Decentralization and Health Care Inequality: A Geographical Approach to the Study of
HIV & AIDS mitigation in Kenya

A thesis presented to
the faculty of
the College of Arts and Sciences of Ohio University

In partial fulfillment
of the requirements for the degree
Masters of Arts

Josiah Nyangau

June 2009

©2009 Josiah Z. Nyangau. All Rights Reserved.
This thesis titled
Decentralization and Health Care Inequality: A Geographical Approach to the Study of
HIV & AIDS mitigation in Kenya

by

JOSIAH Z. NYANGAU

has been approved for
the Department of Geography
and the College of Arts and Sciences by

____________________________________
Elizabeth Wangui
Assistant Professor of Geography

____________________________________
Benjamin M. Ogles
Dean, College of Arts And Sciences
ABSTRACT

NYANGAU, JOSIAH, Z., M.A., June 2009, Geography

Decentralization and Health Care Inequality: A Geographical Approach to the Study of HIV/AIDS Mitigation in Kenya (181 pp.)

Director of Thesis: Elizabeth E Wangui

The 1980’s and 1990’s were characterized by considerable debate on decentralization in the developing world. While advocates argued that decentralization would bring government, and therefore delivery of services closer to users, opponents pointed to potential problems including ‘elite capture’ of the decision making process, disparities in regional resource endowments and corruption. This thesis uses the decentralization framework to investigate the outcomes of health sector reforms in Kenya, especially allocation of HIV & AIDS mitigation resources. A desk review of relevant literature was employed, but the research was also augmented by limited primary data. Findings indicate that though the government embraced a diversity of policies, the broader objectives of reforms, to enhance quality and geographical coverage of health services, remain elusive.

Approved: _____________________________________________________________

Elizabeth E. Wangui

Assistant Professor of Geography
ACKNOWLEDGMENTS

I wish to thank all the incredible people that made this research possible. My sincere gratitude goes to my friends. Aurelie Somda, thank you for her support, love and encouragement. Your keen interest in my progress was a constant source of inspiration. Cathy and Elbie, Thank you for your humor and support.

Thank you to my advisors Elizabeth E. Wangui and Thomas Smucker. I have certainly learned valuable lessons about organizing and writing a research project. Through your open door policy, you guided me through research questions as well as my overall academic progress. Without your patience and unimaginable support, this research would not have been possible. To my committee members Margaret Pearce and Gaurav Sinha, thank you for your invaluable discussions throughout this experience.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>3</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>9</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>10</td>
</tr>
<tr>
<td>LIST OF ACRONYMS</td>
<td>11</td>
</tr>
<tr>
<td>CHAPTER ONE: INTRODUCTION</td>
<td>12</td>
</tr>
<tr>
<td>1.1 Statement of purpose and research questions</td>
<td>18</td>
</tr>
<tr>
<td>1.2 Presentation of the Research</td>
<td>22</td>
</tr>
<tr>
<td>CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK</td>
<td>24</td>
</tr>
<tr>
<td>2.1 Decentralization</td>
<td>24</td>
</tr>
<tr>
<td>2.2 The decentralization process</td>
<td>26</td>
</tr>
<tr>
<td>2.2.1 Definitions</td>
<td>26</td>
</tr>
<tr>
<td>2.2.2 Proponents of decentralization</td>
<td>27</td>
</tr>
<tr>
<td>2.2.3 Critiques of decentralization</td>
<td>28</td>
</tr>
<tr>
<td>2.3 Decentralization, institutions and development</td>
<td>30</td>
</tr>
<tr>
<td>2.4 Decentralization of health services in developing countries</td>
<td>34</td>
</tr>
<tr>
<td>2.5 Health inequalities in developing countries</td>
<td>39</td>
</tr>
<tr>
<td>2.6 Case studies of decentralization of health care in developing countries</td>
<td>41</td>
</tr>
<tr>
<td>2.6.1 Decentralization of health services in Zambia</td>
<td>41</td>
</tr>
</tbody>
</table>
2.6.2 Decentralization of health services in Botswana ............................................. 45
2.6.3 Decentralization of health services in Chile .................................................... 49

CHAPTER THREE: KENYA’S DECENTRALIZATION EFFORTS ............................ 53

3.1 Introduction ............................................................................................................. 53
3.2 Historical overview of evolution of Government and Governance in Kenya ....... 55
3.3 Decentralization, institutions, and government policies ......................................... 57
   3.3.1 The KANU manifesto of 1963 and Sessional Paper No. 10 of 1965 on African Socialism and its Applications to Planning in Kenya ............................................... 59
   3.3.2 The District Focus for Rural Development (DFRD –1983 .............................. 61
   3.3.3 Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth ...................................................................................................................... 64
   3.3.4 The National Poverty Eradication Plan (NPEP) .............................................. 67
3.4 The Constituency Development Funds (CDF).................................................... 68
3.5 Health inequality in Kenya ..................................................................................... 69

CHAPTER FOUR: RESEARCH METHODS ................................................................. 76

4.1 Data needs and sources ........................................................................................... 76
4.2 Data collection and analysis ................................................................................... 78
4.3 Limitations of the Data Set ..................................................................................... 80

CHAPTER FIVE: ANALYSES OF KENYA’S HEALTH SECTOR REFORMS .......... 82

5.1 Introduction ............................................................................................................. 82
5.2 Spatial variation of HIV& AIDS in Kenya .............................................................. 83
5.3 Evolution of health services policy in Kenya ......................................................... 88

5.4 Evaluating decentralization of health resources in Kenya ....................................... 92

5.4.1 Introduction of user fees and budget cuts ........................................................ 93

5.4.2 Decentralization of decision-making ............................................................... 96

5.4.3 Health Management Teams and Boards .......................................................... 96

5.5 Limitations of Decentralization .............................................................................. 98

5.5.1 Weak legal frameworks ................................................................................... 98

5.5.2 Elite capture ................................................................................................... 100

5.5.3 Differentials in distribution of health services between high and low potential
districts .................................................................................................................... 100

5.5.4 Explosion of districts ..................................................................................... 102

5.6 Assessment of failures and successes of decentralization in relation to HIV patterns
.................................................................................................................................... 103

5.7 Utility of geographical analysis to inform decentralization .................................... 114

5.7.1 Maps of HIV prevalence 1990-2003 .............................................................. 115

5.8 Western Kenya: Decentralization, Politicized Ethnicity and the allocation of public
resources ..................................................................................................................... 128

5.9 The Decentralization Framework ......................................................................... 135

5.10 Decentralization and Health Sector Reforms Kenya ............................................ 138

5.11 Policy implications for Kenya ............................................................................ 147

CHAPTER SIX: CONCLUSION ................................................................................... 155
6.1 Has decentralization fundamentally altered patterns of health inequality in Kenya? ................................. 155

6.2 Policy implications for Kenya ................................................................................................................ 158

6.3 Can geographical analyses of HIV & AIDS refine our understanding of the pandemic and illuminate health care challenges of decentralization? .......................... 164

6.4 Implications for Future Research ........................................................................................................ 165

REFERENCES ................................................................................................................................................. 168
LIST OF TABLES

Table 1: Selected Demographic and Health Indicators for Kenya, by Province 2003 ...72
Table 2: Delivery Care Indicators.................................................................74
Table 3: Research Methods............................................................................78
Table 4: Distribution of NASCOP Registered Facilities in HIV Prevalence Zones 2003 ...........................................................................................................106
Table 5: Distribution Health Facilities per Province ....................................109
Table 6: HIV & AIDS Prevalence per Province............................................110
Table 7: Distribution of Health Facilities by Province and Facility Type........111
Table 8: Selected Health Indicators for Selected Districts..............................133
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Management Structure of Public Hospitals in Zambia</td>
<td>45</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Structure of Botswana’s Public Health System</td>
<td>48</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Structure and Functions of Chile’s Public Health System</td>
<td>51</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Map of Kenya Displaying Population Densities</td>
<td>55</td>
</tr>
<tr>
<td>Figure 5</td>
<td>The Public Health Structure</td>
<td>88</td>
</tr>
<tr>
<td>Figure 6</td>
<td>Map of Maximum HIV &amp; AIDS Prevalence Rates in Kenya</td>
<td>116</td>
</tr>
<tr>
<td>Figure 7</td>
<td>HIV &amp; AIDS Prevalence Rates for Nyanza Province 1990-2003</td>
<td>117</td>
</tr>
<tr>
<td>Figure 8</td>
<td>HIV &amp; AIDS Prevalence Rates for Kakamega, Western Province 1990-2003</td>
<td>117</td>
</tr>
<tr>
<td>Figure 9</td>
<td>HIV &amp; AIDS Prevalence Rates for Coast Province 1990-2003</td>
<td>118</td>
</tr>
<tr>
<td>Figure 10</td>
<td>HIV &amp; AIDS Prevalence Rates for Central Province 1990-2003</td>
<td>118</td>
</tr>
<tr>
<td>Figure 11</td>
<td>HIV &amp; AIDS Prevalence Rates for Eastern Province 1990-2003</td>
<td>119</td>
</tr>
<tr>
<td>Figure 12</td>
<td>HIV &amp; AIDS Prevalence Rates for Nairobi Province 1990-2003</td>
<td>119</td>
</tr>
<tr>
<td>Figure 13</td>
<td>HIV &amp; AIDS Prevalence Rates for Rift Valley Province 1990-2003</td>
<td>120</td>
</tr>
<tr>
<td>Figure 14</td>
<td>HIV &amp; AIDS Prevalence Rates for North Eastern Province 1990-2003</td>
<td>120</td>
</tr>
<tr>
<td>Figure 15</td>
<td>HIV &amp; AIDS Prevalence Rates 1990 – 1996</td>
<td>121</td>
</tr>
<tr>
<td>Figure 16</td>
<td>HIV Prevalence Rates in Kenya</td>
<td>123</td>
</tr>
<tr>
<td>Figure 17</td>
<td>HIV &amp; AIDS Prevalence Rates in Kenya</td>
<td>124</td>
</tr>
</tbody>
</table>
LIST OF ACRONYMS

ACU – AIDS Control Units
ANC – Antenatal Clinic
ART – Anti Retro Viral Treatment
ASALs – Arid and Semi Arid Lands
CDF – Constituency Development Fund
CPE – Commission of Poverty Eradication
DDC – District Development Committee
DFRD – District Focus for Rural Development
DHMBs – District Health Management Boards
DHMTs – District Health management Teams
HIMS – Health Information Management Systems
KANU - Kenya African national Union
NPEP – National Poverty Eradication Plan
PHMTs – Provincial Health Management Teams
PMCT – Prevention of Mother to Child Transmission
PRSP – Poverty Reduction Strategy paper
SDD - Social Dimensions of Development
VCT – Voluntary Counseling and Testing
WMS – Welfare Monitoring Surveys
CHAPTER ONE: INTRODUCTION

The HIV & AIDS pandemic is exceptional in its geographical spread, and the contemporary socio economic conditions under which the pandemic spreads are varied. Consequently, geographic studies of spatial variations of HIV & AIDS must consider not only biological and epidemiological parameters, but also the development context within which the pandemic rages (Gould 2005). There is need to consider vulnerability to HIV in terms of both exposure and the society’s capacity to cope in terms of administration of public health resources.

