light. Translating foreign studies to Kenyan circumstances can sometimes be perilous, given different conditions and the scope for misinterpretation.

Respondents agreed that research sometimes also appears to be polarized, between that sponsored by community and church groups and that sponsored by the industry, and also because there is suspicion that ‘he who pays the piper, calls the tune’. Independence is even more important when dealing with technical research than with opinions. People are better able to judge opinions for themselves, but the average person is naturally mystified by technical research. They look for proxies to help them know whether the results of such research are believable. The status of the researcher (or who is paying for the research) is one such proxy.

4.4.3 Evidence-based methodologies

Researchers who took part in the interviews for this study observed that most evidence-based methodologies fit broadly within a cost-benefit (or at least cost effectiveness) framework, designed to determine an estimated (net) payoff to society. It is a robust framework that provides for explicit recognition of costs and benefits, and requires the policy-maker to consider the full range of potential impacts. But it hasn’t been all that commonly or well used, even in relatively straightforward tasks such as infrastructure project evaluation.

It came out clearly that data deficiencies inhibit evidence-based analysis for obvious reasons. They can lead to reliance on ‘quick and dirty’ surveys, or the use of focus groups. In the interviews a respondent observed that a particular government agency in which he had worked was a frequent user of focus groups. They have a purpose, but a more superficial one, better directed at informing marketing than analyzing potential policy impacts.

Openness is also vital when conducting research, thus transparency ideally, which means ‘opening the books’ in terms of data, assumptions and methodologies, such that the analysis could be replicated. The wider the impacts of a policy proposal, the wider the consultation should be. Not just with experts, but also with the people who are likely to be affected by the policy, whose reactions and feedback provide insights into the likely impacts and help avoid unintended consequences. Such feedback in itself constitutes a useful form of evidence. Transparency can have its downsides though. In particular, it may complicate and slow down the decision-making process—transparency involves time and effort. That is what appears to militate against draft reports in a number of policy review exercises in Kenya. This has been a shame, especially for the major industry policy reviews, which contain recommendations with important ramifications for the community and the economy.

4.5 Key findings and emerging knowledge from the study

From the Focus Group Discussions (FGD), the study found that the way information is communicated is important, and should be well-thought-out during the research planning phase rather than immediately prior to dissemination of results. This approach allows project coordinators to include a communication strategy in the project proposal, and to allocate appropriate staff and financial resources for the communication activities. From the beginning of the project, it is important to consider a plan on how to communicate the research objectives and results. Essentially, stakeholders should access the research and use the information for decision-making. Although this is the goal, different stakeholders have different information needs because they make decisions at both policy and programme levels. As such, multiple research questions are often included in a study, which in turn results in a variety of communication objectives. The next step in the communication strategy would be to align the study objectives with the appropriate target audiences.

The argument raised by respondents is that research findings are generally disseminated to several different audiences. Thus, the need to know audiences to include in the strategy and therefore several questions guide which stakeholders to target for information dissemination: These include who will benefit from the data, and what questions they are seeking to answer; who has influence and resources that can support this project; who needs to be targeted to get the data into action; who will be directly or indirectly affected by the outcome of this initiative; who will support the plan; who will oppose it and why; how do we deal with it; and how can we best leverage their insights or assuage their objections?

A predominant finding is that an effective stakeholder analysis answers these questions in a way that significantly improves a project's design and the real world value of the results. The stakeholder analysis typically results in a list of target audiences. After identifying the target audiences, project planners need to identify the appropriate formats and channels to convey their research findings. Academic channels of communication typically include publishing a peer-reviewed article, which adds credibility to research, and has the potential of reaching a large audience. Giving oral and poster presentations at professional conferences are also effective means of disseminating information to fellow researchers and representatives from international organizations. Distributing a CD-ROM at meetings is another way of making research widely available. Lastly, making information available on academic, government and organizational Web sites and through distribution lists increases the accessibility of research.

A research study frequently generates several results, all of which may not be relevant to each stakeholder. Generally, key messages and the channels used to communicate them should be tailored to suit different audiences so the information is available, accessible, relevant, and useful. An adequate understanding of the way stakeholders use information drives which messages to convey while the choice of communication methods and formats depends on how audiences prefer to receive information and their educational level. Regardless of which communication methods and formats are employed, an effective strategy should aim to disseminate actionable findings using plain (non-academic) language, in a culturally appropriate, user-friendly format. The other important issue to look at is the ways in which target audiences often use information and the communication methods and formats commonly employed to convey research. The types of decision-making and communication channels are not exclusive to any one stakeholder group.

This study indicates that developing an information dissemination strategy is likely to increase stakeholders' research uptake. The strategy should be considered during the research planning process and address the communication objectives, target audiences, appropriate channels, and assessment of use. Stakeholder groups vary by their information use, familiarity with research terminology, and preferences for receiving information, resulting in the need to tailor research findings and recommendations for different audiences. Some communication methods and formats may be effective with multiple stakeholder groups. Despite the need to adapt research findings for each stakeholder group and present the information in a user-friendly manner. Stakeholders generally prefer key messages that are concise and actionable. Finally, tracking if and how information was used would allow researchers to document whether the communication objectives were achieved, to assess the effectiveness of communication efforts and if they promote best practices that are informative for future initiatives.

The findings lead to the understanding that government sector officials have limited time and expertise to read detailed research reports; therefore, researchers need to often disseminate information to them in the form of policy briefs, brochures, and executive summaries that highlight actionable recommendations for decision-making. Policy-makers sometimes seek information from government agencies and research organizations suggesting that making research available on public Web sites would increase its uptake. Face-to-face meetings with policy-makers provide direct access to decision-makers, although reaching them may be very difficult as experience shows during data collection stage of this study. Examples of such meetings would include forums where senior policy-makers convey key research messages, and dissemination workshops where policy-makers and program managers use the findings to develop action plans or draft national strategic plans. The African Economic Research Consortium (AERC), a not for profit organization devoted to the advancement of economic policy research and training in Africa conducts such senior policy seminars annually. These provide high level policy makers the opportunity to come together to learn about the results of AERC research, exchange policy experiences with each other and interact with AERC researchers in an atmosphere of peers.

The study shows that communication activities with special groups tend to focus on conveying succinct research findings and recommendations presented in culturally-sensitive, community-specific language. For example, researchers can develop a fact sheet for religious leaders to issue a public statement supporting the use of family planning. Brochures and other handouts are also frequently used to communicate research to community-based and professional groups. But consulting community leaders prior to developing these materials is very crucial.

Arguments arising in the focus group discussions show that mass media, including television, radio, newspapers and magazines, are very powerful communication tools with the potential of reaching a significant number of people. The media use research information to increase public awareness to enable people to make evidence-based decisions and to generate support for policy initiatives. The range of media outlets provides researchers with several communication options; yet in reality, the options may be limited by budget considerations and which audiences are being targeted. Many researchers say that they have very limited budgets for dissemination purposes. Other constraints to information may exist as well. For example, an organization may not have a strong culture of evidence-based policy development or stakeholders may perceive the research data to be of poor quality and are discouraged from using the data. These types of issues can be explored during the communication assessment or separately in more detail.

Some of the most common methods of disseminating research information through the media are building relationships with journalists, helping them to interpret and report data accurately, and issuing press releases. Working closely with journalists enables researchers to increase the likelihood that information is reported accurately. In turn, journalists may perceive the researcher as a reliable source of information and seek their “professional opinion” in the future.

Inviting journalists to dissemination meetings is another approach to increasing opportunities for accurate news coverage. Issuing press releases not only informs journalists about research and urges them to cover the story, but it also lays out the most important findings the researcher wishes to convey. If possible, connect the press release to a dissemination meeting or newsworthy stakeholder event. Sending a press release early in the day and earlier in the week increases the likelihood that it will be used because journalists are looking for stories during these times. Once the press release is sent, it is important to make a follow-up phone call to ensure that it was received and to inquire about whether it will be covered.

By combining efforts, researchers and policy makers would inform, support and promote societal well-being in the face of powerful, vested interest groups. Kenya is not good at bringing stakeholders (policymakers and researchers) to the table, but when this happens, the process needs to involve challenging them with robust evidence and analysis so that they engage with the totality of issues rather than simply their own agendas. If the stakeholder process does not involve challenge, it may simply lead to no real engagement – and possibly to solutions that are beneficial to those at the table at a cost to society at large. The engagement is not without possible risks – and the most obvious is that of promoting ‘group-think’, especially if people were only comfortable with consensus. One way of helping to avoid this is by having open dialogue events and greater acceptance of the value of critical thinking on both sides. If the debate is one-sided – either with the researcher pronouncing and the policymaker silent, or with the policymaker picking holes and the researcher disengaging – there will be no benefits from this type of engagement. These events will not happen unless they are organized by some body or group and supported by researchers and the leadership in the policy community.

There is nothing a Government hates more than to be well-informed; for it makes the process of arriving at decisions much more complicated and difficult. What both are talking about, in old parlance, is ‘frank and fearless’ advice: robust advice that does not second-guess the politics or the politicians. So the first suggestion for advancing evidence-based policy-making is for researchers to be frank and fearless. That doesn’t mean being a loose cannon, or acting contrary to a Government’s broad objectives, but using the opportunity of such political support to strengthen the public service’s capacity to provide evidence-based

advice—and delivering that advice, even if it is against the current, or not confined to a Minister’s or a Government’s favoured position, which often aren’t set in concrete anyway.

Fostering greater engagement between researchers and policymakers in Kenya today would increase the return on the national investment in research that is relevant to policy. For the engagement to contribute to making the policy process more research- and evidence based, strong support is needed from across the full political system. In a context where persistent inefficiencies in policy design and delivery are now less acceptable, and definitely unaffordable, evidence from research can help to ensure that people understand why tough decisions are necessary; it is also important to demonstrate that tough choices can be fair; and show that lessons have been learnt from the past. Recent developments point to possibilities of better engagement between researchers and policymakers in the future. However, this will not develop automatically unless it is welcomed and endorsed by the political system and by public-sector leadership. It also requires that researchers who are interested in policy invest in understanding the many recent changes in institutional systems and structures. The government should take time to build up its capacity and capability, and interim measures are required to speed up the engagement process.

It also emerged from the discussions that because of the many weaknesses of policymaking, there needs to be some good investments made that are relevant to policymaking. These include investments in the data infrastructure and investments in human capital (increase in the number of MSc and PhD students graduating from universities and in the numbers of civil/public servants pursuing higher degrees). Furthermore, most government departments and agencies have had experience of investing in research to inform policymaking, albeit on a somewhat ad hoc basis. What is required now is that the approach to research becomes more systematic, more questioning, and with a greater focus on the important policy questions facing Kenya today.

Suggestions by the focus group discussion on ways in which to foster greater engagement between researchers and policymakers in Kenya today are abound. The argument extended was that relationship between the research and policy communities depends on the networks linking the individual researcher(s) and policymaker(s). When the two communities are linked, such networks emerged naturally; this does not happen today. Until recently when the government committed to building up specialist skills in the civil service, through sponsoring master’s and PhD students, the policy of creating strong generalists meant that there was little reason for engagement. Relationships that had existed were continuously undermined by the mobility of policymakers across areas, usually being replaced by people

with no specialist knowledge of the area, and with a different set of analytical skills. The increased specialization in research in most disciplines over the past years has compounded the problem.

Chapter Five

Policies made in Kenya: Selected case histories

In this section, samples of cases of effective and ineffective policies that have been implemented in Kenya are presented as examples of comparative successful, somewhat successful and unsuccessful case histories — successful where research strongly got into the process of policy formulation and the results were desirable, and unsuccessful where research notoriously did not get into the process, and where there were disastrous results in terms of problem solving. These are presented as cases histories to illustrate an issue of concern and how a solution was sought.

5.1 Successful health policy on smoke free environment

5.1.1 *Kenya Health Policy*

The Kenya Health Policy, 2012 – 2030 gives directions to ensure significant improvement in overall status of health in Kenya in line with the country’s long term development agenda, Vision 2030, the Constitution of Kenya 2010 and global commitments, (KHP, 2013). It demonstrates the health sector’s commitment, under government stewardship, to ensuring that the Country attains the highest possible standards of health, in a manner responsive to the needs of the population.

The Policy was developed through an evidence-based and consultative process that was undertaken over a period of two years. Under the stewardship of the government, an extensive consultation process with stakeholders (government ministries/agencies, development partners, multilateral and bilateral and implementing partners, faith based, private sector, and civil society) was undertaken in order to gain consensus on divergent views. First, a comprehensive and critical analysis of the status, trends and achievement of health goals in the country and secondly the contribution of the previous policy framework and the sector actions towards achieving the health goals was undertaken.

Kenya has over the years taken important steps aimed at laying a firm foundation to overcome the development obstacles and improve socio-economic status of her citizens including health and the development of Kenya Health Policy Framework (KHPF 1994-2010), launching of Vision 2030,

enactment of the Constitution 2010, and fast tracking of actions to achieve the Millennium Development Goals (MDGs) by 2015.

The implementation of KHPF 1994-2010 has led to significant improvement of health indicators such as infectious diseases and child health. The emerging trend of non-communicable diseases is however a threat to the gains made so far. This new health policy provides the long term intent of government towards attaining its health goals. The policy aims at consolidating the gains attained so far, while guiding achievement of further health gains in an equitable, responsive and efficient manner. It is envisioned that the ongoing government reforms, together with anticipated sustained economic growth, will facilitate the achievement of the health goals.

Risk factors to health in Kenya include unsafe sex, sub-optimal breastfeeding, alcohol and tobacco use, obesity and physical inactivity, amongst others, (KHP, 2013). Evidence points to improvements in unsafe sexual practices, with people increasingly embracing safe sex practices. This is attributed to steady improvements in knowledge and attitudes of communities regarding sexually transmitted infections and conditions.

Even though tobacco use remains high, particularly among productive populations in urban areas and among males, there has been successful effort to reduce its consumption in public. Evidence shows that one in five males between 18 – 29 years and one in two males between 40 – 49 years are using tobacco products. The same pattern is seen in the use of alcohol products, especially the impure alcohol products mainly found in the rural areas. Cases of alcohol poisoning have continued to be reported, with over 2% of all deaths in the country being attributed to alcohol use (KHP, 2013).

5.1.2 The reduction of Tobacco use in Kenya: A successful health policy

Kenya has made significant efforts to reduce the use of tobacco and to tackle its serious consequences, particularly tobacco-related diseases. In 1992, tobacco control campaigns were initiated in the country as part of the World No Tobacco Day celebration. In 2001, the Ministry of Health (MOH) established the National Tobacco Free Initiative Committee (NTFIC) to coordinate tobacco control activities, and a tobacco control focal point was designated. Kenya actively participated in the negotiations of the World Health Organization Framework Convention on Tobacco Control (WHO-FCTC), which it ratified in 2004.

Despite the presence of a strong tobacco-industry lobby, a comprehensive Tobacco Control Act was enacted in 2007 to control the production, manufacture, sale, labeling, advertising, promotion and sponsorship of tobacco products, and a Tobacco Control Board was established to provide advice on tobacco control to the Minister responsible for public health. This was followed by a detailed communications strategy to make sure that the issues that needed to be communicated to the general public was done systematically, hence the great success with the drastic drop in the use tobacco in Kenya. You hardly see anyone smoke in public these days.

5.1.2.1 Research on tobacco use

The tobacco epidemic is a growing concern for Kenya's government and its population as a whole. According to the Kenya Health Demographics Survey of 2008/2009, 19% of Kenyan males between 15 and 49 years of age use tobacco products, and 18% smoke cigarettes. Less than 2% of Kenyan women of the same age use tobacco in any form, and 1% smoke cigarettes. The Global Youth Tobacco Survey (GYTS) 2007 found that 8.2% of schoolchildren 13 to 15 years of age smoke cigarettes and 10.1% use any form of tobacco. The fact that 12.7% of boys and 6.5% of girls consume tobacco in some form is a clear indication that young girls are smoking more than their mothers, and the prevalence trend appears to be increasing: In two GYTS surveys performed in the Kenya in 2001, 6.6% of the 13 to 15-year-olds smoked cigarettes and 8.9% used tobacco in some form. There is, therefore, enough data on this subject and the successful implementation of the policy was anchored on the fact that policy makers seemed to be serious about the effects of tobacco and were using research results to aid decisions and formulation of the policy.

The Kenya MOH is responsible for strengthening the implementation of policies, programmes and services to arrest the tobacco use epidemic. In this context, the Government of Kenya invited a team of experts led by WHO to jointly perform an assessment of the country's national capacity to implement the WHO-FCTC, with special emphasis on the following provisions of the treaty: Monitor tobacco use and interventions; protect people from tobacco smoke; offer help to quit tobacco use; warn about the dangers of tobacco; enforce bans on tobacco advertising, promotion and sponsorship (TAPS); raise taxes on tobacco; develop sustainable alternatives to tobacco-growing; control illicit trade and regulate tobacco products. At the request of the Kenya government, WHO, through its country office in Kenya and the WHO Africa Regional Office, worked with the MOH to organize and conduct a joint capacity assessment to enforce bans on tobacco use.

5.1.2.2 The smoke-free policy

The smoke-free policy in Kenya is set by the 2010 Constitution, Article 42, which guarantees the right to a clean and healthy environment. In addition, the Tobacco Control Act 2007 provides that: “Every person has a right to a clean and healthy environment and the right to be protected from exposure to second-hand smoke (SHS); every person has a duty to observe measures to safeguard the health of non-smokers; every head of family, including a parent and/or guardian, is responsible for ensuring that the children are free from second-hand smoke”. No person shall smoke in any “public place”, and the list of such places includes indoor offices and workplaces; health, education and worship facilities; and stadia and sports and recreational facilities. The owners of premises may establish Designated Smoking Rooms (DSRs), provided they meet the specifications prescribed by the Act 3.

A public place is “any indoor, enclosed, or partially enclosed area which is open to the public or any part of the public, or to which members of the public ordinarily have access, and includes a workplace and a public conveyance”, and a public service vehicle has the meaning assigned to it in the Traffic Act 4. Section 34 of the Tobacco Control Act 2007 requires the manager/owner of the public place to display a sign in English and Kiswahili stating that smoking is prohibited and showing the penalty for violation. Powers, including implementation and enforcement authority, are granted to individuals appointed under Section 9 of the Public Health Act 5.

One objective of the National Tobacco Control Action Plan 2010–2015 is “to protect non-smokers from tobacco smoke through implementation and enforcement of smoke-free policies”. The health sector, the civil society organizations and other development partners are responsible for achieving this objective. Article 8 of the WHO-FCTC requires the adoption of effective measures to protect people from exposure to tobacco smoke in indoor workplaces, indoor public places, public transport, and “other public places,” as appropriate. Consistent with other provisions of the WHO-FCTC and the intentions of the Conference of Parties (COP), Kenya, along with the other Parties to the treaty, adopted specific guidelines to assist in meeting the obligations under Article 8 and has proposed measures that can be used to increase the effectiveness of their efforts to eliminate TAPS at both domestic and international levels.

5.1.2.3 Compliance with the TAPS ban

There seems to be good compliance with the ban on TAPS. However, there are reports of subtle advertising, including prices in the print media and the use of accessories such as matches to advertise some brands. Promotion of some products is also noted, including the offer of lighters with the purchase of some brands. Moreover, compliance with the ban on indirect advertising is only moderate. In May

2011, the Strathmore Business School named British American Tobacco (BAT) Kenya the most family-friendly employer among 40 local organizations, which was widely reported in the press. Also, some forms of sponsorship have been reported, including sponsorship of business programmes, education grants and community programmes, mostly in tobacco-growing areas. With few exceptions, local governments have not mobilized public health officers to actively enforce the provisions of the Act banning TAPS.

5.1.2.4 Other bodies implementing tobacco control

The civil society: Kenya has an active civil society network that plays an important role in keeping tobacco control on the government agenda. Many tobacco control Non-Governmental Organizations (NGOs) are organized under an umbrella body, the Kenya Tobacco Control Alliance (KETCA). These NGOs play an essential role in advocacy, lobbying, public education, capacity-building, research and resource mobilization. Membership of KETCA also includes community-based organizations, faith-based organizations, and learning and research institutions that were instrumental in lobbying for legislation as well as implementation of the Tobacco Control Act. Other NGOs also operate in Kenya on both national and sub national levels. Because of limited funds, the staff in these NGOs often work on a volunteer basis.