This research combines the overlapping concerns of political and medical geography. In analyzing the outcomes of health sector reforms and the attendant health inequalities with regard to HIV & AIDS mitigation resources, this research examines the political decentralization of services, and ultimately health care services to the periphery. In so doing, this research evaluates whether the geography of resource allocation reflects targeting geographical areas of greatest need after implementation of reforms. Decentralization is a political process and much of the literature focuses on the broader issues of sub national provision of health while ignoring local variations that powerfully shape health care outcomes (Jimenez and Smith 2005). According to proponents of decentralization, regional authorities are better placed to access information about local variations on health care as opposed to central authorities. Knowledge of the local conditions gives local decision making institutions an edge they can utilize to tailor health services and spending patterns to local needs. Using the study of the spatial-
temporal patterns of HIV & AIDS, this study utilizes the decentralization framework to underscore the outcomes of health sector reforms in Kenya.

Political geography is a subfield of geography concerned with the spatially uneven outcomes of political processes (Taylor 1979; Agnew 1996). More specifically, political geography deals with states and processes that influence interaction between the center and the periphery (Taylor 1979). The core-periphery dichotomy involves the spatial differences and contrasts that characterize contemporary governance in the developing world. The core usually contains the capital city and dominates the rest of the country politically, economically, culturally and demographically (Reitsma and Kleinpenning 1991). Additionally, concentrations of modern industrial, commercial and service activities, fairly mechanized methods of agricultural production and better social and physical infrastructure characterize the core.

The periphery is not just rural, but relatively stagnant, and characterized by subsistence agriculture, out-migration, poverty, and lack of modern services including hospitals. And despite the fact that a majority of the population in the developing world live in rural areas, the periphery has little political power (Reitsma and Kleinpenning 1991). Core-periphery differences are not unique to the developing world. In the developed world, government policies intended to geographically redistribute wealth through opening up and stimulating rural economies shrink those spatial differences. By contrast, serious policy measures aimed at geographical redistributions of wealth are often lacking in developing countries. And while the core entrenches itself at the expense
of the periphery, the gap between the more prosperous core and the backward periphery only widens. As Reitsma and Kleinpenning (1991) note, government policies in many developing countries are biased towards the more prosperous and relatively dynamic core areas, and so the absence of strong decentralization policies to geographically redistribute wealth continues to fuel the growing exclusion of the periphery.

Therefore, the center-periphery relationship is not just dynamic, but is complex and extends beyond the economic to the political and social contexts. Consequently, the concept of a place being marginal or peripheral is deeply rooted in complex historical and political contexts (Southall and Wood 1996). Political elites utilize centralized decision-making structures to marginalize regions that embrace politics of defiance. And in Kenya, these political and historical factors play out in an intricate manner such that place that is marginal in one context may not be marginal in all contexts. A region may be rich in natural resources, but owing to its brand of politics, operatives of the ruling party marginalize the region by committing fewer resources for development activities. Thus, health resource marginalization does not necessarily mean natural resource marginalization.

Popular participation in the political process, one of the processes that influence relations between the center and the periphery can lead to redistribution of state resources to match demand and peoples conception of the geographical dimension of social justice. To redistribute state resources requires an expansion of state apparatus (Taylor 1979) to create an egalitarian system. However, Dawson (2001) asserts that lack of access to state
resources because of lack of political or economic influence often leaves marginalized regions/communities excluded from allocation decisions, thus deepening disparities in levels of development.

On one hand, unequal access to health resources, and essentially HIV & AIDS mitigation resources, occurs in a landscape of profound regional inequality, and policy approaches remain at variance with the broader governance issues of the pandemic (Jones 2005). Indeed, Kenya is among the top 10 most unequal societies in the World, and the most unequal in East Africa (SID 2004). The fact that for every shilling a poor Kenyan makes, a rich Kenyan makes 56 shillings best conveys inequality in contemporary Kenya. The underlying thesis that these figures do not narrate is the resultant discrimination and social exclusion that these inequalities produce.

On the other hand, HIV & AIDS is not just a health issue thus, it cannot be explained only in terms of vulnerability or exposure (to the virus), rather it is a development issue and the need to shift explanations about the geography of HIV & AIDS from a biomedical approach to a broad governance approach cannot be overstated (Gould 2005). The literature on political geography focuses on the process of decentralization, institutions and development, and these processes can help us understand health inequalities as a manifestation of uneven development.

Medical geography exploits techniques and concepts of geography to investigate health related topics such as the spatial distribution of disease and health care resources (Meade and Earickson 2000; Rosenberg and Wilson 2005). In illuminating the geography
of disease, and the spatial distribution of health care facilities and professionals as well as
access/ utilization of medical care services, medical geography utilizes spatial analytic
approaches. And so the spatial distribution of health care facilities or health professionals
becomes an important lens for exploring the geography of health inequality, and
accessibility and utilization of health services assume dominance in this subfield. Medical
geography is an emerging field primarily concerned with improving the understanding of
factors that affect the health of a population. The central concern is the relationship
between geographic location and health outcomes in a population (Fiona 2005). This
subfield of geography makes the most of spatial analyses to understand the distribution of
health inequalities. Uneven health outcomes result from the uneven distribution of health
care services (Meade and Earickson 2000).

Medical geography utilizes tools such as GIS not only to advance investigation
into the spatial distribution of diseases at different scales (Rosenberg and Wilson 2005),
but also linking the outcomes of health inequality to public health policies that play a
substantial role in shaping access to health services in different regions (Jones and Moon
1993). Ideally, local health care needs should play an important role in health planning,
however many state health systems remain remote from consumers because political
processes such as decentralization have substantial impacts on geographic allocation of
state resources.

In many developed and developing countries, allocation of resources, including
HIV & AIDS mitigation and intervention resources to different geographic regions is
uneven. Advocates of decentralization argued that reforms would cut the geographic
distance between the population and the government, hence bring services closer to users
(Crook 2003). However, decentralization is a political process influenced by competing
interests, and like any institutional reform, may create winners and losers. This implies
that policy initiatives and resource allocation measures implemented by the government
to improve equity and efficiency in delivery of social services such as basic health care
were met with challenges of regional imbalances (Crook 2003). Therefore, persistent
inequalities in allocation of HIV & AIDS mitigation resources are a function of the
existing political economy whereby high potential regions enjoy enhanced access to state
resources while low potential regions and those that practice politics of defiance remain
marginalized. Even in the marginalized areas, there exists a hierarchy. Those closer to
urban areas easily access services while those in rural areas have to travel longer
distances to access the same.

In analyzing spatial distribution of disease, the need to understand the political
economy and therefore the development context is as imperative (Gould 2005). That’s
why interventions and mitigation strategies to the overwhelming effects of HIV & AIDS
need to appreciate the spatial inequalities produced by the political economy. For
instance, although exposure is necessary for the spread of HIV, it is not in itself a
sufficient condition for sustaining prevalence of the epidemic. Other dynamics including
health sector policies and issues of distribution of health care resources interact to sustain
the spread, rate, and direction of the pandemic. These factors are important in
epidemiology because they set the context of the local capacity to effectively cope with and manage HIV & AIDS.

1.1 Statement of purpose and research questions

This research seeks to highlight health care inequalities in Kenya in light of decentralization of primary of health services. Highlighting inequalities in health care can contribute to an understanding of inequalities in access to health services. The HIV & AIDS pandemic provides a good lens for evaluating inequalities in distribution of health services because the pandemic consumes substantial health sector resources. This research utilizes the decentralization framework to evaluate allocation of health care resources in Kenya, guided by three research questions:

1. Has decentralization fundamentally altered the patterns of health inequality in Kenya?

2. What lessons can Kenya learn from success stories with regard to distribution of HIV & AIDS mitigation resources?

3. Can geographical analyses of HIV & AIDS refine our understanding of the pandemic and illuminate the health care challenges of decentralization?

Question one explores published academic and grey literature (working papers, technical reports from government and conference proceedings) on health sector reforms in developing countries. Some of the promises of decentralization include improving quality by tailoring services to be responsive to needs and expanding geographical coverage/access of health services. This thesis evaluates decentralization of health
services in developing countries and the changing health inequality in Kenya, and based on the above analyses, the thesis draws conclusions whether decentralization succeeded in reducing inequalities in distribution of health services in Kenya.

Question two examines secondary data to explore case studies of countries that successfully decentralized delivery of primary health services. This study considers countries as successful, if by decentralizing health services, they improved quality and coverage/access of health services, and empowered local health institutions to uniquely cater for the local needs of the population. This research focuses on countries that improved the vibrancy of their health systems in order to draw policy implications for Kenya.

Question three utilizes data reported to the UNAIDS to underscore the spatial and temporal trends of HIV & AIDS. The study maps spatial prevalence of HIV & AIDS to highlight the geographical distribution of the pandemic. Further, this study lays emphasis on western Kenya, a region that continues to witness relatively higher rates of prevalence of HIV & AIDS and other attendant diseases than other parts of the country. GIS provides the necessary tools for describing and understanding the spatial organization of health care, and examining its correlation to health outcomes (Mclafferty 2003). Towards that end, this study utilizes point data to map the spatial-temporal patterns of HIV & AIDS to underscore the uneven distribution of public health resources in Kenya.

Mapping the spatial prevalence of HIV & AIDS is critical in investigating distribution of health care resources, and providing precise information for exploring how
to improve delivery of health care services to match demand. Additionally, effective response to an epidemic requires not only accurate and up to date geo-referenced information on the local situation, but also tools to collect analyze and visually communicate this information (WHO 2007). Geographical analyses (through mapping disease) of trends over time helps highlight places that exhibit unusually high or low prevalence rates, yielding geographical patterns of health events (Cromley 2002). The geographical approach that this research employs to underscore inequalities distribution of health services, if adopted by policy makers, will tremendously improve precision in the (geographical) targeting of HIV & AIDS mitigation and intervention resources. Stated differently, an understanding of decentralization of the delivery of primary health care and the concomitant politics of resource distribution offers policy makers a decisive edge in shaping the planning of health services and policy responses.