Health professional groups: Doctors, dentists, pharmacists, nurses, and clinical officers are organized under their respective umbrella bodies and have the opportunity to meet clients on a regular basis and provide health advice. They also serve as role models in tobacco control. They have branches around the country with the potential for widespread outreach. The Kenya Medical Association (KMA) played a key role in lobbying for the Tobacco Control Act.

The media: Both print and electronic media have also played a key role in promoting public discussions on the issue of tobacco control in Kenya.

5.2 Kenya's ineffective education policy

5.2.1 Kenya's education policy

Before the coming of Europeans, Kenyan societies had their own systems of education. There were no classrooms and no special class of people called teachers. All members of the community were involved in the education of the children. Children learnt cultural traditions and customs of their ancestors from the

community as well as specific skills from their families and other specialized individuals through apprenticeship programs. Localized, relevant indigenous knowledge was, therefore, very important in the organization and transmission of knowledge. Historical records not only from the travels of Johann Ludwig Kraft and Johannes Rebmann reveal that Kenyans had access to education as far back as 1728 with a Swahili manuscript *Utendi wa Tambuka* (Book of Heraclius) attesting to the fact.

The Church Missionary Society (CMS) missionaries interacted with locals in the coastal town of Mombasa and set up one of the earliest mission schools in the country at Rabai in 1846. With the expansion of the railway from Mombasa to Uganda, the missionaries expanded their work into Kenya's interior. An attempt to set up a school and mission at Yatta in 1894 was resisted by the Kamba tribe. The missionaries then penetrated into western Kenya and set up schools and missions. The first school in western Kenya was established at Kaimosi in 1902, (GOK, 1964). During the colonial era, the number of Kenyans with exposure to education steadily increased and a good number of them were privileged to proceed abroad for further education.

The foundation of modern education was thus laid by missionaries who introduced reading to spread Christianity. They also taught practical subjects like carpentry and gardening which were useful around the missions before independence. There were various education forms and structure which included African traditional education, Islamic education, and formal/Western education brought by colonialism. The Frazer report of 1909 recommended the establishment of separate educational systems for Europeans, Asians and Africans. This system was maintained until 1963 when Kenya gained independence, (GOK, 1964). A commission was set up to make changes in the formal educational system. The focus of the commission was to build a national identity and to unify the different ethnicities through subjects in school such as history and civics, and civic education for the masses.

After independence, the government of Kenya undertook to reform education in line with the physical, political, social and economic conditions and challenges of the independent state of Kenya in 1963. The Government undertook to reform education through establishment of various education commissions that have shaped or changed the education system since independence to date (Bogonko, 1991). The government of Kenya established various education commissions which has reformed and shaped the education system since independence to facilitate or address; shortage of skilled manpower, evils facing society thus ignorance, poverty, and diseases. The Commissions were led by prominent scholars in and outside of Kenya. The main education commissions and their findings since 1963 include the following;

Ominde Report, 1964; Bessey Report, 1972; Gachathi Report, 1976; Mackay Report, 1981; Kamunge Report, 1988 and Koech Report, 1999.

The Government did this by making policy documents. And policy in this case means a statement of commitment by the government to undertake specific programme directed at the achievement of certain goals. It also constitutes a notice to citizens at large that reform/new revised programs of action on particular issues are intended within a given time frame. The education reforms after independence took two forms, thus there were two methods used to achieve the process of education reforms (Otiende, et.al). First, there was the establishment of commissions to deal with matters of education on periodicals. Secondly, to use recommendations of these commissions to reform and develop education in Kenya.

The current Kenya education framework has its basis in colonial education. The existing framework has built on this, and reformed or modified the education system to reflect the needs and aspirations of national development. The legislations, commissions and policies constitute the legal framework of the country's education system. After independence in 1963, the government laid emphasis on education as a vehicle for human resource and national development. Indeed, education plays a key role in the development of human capital that is important input in production. For this reason, educational reforms in post-independence era through education policy documents have consistently stressed on the need to offer an education that addresses the importance of national development, national integration, economic growth and poverty eradication (TSC, 2005:6).

Another theme that was focused in the policy documents is the need to promote equality and social justice in Kenya. In the colonial epoch, the colonial government perpetuated a system of education that was characterized by inequality, discrimination and racism. Policy documents on education commissions and committees at the time emphasized on curriculum for Africans that confined them to inferior roles such as menial work, religious codes and vocational training which Ochieng' (1989) observes as "education for hewers of wood and drawers of water" education was supposed to equip them with skills to serve at the bottom of the social hierarchy.

5.2.2 Kenya's current system of education

The education system provides for eight years of primary, four years of secondary and four years of university education. This is referred to as the 8-4-4 system of education.

5.2.2.1 Pre-primary education

Before joining primary school, children aged between three and six are required to attend pre-primary for one or two years. The main objective is to cater for the total development of a child, including the physical, spiritual, social and mental growth, brought about through formal and informal interaction with the parents and the community. Areas of concentration have been health, nutrition, care and basic education.

5.2.2.2 Primary Education

Primary school is the first phase of the 8-4-4 education system and serves students between the ages of six and fourteen. The main purpose of primary education is to prepare students to participate in the social, political and economic well-being of the country and prepare them to be global citizens. Primary education is universal, free and compulsory. A major goal of primary school education is to develop self-expression, self-discipline and self-reliance, while at the same time providing a rounded education experience. The primary school years are split into what is called Standard One through to Standard Eight. At the end of Standard Eight the students sit the Kenyan Certificate of Primary Education (KCPE), the results of which are used to determine placement at secondary school. Candidates are examined in five subjects: Kiswahili, English, Science and Agriculture, Mathematics and Social Studies (Bedi, et al., 2004).

5.2.2.3 Secondary Education

Secondary education begins around the age of fourteen and lasts for four years. However due to delayed primary school entry and limited educational schools and facilities, many students (especially those from rural areas) experience late admission into the secondary education system. Secondary schools in Kenya are aimed at meeting the needs of students who end their education after secondary school and also those who proceed onto tertiary education. Due to the large increase in primary school enrolment (since it became free) the number of students seeking secondary education has grown significantly. In 1963 (the start of independence) there were 151 secondary schools and the total number of students enrolled was 30,120. Today there are over 3,000 secondary schools and the enrolment is more than 650,000 students.

5.2.2.4 Tertiary Education

There are 22 public universities, 14 chartered private universities and 12 universities with Letter of Interim Authority (LIA). The enrolment in the universities is over 60,000 students. In addition to adding

technical courses at primary and secondary school level, vocational education has been a focus of the education system. The Ministry of Higher Education has developed a national strategy for technical and vocational education and training aimed at the rehabilitation of physical facilities and equipment and ensuring that vocational and technical institutions are appropriately equipped.

5.2.3 Transforming the system of education in Kenya

During the colonial regime, Kenyans as other Africans, experienced severe discrimination economically, politically, socially and academically (Urch, 1968; Bogonko, 1992; Otiende et al., 1992). Education system was both stratified and segregated in nature and was therefore offered on racial lines. In such circumstances, Kenyan (Africans) benefited the least from the system. Therefore Kenya's attainment of independence from Britain in 1963 was a great source of hope to her people, for it marked an end to the stings of long suffering and discrimination. The independent Kenya therefore needed to make changes in different areas in order to reflect the needs of her people. Obviously, education was one of such areas that required such changes, given the way it was operated during the colonial regime.

The first changes were achieved through the Ominde Commission Report of 1964 (Republic of Kenya, 1964). The Ominde Commission became the first educational committee in the independent Kenya to look into the educational issues that affected the country and made recommendations for what they considered to be appropriate changes (Simiyu, 1990). Among the changes, were the adoption of 7-4-2-3 structure - seven years primary, four years of lower secondary, two years of upper secondary and three years of university education (Republic of Kenya, 1964). Other changes included the content of subjects such as history and geography in an attempt to build a national identity and the abolition of technical and vocational education in primary education (Republic of Kenya, 1964; Owino, 1997; Simiyu, 2001). Kenya then began a campaign for free primary education and since then, the system of education has undergone transformation twice.

Since independence, the following political education reforms have taken place in Kenya: The introduction of the 8-4-4 Education system; establishment of the second university Moi University; introduction of free education in 1974 and 2003; academic curriculum reforms, vocational and technical subjects; recruitment and training of teachers; selection of students to join public universities and schools, that is national and provincial. However to date politics still play a huge role in the education sector, for instance names of universities are a political tool, read Kenyatta University and Moi University; promotion of teachers and management of secondary schools that is appointment of Board of Governors (BOGs) and chairman of university council – all are political issues; prize giving during co-curriculum

competitions, a politician graces the occasion and school development especially building classes, school land, school buses, among others politicians play a big role in facilitation for schools to acquire them.

5.2.4 Change from 7-4-2-3 to 8-4-4

The call for change from 7-4-2-3 to 8-4-4 was widespread and based on the perceived weakness of the former educational policy. For instance, the critics argued that the former system lacked the capacity and flexibility to respond to the changing aspirations of individual Kenyans and the labour market needs, in terms of new skills, new technologies and the attitude to work (Owino, 1997). The deficiencies of the former educational policy manifested itself through the increased number of school leavers who went through primary and secondary education, but were unemployed at the end because they either lacked the specific skills required for wage employment/self-employment or because the leavers were selective about the type of jobs they thought they had been prepared for (Owino, 1997).

On unemployment, the presidential committee (1982/83) on unemployment noted that one of the factors, which contributed to unemployment, was the type and quality of education, which was being imparted in schools. It further noted that the subjects, which were taught at both primary and secondary schools, were heavily biased towards intellectualism and lacked the development of adaptive skills (Owino, 1997). Similar sentiments were also echoed by Simiyu (2001), when he observed that the 7-4-2-3 policy lacked the technical and vocational component and was therefore accused of being highly academic.

The 7-4-2-3 policy was, thus criticized in two major areas (2001): The policy was being too academic and therefore not suitable for direct employment. Consequently the policy lacked orientation to employment and that the policy encouraged elitist and individualistic attitudes among school leavers, something that was considered incompatible to the African socialist milieu. The Gachathi Report (Republic of Kenya, 1976, p. 33-34) also raised the issue of unemployment in relation to 7-4-2-3 policy, noting that one of the largest problems confronting the country was that of unemployment. The problem was aggravated by the annual outputs of school leavers whose numbers continued to swell following the enormous expansion of the education system in the first years of independence. The Gathachi Report (Republic of Kenya, 1976, p.34) further observed that unemployment, which was said to have started among primary school leavers, had spread to embrace even university graduates.

Hence, education, which was regarded by Kenyans as a medium for social mobility and national economic development failed to deliver as the number of unemployed school leavers continued to grow. In a sense the 7-4-2-3 system was regarded as a failing tool for national development. The policy was

constrained by lack of qualified staff (due to rural-urban migration of qualified staff) and centralization of management that permitted little or no flexibility. Therefore a change of policy was required. Among those who made calls for change of educational policy were, the Kenya National Assembly's Select Committee on unemployment (1970) as cited in Maleche (1976, p.13) indicated an urgent change of the 7-4-2-3 curriculum, noting that of fundamental importance to the solution of unemployment problem will be a reform of content and scope of educational curricula in the nation's education system.

The report observed that the circular was too exclusively academic. The school-leavers could not apply their knowledge to farming or to other activities like book-keeping, masonry, and carpentry and joinery. The school curricula needed therefore be revised to give them a more practical bias. Teaching on agriculture and practical skills had to be established both at primary and secondary schools. The International Labour Organization (ILO) also called for a change to the education system in order to help reduce unemployment. The change consisted of increasing the technical and vocational aspects of the curriculum. The move by ILO towards vocationalizing the education system won support from the World Bank.

5.2.5 Introduction of the 8-4-4 system of education

In 1981, a Presidential Working Party was commissioned to examine curriculum reform of the entire education system in the country. The committee submitted a recommendation to change the 7-4-2-3 education system to the current 8-4-4 system of education, whose overall structure was similar to the U.S. education system. The 8-4-4 system was launched in January 1985. Emphasis was placed on Mathematics, English, and vocational subjects. The focus on vocational education was aimed at preparing students who would not continue on with secondary education, those who would be self-employed, and those who would be seeking employment in the non-formal sector. In 1985 President Daniel arap Moi introduced the 8-4-4 system of education. With the introduction of the 8-4-4 system Certificate of Primary Education (CPE) became Kenya Certificate of Primary Education (KCPE), while Kenya Certificate of Education (KCE) became the Kenya Certificate of Secondary Education (KCSE).

It was observed at the introduction of the 8-4-4 system of education that the fundamental aim of the school education service is to develop the potential of every individual child, so that students become independent-minded and society aware adults, equipped with knowledge, skills, and attitudes which would enable them to lead a full life and play a positive role in the social and economic development of the community (Chi-kim, 1998, p.99). On the importance of technical and vocational education primary schools, on which the 8-4-4 system was based, Simiyu (2001, p.6) argues that: primary school technical

and vocational education is the foundation for the development of effective and interactive skills in learners, and perhaps the only avenue for the pupils at this level to access technical and vocational experience. He adds that when this education is offered, learners have opportunity to acquire positive attitudes towards manipulation tasks, while they socialize with one another. Thus, providing them with a rare opportunity of developing domain of knowledge namely, cognitive, psychomotor, affective and interactive skills.

5.2.6 Implementation of the 8-4-4 system of education

As mentioned earlier, the 8-4-4 policy was favoured on the assumption that it would equip the students with employable skills which they would use either for self-employment or wage employment. In other words the new policy would improve the student's employment potential and thus make them self-reliant (Amutabi, 2003). The Ministry of Education (1984) as cited in King and McGrath (2002, p.85-86) shared similar sentiments, noting that the 8-4-4 policy was designed to encourage students to become more self-reliant and better oriented towards self-employment. It contained a rather broad curriculum at both primary and secondary levels, with a strong emphasis on practical subjects sitting alongside a rather traditional approach to academic subject. Business education was introduced into upper primary as a way of encouraging self-employment. Business education's focus on providing basic knowledge and skills on issues such as record keeping meant there was a cross-curricular emphasis on attitudinal orientation towards self-employment.

The Ministry of Education was charged with the responsibility of implementing the 8-4-4 policy (Eisemon, 1988). It appointed two task forces; that is the task force on curriculum implementation and the assessment of the cost of implementing the 8-4-4 curriculum. The task force on curriculum implementation recommended that (The Ministry of Education (1984, p.4) as cited in Eisemon, 1988, p.29), thus "a structure should lead to the development of communication skills (literacy) through the teaching of mother tongue, English, and Swahili languages. The development of mathematical outlook will be done through the teaching of mathematics, while the development of scientific outlook will be done through the teaching of integrated science. The development and acquisition of social and cultural knowledge, skills and attitudes will be done through the teaching of social studies, religious education, music and physical education, art, craft and home science. All these will provide for practical knowledge and skills."

The task force in charge of assessing the cost of implementation submitted their report in late 1983, but urged caution and gradualism in implementing 8-4-4 reform (Eisemon, 1988). The observations of the

report were as follows (Ministry of Education (1984, p. 30) as cited in Eisemon, 1988, p. 30): The cost of sustaining education system represented about 26% of the national budget; The estimated cost of building and equipping more than 1,300 standard eight classes, employing new teachers and supplying free milk to additional 437,330 pupils was over US\$3,337,000, which was not available. But the savings of the government were projected to be less than a quarter of the total. The task force also considered the implication of eight years scheme in relationship to the availability of trained teachers. It emerged that two-thirds of the 'teaching stock' at the primary level in 1983 had one or two years of initial training. None of them was trained in technical and vocational subjects; thus the implementation of the 8-4-4 curriculum would have constrained the progress that had been achieved in terms of increasing the proportion of trained teachers in primary schools.

In February 1984 the Minister for Education and the President were determined to proceed with the 8-4-4 scheme and cautioned that "there should be no more debate about it" (Weekly Review (1984, p.9) as cited in Eisemon (1988, p.30). Then, the Kenya Institute of Education was instructed to prepare new syllabuses for standard VII and VIII (in less than a month) and the district officers and schools were made responsible for ensuring that standard eight class rooms were ready in time for registration of students in January 1985. The government employed more than 18,000 additional teachers (untrained) in order to cope with the demand of additional year (year eight).

The implementation of the new scheme was burdensome because it required teachers, parents and older students to donate and sacrifice funds for the classroom constructions and furniture. Interestingly, textbooks for standard VII and VIII were not available in several rural schools in time for the first session (Eisemon, 1988). It was also realized that the initial projections on space and facilities requirements rarely took into consideration the overwhelming enrolment that is two to three times more than the initial enrolment, as a result of implementing the 8-4-4 policy. A number of schools experienced shortage of space in their compounds for recreation, teaching agriculture, crafts and other technical and vocational subjects (Eisemon, 1988).

5.2.7 The 8-4-4 educational policy confronted

The 8-4-4 policy has faced criticism since its inception. It has been attacked on several fronts. For instance the implementation of the policy has been criticized for having been done hurriedly, that the curriculum implementation process was 'short-circuited' when the piloting was stopped before completion of primary cycles and the pilot curriculum and curriculum support materials introduced nationwide in 1985 in primary schools and in 1986 in secondary schools (Kiniale, 2000, p.7). The

implementation was done without adequate preparations. There were views that politicians may not have consulted with experts in terms of timing and resource readiness for the new policy (Amutabi, 2003). The implementation should have waited until all the necessary infrastructures were set up. For instance sufficient classrooms and workshops for the extra class in standard VIII should have been prepared prior to implementing the new policy (Amutabi, 2003).

The weakness associated with the implementation of the new policy, is echoed by Sifuna (1990) as cited in King and McGrath (2002, p.92) who claims that the implementation was rushed and debate stifled. He also pointed to the inadequate level of facilities and resources that were provided for the new approach. These weaknesses not only affected the performance of the 8-4-4 system in its early years, but also created a powerful negative perception of the system, which seems to have clouded popular evaluation of it throughout its decade and half of existence. Although the new policy curriculum allowed for more options in technical and vocational subjects, it experienced serious shortages or lack of essential resources and facilities. Also local communities could not be mobilized to provide the facilities required. There were no trained technical and vocational subjects teachers and local craftsmen could not be used (Kerre, 1997; Simiyu, 2001). There were also claims that the new policy was only theoretically oriented due to lack of infrastructure (Amutabi, 2003).

Despite the implementation of 8-4-4 policy, the crisis of unemployment of primary school leavers was still evident (Desouza, 1987; Owino, 1997). And vocational subjects and activities continued to be seen as an extra burden both in practical daily activities in schools and in national examination (Owino, 1997). The new policy curriculum for primary school was also claimed to be overcrowded or overstretched (Owino, 1997; King & McGrath, 2002; Amutabi, 2003). Therefore it was an obstacle to effective learning because the pupils worked under great pressure. They were being taught 13 subjects, nine of which were examined at the end of standard eight. According to Abagi (1997a), to cover an extended curriculum in the same period increased pressure to students and staff and thus reduced students' performance (lower test scores). For instance the pupils stayed in school from 7 am to 6 pm and also had short holidays. The pressure negatively affected the children's motivation to learn resulting in the rise in dropouts (Owino, 1997).

The Kamunge Report (Republic of Kenya, 1988) as cited in Owino (1997, p.32), raised the issue of curriculum overload. It observed that the primary education curriculum is overcrowded in terms of the number of subjects being studied and examined in relation to the time available. Concern was also expressed that this may result in a superficial coverage of the curriculum, which could not give pupils

enough grasp of the basic principles and concepts. Therefore the Kamunge Report (Republic of Kenya, 1988) as cited in Owino (1997, p.33) recommended that the primary school be reviewed to allow the option in vocational subjects and more time to cover the curriculum more efficiently. Abagi and Odipo (1997, p.16) also noted that the overloaded 8-4-4 curriculum affected the pupils' participation in school negatively. At the schools level, standard examination in agriculture, art and craft consisted of multiple-choice type of questions. Although this type of examination has the advantage of objectivity and easy marking, its validity to predict the leavers' ability in higher level of education training and employment was doubtful (Owino, 1997).

Also by the time technical and vocational education was introduced within the 8-4-4 policy, there was a serious shortage of qualified teachers for vocational subjects. Many of the teachers were untrained, for instance untrained teachers (those with no formal teaching qualifications) increased sharply from 70% in 1990 to 96.6% in 1998), while some had been to teachers college, but were not trained in the teaching of vocational subjects, they were thus limited in knowledge and pedagogy (Owino, 199; Bedi et al., 2002). Sifuna (1990) as cited in King and McGrath (2002, p.93) observes that many education reforms internationally have been undermined by the failure to reorient existing teachers and prepare new teachers with the necessary skills to deliver new curricula. This has been seen as an important weakness with the 8-4-4 implementation in Kenya.

The new system placed a substantial financial burden on parents. Physical facilities including workshops and home science classroom had to be constructed to cater for the new vocational training curricular. The financial responsibility for constructing these facilities rested on the parents, school committees and the local community. The additional subjects to be taught (an increase from six (6) to thirteen (13) subjects) under the new curriculum also increased the financial requirements for textbooks. No wonder Amutabi (2003, p.367) noted that, many parents and educationists were fiercely critical of what is known as the 8-4-4 system in Kenya.

The Koech Report (Republic of Kenya, 1999) identified other weakness of the new policy. They included the loss of two years of 'A' level, which robbed the students the opportunity to mature before entering university. As a result, the report claimed that a number of students could not cope with the transition to university life and unsupervised learning life styles. The report also observed that teachers should have been educated on the dynamics and demands of the new system through workshops and short courses, especially during holidays prior to implementation (Republic of Kenya, 1999). Also colleges should have reviewed their curriculum to reflect the needs of the system at least three years prior to the

commencement (Republic of Kenya, 1999). The report continued to argue that Kenyans were just given less than a year to prepare for the new system (Republic of Kenya, 1999). The new policy also encouraged rote learning from primary to university, marked with regurgitation of facts in examinations by learners (Amutabi, 2003). Therefore inadequate training and unavailability of frequent staff development courses as well as lack of training materials in schools limited the teachers' ability to control the teaching and learning in vocational education in Kenya.

However, the problem that confronted the new policy was beyond curricula issues. King and McGrath (2002, p.91-92), argues that on the basis of the Totally Integrated Quality Education and Training (TIQET) and Master plan, the failings experienced under 8-4-4 are independent of the circular structure and go to the heart of weakness in the contemporary political economy of Kenya. Complaints about corruption and political tampering with examination results, the announcement and rescinding of teacher retrenchments, the nonpayment of promised salary increased, head teachers' refusal to implement a policy of fees reduction, and cutbacks in textbook provision by the Ministry were indicative of problems that were likely to persist under whatever approach to curriculum.

5.2.8 Dissatisfaction with the 8-4-4 system of education in Kenya

Although the 8-4-4 policy has been described as a major educational reform in the history of Kenya's education system, there are views that it is a great devastation. For instance, Amutabi (2003, p.136) notes that the 8-4-4 system of education introduced in 1985 still remains the most radical and perhaps mindless change in the education in Kenya since independence. It has already caused great devastation to Kenya that even if it were changed today, the toll on the nation will be felt for many years to come. Its devastation is similar to that of the failed Ujamaa in Tanzania many years after it was officially scrapped. Muda (1999) also notes that the 8-4-4 system has been the subject of national debate since its inception. It has been criticized for being broad, expensive and burdensome to pupils and parents. The education policy has also been implicated in the worst strikes that engulfed a number of schools in Kenya during the year 2001 and the general poor quality of education (Amutabi, 2003).

The other big issue is that head teachers agree that the main objectives for the change of policy were to equip youths with employable skills with which to secure jobs in the labour market. But as already indicated, the change of policy has neither influenced the youths towards technical and vocational career nor provided them with employable skills with which to secure jobs in the labour market. Lack of technically and vocationally qualified teachers and weak infrastructure constrained the system from achieving one of its fundamental objectives. Most head teachers have expressed the view that the 8-4-4

system of education was academically oriented rather than technically and vocationally as initially conceived. They have also suggested that the system should be scrapped and be replaced by the former (7-4-2-3) system of education.

One important point to note is that the political class (policy makers) interferes with proper reform process, which yields nothing unless professionals are left to plan carry out and implement reform. Nevertheless, currently educationists recognize the role of political class to centralize, co-ordination and planning so that Government and society or community get returns in the cost of education. Education reforms since independence from 1963 to 2010, through education commissions have shaped the education system to the level it is right now. However, the following are the main challenges that have gone against the spirit and objectives of education reforms: resistance to education change or reforms; political interference; cost of implementing education reforms such as free primary and secondary education; challenges of universal primary education and education for all; time, poor planning and non-implementation of reforms; poor method of change (power coercive strategy); changing needs of Kenyans – keep on changing putting that pressure on education; colonial government legacy – copying the colonial reform process, timing and procedure; youth employment; physical facilities-inadequate leading to congestion in learning institution hence quality is negatively affected; population growth; reforms failed to yield results as desired thus changed to look like the former – retrogressing to the mean; reforms failed to be implemented in what Amutabi calls “punctuated reform implementation” process in Kenya (Castle, 1966, Amutabi, 2003).

From policy documents since independence, namely Ominde Report to Koech Report, some of the education reforms and unified curriculum cannot achieve intended goals of the community as expected. For instance, previously, before Sessional Paper no 1 of 2005, in Muslim areas such as Coast and North Eastern parts of Kenya, the main religious subject was Christian Religious Education (CRE) and not Islamic Religious Studies (IRE). This is totally different from community needs. In addition, fishing and agriculture taught to mainly pastoral groups of North Eastern and Northern Kenya and yet these environments favors livestock keeping. The curriculum should be environmentally friendly to the community needs hence the community should dictate the reforms in education to meet the community needs and challenges.

The recommendations were not well thought of and implementation was done by force without involving the stakeholders such as parents, teachers, and now there is a move to revert back to 7-4-2-3 or change the 8-4-4. There is even a proposal to change 8-4-4 to 2-6-6-3. Teachers and parents rejected the change

(Daily Nation, 28th May, 2012). The only handicap for changing 8-4-4 has been the cost of the new system, parents fear extra payments of high cost and teachers fearing overloaded curriculum with less teaching and burden to students which could compromise standards.

An in-depth examination of the rationale for introducing 8-4-4 system gives a hidden agenda, according to Amutabi (2003) the 8-4-4 system of education was introduced as a political self-actualization by the Government, thus settling some imbalances and political scores (Amutabi.2003). There was no crisis in education sector that would have forced the Government to change the education system. This is “proved by numerous challenges such as lack of involvement of relevant stakeholders, infrastructures such as classrooms, workshops, curriculum, trained personnel, literature and pedagogy” (Sifuna, 1990, Amutabi, 2003).

The shortfalls of 8-4-4 system forced the Government and other stakeholders to set up many commissions to try to operationalize the new education system. Overwhelming challenges of 8-4-4 after its introduction in 1985 forced the government to appoint a Presidential working committee on education and manpower training for the next decade and beyond chaired by an educationist Dr. James Kamunge. The main factors were the shortcomings of 8-4-4 as highlighted, educated youth unemployment and examination oriented system. The integration of technical and vocational subjects (pre-vocational education) in the mainstream education system was a serious challenge in developing countries given the state of their weak economies. Prevocational education was expensive in terms of staff, workshops, tools/equipment and materials (infrastructure).

The 8-4-4 educational policy, and especially as a pre-vocational programme, experienced serious problems. For instance, the system did not only experience serious shortage of teachers, but professionally incompetent staff (Owino, 1997). Owino (1997, p.129) notes that: many of the vocational educational teachers were professionally incompetent to handle the innovation. Though many had long teaching experience and were trained, the training programme had not been specifically geared to the teaching of vocational subjects. Furthermore, the in-service courses organized for them were rare and when present, they were short and generally limited in scope or course. It was therefore concluded that teachers' incompetence largely contributed to the failure to trigger desired effects through vocational education.

The other problem was associated with assessment. It emerged that the marks of practical assessment of the vocational subjects in schools were never included in the grading of pupils' performance certificates.

Therefore examinations were not encouraging students to acquire vocational skills. There was also the problem associated with the infrastructure that is physical facilities and resources. It emerged that physical facilities were by far inadequate and with the policy of cost sharing.

Lack of change of attitude was another challenge that faced the new education policy. It emerged that the 8-4-4 system of education was unable to change the pupils' attitude towards vocational career. It is being claimed that one of the purpose of introducing vocational education in Kenya was to change the pupils' attitude and inspiration in favour of vocational subjects leading to a vocational career. But the system failed to achieve one of its fundamental objectives, which is producing graduates with marketable skills. The system of education did not influence the youths towards technical and vocational career. Therefore the 8-4-4 educational policy has not been a successful one due to myriads of constraining factors, namely, the Kenya government failed to consult with the experts and planners, hurried implementation, lack of qualified technically and vocationally qualified staff and weak infrastructure (lack of adequate workshops/laboratory, lack of sufficient tools/equipment and lack of materials).

These challenges forced Kenya to change its education policy in the late 1990's. The government established a Commission of inquiry into the education system of Kenya. It was appointed by President Moi in 1998 to recommend ways of enabling the education system to facilitate national unity, social responsibility, accelerate industrial and technological development and lifelong learning. The commission was commonly called the totally integrated quality education and training (TIQET). The recommendations of Koech Commission are within the scope of the Vision 2030, since they touch on various areas such as access, transition rate, equity, equality among others. The objectives and Recommendations cut across all pillars of Vision 2030. There are those that are in political, social and economic pillars respectively.

The recommendation focused on the provision of education to marginally gifted handicapped, remote areas in line with current needs. The recommendation also emphasized the emerging issues such as gender, equity, equality, governance, human right, democracy and HIV/AIDS, which correlate well with Vision 2030. However, different from 8-4-4 system, Sifuna (2000) notes that TIQET had some basic innovations namely; the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors, introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation in post-secondary education; increased access to education through expanded alternative and continuing education; flexibility in

university admission; introduction of early childhood, special and technical education and continuous assessment (Sifuna, 2000).

The report had almost all education targets for Vision 2030, but it was not implemented by the then Government. It was perceived to be expensive and complex. The political class as usual was not enthusiastic to implement the Koech Report, yet it was geared towards rejuvenating the education sector by making it more focused, manageable, relevant and cost effective as Prof. Maurice Amutabi observes that these were *avante garde* recommendations that would have moved Kenya to higher levels of efficiency in education but which unfortunately were scuttled. (Amutabi, 2003:14).

Otiato (2009) further argues the reason for rejection of Koech Report was political rather than budgetary and logistical claims (Otiato, 2009). Indeed, the political class was unhappy with Koech recommendations, perhaps because the report did not agree with the political moves of the Government, and two, it recommended scrapping of 8-4-4 education system and the school milk programme, yet these were as dear to the political establishment of the day as the key legacy in the education system in Kenya. Moreover, Koech Report did not favour the Government's position the way Mackay report did in 1981.

The Government rejected the Koech Report; nevertheless, the ministry of education did introduce some cosmetic changes in the education system after rejecting the Koech Report. May be this was done to divert the attention of the public not to focus so much on the challenges facing the education system or to show that the Government was committed to addressing the education issues at hand which was not true since those issues and challenges had been tackled by Koech report, but the Government rejected them.

Sessional Paper No 1 of 2005 titled: *Paper on the Policy Framework for Education, Training and Research for 21st Century in Kenya* was a policy framework for Education, Training and Research, which provided reforms or new directions on the provision of education and Training at all levels. In the document, the government outlined strategies to improve education thus: access; quality; equity and completion rates (TSC, 2005). The Sessional Paper was based on recommendations of the National Conference on Education, Training and Research held on November, 2003 attended by more than 800 key stakeholders in education. In the paper the Government committed to achieve universal primary education by 2005, achieve Education for all by 2015 in line with Vision 2030.

5.2.9 Ignoring research findings and discontent with the 8-4-4 system of education

When the famous Ominde Commission was set up in 1963, it recommended a change in the then education system with an intention to discard its colonial roots and relate it to the actual needs of Kenyan learners. Similar recommendations were in the Koech Report (1999). The recommendations were informed by the view that the system placed much emphasis on vocational subjects. The new system was expected to equip dropouts at whatever level with adequate skills for self-employment or employment in the informal sector. Thus, the new system would promote self-sufficiency among learners by offering a purposeful education. However, more than two decades down the line, the 8-4-4 system has been seen as merely a process of imparting information. Learners' actual knowledge of what they are taught is scanty and cannot help them think outside the box. The system does not equip learners to be self-reliant, but promotes dependence. Perhaps, that is why after successful course of training, graduates desperately look for employment instead of creating some or employing themselves. The system tailors them to think their best option is formal employment. No wonder the rate of unemployment is high.

The role of primary school education in setting the foundation for one's life cannot be gainsaid. It is at this level that talents should be identified and nurtured, but this seems to have been watered down with time, and latent talents have been stunted and others killed. Those who have talents cannot fulfill them as the system does not allow such growth.

There are proposals to change the current system of education, but with the coming of the proposed new system of education, stakeholders should change approaches to children's learning. It is high time schools engaged the services of experts to serve as role models for learners at different levels. We now need more expertise-based career talks than never before at primary and secondary levels to equip learners for proper choice of careers. Also, learners should be advised on what subjects best suit their dream careers. The greatest undoing for the 8-4-4 system is the value it attaches to passing of exams. Students always prepare to pass exams at the expense of actual learning. That is how their minds have been trained. Failure to excel, you are branded a failure. In nutshell many say that 8-4-4 is tired, has failed to deliver its ideals, and should be rested.

A report launched in 2012 that recommended the scrapping of the 8-4-4 education system suggested that it be replaced with a 6-6-3 scheme. This task force was set up to align the education system to the new constitution. The 8-4-4 system has been described as one that is examination-oriented and that does not inculcate skills to learners. The perception is that if the 6-6-3 system is adopted, standard three pupils will

take County Examinations to “identify the strength of the pupils at this level”. The report says national examinations in Upper Primary (standard six), Junior High (form two) and Senior High (form six) will give students “direction in terms of specialization”. Under 8-4-4 the first national exam is done at standard eight, the second at form four and the final one at university.

With ongoing integration of the East Africa region, there is need to harmonize our education systems. It is argued that the new system will make our system mature in modeling children. It remains to be seen if the new system would harmonize education in a region that is making every effort to integrate. Tanzania and Uganda have the 7-4-2-3 system that Kenya used before switching to 8-4-4 in 1985. New members to the East African Community (EAC) bloc, Rwanda and Burundi, follow the 6-3-3-4 system. The 7-4-2-3 education structure was modelled along the British education system. It provided seven years of primary education; four years of lower secondary education; two years of upper secondary education; and three years of university.

The need for a skilled labour prompted the government to introduce 8-4-4. But the system failed in that mandate. It turned out to be just another drill for examinations when vocational courses could not be sustained. The proposed 6-6-3 would still be exam-oriented as long as the curriculum is focused on selection rather than learning. What should have informed the change is Vision 2030, but when you look at it, it has nothing to do with the change of the education system.

Any new system that is introduced should not have an overloaded curriculum like the 8-4-4 which has been exam-oriented. Funds should rightly be channeled for teaching materials besides ensuring that there is proper leadership in schools. Between 1964 and 1985, the country followed the 7-4-2-3 system, which was to meet the urgent need for skilled workers to hold positions previously held by the British. The government set out to quickly expand educational opportunities to its citizens. In 1981, a Presidential Working Party was commissioned to examine curriculum reform of the entire education system in the country. The committee submitted a recommendation to change the 7-4-2-3 education system to 8-4-4 system of education, whose overall structure was similar to the US education system. The 8-4-4 system was launched in January 1985.

5.2.10 Policy Reforms as a result of disappointments with the 8-4-4 education system

Since independence the Kenyan educational system has experienced several fundamental changes (reforms) in structure and in curricula content (Bedi et al., 2000). Such changes were influenced by a number of commissions. The government realized that education was the key to national development

and therefore appointed commissions to look into entire education system. The commission's work is referred to as reports, hence we have, The Ominde Report (Republic of Kenya, 1964/5); The Gathathi Report (Republic of Kenya, 1976); The Mackey Report (Republic of Kenya, 1981); The Wanjigi Report (Republic of Kenya, 1983); The Mungai Report (Republic of Kenya, 1995); The Ndegwa Report (Republic of Kenya, 1991) and The Koech Report (Republic of Kenya, 1999). These constituted major commissions of enquiry into Kenya's educational systems issues.

Interestingly, a majority of the commission reports were either rejected or partially implemented. For instance (Muya, 2000): - The Kamunge Report (Republic of Kenya, 1985) on education and training which recommended the reduction of examination subjects under the 8-4-4 system was implemented in secondary schools, but ignored at the primary schools level; the Gachathi Report (Republic of Kenya, 1976) was partially implemented i.e. nine years education (pre-primary and primary) and the integration of technical and vocational subjects in the curriculum, as a way of addressing the unemployment of school leavers; the Mackay Report (Republic of Kenya, 1981) was almost fully implemented i.e. the establishment of the second university (Moi). It also contributed to the adoption of 8-4-4 system of education (although it was not part of its terms of reference). The president rejected the Koech Report (Republic of Kenya, 1999); the 1991 findings of the Sagini Report on mass indiscipline in schools was neither implemented nor made public and the Mungai Report (Republic of Kenya, 1995) on the financing of higher education remains a classified document (Muya, 2000).

On the commissions and their reports, Amutabi (2003, p.141) notes that many of the education committees and commissions in Kenya appear to be appointed as response to certain pressures and crises to wade off public concern. The commissions reports are usually put aside after the crises or pressure are over and little or no action is taken". Those commissions' reports, that were implemented, made profound contributions to certain aspects of the education system in Kenya, for instance, the Gachathi and Mackay Reports contributed to the change of education policy from 7-4-2-3 to 8-4-4. The Gachathi report noted with great concern the rising rate of unemployment among school leavers and recommended the restructuring of the education system curriculum in order to have more streams of science, mathematics and, technical and vocational subjects (Republic of Kenya, 1976). The Mackay Report influenced the extension of primary education from seven to eight years and thus influenced the restructuring of the education system from 7-4-2-3 to 8-4-4 and the introduction of technical and vocational, that is practical subjects in primary schools (Kiniale, 2000). Both reports emphasized the integration of technical and vocational education in the entire Kenyan educational system right from primary to tertiary levels (Simiyu, 2001).

Education reforms have been handled by the government to achieve political objectives; politicians have handled education reform as a political tool rather than technical process. This led to resistance to reforms in education, especially the Mackay Commission of 1981 and the creation of 8-4-4 Education System. This is why Kenyan parents and students have flocked Ugandan schools for 'Advance' level and colleges such as Bugema University, Kampala University, Busoga and Makerere. This shows that Kenyans are not so happy with education reform of 1981, more so Mackay Commission created Moi University as a technology based university in 1981, there were challenges such as inadequate facilities for training, lack of qualified staff and the personnel at the university could not accommodate technology hence not able to provide correct technical knowledge required then. Therefore, critics also argue that initially the school of medicine produced incompetent doctors, thus the curriculum of the school of medicine at the university taught and trained doctors to prevent diseases, but not to treat the patients suffering from various diseases.

Thus, education reform process has not served the Kenyans well. Thus, Kenyans will always yearn to change the current 8-4-4 system with the only handicap being inadequate finance and resistance by parents and teachers. As one daily newspaper quoted: "the proposed education system to replace the current 8-4-4 to 2-6-6-3, teachers and parents rejected the change" (Daily Nation, 6th June, 2012). The government in their reform process after independence used power coercive approach to reform education sector without involving other stakeholders. This led to the failure of reform implementation or the implementing agencies used the policy of retrogressing to the mean thus to fight reform or change hence the change did not achieve anything. Moreover, education reforms created more challenges than solving education problems. Academically oriented and elitist education for white collar jobs in urban areas, and school leaver unemployment has been thorny issues in education. A power coercive strategy has failed education reform process in Kenya since independence.

In a major departure from the current system, there is now a proposal that provides for specialization at senior secondary education level on the table. This would see the introduction of a 2-6-3-3-3 system. In the new structure, a child would take two years in pre-school, six in primary education, three in junior secondary education, three in senior secondary education and three at University. The new system would focus on child development, skills and competencies to be learned and ultimate outcome at each level from early childhood care and development to University level.