The challenges of HIV & AIDS are vast, and for Kenya to turn back the tide of infections there is pressing need to develop an effective strategy that underscores the spatial extent of disease. Kenya needs to develop and utilize a geographical analysis (mapping) of disease to steer the planning, decision-making and decision support processes (decision are supported by relevant data and maps). This approach will lead to effective structuring of the health care delivery system, and highlight the need for targeting resources to areas most unequal rather than relying on historic public health spending patterns. Utilizing GIS to map the geographical extent of diseases will powerfully highlight inequalities in the delivery of health services, thus facilitate
formulation of new and effective patterns that reflect enhanced equity in distribution of health resources (WHO 2007).

HIV & AIDS consumes vast health sector resources, and this thesis uses the pandemic as a proxy to explore the outcomes of Kenya’s health sector reforms. But HIV & AIDS is not the only disease in Kenya. Malaria for instance, is a highly seasonal disease that claims 34,000 children under the age of five annually, and threatens the lives of millions of citizens. Further, malaria accounts for 20 per cent of all hospital infections and up to 50 per cent of out-patients across the country (Akwale 2009). While malaria is transmitted through female anopheles mosquito bites, HIV AIDS is primarily transmitted through sexual intercourse with an infected partner. Because HIV & AIDS does not involve a strong environmental component, its spatiality is more related to patterns of human interaction. Thus, patterns of regional prevalence should be explained with the complex cultural, social and economic context in which the pandemic spreads in perspective (Ngigi 2007). HIV & AIDS is therefore a people-driven disease. Nevertheless, the varied prevalence of HIV & AIDS across Kenya’s geographical provides us with an important spatial dimension that poses a particular set of problems for the geographical planning of health resources. In addition, HIV & AIDS was discovered in the 1980’s, a period characterized by budget cuts to the health care sector hence, as prevalence of the pandemic rose, the health care sector faced budget cuts and the concomitant retrenchment of health care staff as part of reforms. As such, HIV & AIDS provides us with one possible prism through which to consider health inequality. It
is however important to note that after the introduction of Structural Adjustment Programs, the government has become less significant as a provider of basic health services as other institutions, including NGOs, bilateral aid agencies and the private sector, are involved in the delivery of primary health services. Consequently, the results of this thesis may not reflect the actual situation of resource availability on the ground. Nevertheless, government still contributes substantially to social equality, and the distribution of health resources is one part of that.

Geographical inequalities in Kenya are manifest in access to social services (SID 2004). For instance, there is a 19-year difference in life expectancy between Nyanza and Central provinces. And while the doctor to patient ratio in Central province is 1: 20,700, the same is 1: 120,000 in North Eastern province. These figures imply that the scale of inequality in contemporary Kenya is a great concern. The skewed development pattern and the concomitant inequality are deeply rooted in the political economy. This context accentuates the fact that HIV & AIDS is a development issue reflected in the uneven allocation of health resources. Thus spatial information about HIV & AIDS will be useful in informing the political processes that shape the geography of mitigation resource allocation decisions. Spatial information will be useful to policy makers and politicians to begin addressing the problem of health inequality based on informed positions.

1.2 Presentation of the Research

This thesis is organized into six chapters. Chapter 2 is a review of the literature on decentralization of services in developing countries. This involves literature on health
inequalities in developing countries and case studies of decentralization of health services in Zambia, Botswana, and Chile. Kenya’s decentralization efforts are discussed in chapter three. This chapter focuses on the evolution of Government and governance in Kenya in the context of decentralization, institutions and government policies. Chapter four provides the methods this study used to collect data and how the data were analyzed and interpreted. This thesis is substantially descriptive, though it is augmented by limited primary data on the prevalence of HIV & AIDS in Kenya. Chapter five provides broad answers to the research questions. This chapter starts with a description of the spatial variation of the HIV & AIDS pandemic in Kenya and proceeds to describe the evolution and decentralization of health services in Kenya. The chapter concludes by reintegrating back into literature to identify the drivers of health inequality in Kenya. Chapter six provides the conclusion of the thesis. After a comprehensive evaluation of published academic and gray literature, the thesis concludes that health sector reforms failed to deliver on the promises of expanding geographical coverage of primary health care services, improving allocative efficiency, enhancing accountability and streamlining the delivery of health care services to balance geographic need with allocation of resources.
CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Decentralization

The contemporary spread of decentralization policies not only yielded uneven outcomes but also transcended central institutions (Work 2002; Astiz 2002). Decentralization policies and their associated good governance practices such as accountability, democratic governance and social justice stimulated giant economies of the developed world to incredible economic success. Good governance practices expanded opportunities, exponentially multiplying wealth. But to the developing world, they led to mixed outcomes, among them, further exclusion of those at the periphery.

Developing countries offer extensive services in cities and urban areas however, coverage of these services in rural areas is limited (Rossi 2006). Nonetheless, better coverage in urban areas does not imply that the entirety of the urban population has equitable access to public resources. In fact, the urban poor constitute a section of the population severely marginalized by exclusionist policies of central governments. The impetus for political and institutional reforms arose from the failure of central bureaucracies to effectively and efficiently provide key services, such as education and primary health care to the public. Some of the forces that beget geographical inequalities in distribution of social services include poor coordination and management of policy implementation measures, poor targeting, and corruption (Bardhan and Mookherjee 1998).
Decentralization began in the period after World War II (Blair 1997) but strongly emerged in the development literature in the 1980’s, and continues to typify contemporary governance in the developing world. Divergent circumstances necessitated reforms in different countries, but striking similarities emerge in the expected outcomes—the need to expand geographic coverage of basic social services (Litvack et al. 1998). The advent of plural politics in Africa, the tremendous expansion of democratic space across Latin America, the transition from command to market economies in Eastern Europe and the former Soviet Union, the need for government to enhance access to public services in East Asia all powerfully outlined the need for reforms (Litvack et al. 1998).

To make government programs more effective and responsive to local needs, and reduce geographic inequalities in access to public resources, donor countries and institutions emphasized the need to transfer power to lower levels of authority. For this reason, decentralization of the delivery of social services was based on the notion that it empowers local institutions to make decisions responsive to the local constituency, hence improving coverage and competitiveness of social services (Blair 1997). Nonetheless, Crook (2003) notes that decentralization essentially is a political process whose outcomes are ultimately determined by political variables. Decentralization involves the distribution of power and resources to sub-national institutions and to different geographical areas, but interested parties explain the dichotomy of central-local politics, and therefore resource allocation decisions in terms of what they gain or lose from institutional reforms.
2.2 The decentralization process

2.2.1 Definitions

Broadly, decentralization involves the transfer of authority and responsibilities of public institutions from the central government to semi-autonomous government institutions. The main types of decentralization include; political, administrative, and fiscal decentralization (Litvack 2006; Blair 1997). Political decentralization offers citizens and their elected representatives more power and influence in the decision-making and policy formulation process. This form of decentralization draws its strength from the notion that greater participation in decision-making broadens public policy support, therefore as government comes closer to people, popular participation in the political process becomes inevitable. Administrative decentralization entails redistribution of authority and responsibilities for planning and financial management to lower levels of government, and fiscal decentralization involves redistribution of revenues, locally or transferred, from the central government. Implementation of decentralization policies was intended to delegate responsibility, authority as well as resources to sub-national levels of government, and communities, to make delivery of social services more responsive to local needs (WHO 1978 cited in Alexis 1999), hence enhance equity in resource distribution.

To redistribute authority to peripheral institutions, decentralization dilutes political power at the center. This implies that decentralization policies require strong legal and administrative preconditions to deliver on the promises (Rossi 2006).
Nonetheless, in many developing countries, decentralization was never accompanied by the strengthening of local institutional capacities to meet the surge in demand for decision-making (Blair 1997). Advocates compellingly argued that decentralization would revolutionize delivery of social services across the developing world. Nevertheless, diverse historical/ political trajectories of different countries make it difficult to draw conclusive outcomes on the failures or success of the process. Failure of decentralization policies to deliver on the promises in some developing countries is principally attributed to stiff resistance from bureaucrats in central governments to devolve sufficient power to enable peripheral institutions to function independently.

2.2.2 Proponents of decentralization

Central governments are considered far away from experiences of their citizens because of the geographic distance that limits interaction between government and its citizens (Kalin 1999), majority of whom live in rural areas, especially in developing countries. Less consensus emerges from literature on the benefits of decentralizing services. Even so, advocates of decentralization are influenced by the work of Tiebot (1956). In this work, Tiebot asserts that decentralization undercuts geographic inequalities, hence improving equity in the distribution of public services. Crook (2003) also argues that decentralization brings government services closer to citizens, both spatially and institutionally, hence increasing the voice of ordinary citizens in the development planning process, and the delivery of social services. Indeed, a government closer to its people will not only be more knowledgeable, but also more responsive to the
needs of its citizens. Some scholars contend that activities of the central government are not driven by specific demands in geographical areas, rather imposed by institutions. Thus, greater proximity to decision making under decentralization would give local residents a greater say in the development agenda (Blair 1997; Rossi 2006; Fisman and Gatti 2002). Also, corruption thrives in centralized governance owing to the robust environment in which rich autocrats, because of their capacity to influence decisions divert resources for their own good (Bardhan and Mookherjee 1998).

2.2.3 Critiques of decentralization

Critics point out a number of potential problems associated with decentralizing delivery of social services. The main shortcomings identified in the literature include weak legislative frameworks to anchor the decentralized institutions, elite capture, disparities in regional resource endowments and lack of adequate technical support (Tanzi 1996; Bardhan and Mookherjee 1998; Litvack et al. 1998; Smith 1997; Rossi 2006; Bossert et al. 2000).

Previous research indicates that lack of strong legislative frameworks in decentralized systems weakens accountability in service delivery, and opens channels for influential individuals to manipulate decentralized institutions to meet their interests. As a result, instead of decentralization creating the necessary checks and balances absent in centralized systems, it produces a highly flawed structure characterized by endemic corruption and poor coordination (Bardhan and Mookherjee 1998; Ahmad et al. 2005).
Critics also identify ‘elite capture’ of the decision making process as a potential problem in decentralized systems. Local elites exploit the population’s inexperience on matters of policy, inattention, and indifference to ‘micromanage’ institutions at the periphery (Blair 1997) to create and sustain power bases in the countryside. Although decentralizing delivery of social services to the periphery would empower the geographically marginalized, the powerful dynamics of the local political economy skew the allocation of resources to benefit the non poor (Bardhan and Mookherjee 1998; Rossi 2006). Even when decentralization captures the interests and aspirations of those at the periphery, weak accountability mechanisms (compromised by local elites) and political realities actively undermine input from the periphery into the planning and policy formulation processes (Crooke 2003).