5.3 Unsuccessful agricultural policies in Kenya

5.3.1 *Kenya's Agricultural policies have been unsuccessful to secure food security*

Agriculture is the mainstay of Kenya's economy, currently contributing over 24 per cent of the Gross Domestic Product (GDP) directly, and another 27 per cent indirectly. The sector also accounts for 65 per cent of Kenya's total exports; provides more than 18 per cent of formal employment; accounts for more than 70 per cent of informal employment in the rural areas, and generally provides a livelihood for close to 80 per cent of the Kenyan population (Aksoy, 2012). However, the performance of the sector over the last two decades has been declining. This trend must be reversed to meet the challenges of Millennium Development Goal 1 (MDG 1) of eradicating extreme hunger and poverty by year 2015.

The Kenyan agricultural sector is dualistic in nature consisting of a predominant smallholder subsector and a relatively small number of large-scale farmers and ranchers. However, major agricultural policy efforts have failed to relieve hunger and malnutrition in Kenya. The country is short of innovative farming and marketing strategies that can deal with the challenges of farming. Farming in Kenya's arid regions is particularly more challenging because of low and erratic rainfall, land and water depletion, thus the resulting declines in agricultural productivity.

Climate change is also having negative impacts on households. Unfortunately, effective technologies developed by decades of agricultural research have not been adopted by farmers. The success of Kenya's Strategy for Revitalizing Agriculture (SRA) would depend critically on Kenyan policy processes, structures and actors affecting agricultural policy in Kenya. Thus, it is imperative to briefly look at Kenyan agricultural policy-making, both historically and in the present and then pick out the challenges. On the whole, the policy-shaping environment in the agricultural sector has not been pro-poor and few incentives have existed for the Kenyan political elite to listen to the poor.

Historically, the agricultural policy environment has been shaped mainly by the influence of the patrimonial State. Kenya's political system concentrates power in the Presidency, thus, the relationship between ethnicity and agricultural practices. Policy formulation processes have tended to be biased in favour of particular ethnic groups, whilst penalizing others, for example through the selective allocation of trade licenses. The other issue is economic rent and patronage. Rent in the agricultural sector is created by artificial shortages through licensing and restrictions applied to the production and marketing of agricultural commodities inputs and services.

Ataman Aksoy (2012) for instance illustrates how political economy forces determine outcomes. One is the differential performance of tea and coffee sectors in Kenya and Tanzania. Both were the main sources of rent allocation and especially in Kenya, the Kikuyu since independence in 1963 was the major producer of coffee. The new president in 1978 was from another tribe (Kalenjin) and sought to undermine the political base of the past president by eliminating their main source of income. As a result, reform programs failed and coffee output stagnated. In Tanzania, cooperatives extracted rents from farmers through long-term contractual arrangements and acting as a monopoly. There was little systemic support for the sector, and output stagnated. These two coffee cases illustrate the impact of a political rent fight over an important sector for each economy. The reforms could not overcome the conflict among the groups.

In the tea sector, multinational companies (estates) were strong and created an umbrella under which smallholders received some protection. In Kenya, the tea sector, despite being owned historically by the Kikuyu tribe, was spared because smallholder expansion took place in the region dominated by the new president's tribe. In conjunction with the strength of the multinationals, this supported a positive outcome post-reform, despite attempts to eliminate an important source of income for the Kikuyu tribe. In Tanzania, the tea reforms were the least contentious among all commodities, in part reflecting the strength of the multinationals as well as the lack of involvement of the political elites in this sector. Most tea estates were not nationalized in contrast to other commodity estates. In this sector reforms were implemented efficiently and the sector performed well.

Kenya's post-independence agricultural policy was demand-driven, responding to local stakeholders needs. However, subsequent policy was supply driven and significantly influenced by donors from the mid 1970's, peaking with the introduction of Structural Adjustment and Integrated Rural Development Programmes. This was followed by the 'donor-do-nothing' phase of early 1990s to the 1994 Agricultural Sector Investment Program (ASIP).

5.3.2 Lessons learned from past agricultural policy formulation

Despite the failure of past agricultural policy initiatives to bring about agricultural development and poverty reduction, a number of lessons for donors can be drawn from past experience, particularly the importance of: cultivating local ownership and commitment to policy reforms within government and the wider community; local factors such as political economy, crucial for successful implementation of proposed policy reforms; identifying and establishing access to key decision makers influential in policy formulation; fully costing policy proposals and establishing methods to integrate the proposals into the

budgetary process and appreciating capacity gaps in civil service and the necessity of introducing a phased approach to complex policy issues.

There are a number of actors in decision making affecting agricultural policy today. Their roles are related to their control of development resources. The Government's role for instance has evolved, with now an increased focus on the contribution of other actors and participation, especially with the 2002 District Focus for Rural Development (DFRD) strategy. The donors' reforms were sometimes linked to donor conditionalities. Donors also initiate and influence policy decisions by matching funding through government budgetary frameworks, or financing programmes serving their interests. The civil service and Kenyan technocrats have often analyzed economic problems and proposed solutions in terms of policies - like sessional papers, development plans and commission reports and then there is the interest groups around key policy-making nodes who include the Presidency, ethnic groups, civil society organizations, academics and consultants.

5.3.3 Emerging agricultural policy formulation processes

Indications suggest the policy process is becoming more systematic, transparent and inclusive. A greater role for various stakeholders and a voice for parliamentarians, the private sector, civil society and the poor are emerging. The consultative ways in which the Poverty Reduction and Growth Facility (PRGF) in 2000 and Poverty Reduction Strategy Paper (PRSP 2001-2004) evolved is evidence of this. However, this has not been the case with the Kenya's strategy for revitalizing agriculture. The strategy for revitalizing agriculture is a 10-year agricultural policy framework designed to be implemented under the Medium-Term Expenditure Framework budgetary process, structured around three-year rolling plans. At the national level the framework for the Strategy for Revitalizing Agriculture (SRA) encompasses a yearly national forum of stakeholders in the agricultural sector, organized by lead ministries.

There is also an Inter-ministerial Coordination Committee (ICC) of ministries which provide services for the agricultural sector, such as the Ministry of Roads and Public Works. The committee includes private sector representatives, reflecting the emphasis of the SRA on private sector-led growth in agriculture. The lead ministries - the Ministry of Agriculture, Lands and Local Government - form the Technical Inter ministerial Committee (TIC) which acts as the secretariat to ICC. Technical inputs necessary to achieve SRA will be brought in at this level. The SRA recognizes only two roles for government: to provide a limited range of goods and services and to carry out a small range of regulatory functions that cannot be enforced by private self-regulation and industry code of conduct.

The SRA's reform agenda is ambitious. It is implementable, but requires a lot of resources, collaboration with other sectors in the form of sector wide approaches (SWAPs) and efficient structures. It is important for the supporting sectors to consider the agricultural sector when formulating their agendas. However SRA has faced a number of difficulties including: the lack of stakeholder ownership of the proposed reforms due to the speed with which the policy was brought out. This has serious implications for resource-allocation to implement proposed policy reforms; lack of capacity to carry out such a massive reform initiative and lack of provision within the policy document itself; lack of a monitoring and evaluation framework built into policy framework; failure to build in to the policy framework the ongoing public expenditure reforms that favour devolution of public expenditures to the counties and local authorities and neglect of co-operative movements and societies that manage the production and/ or marketing within the policy framework and process. Other weaknesses include: inadequate policy analysis capacity in ministries; lack of reliable and recent data; weaknesses in the budgetary process; problems of inter-ministerial co-ordination, personality driven processes, vested interests and confused paradigms and policy narratives.

5.3.4 Ineffective extension and advisory services in Kenya

Agricultural sector extension service plays an important role in sharing knowledge, technologies and agricultural information, and in linking the farmer to other actors in the economy. The extension service is therefore one of the critical change agents required to transform subsistence farming to modern and commercial agriculture. This is critically important in promoting household food security, improving incomes and reducing poverty.

Agricultural extension in Kenya dates back to the early 1900s, but its only notable success was in the dissemination of hybrid maize technology in the late 1960s and early 1970s. The extension system in Kenya has evolved through various stages since the colonial and post-independence eras. The popular approaches during colonial times were mainly tailored to cater for settler and commercial farming systems. These were well-packaged programs that combined extension services with credit and subsidized inputs. However, the extension approach used for indigenous Africans, who were mainly engaged in subsistence farming and pastoralism, was coercive in nature and therefore not readily accepted.

After independence, more persuasive and educational approaches and methods were adopted across the board, implemented mainly with the assistance of donor-funded projects and programmes. These efforts

included the conventional agricultural extension approach in the 1960s and 1970s, establishment of farmer and pastoralist training centres, the whole farm extension approach, and use of integrated agricultural development approach. In the 1980s and 1990s farming systems and training and visit approaches were introduced, (Republic of Kenya, 2004). Alongside these, the ‘commodity specialized approach’ was predominantly used in the large export commodity subsector spearheaded by commodity boards and private companies.

These approaches were characterized by high demand for manpower, time and financial resources. In general, all the approaches were essentially top-down and lacked participation in articulating client demands. Based on lessons learnt from the above approaches, the Government in collaboration with other stakeholders has in recent years embraced more participatory and demand-driven extension approaches. These are intended to tap farmer participation and private sector contribution in providing extension services. Some of these approaches include the focal area approach and farmer field schools (FFS).

Over the years, extension has emphasized on increasing production with little or no regard to value addition and marketing. However, it is now acknowledged that linking production with processing and marketing is a prerequisite in transforming agriculture from subsistence to a commercial enterprise. Other new concepts being embraced mainly to address financing of extension services include cost sharing, commercialization and privatization. Implementation of these concepts will take cognizance of clear exit and entry mechanisms to avoid disruption of the service.

The sector ministries in consultation with development partners have made recommendations on how to approach commercialization and privatization of extension and agricultural services. The guidelines are relatively easy to follow for agricultural services, but require more care when it comes to extension services. The current extension system is a product of gradual evolution in extension management practices and the entry of private sector, NGOs and civil society players over time in response to changes in economic policies, (Republic of Kenya, 2004). The changes have implications on how extension is managed, application of approaches and methods, coordination and linkages among key stakeholders, and the most optimal way of financing extension service in the country.

5.3.5 Significance of agricultural extension services

The importance of agricultural extension in relation to the fight against poverty was underscored in the Strategy to Revitalize Agriculture (SRA) (Republic of Kenya, 2004). Extension was identified as a critical area that required immediate action and is one among the six SRA first-tracked interventions. The

declining effectiveness of the extensions service was identified as a major factor that was hampering growth of Kenyan agriculture. In this regard, SRA suggested reform of the extension service system in order to create more effective linkages between research, extension and farmers, who are the ultimate beneficiaries.

The government through its Ministry of Agriculture provided the bulk of extension services to both small scale farmers and commercial producers. After the implementation of structural adjustment programs (SAPs) in the 1980s, the Kenyan government came under considerable pressure to scale down its dominant role in national economy (FAO, 1997). Kenya's agricultural extension budget together with extension staff numbers then plummeted significantly. At the same time, the performance of the public agricultural extension service in Kenya was questioned and its effectiveness became a very controversial subject (Gautam & Anderson 1999). The traditional public extension system was perceived as outdated, top-down, paternalistic, uniform (one-size fits-all), inflexible, subject to bureaucratic inefficiencies and therefore unable to cope with the dynamic demands of modern agriculture.

To respond to these challenges, the Ministry of Agriculture and Rural Development formulated the National Agricultural Extension Policy (NEAP) to guide improvements in delivery of extension services in 2001. The NEAP recognized the need to diversify, decentralize and strengthen the provision of extension services to increase their sustainability and relevance to farmers. The NEAP was meant to form the basis for all extension work within the government and interact with other stakeholders in agricultural research and development. To operationalize the NEAP, the ministry prepared a National Agricultural and Livestock Extension Program (NALEP) and NALEP Implementation Framework. The policy was criticized for being ambiguous on the specific roles of various actors in extension provision and particularly for failing to specify how the private sector would be encouraged to play a stronger role in extension. Thus there was a desire to reform the public extension into a system that was cost effective, responsive to farmers' needs, broad-based in service delivery, accountable and with in-built sustainability mechanisms. There was also a call for stronger involvement of stakeholders and beneficiaries at grass root level.

Rural and agricultural development is integral to any strategy to alleviate poverty and promote broad-based growth in Kenya. It was envisaged that the economic expansion momentum would be consolidated further through Vision 2030 Strategy which is a successor to the ERS (MOA, 2008). Extension is identified as a critical area that requires immediate action. Kenya's small farmers had traditionally benefited from two major types of extension systems. The first is the government extension system

focusing on mainly food crops. The government has tried a number of extension styles, including progressive or model farmer approach, integrated agricultural rural development approach, farm management, training and visit (T&V), attachment of officers to organizations, farming systems approaches and farmer field schools (FFS). The second type of extension system includes the commodity-based systems run by government parastatals, out grower companies, and cooperatives. The commodity-based extension deals mainly, but not exclusively with commercial crops such as coffee, tea, pyrethrum and sisal. These extension services are deliberately motivated by profits, and tend to work well when both the firm and farmers clearly benefit from the extension expenditures.

As a result of flaws in the public extension system, a third type of extension service has emerged: the privatized agricultural extension initiatives provided by private companies, non-governmental organizations (NGOs), community-based organizations (CBOs), and faith-based organizations (FBOs). Extension is now broadly seen as a complex system where services are provided by a range of private and public sector entities. The National Agricultural and Livestock Extension Program (NALEP), the main government extension program is implemented by the Ministry of Agriculture and supported by the government of Kenya (NALEP-GoK) and Swedish International Development Agency (NALEP-Sida). The program aims at enhancing the contribution of agriculture and livestock to social and economic development and poverty alleviation by promoting pluralistic, efficient and demand-driven extension services to farmers and agro-pastoralists (Muyanga & Jayne, 2006). But there are concerns about the effectiveness of the pluralistic agricultural extension systems involving both public and private extension delivery methods in reaching target farmers and producing expected results of lifting the standard of living of small holder rural farmers as well as boosting businesses for commercial farmers.

5.3.6 Major institutions providing inefficient extension/advisory services in Kenya

Agricultural extension services can be potentially provided by three main groups: the public sector, the private nonprofit sector and the private for-profit sector. The public sector includes Ministries and Departments of Agriculture and Agricultural Research Centers. In Kenya, the public sector is represented by the Ministry of Agriculture (MOA) through the Direction of Extension, Research and Technical Training, the Ministry of Livestock and Fisheries Development (MLFD) through Kenya Marine and Fisheries Research Institute (KMFRI), Kenyatta University, other universities and research institutions around the country. These institutions provide extension services through various departments and institutes.

The public extension institutions in this case include the Ministry of Agriculture (MOA) with the Directorate of Extension, Research Liaison and Technical Training; Extension Services Division; Agricultural Sector Coordination Unit and Horticulture Crops Development Authority. The other public institution would be the Ministry of Livestock and Fisheries Development (MLFD) with the Kenya Marine and Fisheries Research Institute (KMFRI). The Public Research and Education Institutions include the Kenya Agricultural Research Institute (KARI); Kenya Sugar Research Foundation (KESREF); Coffee Research Foundation (CRF); Tea Research Foundation of Kenya (TRFK); Agricultural Research and Development Investments and Capacity in Kenya; and Kenyatta University's, Center for Entrepreneurship and Enterprise Development. International Organizations include International Livestock Research Institute (ILRI) and the GIZ – Promotion of Private Sector Development, (Republic of Kenya, 2004). As for the Private Sector Firms, we have the private nonprofit sector that includes local and international Non-Governmental Organizations (NGOs), foundations, community boards and associations, bilateral and multilateral aid projects and other non-commercial associations. The private for-profit sector consists of commercial production and marketing firms (such as input manufacturers and distributors), commercial farmer or farmer group operated enterprises where farmers are both users and providers of agriculture information, agro-marketing and processing firms.

In Kenya, while most extension providers in the past focused on production, currently, the private sector extension providers are going beyond production to support value addition activities and link farmers with output markets. Public sector collaborates with other development agents and the government offering extension services to reduce cost on the part of the private non-commercial extension providers (Muyanga and Jayne, 2006). Private companies co-finance major agricultural shows and also invest in extension which they consider as part of their marketing strategy.

5.3.7 Non-Governmental Organizations and other Donors

Private Non-Governmental, Faith based and Community-based organizations are currently providing farmers with agricultural extension services. Most of them are promoting commercialization of small-scale agriculture, and provide training on marketing and calendarization (not to grow when everybody is growing to avoid depressing output prices). The majority of NGOs have extension staff trained in relevant agricultural disciplines. Most of these NGOs rely on the government research institution such as KARI for technology, and others have established links with private companies as well as international research centers International Centre for Research in Agro forestry (ICRAF), International Centre for Insect Physiology and Ecology (ICIPE), International Maize and Wheat Improvement Centre (CYMMIT), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), International Potato Center

(CIP) and International Institute Tropical Agriculture (IITA). Following is a list of selected Kenyan NGOs involved in agricultural production and agribusiness supply chain development: Care – Kenya; Sacred Africa; World Vision; Catholic Relief Services and Winrock International Institute for Agricultural Development.

5.3.8 Farmer Based Organizations and Cooperatives

Farmers have the tradition of organizing themselves at local level into membership-based entities (associations, cooperatives). In Kenya, farmers have organized themselves in groups to facilitate such ventures as the marketing of agricultural output, mutual help assistance and acquisition of agricultural credit. Community labor-sharing groups in Kenya are one of the successful farmers' based organizations providing supply of labor to farmers during critical periods of the cropping season. These groups allow the members to help each other to accomplish heavy farm tasks such as ploughing, planting, and harvesting. Some development organizations try to build on these local institutions to carry out their agricultural extension work.

The work groups are common in many parts of Kenya, and are used by NGOs and other partners to promote and share new farming and conservation practices. Using community groups is a form of farmer-to-farmer extension, as farmers learn a particular innovation and share their knowledge and skills to other farmers. Farmers are generally enthusiastic to share their skills with other farmers. Extension cannot be expected to reach every farmer - hence, the need for selectivity and reliance on farmer-to-farmer dissemination (World Bank, 1999).

The Kenya National Federation of Agricultural Producers (KNFAP) is the largest farmers union in Kenya whose mission is to “empower its members to make informed choices for improved sustainable livelihoods”. Other farmer organizations that provide some agricultural information and services to their members include: Fresh Produce Exporters Association of Kenya (FPEAK); Kenya Flower Council; Cereal Growers Association and Co-operative Societies.

5.3.9 Enabling environment and effective extension services

It is proven that an effective extension system improves agricultural productivity through providing farmers with relevant information that help them optimize the use of resources. In its strategy to alleviate poverty and promote growth, the government of Kenya through the Ministry of Agriculture has put in place a National Agricultural Extension Policy to guide improvements in delivery of extension services.

A complex extension system involving the public sector represented by the government and a range of private entities is working collaboratively to reach out to both small scale and commercial farmers in every part of the country.

Kenya can boast of substantial advances in the use of Information Communication Technology (ICTs) especially the use of mobile phone and internet services in the provision of agricultural advisory services to farmers. However, there are concerns about the effectiveness of the pluralistic agricultural extension systems involving both public and private extension delivery methods, especially the ability for limited resources farmers to access paid extension services. Private extension is not a substitute for public extension and the public sector should continue funding extension significantly, but in ways that do not duplicate services already being provided by sustainable alternative extension providers.

The development of the information society in Kenya can be reviewed in terms of the development of ICTs, informatics, e-government or telecommunications reform policies, which have been actively pursued since the early 1980s. According to the proposed National ICT Policy, there has been rapid growth in ICT development and adoption in Kenya. The 2009 World Bank statistics report indicated that 48.7 percent of the population of Kenya own and operate a mobile phone, and 10 percent of the population had access to internet in 2009. Today more than 20 million Kenyans operate a mobile phone. Several ICT tools used in disseminating agricultural knowledge and technology elsewhere including email, internet, phone, radio, television, and print are found in Kenya.