Tacit collusion between local elites and bureaucrats greatly undermines decentralization. Funds are allotted from the central government with the understanding that local elites will siphon the funds and redirect them to their narrow interests as opposed to serving the broader needs of development (Crook 2003). Thus, in many developing countries, decentralization of services only created a patronage-fuelled network that systematically excludes the poor.

Local revenue mobilization is a fundamental issue in decentralized governance. Nevertheless, resource endowment in many developing countries is uneven. Some geographic regions are wealthier than others consequently, decentralizing delivery of basic services without corresponding mechanisms for redistributing more resources to
poorer regions only entrenches inequalities (Litvack et al. 1998; Smith 1997). Bolivia is a case in point in which although central funds are allocated on a strict per capita basis, decentralization has empowered some regions to generate far more resources than others. For instance, the Santa Cruz department, a province (in Bolivia) with the most dynamic regional economy raised $ 58 per capita in 1995, as opposed to Potosi department, one of the poorest provinces that raised only $ 14 over the same period of time (Blair 1997). When these figures are added to the $ 21 per capita from the central government to all regions, Santa Cruz had a cumulative $ 79 per capita while Potosi had $ 35 per capita to spend on public services.

2.3 Decentralization, institutions and development

Theoretically, decentralization redistributes power and reassigns administrative functions to lower levels of government. However, this is a political process and so, issues of power redistribution and decision-making generate systematic challenges (Wunsch 2001). As such, efforts to improve equity in distribution of state resources in many developing countries achieved little success, and resource allocation decisions remain skewed against geographically marginalized sections of the population (Ahmad et al. 2005) as influential politicians and civil servants from central governments undermine the authority and independence of local institutions. In Nigeria for instance, a country that made promising start, local governments’ overdependence on the central government creates uncertainties and allows the central government to influence institutions at the periphery (Wunsch 2001). In theory, local governments offer great potential in making
services responsive to the local population. In practice however, these governments enjoy limited managerial capacity, and are overly dependent on the central government, hence implement policies from central government instead of initiating their own projects that match local priorities. This lack of independence for decision-making implies that local authorities attach little significance to serious planning with a view to diversifying allocation of resources (Smith 1997 and Wunsch 2001), and merely work as agents of the central government.

Across the developing world, less consensus emerges from the literature that the principles of efficiency and equity are embraced in resource distribution to different geographic regions and sub-national governments. Instead, power politics and historical legacies (Wunsch 2001) influence allocation of resources. Although, proximity to government decision-making organs and geography are two factors that should guide distribution of resources, in practice however, political expediency takes precedence. Indeed, political leaders in developing countries depicted a commitment to decentralize institutions. Nonetheless, vast challenges emerged in the ‘nuts and bolts’ of change. After transferring power and responsibilities to lower institutions of government, in Uganda, Tanzania, and Nigeria for instance, elites emerged at the periphery to exert influence on public policy. Moreover, frail oversight institutions cannot stave off powerful interests (in the administration of public resources) from the central government (Litvack et al. 1998; Enikolopov and Zhuraskaya 2007; Bardhan 2002).
Ghana is an interesting example in which though a decentralized government is in place, there is little evidence that it has resulted in pro-poor policies (Crook 2003). Although Ghana’s District Assemblies were initially successful in enhancing popular participation from farmers, traders and artisans, the leadership of these Assemblies firmly remains in the hands of well-connected elites. While it may be argued that decisions taken in public meetings summoned by such Assemblies adhere to well established procedures for achieving consensus, decisions from such forums rarely challenge the existing social hierarchies. In other words, the existing social context determines the structure and ultimately the way the decentralized system works (Crook 2003).

Cote d’Ivoire developed a system of communes based on populations of about 20,000, to encourage the development of popular community-based governments (Crook 2003), but the complex interaction between the local and national structures of power produced a very elite-dominated system in which mayors and politicians who live in the capital Abidjan-far from the periphery, dominated the communes. The Tanzanian system established in 1982 does not fair any better. Citizens view the structure as an instrument of the ruling Chama Cha Mapinduzi (CCM) to sustain political power and patronage. In consequence, the system is characterized by apathy to governance and policy formulation. In all these systems, proposals from local planning committees’ remain wish lists while plans from the central government are implemented (Oyugi 1990 cited in Wunsh 2002; Crook 2003).
To achieve equity in resource distribution, decentralization must be augmented by deployment of sufficient financial resources to the periphery (Rossi 2006). And to achieve regional parity, central governments must collect and redistribute resources in a formula that eventually favors poorer regions. On the contrary, even when these transfers are formula driven, political influence ultimately determines resource allocation decisions (Ahmad et al. 2005). While many developing countries implemented political and fiscal reforms, their approach to administrative reform is closely associated with either deconcentration (local service providers remain full employees of the central government) or delegation (local governments have limited authority over their employees), as a result, administration reform across the developing world led to confusion, overlaps, and conflicts in public resource allocation (Ahmad et al. 2005; Kalin 1999).

Similar decentralization measures in different developing countries resulted in diametrically opposed outcomes, depending on the approach at inception (Crook 2003). In Africa, ethno-regional politics played a significant role in shaping the structure and indeed, the outcome of decentralization. Stated differently, decentralization was based on the extent to which it remained acceptable to the ruling elite instead of a genuine ‘draw down’ of resources from central government to bolster the power of the periphery. Congruence on whether decentralizing delivery of public services is overall, a good or bad approach for undercutting geographic disparities (Litvack et al. 1998) remains
elusive. However, to achieve the broader benefits of decentralization, academic literature emphasizes the need for strong oversight institutions.

2.4 Decentralization of health services in developing countries

   Decentralization dominated health care politics in the developing world in the 1990’s as a remedy to the failures to centralized health systems. The broader socio economic trends including the debt crisis and the subsequent recession across the developing world underscored the urgent need for governments to explore ways to diversify funding for social services and other sectors of the economy (Gideon 2007). On one hand, the World Bank and the International Monetary Fund (IMF) stepped up to provide Loans to developing countries to help them achieve macroeconomic stability. On the other hand, these lending institutions pushed developing countries to introduce stabilization and structural adjustment programs (SAPS), effectively ushering in a new era in which the Bretton Wood institutions became directly involved in the delivery of social services such as the health care.

   Prior to the 1980’s, the World Health Organization played a leading role in setting the agenda for health service delivery based on the on the need for governments to increase support to primary health services, health promotion and strengthening of community-based approaches to health care (Cuto de Casas 1994, cited in Gideon 2007). Neo-liberal reform offered a reformulated approach to health service delivery as well as a growing influence of the World Bank and the International Monetary Fund in international health policy. The late 1980’s marked a period when the World Bank
strongly emerged as a major international health lender, working closely with developing countries assisting them prepare health sector reforms based on neo-liberal principles (Gideon 2007). The subsequent World Bank Report (1993), *Investing in Health*, focused solely on health sector reform in developing countries.

Critics contend that many of the proposals (the introduction of user fees, enhanced participation of non-state entities, increased reliance on market mechanisms as well as decentralization and reform of social insurance funds) of the World Bank Report (1993) were not suitable for developing countries. Nonetheless, these elements remained central components of health sector reform (Gideon 2007), and the World Bank and the IMF continue to influence the global agenda for the health sector.

Many developing countries developed their public health systems in accordance with central government policies whereby decision-making was highly centralized (Mills et al. 1990; World Bank 2008; Gideon 2007). Health sector reforms, part of the broader political and economic reforms aimed at redressing issues of equity in access to resources ushered in a new structure-decentralizing management while strengthening local institutions involved in the delivery of health services. Regardless of the definition of equity in health care, equality in terms of access and utilization, and geographic distribution according to need remain cross cutting aspects (Burstrom 2001; Bossert and Beauvais 2002; Collins et al. 2002).

The World Bank Report (1993) forms the basis for reforms in the health sector. This section of the thesis substantially relies on this report in part because it is the
document that the World Bank evoked to justify the push for reforms. The report is also the most comprehensive discussion available on health sector reforms. In this report, the World Bank identifies discrepancies in allocation of public health sector funds as a major cause of inequalities in health care in developing countries. According to the report, public healthcare resources are spent on interventions of low cost-effectiveness, for instance cancers, thus undermining social equity because high cost-effective interventions such as HIV & AIDS and other sexually transmitted diseases remain chronically underfunded. In addition, major referral institutions in developing countries, mainly serving urban dwellers and high end consumers, take up to 20% or more of the total health sector budget, in spite of the fact that all cost effective interventions are at best, delivered at lower-level health care facilities that cater for a majority of the poor population, and especially in the rural areas. This model of allocation of health care resources exacerbates inequalities in delivery of health services by depriving some geographic regions of basic health services (World Bank 1993). Further, the report argues that government health care institutions are not only characterized by gross inefficiency, but also suffer from highly centralized decision making structures and skewed budgetary allocations. The outcomes of these, according to the report, are disastrous, as the poor are consistently excluded.

In its proposals, the World Bank Report (1993) recommended cutbacks on less cost effective programs that favored the rich. Instead, the World Bank required governments to double or triple spending on cost effective health programs such as HIV
& AIDS prevention strategies. In addition, introduction of cost-sharing (user fees) would help raise more funds, which governments could use to implement measures aimed at equitably redistributing health services. However, it is the recommendation for developing countries to devise an ‘essential basic health care package’ to be provided at all clinics at highly subsidized costs, that tremendously improved geographical coverage of health services in countries like Zambia and Botswana.

The World Bank estimates that that if primary health care services reach approximately 80 percent of the population, then 24 percent of the current burden of disease in low-income countries could be averted (World Bank 1993). In addition, decentralizing delivery of health services would make the wealthy opt out of public health care because of perceived higher quality and convenience of privately financed health care. This would in return provide developing countries an immense advantage they could use to target scarce health care resources to marginalized geographic regions. Moreover, decentralizing delivery of health services would facilitate strong and precise action in the fight against HIV & AIDS-timely dissemination of information to promote behavior change, extended and well-coordinated channels of condom distribution and treatment of other STDs at the local health care centers.

The report prescribes this common approach to all developing countries because the preconditions for transmission of HIV that enhance the spread of the pandemic are strikingly similar. These include high rates of prostitution and high rates of prevalence of other sexually transmitted diseases. The proposed health sector reforms would shift
government spending down the pyramid, from the apex to the broad base that includes the widely accessible community health care centers and posts. Therefore, including HIV & AIDS services in the minimum package and allocating health care resources to all geographic regions would yield tremendous success in the fight against HIV & AIDS (World Bank 1993).