An illustration of a potentially beneficial application of new technologies is found in mobile telephony. The SMS-based service offers farmers a timely source of information, as they no longer have to wait for newspapers to publish the information a day after the price is reported (Mungai, 2005). The Mumias Information and Welfare Advances (MIWA) project in (2011) tested the effectiveness of cell phone messages to a subset of farmers on recommended agronomic practices such as weeding, trash lining, and gapping and found it useful. Kenya Agricultural Commodity Exchange (KACE) launched an SMS-based information service—SokoniSMS64—for farmers. The SokoniSMS service enables these farmers to receive market prices in various market centers around the country through their mobile phones. Equipped with this information, the farmers are able to determine the most profitable market center to transport products to and circumvent middlemen who usually offer to buy the products at much lower prices. Another example of ICT use is infonet biovision; it is a web-based information platform offering trainers, extension workers and farmers in East Africa a quick access to up-to-date and locally relevant

information in order to optimize their livelihoods in a safe, effective, sustainable and ecologically sound way.

The quality of extension staff may well be a more important constraint on the diffusion of innovations and adoption of new technologies than the farmers themselves. Training agricultural professionals increases the skills of extension staff in the field. Agricultural training institutions in Kenya (Jomo Kenyatta University of Agriculture and Technology and Egerton University) like in many other East African countries provide formal training in agriculture and agriculture related fields at the degree and diploma level. The Directorate of Extension, Research Liaison and Technical Training of the Ministry of Agriculture oversees the planning, utilization and management of technical human resources requirement and training needs for the Ministry. The Ministry has two colleges; Bukura Agricultural College for training and upgrading skills of serving officers from certificate to diploma level and Embu Agricultural Staff Training College (EAST College), which focuses on short refresher courses for in-service agricultural professionals (MOA, 2008).

5.3.10 Ineffectiveness of the public extension services in Kenya

The public extension service appears to be high-cost compared to private commercial and non-profit extension services. Since public resources for extension are very constrained, it may make sense for public extension not to duplicate or overlap in the same areas that are being provisioned more efficiently by commercial and non-profit systems. This would leave more public resources for concentrating extension services for farmers in areas that are remote and poorly served by the commercial systems. However, it is clear that the commercial and non-profit systems benefit from the presence of the public extension service.

The alternative systems rely on public extension workers for training and appropriate management advice, so even if the public system were to withdraw to the more remote areas where private extension is unprofitable, there would still need to be provisions made for the commercial extension and public extension services to learn from each other, coordinate messages, and mutually support each other. It may be appropriate to institute some type of commercial contracting of public sector extension system staff so that the latter can impart needed skills and capacity building of the commercial extension systems, (Muyanga & Jayne, 2012).

Contracting out extension services makes it possible to take advantage of all of the talent and experience existing in the field, but does not eliminate a government role which, in addition to funding, ensures

quality assurance, oversight, and provision of training and information to contracted services providers. The government should retain the responsibility for establishing criteria for use of funds, quality control, and monitoring and evaluation, while private entities provide services, define specific objectives for each locality, train extension staff, develop appropriate extension methods, and conduct Monitoring and Evaluation studies.

Policy challenges: the existence of chronic rural poverty, despite abundant natural resource wealth, has created a sense of urgency for improving the productivity and competitiveness of agricultural sector in Kenya. Small farmers are not reached by public and private services. Larger farmers feel the extension agents have nothing to offer. Research stations claim to have many new technologies “on the shelf,” that are not being adopted by the farmers. Experience has shown that no single extension model is universally relevant, and situation-specific models need to be developed. The challenge is looking for innovative ways of passing these technologies efficiently and effectively to farmers, ensuring that farmers receive relevant information while avoiding past mistakes.

The main constraints with respect to extension facilitating factors include weak coordination of inter sectoral planning by the development committees at the decentralized level; inadequate investment in infrastructure to facilitate extension and agricultural services by stakeholders; and weak institutional capacity to enforce existing laws and regulations governing the agricultural sector. The main challenges in ensuring provision of facilitating factors include strengthening inter-sectoral planning and coordination at the county level; linking with and influencing stakeholders to plan for and provide key facilitating factors such as infrastructure and rural finance; influencing local authorities to utilize produce cess and Local Authority Transfer Fund (LATF) funds to provide facilitating services; strengthening rural-based institutions such as CBOs, village banks, Savings and Credit Association (SACAs) and Savings and Credit Cooperative Society (SACCOs); and ensuring proper implementation of and compliance with existing laws and regulations.

Current sources of funding extension services come from the Government and the private sector. Government is still the main player in extension service provision though most of its funding has been mainly towards personnel emoluments with inadequate provisions for operations and maintenance. However, some programmes and projects have extension services funded as a core activity. The main challenges to ensuring sustainable funding to agricultural extension include increasing resources allocated to fund public extension services and improving planning and coordinating the allocation of resources to extension by different stakeholders to minimize duplication and wastage. Other aspects to be addressed

include formulating a well-managed public sector financing and exit strategy including sustainable privatization and commercialization of extension services, designing a financing mechanism for extension services with better targeting, especially for the marginalized and vulnerable groups, creating an enabling environment for the private sector to take an increasing role in provision of extension services, and developing modalities for identifying services and the mechanisms for contracting them out.

Over the years, extension has emphasized more on production aspects with little regard to other factors such as marketing, value addition and quality and standard of inputs. This has been partly due to lack of expertise among extension agents especially in entrepreneurship and value chains development, as well as weak application of a unified extension approach at the grassroots level. Subsequently, the packaging of extension messages lacks the required dynamism to address varying agro-ecological zones, socio-cultural aspects and emerging cross-cutting issues. The main challenge is the development of comprehensive and dynamic extension packages that consider client socio-economic conditions, sustainable use of natural resources, gender, HIV and AIDS, quality of goods and food safety, agri-business and response to market demand. Expanding the scope of skills of extension agents is another major challenge.

The National Agricultural Extension Policy (2001) sought to provide policy guidance to address these challenges without success. NALEP was among projects that demonstrated the feasibility of working closely with, and engaging the private sector and grassroot client institutions, such as common interest groups, in extension service delivery and cost sharing. However, implementation of the policy was adversely affected by, among other factors, reduced funding in the public sector (especially for operations and maintenance) and inadequacy of complementary services (input supply, credit, market outlets). Moreover, institutional arrangements for implementing the NAEP among the agricultural sector ministries, the private sector and civil society were not well coordinated.

5.4 Kenya's botched housing policy

5.4.1 Housing Policy for Kenya

The first comprehensive Housing Policy for Kenya was developed in 1966/67 as Sessional Paper No. 5. At that time Kenya's population was just over nine million people growing at a rate of 3 percent per annum for the whole country and 5 to 6 percent per annum in the urban areas. The annual housing requirements then were 7,600 and 38,000 new units in urban and rural areas respectively (GoK, 2004). The policy directed the Government "to provide the maximum number of people with adequate shelter and a healthy environment at the lowest possible cost". The policy advocated for slum clearance and

encouraged mobilization of resources for housing development through aided self-help and co-operative efforts. Emphasis was placed on enhanced co-ordination to increase efficiency in programmes and projects preparation. Other areas addressed in the policy paper included increased research in locally available building materials and construction techniques, and housing for civil servants through home ownership schemes in urban areas as well as institutional and pool housing schemes in remote stations.

5.4.2 Challenges in the housing sector

The investments in the housing sector since the 1966/67 Policy have been minimal and sporadic. The demand for housing still far outstrips supply. High rate of urbanization, increasing poverty and escalation of housing costs and prices have made the provision of housing, infrastructure and community facilities one of the daunting challenges in the socio-economic development of the country. Even though research on low cost building materials and construction techniques has been limited, thus not providing viable guidance to the development of the sector, there are tons of studies that have been carried out that would guide the sector. Moreover, stringent planning regulations and high infrastructural standards have been an impediment in the housing delivery system.

The high level of poverty has rendered access to decent housing an elusive dream to the swelling ranks of people living below the absolute poverty line. The problem in urban areas is mainly that of acute shortage in the number of habitable dwellings, inadequate infrastructure, community facilities and services, overcrowding and extensive slums and squatter settlements. The situation was aggravated by the socio-economic reforms, especially the Structural Adjustment Programmes (SAPs) that were initiated in the country. On the other hand, the major problem in rural areas is mainly that of poor quality of the shelter fabric and limited access to safe drinking water.

The estimated current urban housing needs are more than 150,000 units per year. This level of production can be achieved if the existing resources are fully utilized by the private sector with the enabling hand of the Government. It is estimated that the current production of new housing in urban areas is only 20,000-30,000 units annually, giving a shortfall of over 120,000 units per annum (GoK, 2004). This shortfall in housing has been met through proliferation of squatter and informal settlements and overcrowding. The institutional housing situation for public servants, especially for the Police and Prisons staff has greatly deteriorated over the years. It is alarming that currently a section of the uniformed forces live in deplorable conditions with up to four families sharing a house meant for only one family, thereby compromising everyone's privacy.

5.4.3 Interventions and strategies introduced to alleviate housing problem

Various interventions and strategies have been introduced in the past to alleviate the housing problem. For instance following the International Year of Shelter for the Homeless in 1987, the National Shelter Strategy to the Year 2000 was formulated to advocate a change in policy. Since the public sector was unable to meet the challenge through direct provision of housing, the solution had to be sought within an enabling approach, where the Government facilitates other actors to invest in shelter.

In 1990, the process towards housing policy review was initiated and the same objective was pursued. It therefore became necessary to have a critical look into present and future performance of the entire housing sector and formulate a new policy and strategies that would guide the preparation and implementation of future housing programmes. The review of the housing policy in 2004 was intended to provide a guide in this direction as Kenya, along with other members of the international community, implements the Habitat Agenda and the National Plan of Action on Shelter and Human Settlements to the year 2020. This policy adopted an enabling strategy, guided by the principles of partnership and participation by all partners in accordance with their comparative advantages, however, not much has been achieved.

5.4.4 Policy targets that need to be instituted

Based on the 1999 national Population and Housing Census there are more than three million people in urban areas and about six million people in rural areas in urgent need of proper housing. Given the average household size of four persons from the census, there are about 750,000 households in urban areas and 1,500,000 households in the rural areas that need to be housed. The Government promised to facilitate an annual output of 150,000 housing units in urban areas and 300,000 units in rural areas in order to be able to meet that demand, this has since not been achieved. There are also additional housing needs arising from increased household formations as well as housing that will become dilapidated from the existing stock.

Poverty has been a major limiting factor in development. In rural areas, the majority of the population is unable to meet their basic requirements. It is estimated that over 50% of Kenya's urban population live in very poor neighbourhoods and about 60% of these are estimated to be absolutely poor (GoK, 2004). The influx of rural youth to urban areas where there are limited employment opportunities has compounded the level of urban poverty on one hand, and rural poverty on the other. As such, rural areas are being

deprived of their active and more productive labour force. There is therefore a need for social safety nets in various areas, including housing delivery to cushion the vulnerable groups.

Recognizing the ingenuity exhibited by poor people in their quest for shelter has been displayed to the government of the day, but it is yet to revise by-laws, standards and regulations relating to planning, building and environmental management to ensure that the poor urban citizens will have access to their most basic needs including access to shelter, food, infrastructure, water, health and other essential services; and be engaged in activities that can sustain their livelihoods.

Promises have been made by the government to promote small-scale building materials industry and encourage labour intensive construction techniques to foster income generation. Special areas within informal settlements need to be earmarked for small scale enterprise (*Jua kali*) activities and support activities, which target poverty alleviation, particularly among the vulnerable groups. The poor people's pragmatic approach to housing should be harnessed and put to maximum utility by community-based organizations through effective and well-defined popular participatory approaches. Community involvement as a planning tool needs to be advocated in all housing programmes targeting the poor.

The Government also recognizes that security of land tenure as well as availability of adequate quantities of land in suitable locations at affordable prices is a central requirement for clearing the backlog of housing demand for the urban poor, but very little is being done to address this. Housing programmes for the poor should be pursued at a scale, which is commensurate with need and availability of resources.

Development and properly maintaining public housing for civil servants, especially in remote areas is important, however, not much has been done by the government on this front. The Government should also carry out periodic rental valuations for all existing public housing stock as a basis for determining the economic rents payable. All tenants in public housing need to pay economic rents, in this regard, the Government should pay, where feasible, market responsive house allowances to civil servants.

In Kenya, the problem of urban housing is characterized by an acute shortage in the number of dwellings, overcrowding in the existing housing stock as well as the existence of sub-standard human settlements such as extensive slums and squatter settlements. The acute shortage in housing supply has led to high rents being charged by landlords. The majority of the people in urban areas do not own homes as the level of owner-occupancy has been declining. The provision of infrastructural facilities has not adequately satisfied the demands of the growing population. The Government has for ages been promising to address

this situation through strategies such as development of urban middle-cost and low-cost housing; upgrading of slums and informal settlements and rental housing.

5.4.5 *Upgrading of Slums and Informal Settlements*

Upgrading of slum areas and informal settlements should be given high priority. It needs to be undertaken with minimal displacement to cater for proper planning and provision of necessary infrastructure and related services. Appropriate upgrading measures should be instituted for existing slum areas taking into account key upgrading components that cover security of land tenure, provision of basic infrastructural facilities and services, improvement of housing structure and the socio-economic status of the target community.

The Government also needs to facilitate slum upgrading through integrated institutional framework that accommodates participatory approaches involving relevant stakeholders, particularly the benefiting communities while enhancing co-ordination at national level. Upgrading needs to take into account factors of ownership of land and structures, age of settlement, and affordability, and then appropriate compensation measures is instituted for disposed persons where necessary.

However, lack of a comprehensive land use planning and management policy has led to development of substandard settlements with inadequate infrastructure, services and open spaces. Land supply/delivery mechanism for housing development is characterized by formal and informal sub-divisions undertaken by both the public and private sectors. Formal subdivisions follow a long process whereby provision of services is mandatory before registration and necessary transfers can be effected. On the other hand informal subdivisions often fall short of planning requirements set by the approving authorities hence cannot be registered. However purchasers of such parcels receive share certificates as ownership documents awaiting issuance of land title deeds once legal transfers are effected. In some cases land is availed through illegal occupation and informal settlement by squatters. Land provided through informal subdivisions is often short of essential services and social amenities. There is enough research that has been carried out in this area, what is lacking is proper take up and use of the recommendations suggested in these studies.

5.5 Summary

It is evident from these four cases that policies which benefited from research and an appropriate and comprehensive communications strategy during formulation turned out to be good policies, while those

which research seems to have been ignored and there were no clear communication channels between the implementers and the stakeholders faced a lot of challenges. Evidence is usually communicated for information and knowledge; this in turns inspires development policy and practice. In order for the successful case to come through, there were several steps taken to make the case of smoke free environment more inspirational and informative. Researchers in this case did not fail to put the problem on the policy agenda. This is because they came to grips and appreciated the real problem facing policymakers, thus they provided operational feasibility of alternative policy options. In other words, the policy options that were outlined in research publications in this case did not fail to capture policymakers' attention and to connect with them. Thus, the health policy on smoke free environment succeeded because the implementation was guided by a comprehensive and detailed communication strategy and other political considerations were taken care of.

The rest of the other three policies basically failed because of lack of sensitivity to communication and political economy. Thus, there was a real need to strengthen researchers' communication skills in order to get the target group right, get the format right, and get the timing right; there was need to aim for close collaboration between researchers and policymakers; construct an appropriate platform from which to communicate, for instance a platform of broad engagement like a public campaign would have been more likely to be heard. The process should also have incorporated communication activities into the project design, taking into account, for example, gender, local context and existing ways of communicating, as well as possibilities for new ways of communicating through Information and Communication Technologies (ICTs). The designers would also have done well to encourage user engagement by mapping existing information demand and information-use environment, as well as promoting participative communication for empowerment. Also creating an enabling environment would have been important, as failure to use research/information is not always due to lack of communication, but can instead be due to lack of a favourable political environment or lack of resources.

Chapter Six

Conclusions and Recommendations

In this section, the conclusions and recommendations are presented. The section describes the interpretation of the results in (Chapter four). The conclusions are drawn from the analysis of the results and then recommendations made based on the analysis. In short, this section tells the reader what the results mean and what actions should be taken as a result of the findings. The section also provides the opportunity to discuss the meaning of the results beyond what they mean statistically; that is, the interpretation of the findings and indicating what can be concluded from them. The relationship of the results to the original problem description is also discussed with a focus on whether any of the alternatives that the study has come up with make a difference, would help to solve the problem, or improve the situation. Also considered are the long-term as well as the short-term implications of the findings, besides in what way these findings relate to those of other researchers cited in the literature review. While conceiving the recommendation section, it was ensured that the recommendations made also show how the results from the study support them. These recommendations largely entail what should be done, the steps required for implementation, and the resources needed.

6.1 Communicating research

This chapter summarizes the analysis conducted in the thesis. The overall conclusion drawn from the research study is that there is a huge disconnect between researchers and policy makers, thus strategically communicating research findings to policy makers would go a long way to improve the quality of policies formulated. Anchored on the organizational information model, the study concludes that active communication strategies ought to be considered while designing any research activity; this can imply a closer engagement of the producer with the user of research results, thereby allowing for an improved flow of information and ideas. Increasing the impact of research through closer collaboration between the producer and user to improve impact of research does not only impact on knowledge dissemination, but also on research planning and organization as it encourages demand led research.

What must be understood though is that there are levels of policy change and a really radical policy change in service delivery may take a political upheaval or an extremely innovative top manager. Lower

level people really don't have much leeway to change policy, and simply resign to doing what they are told. This therefore begs the question: At what point of policy making do policy makers need to have research data for policy decisions. The clear entry points according to respondents would be at the highest level, that is parliamentary committees, parliamentary debates and within ministerial organizations, thus research evidence is most important at the highest and sometimes at the medium levels. At the medium level is where policy makers have at their call people who can help them interpret research data. Some have fully fledged departments with technocrats to work with this data.

Actively communicating research is at least, a twofold activity: On the one hand it comprises part of translating and tailoring research products by technocrats to users; on the other hand, however, closer engagement and linking with decision-makers always has to deal with the problems of personal communication. Importantly in this regard are concerns about the independence of researchers, who are very closely engaged with decision-makers that might also decide on future research funding, and the negative incentives for researchers achieving less scientific merits through publications in peer-reviewed journals.

Research should not only be communicated in the academic community, but also to lay audiences in an accessible format. As non-academics tend not to read academic articles, a separate report should be written for a lay audience. This separate report does not need to include all information but, preceded by bullet points, the key findings in a meaningful way, telling a story based on the evidence. Researchers need to write both reports, more so for journalists to disseminate to the general public. Incidentally, economic journalists appear to be more active where efforts are made to enhance the ability of the print and broadcast media to cover economic issues. Kenya has done well in terms of economic journalism, but a lot of ground still needs to be covered. Some countries usually have media training sessions and briefings for journalists to bring them closer so that they can be able to identify with recent research finding and develop stories around them. Linking research with policy processes would require active participation of the media as well, which plays a critical role during the policy making process.

Those who fund research should take an active role in the dissemination process. For effective dissemination, there needs to be active engagement from the beginning of a project to the end in an accessible language and format. This would be one way of bringing policy makers into the research process. Politicians often misinterpret research because the 'knowledge transfer' terminology is inappropriate. However, it is evident that researchers really want many people to take their messages on board.

There is a need to strengthen the networking between researchers, policy makers/practitioners in a way that promotes ongoing dialogue throughout the research process. Improving the dissemination and repackaging of research for a range of different audiences is one way of doing this, while finding appropriate ways to promote networking that counter-balances the power of prevailing policy networks in policy-making is another. It is also important to learn from work at the ‘research–practice boundary’ and the various forms of ‘embedded’ critical enquiry beyond formal academic research programmes. Evaluating research impact more robustly should be of keen interest to policy makers as well.

From the theoretical framework, it is evident that a growing body of literature demonstrates stakeholders’ limited use of research outputs to inform decision-making mainly due to the communication gap. For example, information is not always disseminated or available to all of the stakeholders who need to be informed. When information is not presented using a method or format appropriate for a particular audience, it is deemed inaccessible and not used for decision-making. Few stakeholders have a background in statistics or research methods; therefore, research findings and other data presented using technical jargon can be too scientific and difficult to understand. Different stakeholders have different information needs because they make different types of decisions. The information communicated to stakeholders must therefore address their needs and concerns. In addition, communication with stakeholders should emphasize key findings for action and include recommendations that are useful. In general, improving stakeholders’ use of information requires that it is available, accessible, relevant, and useful.