On one hand, advocates of health sector reform argued that decentralizing the provision of primary health care services would invigorate centralized health systems perceived as lacking robustness in both policy formulation and implementation. They pointed out these as the key obstacles that exacerbated political bureaucracy and regional/geographic inequalities, ultimately undermining equity of access to health care resources. Similarly, these obstacles suffocate managerial and decision making capacities at local health care institutions (Collins et al. 2002). The long chain of command in centralized health care systems, they pointed out, delayed decision making, failed to ensure a close monitoring of resource management and limited popular participation in the health system. For these reasons, health sector reforms were imperative to unify and rationalize delivery of basic health services, increase efficiency, reduce duplication, and enhance equity in distribution of services. These measures, according to advocates, would turn former bureaucracies into vibrant health care institutions sensitive to local needs (Rifat 2004; Sekher 2005).

On the other hand, critics argued that health sector reform in a variety of countries failed to deliver on the promises of equity and efficiency because commercialization of
the health sector and increased reliance on the private sector inflated the cost of health care thus, excluding certain sections of the population (Gideon 2007). Other critics pointed out that decentralization of health care either precipitated inequalities in already fragile health care systems or only reflected inequalities in the former system (Bossert et al. 2000; Collins et al. 2002).

Dissonance of functions in decentralized institutions, weak coordination structures from the parent ministry and the donor-driven user fees are some of the key challenges that strongly emerge in the decentralization literature as profoundly intensifying geographic inequalities because health sector reforms were explicitly focused at macro-economic stability and not at improving performance of health systems. Skepticism therefore, is deeply rooted in the fear that decentralization increases both operational costs and corruption, hence fragmenting the fragile health care sector in developing countries (Collins et al. 2002).

2.5 Health inequalities in developing countries

Defining and measuring the distribution of health in a population remains a complex exercise, given the diversity of countries’ political and economic trajectories. Nevertheless, Gakidou et al. (2000) define health inequalities as the variations in health status of individuals across a population. Extending this description, Braveman et al. (2004) broadly define health care disparities to include variations in health or the likely determinants of health that can be systematically associated with underlying social advantage or position. Implementation of health care reforms in some countries has been
a technical, logistical, and financial nightmare (Nuria and Antonio 2005). Shifting of part
of the financial burden from “unconcerned and inefficient bureaucrats” to the people was
haphazard and in some instances, wasteful of the scarce resources. Interestingly though,
is that donors supported decentralization as a way of promoting democratic governance
even in dictatorships. This underscores the lack of clarity on the guiding principles of
these reforms.

Risk to disease is higher for those with lower levels of income (Mackenbach and
Chapman 2003), and even with many developing countries decentralizing delivery of
primary health care services to improve equity, morbidity rates consistently remain high
(Kumar 2003) in some sections of the population, especially in rural areas. Geographic
inequalities in access to health services in developing countries significantly affect
utilization of health care as well as distribution of health in the population (Kumar 2003).
The trend in many developing countries has been to build more health care facilities to
enhance distribution and utilization of health services, but urban and developed areas
enjoy better access to both public and private health care services compared to rural, and
often less developed areas. In addition, government health policies in developing
countries skew the distribution of health care resources (Kumar 2003). Bureaucratic and
political interventions often influence heath care facility allocation decisions in favor of
urban regions or regions with influential politicians at the expense of marginal areas. In
fact, institutional weakness compromise formal or geographic analyses, and final
decisions on allocation are often political (Smith and Rahman 2000), hence fail to
underscore unmet needs. Although a lot has been said on the costs and benefits of decentralizing delivery of primary health services, harmony in the theoretical literature that countries with significant degrees of success in implementing health sector reforms have better outcomes is diminutive. Instead, scholars evaluate the benefits of decentralization based on indicators of health care outcomes.

2.6 Case studies of decentralization of health care in developing countries

There is a dearth of systematic evidence on the outcomes of decentralization in developing counties. In cases where some evidence exists, measures usually used as indicators of the character and functioning decentralization, for instance, sub-national expenditure as a proportion of total government expenditure are essentially flawed (Crook 2003, 78). Therefore, results obtained from such analyses are suggestive at best. In addition, most data are derived from case studies that are not systematically comparable. As such, there is need for rich case study evidence that evaluates temporal performance of the complex political as well as institutional processes after implementation of health sector reform policies. Analyses presented in this chapter are based on the ‘best available documented’ cases: Zambia, Botswana, and Chile.

2.6.1 Decentralization of health services in Zambia

Zambia implemented health care reform initiatives during 1993-1998, a period characterized by rapid economic decline due to dwindling prices of copper in the world Market (Blas and Limbambala 2001). The subsequent structural adjustment programs included extensive privatization of government enterprises and systematic transformation
of the centrally planned command to a market driven economy in which Health Sector Reforms were an integral part. Reforms in Zambia were substantially supported by the World Bank and other bilateral donors who suggested a three pronged approach, in line with the World Bank Report (1993), *investing in Health*. The approach includes redirecting government spending to more cost effective programs, promoting greater diversity and competition in the financing and delivery of health services and fostering an economic environment that would enable households improve their own health.

In adopting reforms, the government committed itself to revamp the health care sector to provide Zambians with equity in distribution, cost effective and quality primary health care as close to the family as possible (Mwangelwa 2000). To achieve this, Zambia’s Ministry of Health established the Health Management Information System, a system that covers all primary health care facilities in the 72 districts of Zambia. The system not only captures data on service delivery in terms of staff workload, health facilities utilization and availability of essential drugs, but also disease morbidity and mortality (MoH 2007). Data collection is paper based at the local health care facilities but is computerized and aggregated at the district and national level. This approach to reform enabled Zambia to identify inefficiencies in the health system and therefore define solutions.

The case of Zambia is instructive because it enabled the government to devolve resources to the base of the health care system. Before reforms, Zambia’s three referral hospitals consumed 30% of the national health care budget (Hanson et. 2001). With the
advent of reforms, Zambia decentralized delivery of primary health services to district levels, while the Ministry of Health retained responsibility for policymaking, donor relations, and oversight.

Zambia created the Central Board of Health charged with the overall responsibility of provision of health services. Similarly, District Health Boards were charged with the responsibility of providing of health services up to the first referral level (Hanson et al. 2001). The relationship between the Central Board of Health and health care providers is governed by annual service contracts that specify services that districts and hospitals commit to provide to their catchment areas (Hanson et al. 2001).

Furthermore, Zambia (in keeping with recommendations from the World Bank) developed an essential package of health services based on the countries’ burden of disease and cost effectiveness. This package attracts user fees and is available in all health care facilities in the district level and below (Feiden and Nielsen 1998 cited in Bossert et al. 2003). To diversify their revenues bases (besides selling non-package services at market rates), hospitals engage in income generating activities including selling advertising space on hospital walls, operating maize meals and renting out premises to private pharmacies.

Zambia’s long history of utilizing mission hospitals to provide basic social services was decisive to the success of decentralizing health care (Hanson et al. 2001) because mission hospitals are located in rural areas. The government of Zambia (in 1996) signed partnerships with the NGO sector and the Church Medical Association of Zambia.
These partnerships granted private health care providers the same regulatory powers as those of public hospitals under the National Health Services act, effectively harmonizing and consolidating delivery of primary health services. The partnerships provided the legal basis for government to finance NGO hospitals up to 75% of the rate per bed of government facilities (Hanson et al. 2001). To enhance equality in various regions, the government developed an allocation formula based on population density, for assigning health care resources to districts. These reforms turned the former bureaucracy into a vibrant provider of health services in which resources are concentrated at the periphery where needed the most.

Figure 1 represents the new management structure of Zambia’s health care system. The Central Board of Health is the main implementing agency of the Ministry of Health. The Board also formulates annual service contracts that guide health care providers. The outcome of Zambia’s Health Sector Reforms is pattern of resource distribution that invests resources according population density and geographical need (Bossert et al. 2003; Hanson et al. 2001). These reforms enabled Zambia’s Ministry of Health to allocate HIV & AIDS related services closer to patients. For instance, the sitting of ARV sites, the first line of contact of HIV & AIDS patients with the health care system correspond to geographic needs (Hanson et al. 2001).
Political commitment to reform in Zambia proved very productive as both bilateral and multilateral donors to the health sector worked to reform the health sector. The country’s common approach to reform in health care emphasized the identification of problems that caused inefficiency, ineffectiveness, and insufficient geographical coverage hence; define sustainable solutions (McLaughlin 1995). The Zambian approach remains notable for its comprehensiveness as well as the unique and cooperative partnerships between government and the donor community.

2.6.2 Decentralization of health services in Botswana

In its National Development Plans 1970-1975 and 1973-1978, the government of Botswana authorized local authorities to build health care centers to provide basic health
services across the country. The subsequent National Development Plan 1985-1991 entails the government’s approach to decentralizing primary health care (Mills et al. 1990). This plan, while emphasizing participation of the locals in planning and implementation of health policies, expanded the role of districts in decision-making. In its memorandum, the government set out responsibilities of local governments with regard to delivery of primary health services as follows:

[T]he central government is fully committed to building new hospitals and health centers, as well as the extension of present hospitals, and the provision of clinics buildings and health posts must be the responsibility of District Councils” (Mills et al. 1990, 42).

In addition, criteria for constructing health facilities, based on population density and distance, were clear in the national development plan. Within the decentralized system, the ministry of health retains the overall responsibility of monitoring quality assurance. This approach enabled Botswana to build a health care facility in each village, tremendously expanding coverage of services to the periphery (Mills et al. 1990). Larger villages have health centers that serve as referrals to the surrounding smaller villages served by health care out posts. These local institutions coordinate with the elected district councils, village health committees, and family welfare educators in planning health care projects. In addition, strong collaboration between district development committees, district extension teams, village extension teams and various committees
from central government, departments, and other local authorities contribute to the overall success of providing basic health services in the villages (Mills et al. 1990).

Figure 2 reflects the cross cutting nature of the planning process in the provision of health care in Botswana. While the Ministry of health concentrates on resource mobilization for capital development, personnel training, and supervising the running of health facilities, local authorities implement health care programs aimed at reaching the masses (Mills et al. 1990). The authority decentralized to local health officials is exercised collectively through health teams at the regional or district levels. The clinics, health care posts, and district hospitals provide integrated, preventive, and curative services. Health posts serve areas with populations of less than 500 people, clinics serve areas with populations of between 500 to 10,000 people, whereas district hospitals serve as regional referral institutions and serve both in-patient and out-patient care.
By integrating HIV & AIDS into National Development and budgeting Plans, the government of Botswana demonstrated a high degree of political commitment to addressing the pandemic (Mills et al. 1990). Decentralization of delivery of primary health care to district and local levels enabled Botswana to roll out an equitable and well-coordinated mechanism for distributing antiretroviral therapy across the country (WHO 2005). Botswana also invested vast resources in antiretroviral therapy training programs.
with the objective of training health workers, physicians, nurses, pharmacists, and counselors, to deliver critical HIV & AIDS services at their local health institutions. As a result, by the end of 2004, Botswana had already achieved the WHO “3 by 5,” target (WHO 2005). The World Health Organization had envisioned that by 2005, at least 30,000 people living with AIDS should be receiving (free) treatment.