Anyone within government should appreciate the value of an evidence-based approach to public policy. The term ‘evidence-based policy-making’ was popularized by the Blair Government (former Prime Minister of the United Kingdom), which was elected on a platform of ‘what matters is what works’. Blair spoke of ending ideologically-based decision-making and ‘questioning inherited ways of doing things’. Of course, ‘inherited ways of doing things’ meant to the Blair Government the ways of the previous Margaret Thatcher (and John Major) administrations! The advent of a new government was clearly a good time to initiate an evidence-based approach to public policy, especially after a decade or more of a different regime.

Evidence that is directed at supporting narrow objectives—a particular group or sector, or fostering use of a particular product or technology—will generally look quite different to that which has its objective the best interests of the general community. Of course, this depends on having the analytical tools to enable

such a broad assessment to be undertaken. It also reveals the sterility of academic debates about whether evidence can or should play a ‘deterministic’ role in policy outcomes. Policy decisions will typically be influenced by much more than objective evidence, or rational analysis. Values, interests, personalities, timing, circumstance and happenstance—in short, democracy—determine what actually happens. But evidence and analysis can nevertheless play a useful, even decisive, role in informing policy-makers’ judgments’. Importantly, they can also condition the political environment in which those judgments need to be made.

Credible evidence can only be ensured by transparency, which is open communication and discussion to educate the public. A receptive policy environment and willingness to test policy options and the structures and resources to do so are also key pointers. There are essential ingredients for evidence to discharge these various functions, however, it needs to be the right evidence; it needs to occur at the right time and be seen by the right people. That may sound obvious, but it is actually very demanding. And all these must be backed with good methodologies. And good methodologies have a number of features in common: they test a theory or proposition as to why policy action will be effective—ultimately promoting community wellbeing—with the theory also revealing what impacts of the policy should be observed if it is to succeed.

A successful researcher needs to be an effective communicator of their own research. Thus, researchers need to communicate their work more effectively. Consequently, communications capacity building training events in collaboration with researchers and the media is crucial. There should be an opportunity for researchers to build their capacity and skills, improve their ability and increase their confidence in communicating research to policy to maximize its uptake and impact. And training researchers on research communications should not only be about developing their communications skills, it is important that researchers also deeply understand and analyze the political and social context in their respective areas before approaching policymakers.

Some of the significant challenges researchers face in Kenya that contributes to policy failures includes:

- i. Lack of interest expressed by policymakers in what academics produce on economic and social development;
- ii. Crafting effective and simplified messages exempted of jargon and terminologies;
- iii. Getting research published in reputable academic journals accessed by policy makers;
- iv. Lack of understanding of the value research has by policy makers;

- v. Existing gender bias aspect in the development community (negative perception of research produced by women);
- vi. Motivating media practitioners to listen to researchers and pitching stories out of academic research;
- vii. Establishing a dialogue between academic researchers, decision makers and communication practitioners;
- viii. Lack of accuracy of media practitioners when publishing research findings.

However, there are some successful tactics that would help researchers and their homologues get their voices heard. Some of the tips and tactics include:

- i. Organizing dissemination workshops that bring together researchers, policymakers and media practitioners;
- ii. Organizing dissemination workshops that bring together researchers, policymakers and media practitioners;
- iii. Taking part in informal events where policymakers are present.
- iv. Making use of social media;
- v. Using media to reach a broader audience/ordinary public;
- vi. Communicating research at an institutional level – researchers to liaise with their institutions/organizations to get their findings disseminated given that a researcher has more power as an institution.

6.1.1 Research communication strategies

National research strategies should be based on a process that is inclusive and participatory and improves the degree of adoption, reach and impact of evidence-informed policy-making. What comes out clearly in the study and other discussions is that some steps if taken seriously would enhance the use of research by policy-makers. Some of these steps include:

- i. Documenting and communicating the outcome of research to interested stakeholders;
- ii. Building the capacity of researchers to communicate their findings, and the abilities of policymakers to use research evidence;
- iii. Creating a culture and environment where the work of researchers is recognized and appreciated and evidence is demanded by the policy-makers.

In order to materialize the above, the probable actions to undertake may include the following among others:

- i. Ensure that government as well as non-governmental organizations have a scanning function that is effective enough to assist in getting information on adapting to the new challenges;
- ii. Develop national strategies for economic research based on the systems approach, where there is clear relationship between inputs and outcome/impact of research activities;
- iii. Inculcate a research culture among all concerned with the economic sector, in order that the value of research and of researchers is recognized, and a supportive environment for research is created at all levels;
- iv. Structure national economic research systems according to national needs and enable them to form partnerships with industry, development partners and civil society and sectors other than economic;
- v. Ensure policy relevance as a critical variable when setting national economic research priorities or funding any research out of public funds;
- vi. Develop capacities and abilities of national policy-makers in use of research by introducing seminars/talks at the national public policy-making level and in management schools;
- vii. Introduce a cadre of intermediaries in the ministries of finance or planning who understand both research and the intricacies of policy planning;
- viii. Ensure that research funded by public funds has a planned and budgeted activity for dissemination of results to the policy-makers and stakeholders;
- ix. Plan regional consultations where policy-makers and researchers can share their frustrations and discuss ways to improve the use of research.

Although this study does not claim to be exhaustive, the research needs of policy makers have been identified and all the three objectives stated at the beginning are fulfilled. The study also identified the activities of the policy makers. Armed with these activities, the researchers will be in the position to provide the research needs of policymakers. Moreover some of the main factors affecting access to research by policy makers were identified as among others absence of timely, relevant and accessible research.

6.2 The research, communication and policy nexus

Without evidence, policy-makers usually fall back on intuition, ideology, or conventional wisdom—or, at best, theory alone when confronted with a task to formulate a policy. And many policy decisions have

indeed been made in those ways. But the resulting policies can go totally awry, given the complexities and interdependencies in our society and economy, and the unpredictability of people's reactions to change. The study found that half the battle is in understanding the problem. Failure to do this properly is one of the most common causes of policy failure. Sometimes this is an understandable consequence of complex forces, but sometimes it seems to have more to do with a wish for government to take action regardless.

Good evidence that is communicated well can ameliorate or 'neutralize' political obstacles, thereby making reforms more feasible. In the real world, policy is developed in a fluid environment, is subject to competing vested and political interests, and can be driven by pressure to act quickly to solve headline-grabbing problems. Ideally, we need systems that are informed by evidence at each stage of policy development, from when an issue is first identified, to the development of the most appropriate response, and subsequent evaluation of its effectiveness. This is even more important when dealing with complex problems, particularly when the evidence on which responses must be based is shifting rapidly and involves many different interactive elements.

The study discovered from the focus group discussion that even when dealing with less complex issues, if evidence is successfully integrated into the policy-making process, the evidence has to be good to begin with. This means not only collecting data and investing in research, but ensuring that policy makers have the right skills to discriminate between evidence which is reliable and useful, and that which is not. Evidence should also be open to rigorous public and professional debate. Validating evidence and transparency can also help governments to gauge community reaction to ideas before they are fully formed and so better anticipate the politics of pursuing different courses of action. However, this does add to the challenge for policy makers, as transparency takes time and effort, and governments often have a need for speed.

Often you can't get sufficiently good evidence, particularly when decisions must be made quickly. And you can never have certainty in public policy. All policy effectively is experimentation. But that does not mean flying blind—a good rationale or a good theory is still needed. Rationales and theories themselves can be subjected to scrutiny and debate, and in a sense that constitutes a form of evidence that can give some assurance about the likely outcomes. Importantly though, all policy experiments need to be monitored and evaluated and, over time, corrected or terminated if they turn out to be failures. These are things that Governments typically find hard to do—particularly the termination part. Complexity and

uncertainty would make policy choices hard enough even if they could be made purely on technical grounds.

But policies are not made in a vacuum. Rather, they typically emerge from a flurry of political energy, vested interests and lobbying. Commonly, those with special interests will try to align their demands with the public interest. The average person (voter) rationally doesn't do the hard work necessary to find out whether that is correct or not, but often feels intuitively supportive. In that realpolitik, evidence and analysis that is robust and publicly available can serve as an important counterweight to the influence of sectional interests, enabling the wider community to be better informed about what is at stake in interest groups' proposals, and enfranchising those who would bear the costs of implementing them.

What is key though is that researchers need to take into consideration the intersection between new knowledge and complex power relations that underpin policy processes. For that reason the presentation of research evidence that challenges prevailing understandings has to tread a fine line between opening up new policy horizons while avoiding being too confrontational and alienating readers. For example the study points that researchers need to be wary of presenting evidence that is framed within a political viewpoint at odds with the politics of those in power, as their work would be disregarded. This reinforces the importance of framing research evidence in a way that is sensitive to the political context if the messages are to be accepted and potentially acted upon.

It emerged from the study that many policy-makers value research evidence; however, they do not want to be simply presented with research findings. Instead, they generally value researchers' opinions about the policy implications of their findings. The demand for opinion, value judgments and advice on policy actions is also generally high. The development of linkages among independent policy/research organizations and private sector-oriented consultative groups, which is envisaged in this study, would therefore help broaden demand for research and opportunities for policy input in Kenya. These bodies present excellent opportunities to strengthen the communication between university and non-university based researchers and policy decision-making. This study makes numerous suggestions on how research organizations might interact with both groups or encourage researchers to interact. This can be done through:

- i. Publication of research summaries or bulletins jointly; these should be targeted to local policy makers describing policy-oriented research activities;
- ii. Using both groups as sources of "policy-oriented" resource people, and participants in events such as national or regional policy workshops/seminars;

- iii. Use of such groups as informal consultative bodies as research organizations periodically to consider different policy study priorities;
- iv. Use of such groups as an audience for dissemination of research findings;
- v. Facilitating dialogue among key partners in research consortia enhances ‘joins-up’ working and draws on the existing strengths of partners to make best use of links and networks;
- vi. Inception workshops for instance help to map existing linkages and communication initiatives among consortium partners in order to build them into an integrated communication strategy;
- vii. As part of research dissemination, forums to discuss research with a range of stakeholders across sectors can help practitioners frame research findings in their own context and make use of what is relevant.

Developing links, partnerships and networks between researchers and policy-makers in particular, and dialogue with other stakeholders, such as editors of economic journals, the development community, research funders and civil society, is essential to enhance the use of research for informed policy-making. The Ministry of Planning and Devolution for instance can play a catalytic role in convening the meetings of different interested partners and initiating a dialogue. Development of national economic strategies, which involve all stakeholders in a transparent manner and are planned to improve the use of research evidence for policy-making, will be a good starting point. Strengthening the capacities and abilities of both researchers and policy-makers to generate and demand policy-relevant knowledge should also be emphasized.

Direct interaction among researchers and policy makers does not occur very often in Kenya, just a few national level seminars and some regional meetings have been seen to take place in the recent past. Based on comments made by researchers and policy makers in this study, it is now time to help change perceptions and attitudes, and initiate valuable contacts between the two communities. Thus, research institutes and like-minded organizations should encourage and support national policy workshops and continue to play largely a catalytic role in getting an initial Grand National workshop off the ground, with the lead role played by them. Such organizations could also go further to facilitate the presentation of synthesis and special papers they support at national seminars. Often these papers will be more slanted to a policy audience than individual research papers, and can therefore elicit broader dialogue among seminar participants. The key here is that for efficient communication of research, interaction between researchers and policy makers is extremely useful.

It is also important to note that there are a considerable number of economic research papers that are timely and relevant to policy makers, but the authors clearly struggle with articulating policy implications. It is not apparent that some research organizations are doing as much as they can to assist researchers who need assistance in this area. But, different approaches might be considered, for instance the organizations can provide more guidance and feedback to researchers during the review of papers. Besides, there is room for these organizations to be more demanding of some researchers in regard to the policy aspects of their work.

An increase in the degree of policy-related discussion and feedback during research workshop is also preferred. These research organizations could increase the proportion of policy makers among its resource people so that debates in these policy workshops are smoothed. Alternatively, it may be worth considering some form of floating resource persons group, composed largely, if not exclusively, of policy makers (mainly with the background of academia). Members of such a group could review and identify promising research and meet with selected researchers during the course of such workshops. Possibly their comments could be included during the review with technical committees. Such an approach would enhance policy focus where most needed, without detracting from the largely technical or methodological focus.

In situations where government action seems warranted, a single option, no matter how carefully analyzed, rarely provides sufficient evidence for a well-informed policy decision. The reality, however, is that much public policy and regulation are made in just that way, with evidence confined to supporting one, already preferred way forward, hence the subversive expression, ‘policy-based evidence.’

6.2.1 Key conclusions drawn from the study about policy making in Kenya:

- i. Evidence will play a relatively modest role in policy making which is dominated by political expediency.
- ii. Policy makers tend to use stories rather than ‘hard’ evidence as they are easy to understand and effective.
- iii. Decision makers tend to focus on communication as a way of getting a message across rather than as a participatory development process.
- iv. Donors have a key role in stimulating the integration of information and communication into development practice – they have influence on developing country priorities; they can ‘lead by example’ and develop effective communication strategies. However, one problem that the study found is that externally funded research and internationally sanctioned policy objectives have

often resulted in research undertakings that fail to illuminate prevailing realities and policy goals. These kinds of research findings are commonly out of touch with actual possibilities.

- v. New evaluation methods are needed to strengthen the evidence base as the processes of information and communication do not lend themselves to impact assessment.
- vi. The interrelationship between literacy research, policy, and practice is extremely important. These three spheres of activity, which in principle should be closely linked and mutually supportive, have in fact developed independently of one another and remain separated by mutual misunderstandings.

6.3 Recommendations

Even the best evidence is of little value if it's ignored or not available when needed. An evidence-based approach requires a policy-making process that is receptive to evidence; a process that begins with a question rather than an answer, and that has institutions to support such inquiry. An essential ingredient, of course, is data and Kenya has been served by the Kenyan Bureau of Statistics and the integrity of the national databases that it has generated for years. But in some areas, the country is still struggling. Apart from the challenges of valuing impacts, and disentangling the effects of simultaneous influences, we often face more basic data deficiencies. These are typically in virtually all domains including economic, social and environmental, where the country must rely on administrative collections—or indeed there may be no collections at all.

Data problems bedevil all sectors of the economy. Preventative economic strategies and pathways of causal factors are one such example. Indigenous policy provides another striking one, involving a myriad of problems to do with different economic or other circumstances, and their distribution across different parts of the country—all of which are very important for public policy formation. In the crucial education area for instance, obtaining performance data has been an epic struggle and yet we need systems that are open to evidence at each stage of the policy development 'cycle': from the outset when an issue or problem is identified for policy attention to the development of the most appropriate response, and subsequent evaluation of its effectiveness.

Even though in the contemporary world, there is a growing recognition that policy processes are complex, multidimensional and unpredictable, there is still that urgent need to find mechanisms to promote the use of research outputs and other forms of evidence in the development of policies and there are ways of

doing this. Building capacity—or rebuilding it—is very important in this mechanism. But it can't happen overnight. For one thing, the government needs to be recruiting into the public service more graduates in the social and economic sciences.

Any government agency that is serious about encouraging an evidence-based approach needs to develop a 'research culture'. Establishing dedicated evaluation units, achieving a critical mass of researchers, strengthening links with academic and other research bodies, are all integral to this. There is also the broader question of institution-building to underpin better evaluation generally across government. Some initiatives have developed out of the foreign aid programmes and literature that may be instructive. These include evaluation clubs or forums that promote cross-fertilization, peer support and learning about what works—both in relation to methodologies and policy approaches themselves. Kenya could think of developing comparable institutions as centres of excellence to foster greater inter-jurisdictional learning.

When it comes to the (inevitable) use of external contractors, we need to give far more attention to defining the task, and to identifying how contractors can best help us to make good public policy. Choosing the contractor—getting the right consultant for the task—is obviously fundamental. In many cases, it is better to go directly to the experts rather than to the big jack-of-all-trades management consulting firms that may be willing to tackle anything, but have an indifferent performance record in policy-related work. Such firms often rely on sub-contractors anyway, so the best thing is to go direct to those with reputation in the field.

Part of the challenge, if consultants are to become contributors to a truly evidence-based approach, is to limit their tendency to 'second-guessing', which can compound public servants' own tendencies in this direction. This may be less of an issue for academics, who typically do not rely on such sources of income, than for business consultants, who do. An evidence-based approach ideally requires contractual arrangements that create neutral incentives for the researcher to make robust findings—for example, by making it clear that their work will be peer reviewed.

More generally, monitoring and reviewing the quality of such external work is crucial and, again, academic specialists would seem particularly well-placed to assist with that, as well as helping agencies to choose which consultant to use in the first place. Peer review can also be very worthwhile for the research that is done within Government, but this is not common practice. It is especially valuable where political sensitivities require secrecy during the policy development phase, and where there may be significant downside risks for the community from getting it wrong.

There is a strong emphasis that policy-making should be based on evidence of what works, and that the civil service must improve departments' capacity to make best use of evidence. To enable this to happen, departments need to 'improve the accessibility of the evidence available to policy makers. Thus, what is needed is a combination of generalists and specialists. This means developing and retaining the specialist skills of people entering the civil service.

6.3.1 *Specific recommendations*

- i. Researchers can increase the accessibility of policy-relevant research to policymakers by providing non-technical summaries/abstracts of research findings, via research bulletins, policy briefs, web pages and blog postings. This could cover research relevant to Kenya that has been published internationally and is not readily accessible to policymakers. Working papers could also have such non-technical summaries, as could PhD theses undertaken at Kenyan universities. It is arguably a good discipline for researchers to summarize findings in an accessible form and, where appropriate, draw out their policy relevance. The benefits to the policy community and to students would be considerable. And researchers, particularly economists engaged directly in policy research would identify examples to illustrate the generality of their findings.
- ii. Exchanges of personnel between the two sectors should be promoted and welcomed, but this will take some time to develop. Meanwhile, working closer together would help establish a clearer understanding of roles, interests and the requirements of researchers and policymakers. This would allow more productive interactions, thereby enhancing benefits and reducing potential tensions. It may help in turn to foster commitment on both sides to building a meaningful research agenda, which would see researchers producing policy outputs (published reports) and academic outputs (peer reviewed papers). Interactions with policymakers could stimulate research into new issues and, when linked to pilot studies involving multidisciplinary teams, could generate significant new research possibilities.
- iii. The major risk in collaboration is that the researchers lose, or are perceived to lose, their independence, by engaging with the policymakers. To avoid this, an open and transparent process is needed. As part of this process, policymakers would provide inputs to the research that seek to inform and improve the analysis rather than influence the conclusions. Similarly, researchers need to engage with policymakers' inputs and with standard peer-review processes. The researchers

ought to also retain their right to publish the policy research and commit to it being placed in the public domain so society at large can examine the findings.

- iv. Kenyan policy makers and political leaders should be cognizant of on – going research and that being done by research networks across the country when they are formulating policies. If policy-makers are not taking research findings into account when deciding on key policies that can make or break developing efforts, then the relationship between research and policy needs to be enhanced to remedy this weakness. Even though in the contemporary world, there is a growing recognition that policy processes are complex, multidimensional and unpredictable, there is still that urgent need to find mechanisms to promote the use of research outputs and other forms of evidence in the development of policies.
- v. Personal interaction remains the most effective means of communicating with policy makers. Policy briefings are widely used, websites and emails can support personal communication. Thus, communication strategies should be built on existing networks and communities of interest. As this is done, it is important to note that engaging policy makers less interested in communication requires the integration of evidence into mainstream development learning.

6.4 An Integrated summary model

6.4.1 Communicating research for policy formulation

This integrated model draws from a broad literature on organizational communication developed since the early 1950s and links with the theoretical framework developed for this study. In particular, the works of theorists including Charles Redding (1972) was referred to in the literature for its clarity and rich recommendations for a more people-inclusive, integrated approach of using communication for development. Likewise, theories of organizational information, environmental scanning, group dynamics, conflict resolution, leadership, quality improvement and future search, as well as the network/convergence theory of communication have been used to develop the model.