Botswana’s successful model provides a striking example of how scarce HIV & AIDS resources could be equitably distributed in large scale. The strategy enabled the country to achieve remarkable success in expanding geographic coverage of health care services, particularly to the rural population. Botswana became the first country in Africa to aim at providing free antiretroviral therapy to all its infected and disadvantaged citizens (Guzik 2006) through decentralized health facilities. Botswana’s successful decentralization policies are reflected in the country’s ease of access to treatment the health system offers to all its citizens. The country’s groundbreaking response to HIV & AIDS serves as a model for other developing countries that seek to improve coverage of social services.

2.6.3 Decentralization of health services in Chile

Chile’s health sector reform started in the early 1980’s under the military dictatorship of Pinochet (Gideon 2007). This regime implemented policies aimed at reducing the role of the state while expanding that of the private sector in health care financing. Chile’s health sector reforms resulted in the ministry of health retaining policymaking, health planning powers, supervision, and evaluation. Reforms transferred
the overall financial responsibilities for health care to individual consumers (Gideon 2007). Broadly, these reforms conform to the standard neo-liberal health sector reform model advocated by the World Bank and the International Monetary Fund, with the only difference being that Chile’s government maintained the obligation to provide for the poor who could not afford to purchase private health care (Gideon 2007; Mills et al. 1990).

Subsequent to implementation of reforms, private insurance companies, the institutos de salud previsional (ISAPRES), were established to compete with the social health insurance system, the Fondo Nacional de Salud (FONASA) (Gideon 2007), effectively creating two parallel systems. Chile’s health Sector Reforms, as in many developing countries, led to enormous cuts in government funding, and exacerbation of health inequalities because commercialization of the health care sector isolated sections of the population. Essentially, those at low risk of ill health (the rich) are ‘creamed off’ by the private sector, leaving those at higher risk (the poor) in an already over-burdened public sector that does not have adequate resources to cater effectively for all in need (Gideon 2007). In fact, reforms in Chile’s health sector continue to fuel the growing exclusion of poorer sections of the population from the health sector.

Figure 3 displays Chile’s decentralized state agencies that are responsible for running health services. The ministry of health retains the overall policy and planning functions while regional secretariats are charged with administrative and supervisory functions. The health service boards and the municipality primary care clinics implement
day-to-day operational functions (Mills et al. 1990). Restructuring Chile’s health care system only improved administrative efficiency, but not equity in distribution of resources. Although Chile documents success in building a mixed state-private health system better adapted to the needs of the population, equity, and quality of health care have not improved.

Conclusions

The need to improve allocative and technical efficiency and community participation in the policy formulation process have emerged as the key factors that necessitated health care reforms in developing countries. However, outcomes of decentralizing delivery of services in different countries never adhered to this simple sequence of events, rather a complex set of policies and actors in different countries led to varied outcomes. In some countries, health sector reforms led to measured achievement of equity in resource distribution while in others, reforms exacerbated
geographical inequalities in access to health services. Health sector reforms in Zambia and Botswana drew down decision-making from the central Ministry of Health to the periphery, thus bringing services closer to users. In other countries like Chile, reforms led to further social exclusion of (poor) sections of the population from the health system. Decentralization aims to decrease dependency on the central government by giving citizens at the periphery a higher stake in policy formulation, and therefore delivery of services. Nevertheless, differentials in resource endowment undermine the potential of poor geographic regions to raise revenues.

On one hand, decentralization was expected to deliver on the promises of enhanced equity in resource distribution, responsiveness to local needs in health planning between different geographic regions, improved access and equitable utilization of the health care system as well as improved quality of health services. On the other hand, skepticism was deeply rooted in the notion that elite capture of the decision-making process, regional differentials in resource endowment, and weak coordination structures exacerbate geographic inequalities in access to state resources, hence undermine the potential for equity. Ultimately, institutional reforms in developing countries are influenced politics because decentralization is essentially a political process characterized by vested interests. Even so, technical expertise cannot solely propel reforms, rather, a robust political leadership committed to reforms, and sound technical expertise are critical prerequisites for the success of health sector reforms.
CHAPTER THREE: KENYA’S DECENTRALIZATION EFFORTS

3.1 Introduction

This chapter provides background information on the study area. First, I describe the country’s location and the administrative provinces, and provide a historical overview of the country’s political and administrative geography. Next, I explore the evolution of governance with regard to decentralization of delivery of services. Literature on decentralization of the provision of basic services explores policies embraced by successive regimes in their attempts to allocate state resources equitably. Towards this end, I highlight the KANU manifesto produced shortly after independence, the Sessional Paper No. 10. Of 1965 on African Socialism and its Applications to Planning in Kenya, the District Focus for Rural Development, the Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth, the Structural Adjustment Programs advocated by the World Bank and the International Monetary Fund (IMF), and the Constituency Development Funds (CDF). The KANU manifesto is particularly important because KANU was the independence party that ruled the country until 2002 and so, KANU policies defined the administration of state resources for decades. Evaluation of policies embraced by different regimes will highlight the challenges that characterized decentralization in Kenya. Lastly, I highlight health inequalities in Kenya—the result of decades of political neglect for regions that embraced a brand of politics different from that of the ruling party. I use general indicators of health to emphasize the unequal
distribution of health outcomes. This chapter therefore, grounds this research within the study context.

Kenya lies on the East coast of Africa and shares a border with Uganda to the west, Tanzania to the south, Sudan and Ethiopia to the north, Somalia to the east and the Indian Ocean to the south-east (Ngigi 2007). According to the 1999 population and housing census, Kenya had a population of 28,660,534. At present, population estimates stand at 36,913,721 (World Factbook 2008), of which approximately 25% live in urban areas. These estimates take into consideration high mortality rates due to HIV & AIDS that have led to lower life expectancy, higher infant mortality, and death rates and lower population growth rates.

Kenya is a unitary state divided into eight administrative provinces and these provinces are further sub divided into districts (Gathata 2008). Districts are sub divided into divisions, divisions into locations and locations into sub locations. These local authorities are charged with administrative responsibilities in their areas of jurisdiction. Administratively, provinces are headed by Provincial Commissioners, districts by District Commissioners, divisions by Divisional Officers, Locations by chiefs and sub locations by Sub-chiefs- all appointed through office of president.

Kenya’s population is distributed in the eight provinces in varying densities. Regions with high rainfall densities and fertile lands have higher population densities while regions characterized by dry savanna and semi arid conditions are sparsely populated (Ngigi 2007). As such, Nyanza, Western, the central parts of the Rift Valley,
Central, part of Eastern as well as part of the Coast, and Nairobi provinces are characterized by higher population densities (Ngigi 2007) while the rest of the country is arid and semi arid (ASAL) and has low population densities (figure 4).

Figure 4: Map of Kenya Displaying Population Densities

3.2 Historical overview of evolution of government and governance in Kenya

Prior to attaining political independence in June 1963, a system of governance where executive, legislative, and financial powers were shared between central and regional governments was envisaged, and subsequently introduced into the Kenya constitution at the Lancaster House Constitutional Conference of 1962. Kenya’s
independence constitution therefore, provided for a decentralized structure that gave more autonomy to regions and local authorities categorized into city, municipal, town/urban and country councils (Patrick et al. 2005). These institutions were charged with the responsibility of providing a wide range of basic social services. However, this only held for a briefly, between December 1963 to December 1964. The two major political parties of the time, KANU and KADU held diverse opinions on which system of governance to adopt for posterity. Whereas the Jaramogi Ogonga Odinga-led KADU favored *majimbo* (a devolved system of governance), the Kenyatta-led KANU wanted a unitary system (Ajulu 2002).

Kenyatta coerced KADU members to dissolve their party and join KANU (Southhall and Wood 1996), and in 1964, KADU leaders crossed the floor to join KANU, effectively dissolving the simmering tension. Voluntary liquidation of KADU fortified the conservative element within the ranks of KANU at the expense of the radical faction associated with Oginga Odinga. Consequently, Kenyatta had his way and consolidated leadership, quickly establishing a strong dictatorship by inheriting all structures of governance from the colonial system. Successive constitutional amendments abolished the regionalism concept from the Lancaster constitution and provided for an executive president. These developments enabled the government to re-assert full administrative control over the country as politics evolved around the institution of the presidency. This consolidation of powers implies that the division of responsibilities for provision of social
services as envisaged under regionalism was abandoned as central ministries assumed full responsibility of development activities.

The enactment of the Transfer of Functions Act in 1969 transferred the role of provision of basic services to the central government leaving the maintenance of feeder roads and markets, business licensing and support of veterinary services to local authorities (Patrick et al. 2005). In sum, the Kenyatta administration reverted to the centralist policies of the colonial era, an approach enabled the independence party KANU, to create an authoritative government that saw people as recipients rather than actors in the process of development (Cohen and Hook 1987; Opon 2007). In independent Kenya, domination by local political elite replaced domination by foreign powers, political power remained centralized, and resources disproportionately shared in favor of geographic regions that formed the core political constituency of the ruling elite. Over time, imbalances in development became apparent with geographic regions that produced the president and influential politicians receiving a bigger share of state resources at the expense of other regions.

3.3 Decentralization, institutions, and government policies

Kenya has since independence had three presidents. The first president, Jomo Kenyatta, ruled from independence in 1963 to his demise in 1978. His successor, Daniel Moi, governed from 1978 to 2002 while Mwai Kibaki ruled from 2002 to date (Kimenyi and Meagher 2004). Central province formed Kenyatta’s political base while Baringo in the expansive Rift Valley province formed Moi’s political constituency and so, Kenyatta
and Moi had different support bases. During these two administrations, political and ethnic considerations, instead of actual needs of the population or economic efficiency strongly determined resource allocation decisions (Kimenyi and Meagher 2004). The Kenyatta era was marked by a heavily skewed pattern of resource allocation, in favor of his Central Kenya backyard, and successive administrations have perpetuated a geographically imbalanced pattern of allocation of state resources. And the shift of political power to Moi in 1978, also shifted the mechanism of skewed allocation of state resources to his Rift Valley political constituency, and similar concerns continue to dominate the current political landscape (Nyanjom 2006).