For social change to be realized as a result of the adoption of a particular policy, a model of communication is required that is cyclical, relational and one that leads to an outcome of mutual change. This study provides a description of such a model. The model reflects a dynamic, iterative process that starts with a ‘catalyst/stimulus’ that can be external or internal to the community. This catalyst leads to communication within the community that when effective, leads to collective action and the resolution of a common problem. Indeed most interesting theories share the quality that they constitute an attack on

assumptions taken for granted by an audience. Many researchers find non-intersecting propositions that affirm their assumption ground (that's obvious), that do not speak to their assumption ground (that's irrelevant), or that deny their assumption ground (that's absurd), (Davis, 1988). Participants geared at solving a social problem should see themselves as working side by side, attacking the particular problem, but not each other – they should instead empathize with each other's predicament. Taking positions, however, makes things worse, as people's egos become attached to positions. Also to note is that compromising between positions is not likely to produce an agreement which will effectively take care of the human needs and interests that led people to adopt those positions.

Failure to communicate research findings to policy makers is a complex set of factors that include: the lack of capacities and abilities of national policy-makers in use of research; lack of long term steady build-up of research; limited continued linkage with policy makers; few strong political and policy champions; absence of public relations; lack of a scanning function that is effective enough to assist in obtaining information on adapting to the new challenges; lack of research culture among all concerned with the economic sector, in order that the value of research and of researchers is recognized; inadequate policy relevance in the research outputs, which is critical when setting national economic research priorities; low cadre of intermediaries in the ministries, particularly those of finance or planning who understand both research and the intricacies of policy planning; lack of non-technical summaries/abstracts of research findings; no personal interaction, which remains the most effective means of communicating with policy makers; zero clear relationship between inputs and outcome/impact of research activities; lack of planned and budgeted activity for communication of research results to the policy-makers and stakeholders; and limited regional consultations where policy-makers and researchers can share their frustrations and discuss ways to improve the use of research.

6.4.1.1 *Possible recommendations for communicating research*

- i. *Improve the conditions under which research is communicated:* The success (or failure) of communication at an individual, local or project level is largely determined by wider systems – including the political environment and socio-economic conditions. The conditions under which research is communicated can have a far more decisive effect on research uptake than the actual communication content, channel or strategy.
- ii. *Approach communication as a systemic issue:* The most evident gap in the field is perhaps the failure to see communication as a systemic issue that is linked to economic and political processes in society. Many of the current recommendations offer several possible communication options for individuals and local or project level activities, but have very little to say about how to approach or improve communication at a systemic level.

- iii. *Facilitate different levels of user engagement in communication of research:* User engagement is the key to taking communication beyond dissemination. It can be approached at three levels, in relation to: (a) the importance of mapping research demand; (b) how to strengthen research capacity; and (c) how to facilitate research communication. While the current recommendations from the literature focus on the first two points (research demand and research capacity), there is relatively little discussion concerning user engagement at the level of research communication. The ability to use and shape communication processes are often correlated with the ability to engage in and shape decision-making processes, and is therefore a crucial component of any empowerment process.
- iv. *Invest in communication for double loop learning:* Many of the current recommendations on communication aim to maximize the direct impact of research on policy and practice. In the process they frequently lose sight of the more gradual and indirect impact that research can have. The current focus is on instrumental change through immediate and identifiable change in policies, and less on conceptual change in the way we see the world and the concepts we use to understand it. The current literature therefore tends to encourage single loop learning, which is bringing about corrective action within existing guidelines and frameworks, but largely overlooks the important, but gradual contribution that research can make for double loop learning, that is independent and critical debate about the frameworks themselves.
- v. *Need for the development of some simple messages and model:* This is important because all these might work in different contexts – for instance a press release, a report, a newspaper article, and a website page will suffice. The project should be branded in line with the communication objectives, it, therefore, has to be clear about the target audiences and user groups, and they should be prioritized according to importance and influence relative to the objectives; one also needs to think about both the actual and preferred channels the target audiences might use and know whether the planning is precise to use the right ones for maximum impact; include a full list of all the relevant communications activities, developed into a working project plan with deadlines and responsibilities; invite participants who have knowledge of, or are affected by, the proposal or issue of interest and invite participants to identify the underlying paradigms or unwritten laws of change; trends or driving forces and collect into general categories (economy, socio/political).
- vi. Unlike traditional academia, which focuses on building knowledge within a group of peers, policy science needs to address real-world problems, and therefore provide recommendations and a framework for their application within the targeted society.
- vii. Organizations engaged in lobbying activities must seek to persuade public bodies of the reasons why certain issues, policies or laws should be supported or rejected. Despite its somewhat

tarnished reputation, lobbying remains a useful tool for charities seeking to make an impact in the public sphere. Lobbying used as a means by which organizations can further their objectives by influencing the direction and content of government policy decisions is very important.

- viii. The press reports policy announcements and key political debates every day. Newspapers in particular are an important means of communicating the major political stories of the day. Some people believe that the press may influence the political agenda and put pressure on the government to alter the course of its policies. It must therefore be embraced for wider communication.
- ix. The radio has enormous potential to communicate to a wide audience, especially with the mushrooming of FM radio stations throughout the country and access to radio through the internet. Radio also has the advantage of being able to ‘bring to life’ development issues, events and activities, thus often transmitting messages in an interesting and effective way.
- x. The website is also important for communication, it aims to make information available, freely and in forms that are easily accessible. The array of computer software and graphics packages and the capacity of the web as a publicity tool, information source and forum for public input or electronic democracy is also expanding, increasing the application of this participatory tool. Websites are particularly useful for people in remote areas accessing project information and are more effective than information repositories in this regard.
- xi. Blogging is a growing trend, and an easy and informal way to communicate with a wide range of people. Although it requires some input it can provide useful and encouraging feedback. Weblogs, or Blogs for short, are often likened to journals. The entries made to blogs can be either interactive or non-interactive and for the interactive ones, people can add commentaries to the entry.

6.4.2 Comparative case histories for successful and unsuccessful policies

It is evident from the four case histories studied on health, education, agriculture and housing that policies that benefited from research and comprehensive communications strategies succeeded, while those which research seemed to lack clear communication channels between the implementers and the stakeholders failed. The policy formulation process with regard to smoke free environment in Kenya was more systematic, transparent and inclusive. There was a relatively greater role for various stakeholders and a voice for parliamentarians, the private sector, civil society and the poor. Policy making in general and

within the ministry of health in particular, has tended towards evidence-based findings from research undertakings of local consultants, universities and policy research institutes (PRIs).

Evidence is usually communicated for information and knowledge; this in turn inspires development policy and practice. In order for the successful case on health to come through, there were several steps taken to make the case of smoke free environment policy more inspirational and informative. Researchers in this case did not fail to put the problem on the policy agenda. This is because they came to grips and appreciated the real problem facing policymakers, thus they provided operational feasibility of alternative policy options. In other words, the policy options that were outlined in research publications in this case did not fail to capture policymakers' attention and to connect with them. Thus, the health policy on smoke free environment prospered because the implementation was guided by a comprehensive and detailed communication strategy and other political considerations were taken care of during policy formulation.

The rest of the other three policies basically failed because of lack of sensitivity to communication and political economy. In all the three (agriculture, education and housing) there was a real need to strengthen researchers' communication skills in order to get the target group right, get the format right, and get the timing right. There was need to aim for close collaboration between researchers and policymakers and construct an appropriate platform from which to communicate, for instance a platform of broad engagement like a public campaign would have been more likely to be heard. The process should also have incorporated communication activities into the project design, taking into account, for example, local context and existing ways of communicating, as well as possibilities for new ways of communicating through Information and Communication Technologies (ICTs). The designers would also have done well to encourage user engagement by mapping existing information demand and information-use environment, as well as promoting participative communication for empowerment.

Based on the findings of this study in the case of failing policies in the agricultural sector, the one recommendation that is significant would be that of developing new concepts for communication with small holder farmers where simple modes of communication with them would play the central role, and with critical journalists who can engage with extension officers and researchers. A media mix around radio would then also be used to complement the different information needs of farmers. It is obvious from the study that researchers too need to develop a strategy concerning how to communicate with farmers directly when extension services are limited in terms of scope and finance as currently in Kenya. In the case history on agricultural sector, again the study shows that the government extension had been the most trusted source of information among information providers regarding agriculture even though

farmers are not content with their services. Mostly farmers criticize the reduction of public extension services and complain that extension officers are difficult to approach.

Any communication to local policy makers and farmers that is focused on reaching a large audience needs to be built around the radio and an appropriate media mix including newspapers, brochures, and mobile services. Additionally, the information flow between research and extension itself needs to be investigated. Researchers presume that a lot of useful information gets lost or is not taken up by extension. The information chain between researchers, policy makers and farmers is broken and should be fixed. Thus, dissemination events by government, extension services, and research institutions have got to be improved. Of importance is the combination of media exposure and personal communication including extension officer, farmer groups, and policy maker that would increase the probability of farmers' uptake of new technologies. Information management in all aspects of agriculture from the time research is disseminated to the time a policy is formulated is fundamental to the success of the agricultural sector. Essential aspects of information for agriculture improvement should embrace the totality of the value chain from the farm to the market. Other important elements that would bring success in the sector include availability of data and information on production systems and the production resource base. Also understanding the distribution systems, marketing channels and the regional and global market opportunities as well as constraints are essential to the sustained development of a competitive agricultural industry.

6.5 Suggested areas for further research

- 1. Increasing citizens communications capacity for policy dialogue in Kenya*
- 2. Assessing communication challenges during policy enactment in Kenya*
- 3. Policy implementation and the role of organizational communication*
- 4. Communications process perspectives on policy change: The case of policy execution in Kenya*
- 5. Integrating researchers tasks with those of policy makers to smooth policy formulation in Kenya*
- 6. Strategies for communicating development research in Kenya*
- 7. Impact of research communication on policy projects in Kenya*

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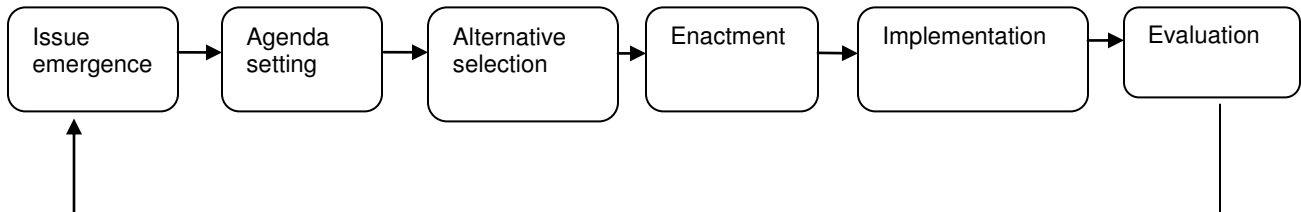
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Appendix: 1

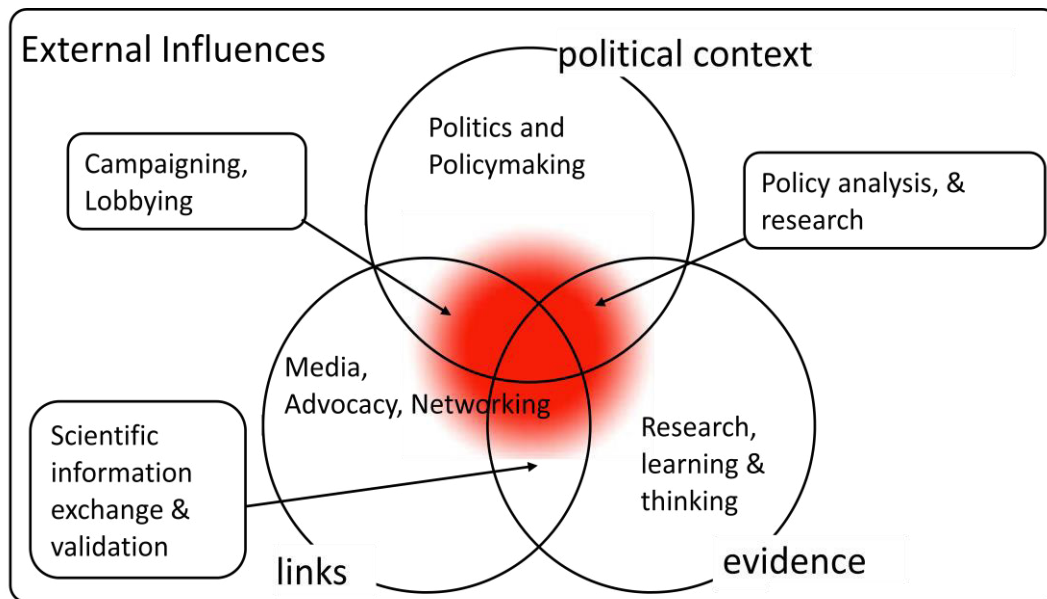
Illustrations of a simple policy process

Figure I: The stages of a linear policy-making process



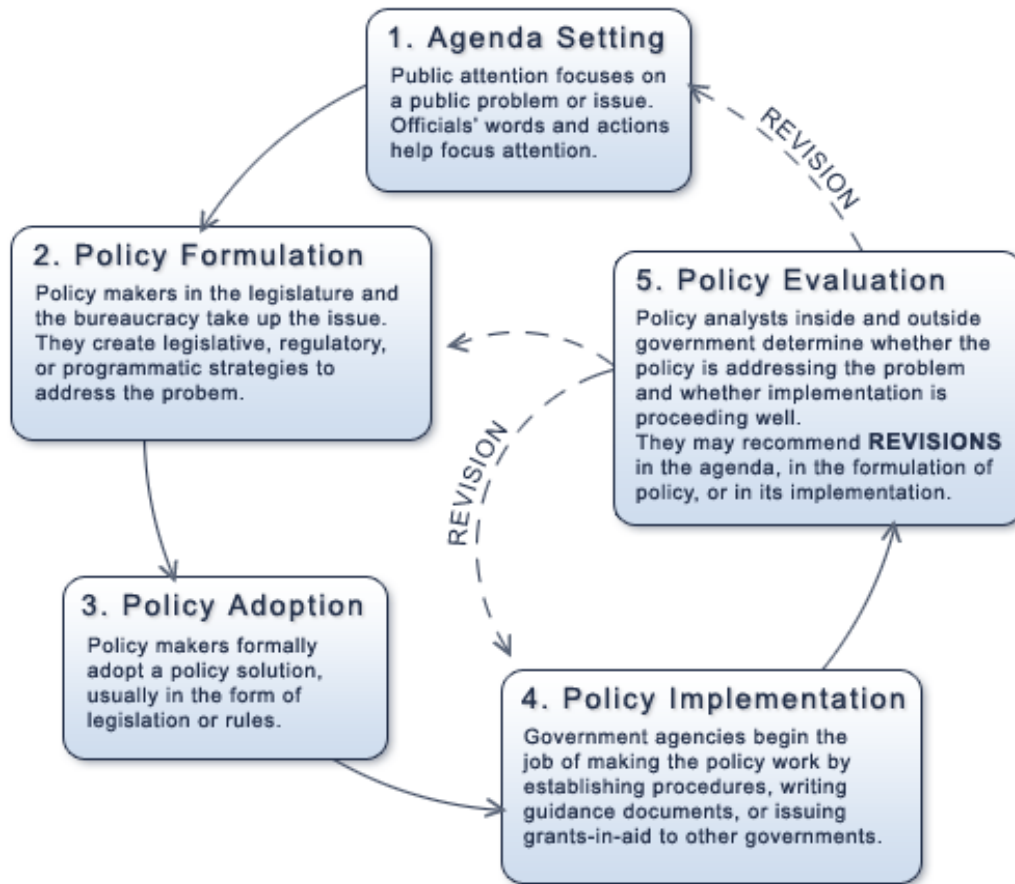
Source: Birkland, T.A. 2001.

Figure II: Context, Evidence and Links: Adapted from the RAPID Framework



Source: ODI, 2009

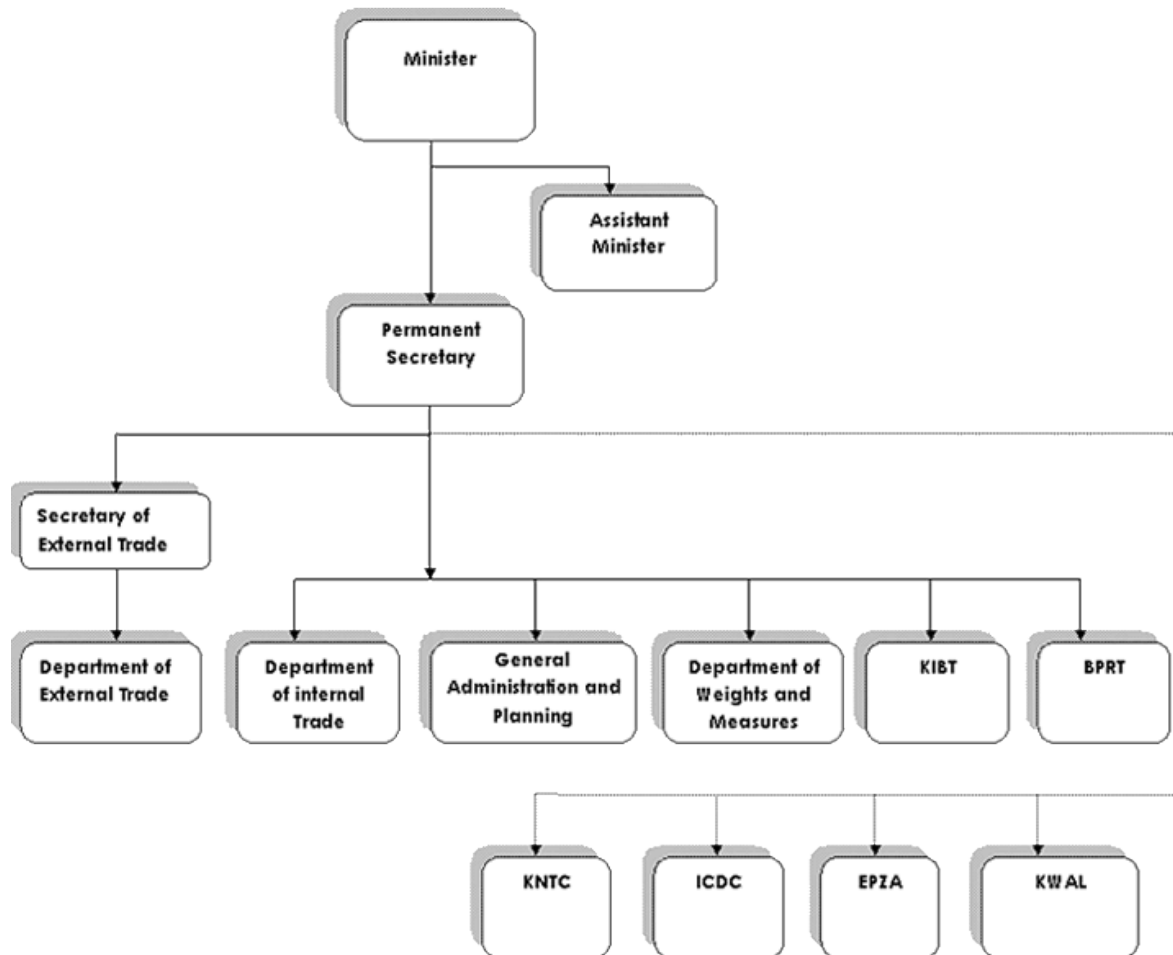
Figure III: The policy cycle



Source: Texas , 2009

Appendix: 2

Typical Organizational Structure, Ministry of East African Affairs, Commerce and Tourism



Source: Ministry of East African Affairs, Commerce and Tourism, 2013

Appendix: 3

Organizations in Africa that engage in economic policy research

- Centre Ivoirien de Recherche Economique et Social (CIRES)
- Council for the Development of Social Science Research in Africa (CODESRIA)
- Centre National de Recherches Agronomiques (Cote d'Ivoire)
- Centre for Applied Research (Senegal)
- Development Policy Centre (Nigeria)
- Eastern and Central African Programme for Agricultural Policy Analysis
- Economic Policy Research Centre (Uganda)
- International Development Research Centre (IDRC)
- Institut National de la Statistique Malgache (Madagascar)
- Institute of Economic and Social Research (Zambia)
- Development Policy Research Unit (South Africa)
- Nigerian Institute of Social and Economic Research (NISER)
- University of Nairobi's Institute for Development Studies (IDS)
- Institute of Policy Analysis and Research (IPAR)
- Kenya Institute of Public Policy Research Analysis (KIPPRA)
- Institute of Economic Affairs (IEA)



Appendix: 4 The Kenya Government (Policy Making Organ)

Office of the President
Office of the Deputy-President

Ministries:

- Ministry of Agriculture, Livestock & Fisheries
- Ministry of East African Affairs, Commerce & Tourism
- Ministry of Education
- Ministry of Energy & Petroleum
- Ministry of Environment, Water & Mineral
- The National Treasury
- Ministry of Foreign Affairs
- Ministry of Lands, Housing & Urban Development
- Ministry of Industrialization & Enterprise Development
- Ministry of Information, Communication & Technology
- Ministry of Health
- Ministry of Devolution and Planning
- Ministry of Mining
- Ministry of Defense
- Ministry of Transport & Infrastructure
- Ministry of Sport, Culture & Arts
- Ministry of Labour, Social Security & Services
- Ministry of Interior and Coordination of National Government

Public Service Commission
Independent Electoral and Boundaries Commission
Exchequer and Audit Department
National Assembly
State Law Office
The Judiciary

Source: GOK (2013)

Appendix: 5

Introduction

1 March, 2013

Dear Participant:

My name is **Charles Owino** and I am a PhD student at the **University of Nairobi**. For my final project, which is a PhD thesis, I am examining *The Role of Communication in Linking Research to Economic Policy Formulation in Kenya*. Because you are a (**Researcher/Policy-maker/Policy practitioner**) I am inviting you to participate in this research study by completing the attached surveys.

The following questionnaire will require not more than **30 minutes** to complete. I would like to stress that your participation in this study is voluntary and all efforts to protect your identity and keep the information confidential will be taken. In order to ensure that all information will remain confidential, please *do not* include your name. Copies of the project will be provided to my Supervisors at the University of Nairobi. If you choose to participate in this project, please answer all questions as honestly as possible, and return the completed questionnaires promptly using the provided stamped envelope or through email.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding the use of research during policy formulation. If you would like a summary copy of this study please complete and detach the Request for Information Form and return it to me online or me in a separate envelope. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact me at the number listed below. If you are not satisfied with the manner in which this study is being conducted, you may report (anonymously if you so choose) any complaints to the University of Nairobi, telephone number: +254 318 262.

Yours Sincerely,

Charles Owino

Tel: +254 721 382 777 e-mail: c_owino@yahoo.ca or official: charles.owino@aercafrica.org

Supervisor's Name:

Prof. Robert White

Tel: +254 735 781 810 e-mail: whitesaut@yahoo.com

Detach here

(This request for information form is an optional part of the cover letter and is not required for University of Nairobi approval.)

Request for Information

Please send a copy of the study results to the address listed below.

Name:

Address:

Do not return this Request for Information form with your survey

Return to: Charles Owino,

P. O. Box 18685-00100 Nairobi, Kenya

Policy Maker/Policy Practitioner

Please answer the following questions by **CIRCLING** or **HIGHLIGHTING** the relevant number and writing down your answer in the space provided.

Section A – Background information

This section of the questionnaire refers to background or biographical information. Although we are aware of the sensitivity of the questions in this section, the information will allow us to compare groups of respondents. Once again, we assure you that your response will remain anonymous. Your co-operation is appreciated.

1. Gender

Male	1
Female	2

2. Age (in complete years)

--	--

3. Sector of your organization

Finance	1
Agriculture	2
Education	3
Health	4
Information & Communication	5
Other (specify)	6

4. How would you describe yourself?

Policy maker	1
Policy practitioner	2
Researcher	3
Policy broker	4
Other (specify)	5

5. Your highest educational qualification?

Primary school leaver	1
High school leaver	2
Certificate	3
Diploma	4
Baccalaureate Degree(s) (BA)	5
Post- Graduate Degree(s) (MA/PhD)	6

6. How would you describe the area in which you are working?

Urban	1
Rural	2

7. Size of your organization/workforce, i.e. the number of people, including yourself, who have been working in your department for at least one year?

1-10	1
11-20	2
21-30	3
31-40	4
41-50	5
More than 50	6

Section B

This section of the questionnaire explores your habits and preferences, if any, with regard to the consumption of research outputs.

8. Have you used at least one research finding in the past three months to inform policy making process?

Yes	1
No	2

If you answered yes to question 8, please skip question 9 and continue from question 10.

9. Please rank, in order of importance, each of the following reasons for not using research findings for the past three months. Allocate a rank of 1 to the most important reason for not consuming research in the last three months, a rank of 2 to the second most important reason, etc. Allocate a rank of 12 to the least important reason for not using research outputs in the last three months.

Use each of the numbers 1 to 12 only once.

<i>Reasons for not consuming research in last three months</i>	Rank
The research finding(s) do not resonates with me or my assumptions	
I consider the evidence not to be credible or convincing	
I do not share any common networks with the research producers	
The research is designed and produced without regard for gaps	
The research is not consultative from the early stages of proposal	
The research results are not of high quality and also not based on good empirical data	
We do not have personnel to scan external environment for new information	
Our organization does not have good environmental scanning facilities	
We do not have structured decision-making processes pertaining to policy formulation	
Information flow from top to bottom is not always smooth	
It is not our culture to use research during policy making process	
I am not competent enough to use the kind of research we come across	

10. Please rank, in order of importance, each of the following reasons for using research findings for the past three months. Allocate a rank of 1 to the most important reason for consuming research in the last three months, a rank of 2 to the second most important reason, etc. Allocate a rank of 6 to the least important reason for using research outputs in the last three months.

Use each of the numbers 1 to 12 only once.

<i>Reasons for consuming research in last three months</i>	Rank
The research findings resonates with me or my assumptions	
I consider the evidence to be credible or convincing	
I share common networks with the research producers	
The research is designed and produced with regard for gaps	
The research is consultative from the early stages of proposal	
The research results are of high quality and also based on good empirical data	
We do have personnel to scan external environment for new information	
Our organization has good environmental scanning facilities	
We have structured decision-making processes pertaining to policy formulation	
Information flow from top to bottom is always smooth	
It is our culture to use research during policy making process	
I am competent enough to use the kind of research we come across	

The following questions ONLY pertain to people who have used research outputs to inform policy process in the last three months.

11. In a typical day, how many publications on policy research do you refer to while formulating a particular policy?

2 or less	1
3-4	2
5-6	3
7-8	4
9 or more	5

12. How often do you make reference to policy research on each of the following occasions?

	Never	Rarely	Often	Always
During issue emergence?	1	2	3	4
During agenda setting?	1	2	3	4
During alternative selection process?	1	2	3	4
During decision making process?	1	2	3	4
During enactment?	1	2	3	4
During implementation?	1	2	3	4
During monitoring?	1	2	3	4
During evaluation?	1	2	3	4

13. Please indicate which one of the following types of research findings you use most and which one you prefer most. (Mark one option only in each of the columns.)

	Use Most	Most Preferred
Economic	1	1
Agricultural	2	2
Education	3	3
Health	4	4
Information & Communication	5	5
Other (specify)	6	6

14. If the type of research you use most often differs from the type you prefer most in question 13, what is the MOST important reason for this discrepancy? (Mark ONE option only.)

If there is no discrepancy, please go to question 15.

I cannot access the type of research I prefer for policy formulation	1
The place where I work does not use research to formulate policy	2
Other members in my team prefer other types of research	3
Other (specify)	4

15. What is the most important reason for using the type of research specified in question 12. (Mark one option only.)

It is the type I prefer	1
It suits me best in my professional area	2
It is the most convincing	3
It is the most readily accessible	4
It is the most used type	5
It is easier to comprehend	6
It is most used by my colleagues	7
Other (specify)	8

16. How important is each of the following to you when trying to access policy research? Please indicate your answer using the following 4-point scale where

	U	SU	I	VI
Low price or free	1	2	3	4
Credible or convincing evidence	1	2	3	4
Resonates with me or my assumptions	1	2	3	4
Research is designed and produced with regard for gaps	1	2	3	4
Research results are of high quality and based on good empirical data	1	2	3	4
We have designated personnel to scan external information	1	2	3	4

Key

1 = Unimportant (U)

2 = Somewhat Important (SI)

3 = Important (I)

4 = Very important (VI)

17. Do you consider yourself a staunch user of research findings?

Yes	1
No	2

Section C

This section explores your attitude and perceptions regarding use of policy research.

To what extent do you agree with each of the following statements? Please indicate your answer using the following 5-point scale where:

- 1. = Strongly disagree (SD)
- 2. = Disagree (D)
- 3. = Neutral (N)
- 4. = Agree (A)
- 5. = Strongly Agree (SA)

		SD	D	N	A	SA
18	Using research findings increases the quality of policies that are eventually formulated	1	2	3	4	5
19	Using research outputs improves the quality of decision-making process	1	2	3	4	5
20	I cannot make a decision if I don't make reference to recent research	1	2	3	4	5
21	I prefer using research to formulating policies blindly	1	2	3	4	5
22	Using research gives me an intellectual boost	1	2	3	4	5
23	I use research because my colleagues do so as well	1	2	3	4	5
24	I use research for the knowledge	1	2	3	4	5
25	I use research because it is fashionable	1	2	3	4	5
26	Using research excites me	1	2	3	4	5
27	I prefer using policy research to using any type of research	1	2	3	4	5
28	I cannot participate in formulating any policy without being armed with relevant research	1	2	3	4	5
29	I consume research to make me stay in touch with recent findings	1	2	3	4	5
30	I prefer locally done research to those done by foreigners	1	2	3	4	5
31	Using research makes me feel important	1	2	3	4	5

Section D

This section of the questionnaire gives the respondent an opportunity to explain deeply their understanding about policy formulation their perception about use of research during policy making processes.

32. What are some of the key processes that the Kenyan Government follows while formulating national policies, taking due regard of the fact that it is through policies that governments pursue certain desired 'outcomes' to its people?

33. What are your thoughts about the current understanding that policies in Kenya are made haphazardly and there is need to develop an agreed method that is people-driven and informed by recent research?

34. What is your perception regarding beneficial or detrimental effects of using research findings during policy making process?

Thank you for your co-operation in completing this questionnaire. Kindly return the questionnaire as specified in the cover letter.

Researchers/research organizations

Please answer the following questions by circling/ticking the relevant number or writing down your answer in the space provided.

Section A – Background information

This section of the questionnaire refers to background or biographical information. Although we are aware of the sensitivity of the questions in this section, the information will allow us to compare groups of respondents. Once again, we assure you that your response will remain anonymous. Your co-operation is appreciated.

1. Gender

Male	1
Female	2

2. Age (in complete years)

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3. Sector of your organization

Finance	1
Agriculture	2
Education	3
Health	4
Information & Communication	5
Other (specify)	6

4. How would you describe yourself?

Policy maker	1
Policy practitioner	2
Researcher	3
Policy broker	4
Other (specify)	5

5. Your highest educational qualification?

Primary school leaver	1
High school leaver	2
Certificate	3
Diploma	4
Baccalaureate Degree(s) (BA)	5
Post- Graduate Degree(s) (MA/PhD)	6

6. How would you describe the area in which you are working?

Urban	1
Rural	2

7. Size of your organization/workforce, i.e. the number of people, including yourself, who have been working in your department for at least one year?

1-10	1
11-20	2
21-30	3
31-40	4
41-50	5
More than 50	6

Section B

This section of the questionnaire explores your habits and preferences with regard to dissemination of research outputs.

Before a research product is disseminated, it is considered important to go through a checklist to ensure that the messages are of high quality. Ideally one would be looking at the following:

- ✓ *Does the message capture the importance of my work?*
- ✓ *Does the product show honesty and trustworthiness?*
- ✓ *Does it show, in concrete terms, what has been achieved?*
- ✓ *Does it frame the issue and the research within the issue's broader perspective?*
- ✓ *Does the message inspire? Does it convince an audience of its worth?*
- ✓ *Does it lead an audience to further resources?*
- ✓ *Is the message timely, useful to policy makers and easy to consume?*

Please answer the following questions by writing down your answer in the space provided.

1. How have you been communicating/disseminating your research results in the past?

2. How effective has that been?

3. Who is the key audience to your research outputs and how do they perceive the messages?

4. What do you want your communication to achieve particularly with the policy makers?

5. What kind of information do policy makers need the most to act upon the research results?

6. Generally what do you think should be the role of research in policy making process?

7. What kind of message do you usually communicate to policy makers?

8. Do you normally have one message for multiple audiences or multiple messages for multiple audiences?

9. What kinds of communication “products” best display and deliver your messages?

10. What channels do you generally use to disseminate your research products?

11. Do you usually have a budget for this kind of activity?

12. What communication skills do you think are important for disseminating research results and do you have any of these?

13. Does the work (or future work) of like-minded organizations or ministries, etc., present any opportunities for disseminating your research results?

14. How would you know when your communication strategy is successful? What would have changed? How can you assess whether you used the right tools, were on time, and had any influence?

Thank you for your co-operation in completing this questionnaire. Kindly return the questionnaire on line.

Appendix: 8

Interview Guide for Focus Group Discussion

- **Policy Maker**
- **Policy Practitioner**
- **Researcher**
- **Media Representative**
- **Civil Society Representative**

Thank you for your willingness to participate in our focus group. As discussed on the phone, we would like to hear your ideas and opinions about the role research plays during policy formulation. You will be in a group with 6 to 9 including a policy maker, a policy practitioner, a researcher, a media representative, a civil society representative and a head of organization/institution. Your responses to the questions will be kept anonymous.

1. What are your thoughts about using research during policy formulation?

2. In your opinion, what kind of organizations make good use of research and why?

3. What factors enable organizations to have good environmental scanning facilities to obtain new research for use in policy formulation?

4. What do you think should be the key functions of scanners of the environment whose job it to obtain new research for use in government departments, research institutes and other organizations?

5. What are your perceptions about the role of research in policy-making process?

6. What do you by and large have to say about policy making processes in Kenya?

7. What is your general feeling about usage of research in Kenya and are there things you are dissatisfied with that you would like to see changed?

Thank you for your co-operation

Appendix: 9

Tips for developing a press release, policy brief and a brochure

Tips for writing a press release to communicate research findings

- Write in the third person.
- Use short sentences.
- Use active verbs and avoid passive voice.
- Make it short (one page) and use simple, non-academic language.
- Follow the format of a news story.
- The headline should contain keywords and catch the reader's attention.
- The first paragraph should address the 'who', 'what', 'when', 'where' and 'why' questions.

Tips for an effective policy brief

- Identify a problem, propose a solution and present a compelling recommendation.
- Use a professional versus academic tone.
- Ground the argument in the evidence.
- Make it interesting by using images, quotes, photographs, boxes, etc.
- Make sure the recommendations are feasible.
- Consider providing supporting documents with the policy brief.
- The length depends on the intended audience (two to eight pages).

Tips for developing a policy brochure

- State the problem in terms of an objective.
- Review the background and rationale for the initiative.
- Present research results and their implications.
- Include an overview of the research project/institution/team.
- Provide links to further sources of information.
- Readers should be able to understand the message at a glance.
- Colors, images, and effective typefaces add flavor.
- Provide contact information.

Appendix: 10

Suggested communication methods for each stakeholder group

Politicians and government officials

- Senior policy seminars
- Dissemination workshops
- Face-to-face meetings
- Policy forums (regional or national)
- Policy briefs, brochures, and executive summaries
- Public Web sites

Academic researchers and international agencies/organizations

- Peer-reviewed articles
- Dissemination workshops
- Research databases
- Oral and poster presentations
- CD-ROMs
- Web sites
- Social media

Civil society, NGOs and professional associations

- Fact sheets
- Brochures and other handouts
- Audiovisual presentations
- Social media

Private-sector

- Fact sheets
- Audiovisual presentations
- Social media

General public

- Newspapers
- Magazines
- Press releases
- Radio & Television
- Web-based media
- Social media

Donors/funders

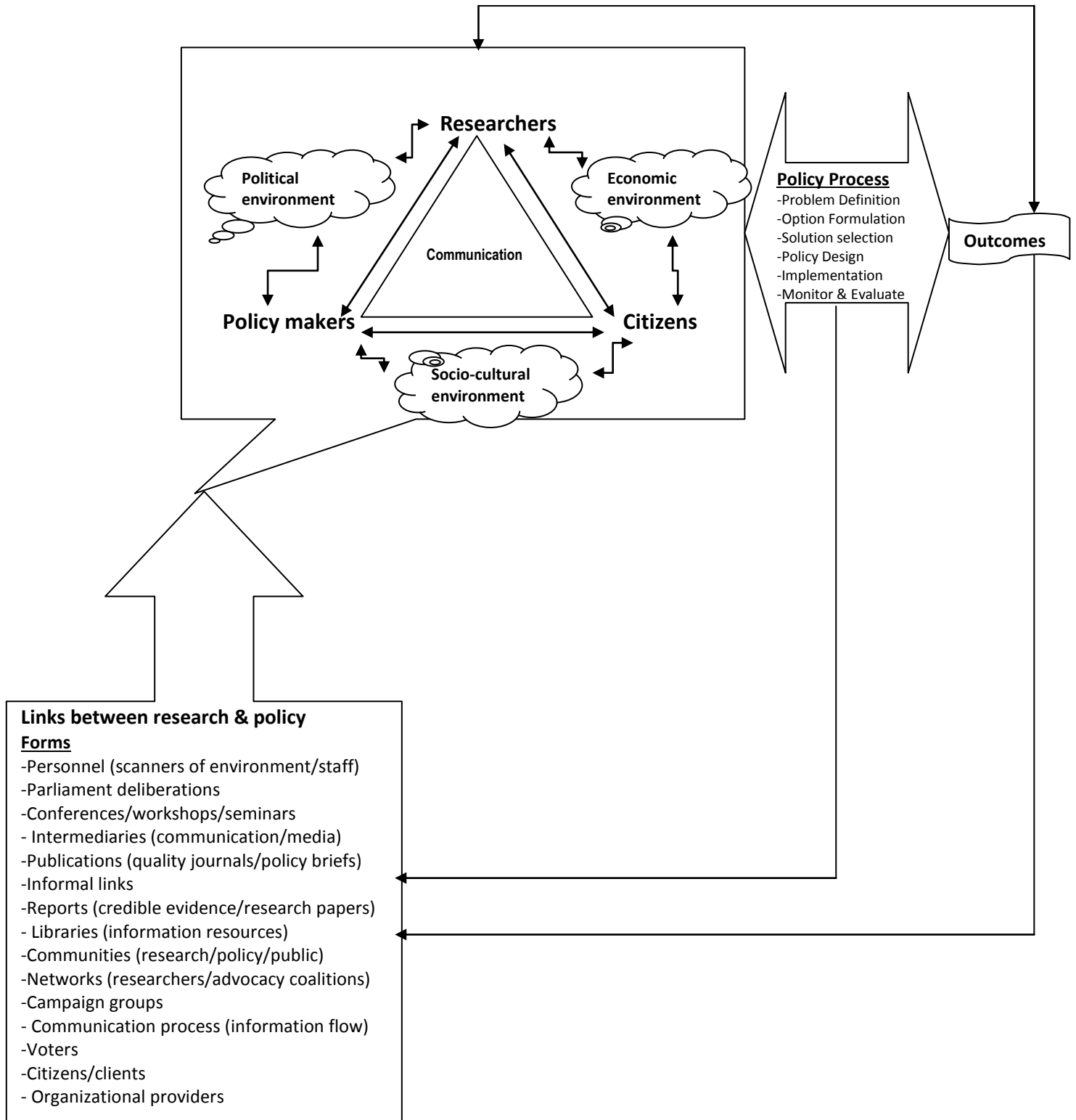
- Full research report
- Audiovisual presentation
- Social media

Program managers

- Monthly or quarterly reports
- Summary reports
- Executive summaries
- Audiovisual presentations
- Social media

Appendix: 11

Conceptual framework formulated after data analysis



Source: Author, (2014)