Poverty, illiteracy, and disease, major impediment to development in independent Kenya are often blamed on inequitable access to state resources (Omiti et al. 2002), and to ensure fair distribution of those resources, the government, over time formulated and implemented a diversity of policies including Poverty Reduction Strategy Papers, Participatory Poverty Assessment Reports (PPARS), and National Poverty Eradication Plans (Omiti et al. 2002). These documents outline policies to address uneven distribution and therefore access to state resources, especially in rural areas where majority of the population lives. Uneven distribution of state resources dates back to pre independent Kenya however, the government took drastic measures to address these imbalances in the 1980’s.

The government’s Poverty Assessment Reports point out that policy formulation consistently excludes the poor (Omiti et al. 2002), and reduces them to passive
participants in their own development process. In addition, efforts to relate policies and institutions to the process of development in independent Kenya have been scarce. Thus, while relevant institutions formulate policies, the overall policy environment remains hostile (Omiti et al. 2002). Indeed, post independence policies have consistently been undermined by deficiencies in specificity, realistic approaches, and lack of political commitment. Policies embraced by the government to expand delivery of social services are divided into four main phases (Omiti et al. 2002; Opon 2007), namely;

I. The KANU manifesto of 1963 and Sessional Paper No. 10 of 1965 on African Socialism and its Applications to Planning in Kenya
II. The District Focus for Rural Development of 1983 and Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth
III. Structural Adjustment Programs
IV. The Constituency Development Funds

3.3.1 The KANU manifesto of 1963 and Sessional Paper No. 10 of 1965 on African Socialism and its Applications to Planning in Kenya

KANU was the political party that formed the first government in independent Kenya and governed until 2002. The party’s philosophy was to attain the fastest economic growth in post independence Kenya, and to secure a just and fair distribution of state resources between the different geographic regions of the country. However, this Manifesto failed to outline realistic strategies and frameworks for enhancing geographical
equity in resource allocations (Omiti et al. 2002), and ultimately failed to achieve its core objectives.

Similarly, critics blame Sessional Paper No. 10 of 1965 on *African Socialism and its Application to Planning in Kenya* for the social exclusion that exists today (Omiti et al. 2002; Obama 1965). This policy document was prepared against a backdrop of ideological differences in the ruling party, KANU. One school of thought advocated for a command economy while the other professed the virtues of capitalism and free enterprise. In the end, this strategy paper provided the Kenyatta administration with a solid basis for its ‘Basic Needs Approach’ to development (Omiti et al. 2005), an approach that involved decisions to subsidize costs of social services such as basic health care to widen geographical coverage. But the lack of precision undermined achievement of objectives of Sessional Paper No. 10 of 1965. The concept of ‘African Socialism’ was undefined, and while leaders disliked capitalism, their style of leadership failed to subscribe to any defined ideology (Obama 1969). While Sessional Paper No. 10 emphasized a model of growth that emphasized investment of more resources in high potential areas rather than redistribution to achieve equity (Omiti et al. 2002; Barkan and Chege 1989), Obama (1969) asserts that the country would achieve economic progress only if economic gains were redistributed equitably to eliminate a lopsided pattern of development. Investment of more resources in areas of high returns failed to reconcile with the fact that returns were low because some regions of the country were undeveloped.
Besides, Sessional Paper No. 10 of 1965 and other policies of the time were not only calculated to garner political support, but also issued thorough decrees, thus undermining sound planning and strategy. The 1982 declaration by president Moi, that Kenya would henceforth allocate its resources for rural development on a decentralized basis in line with the needs of *wananchi* (citizens) provides a classic example of the haphazard manner that characterized implementation of decentralization policies in Kenya (Barkan and Chege 1989).

### 3.3.2 The District Focus for Rural Development (DFRD –1983)

The launch of the DFRD in 1983 aimed at shifting the planning and implementation of policies from the central government to sub-regional governments. With the launch of the DFRD, the government also inaugurated District Development Committees (DDC) with the intention of involving districts as well as other stakeholders in planning development projects (Opon 2007; Omiti et al. 2002). Through the DFRD program, the government hoped to stimulate rural development by involving the local population in the development planning process. Residents would have the opportunity to identify high priority projects, participate in resource mobilization and project implementation. Under the DFRD framework, state resources would be allocated on a more geographically equitable basis with emphasis on disbursement of more resources to less developed regions to fast track development (Kirubi, undated).

To enhance coordination of the deployment of state resources to the periphery, the administrative structure of DFRD incorporated representatives of lower tier elected local
government councils (Patrick et al. 2005). DFRD committees were required to prepare and submit their resource requirements for the fiscal year in consideration to the central government, and the central government would in turn allocate resources based on the needs highlighted in those development plans. Nevertheless, the DFRD framework fell short of decentralizing planning, management and fiscal authority to the periphery (Crook 2003; Bagaka 2008; Barkan and Chege 1989) and what exists today is akin to deconcentration whereby regime officials tightly control the central ministries and by extension, allocation of state resources. For instance, the political elite and local members of parliament work in close collaboration with presidential appointees (District Commissioners) to make decisions on development projects and resource allocations and so, decisions do not arise from need rather from political patronage and access to central networks. Weak representation of the poor and marginalized, coupled with domination of DDC’s by political appointees implies that the political elite undermine popular participation by deleting proposals from District Development Committees (DDCs) without recourse, or even worse, priorities identified by District Development Committees do not get considered at all (Crook 2003). The broader implication of domination of DDC’s by politicians and political appointees under the KANU regime is that distribution of resources to poorer areas was based on political calculations of gaining support from those communities to strengthen and consolidate the party’s political base (Crook 2003).
The DFRD though attractive, had little success in distributing resources to the periphery (Patrick et al. 2005). Scholars attribute failure of the DFRD to varied factors, key among them being the lack of involvement of all stakeholders in the development planning process (Omiti et al. 2002; Wallis 1990). Planning took place at the district level but, central government provided the framework, structures, and even dictated on who should sit on District Development Committees. In fact, all DFRD committees were headed by government appointees- District Commissioners, Divisional Officers, and Chiefs who ultimately influenced decisions emanating from DFRD committees.

Lack of political will to support decentralized institutions greatly undermined their effectiveness (Omiti et al. 2002; Kirubi undated). In actual fact, resource allocation to District Development Committees were too little to spur meaningful development, and the lack of clear mechanisms for allocating resources to districts resulted in mismatches between budgetary allocation to districts and requirements forwarded from districts. In spite of implementation of this ambitious program, research indicates that resource distribution remained centrally controlled and only disbursed after Ministries concerned ‘approved’ of the viability of proposed projects (Oloo et al. 2000; Wallis 1990). Bureaucracy provided room for manipulation of resource allocation decisions, as influential politicians and civil servants dictated projects that received priority funding and those (in opposition strongholds) to be placed on the waiting list. As such, districts with influential individuals in government agencies gained more from the DFRD program while opposition zones waited until funds became ‘available’ (Nyanjom 2006;
Oloo et al. 2000). Kenya’s the top down budgetary process further undermined the DFRD program. Reforms failed to modify the budgetary process to recognize the expanded role of District Development Committees in the development process.

Researchers have also argued that decentralization policies failed because of missteps right from inception (Oloo et al. 2002). Implementation of decentralization emphasized shifting the planning and management functions to the periphery, disregarding the most critical aspects of the course (monitoring and evaluation, decision-making and financial management). Central ministries ended up retaining powers regarding financial management and decision making, resulting in what is often referred to as a ‘highly centralized-decentralized DFRD’ in which accountability and transparency are scarce (Oloo et al. 2002). And as the Daily Nation article on March 28, 2009 noted, the haphazard creation of (political) districts, often during electioneering periods to reward loyalty defeats the logic of long term planning because newly created districts have to share resources with old ones. Indeed, the last five years alone witnessed the creation of 130 new districts, and between January and March 2009, the president created 30 new districts. It is hard for planners to keep up with the increasing number of districts. Interesting however, is the fact that the number of districts continues to increase against cutbacks in social spending.

3.3.3 Sessional Paper No. 1 of 1986 on Economic Management for Renewed Growth

Sessional paper No.1 of 1986 was prepared against a backdrop of a faltering economy and increased inequality in access to state resources (Cohen and Hook 1987).
This document proposed guidelines for correcting glaring inequalities on three policy fronts namely; promoting the development of the private sector, managing high budget deficits, and correcting distortionary trade policies (Omiti et al 2002). This paper, just as Sessional Paper No. 10 of 1965, touted economic growth as the central plank to prosperity. Emphasis on economic growth effectively approved of the implementation of structural adjustment programs, reforms that ushered in cost sharing in the provision of basic services and cut backs on government subsidies to critical social services such as health care. Proposals to scale back resources to the health sector sidetracked the government’s efforts from the fight against disease (through expansion of geographical coverage of health services) to macro-economic stability (Omiti et al. 2002). Structural adjustment reforms, especially the introduction of cost-sharing pushed the cost of health care beyond the reach of the poor (Cohen and Hook 1987; Omiti et al 2002). Efforts to cushion the poor (and often vulnerable) from further exclusion led the government to suspended user fees (cost-sharing) in 1990 but re-introduced it again a year later because the new system would not be sustainable. The need to cushion the poor formed the core of successive government policies including the Social Dimensions of Development program (SDD).

3.4.3.1 Social Dimensions of Development (SDD) program

The Social Dimensions of Development Program, launched in 1994, identified exclusion of the poor and vulnerable from the provision of basic services, mainly health care and education, as shortcomings of institutional and economic reforms of the 1980’s
(Omiti et al. 2002). While emphasizing the need to allocate state resources according to need, this program advocated for careful planning, and effective and efficient use of resources to realize both rapid and equitable economic, social and regional development. In response, the government allocated KES 5.8 million in the 1994/1995 budget to school fees bursaries for the poor and supply of drugs to public hospitals to reduce costs (Omiti et al. 2002). Nevertheless, these funds were insufficient to provide adequate cushion to the poor against the adverse effects of cost-sharing. Besides, a significant amount of this money ended up in non-poverty alleviation projects. Funds allocated to bursaries ended up benefiting the non poor-power brokers in the bursary disbursement process. In spite of the hype, the SDD program achieved little.

3.3.3.2 The Welfare Monitoring Surveys of 1994

After failure of the SDD program, the government formulated the Welfare Monitoring Surveys (WMS) to document the qualitative and quantitative aspects of inequalities at national and regional levels (Omiti et al. 2002). However, these WMS, unlike Sessional Papers and the SDD program, remained academic papers that never saw the light of day because the political constituency in charge of providing policy directions and support for implementation of development programs never approved of them (Omiti et al. 2002). Consequently, Sessional Papers and the Social Dimensions of Development program remained the most important economic policy documents until the launch of the National Poverty Eradication Plan (NPEP) in 1998/99 and the subsequent Poverty Reduction Strategy Paper (Omiti et al 2002).
3.3.4 The National Poverty Eradication Plan (NPEP)

The National Poverty Eradication Plan, designed in 1998 with a fifteen-year period, aimed at eliminating poverty in Kenya (Patrick et al. 2005). Just like the SDD program, the NPEP emphasized the need to ensure geographical targeting of resource distribution as well as involve the community in development planning to stimulate growth. To eradicate inequalities, this policy document proposed implementation of well-planned pro-poor policies and planning to equitably distribute essential services (Omiti et al. 2000). The NPEP, according to government projections, would reduce poverty by 50% by the end of 2010 and increase primary school enrolment rates by 15% by 2005. Similarly, this program would enable the government to achieve universal primary education (UPE) by 2015, and achieve universal access to primary health care to within 5 km of all rural households by 2010 (Omiti et al. 2002). To fast track progress towards the achievement of the above goals, the government formed the Commission of Poverty Eradication Unit (CPE) to oversee the implementation of the National Poverty Eradication Plan. Nonetheless, objectives of the NPEP proved elusive and its implementation failed to improve household capacities to spur equitably distributed growth. In fact, the NPEP only enhanced political patronage in the administration of state resources because beneficiaries of the downward flow of resources were associates of the then ruling party- KANU (Patrick et al. 2005).
3.3.4.1 The Poverty Reduction Strategy Paper (PRSP), 2000-2003

The Poverty Reduction Strategy paper is a blueprint prepared by the government to improve distribution of educational and health care facilities through stimulation of economic growth (GoK 2003). The PRSP emphasized the need to link policy, planning and budgeting to improve efficiency and equitable distribution of national resources. Since independence, the PRSP provides the most comprehensive and most focused policy document in the fight against unequal distribution of national resources (Omiti et al. 2002) because it draws from failures of the past policies. Also, preparation of this document was a very extensive consultation process that involved all stakeholders. These included the government, the private sector, civil society, donors and citizens. Nonetheless, the ambitious policies of the PRSP proved elusive. Omiti et al. (2002) attribute failure of the PRSP policies to the donor syndrome. Although formulation of the PRSP guidelines was an extensive process, donors prescribed policies disregarding the input from local institutions and communities. In fact, PRSP turned out to be yet another condition for the country to qualify for further credit, and despite promises from the World Bank and the IMF, these institutions are yet to initiate programs to assess the social impacts of their loan programs in developing countries (Verhuel and Rowson 2001).

3.4 The Constituency Development Funds (CDF)

The National Management Committee administers CDF, a program established in 2003 under the CDF Act (Opon 2007). Through this program, the government allocates
2.5 per cent of its revenue to development at the periphery. Though the program has been successful in geographic targeting state resources, the weak legal framework governing it makes it vulnerable to manipulation by the local political elites. The vacuum created by the weak legal framework has resulted in members of parliament (whose primary role should be legislative) assuming an executive role (Opon 2007). Besides, the country’s unitary structure hampers decision-making at sub national institutions, hence intensifies allocation inefficiencies from the central government. Public toilets constructed at the country’s popular Bus station ‘Machakos’ in kamkunji constituency, Nairobi are illustrative of the lack of harmony between different institutions. The toilets are barely 20 feet apart, and one was constructed using CDF and the other by local authorities (Omiti et al. 2000). Overlaps such as these arise from parallel administrative structures and lead to poor implementation and wastage of resources. This lack of harmonization and proper coordination between different institutions has led to several stalled development projects across the country.

3.5 Health inequality in Kenya

Inequalities in health status are an indication of asymmetries in allocation of health care resources. This research borrows from Tarimo and Braveman (2002) and Gakidou et al. (2000) and defines health inequality as differences in health status or in the distribution of health determinants between different groups. Inequalities in health between different groups within a population are a result of wealth, power, geographic location or ethnic or religious differences.
Health care indicators in Kenya have been on the decline since the adoption of structural adjustment reforms in the 1980’s (Ngilu 2006). In 1980, life expectancy was 60 years and by 2006, life expectancy had declined to approximately 47 years. HIV&AIDS plays a substantial role in reducing the life expectancy of the population, and so does the reduced expenditures on health care after the introduction of structural adjustment programs. The fact that decline in the status of health within the population is not uniform underscores the existing health care inequalities. Statistics indicate that infant and maternal mortality rates are higher in slums and poor rural households across the country, implying that health care policies continue to exclude poorer sections of the population from accessing quality health care. A study conducted by the Ministry of Health revealed that over 40% of the sick do not seek timely medical care, a fact that Ngilu attributes to reforms that evolved to exclude the poor (Ngilu 2006).

Policies formulated by the government to boost coverage of primary health care services only achieved measured success. The National Health Sector Strategic Plan I (NHSSP I) 1999-2004, a plan tailored to reduce differences in health status of the population through increased coverage of primary health care for HIV&AIDS, child immunization and malaria (Glenngard 2005) is a case in point. The NHSSP I endeavored to target health resources according to need in order to provide affordable and accessible high quality health care. However, by 2003, these objectives remained unmet (Glenngard 2005), and health services were far from being equitably distributed. In fact, during the period 1998-2003, Kenya recorded a decline in antenatal coverage and child
immunization programs, while infant and child mortality rates continued to escalate. Kenya’s health care crisis has been over two decades in the making. Implementation of health sector reforms stalled the government’s efforts to expand the geographical coverage of health services, yet these reforms intended to achieve analogous objectives (Ambrose 2006). Actually, declines in health status of the population, including the plummeting of life expectancy from an estimated 57 years in 1986 to 47 years in 2000, and rising infant mortality rates from 62/1000 in 1993 to 78/1000 in 2003, characterized the period after implementation of health sector reforms (Ambrose 2006).

Correspondingly, under five mortality rates increased from 96/1000 live births in 1993 to 114/1000 live births in 2003, the percentage of children exhibiting stunted growth increased from 29 per cent in 1993 to 31 per cent by the end of 2003 and national immunization coverage dropped from 79 per cent in 1993 to 52 per cent in 2003.

Emphasis on national coverage of health care services obscures substantial within-country differentials. However, this research does not discuss these, but highlights selected indicators to accentuate health inequalities.

Immunization coverage is an important factor that determines the health of infants and children. Statistics indicate that 57 per cent of children in the country received full immunization by the end of 2003, but coverage of immunization programs indicate that while 79 per cent of children in Central province had access to full immunization, only 9 per cent in North Eastern province had access to such services (Glenngard 2005). The selected demographic and health inequality indicators below (Table 1) provide useful
insights into patterns of health inequality thus, exemplify the uneven patterns of health care spending.

Table 1

<table>
<thead>
<tr>
<th>Selected demographic and health indicators for Kenya, by province 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>------</td>
</tr>
<tr>
<td>% Use of Contraceptives</td>
</tr>
<tr>
<td>Infant mortality /1000 live Births</td>
</tr>
<tr>
<td>Under five mortality/1000</td>
</tr>
<tr>
<td>Vaccination coverage %</td>
</tr>
</tbody>
</table>


These indicators point to worrying trends of health inequalities across the country. Whereas Central province records infant mortality rates of 44/1000 live births, Nyanza province records 133/1000 live births, more than triple the rate of Central province, and double the rate of Nairobi (67/1000 live births) and Eastern (56/1000 live births) provinces. North Eastern and Western provinces also exhibit significantly high infant mortality rates 91/1000 live births and 80/1000 live births respectively. In 2003, Nyanza
province recorded the highest under-five mortality rates, at 206/1000 live births, more than double the rates of Nairobi 95/1000, Eastern 84/1000, and Rift Valley 77/1000, and more than triple the rate of Central province 54/1000. Similarly, Coast, Western and North Eastern provinces exhibit significantly high under five mortality rates at 116/1000, 144/1000 and 163/1000 respectively. These glaring inequalities are a powerful indicator of the unequal access to health care across the country’s landscape.

Delivery care is important for the health of both the mother and the baby because it reduces the risks of fatalities arising from complications or infections (CBS 2003). Women in rural areas are twice less likely to receive medical assistance during delivery and twice less likely to deliver at a health facility (table 2). While mothers in Nairobi and Central provinces are more likely to receive medical assistance during delivery, and to deliver at a health facility, only 8 per cent of mothers in the remote North Eastern province receive medical attention during delivery and only 7 per cent are likely to deliver at a health facility. No doubt, equality of distribution of public health services has proved elusive, and the situation is worse in arid and semi arid regions where the limited numbers of health facilities that exist are also severely understaffed and lack even the basic supplies.
Table 2

<table>
<thead>
<tr>
<th>Province</th>
<th>% delivered by a health professional</th>
<th>% delivered in a health facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>73</td>
<td>71</td>
</tr>
<tr>
<td>Rural</td>
<td>34</td>
<td>33</td>
</tr>
<tr>
<td>Nairobi</td>
<td>79</td>
<td>77</td>
</tr>
<tr>
<td>Central</td>
<td>69</td>
<td>68</td>
</tr>
<tr>
<td>Coast</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>Eastern</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Nyanza</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Western</td>
<td>29</td>
<td>28</td>
</tr>
<tr>
<td>North Eastern</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: CBS 2003

Health infrastructure in the remote corners of the North Eastern province, Coast, parts of the Rift Valley, Western and Nyanza is not only dilapidated, but can also barely meet health demands of inhabitants of those regions. In remote parts of Nyanza province for instance, the high HIV & AIDS prevalence rates and the poor state of health care infrastructure, and ultimately health care delivery exacerbates health inequality. The broken health care delivery system in arid and semi arid regions (because of government
neglect) results in loss of lives from easily treatable communicable diseases (Glenngard 2005).

Conclusions

Kenya has not been short of polices aimed at expanding geographical coverage of health care services. However, failure of these policies to achieve stipulated objectives underscores their in-built weakness as well as conditions that undermine them mainly, the lack of political will to implement policies or to support decentralized institutions and corruption. Further, rhetoric about decentralization of basic services to the periphery was never accompanied by devolution of necessary autonomy to institutions at the periphery. For this reason, efforts to spread out the geographical coverage of services had little impact. It is therefore not surprising that health care inequalities persist decades after independence, and general indicators of the distribution of health in the population are suggestive of continued exclusion of some regions of the country. In the end, though government aims at expanding coverage of basic services, equality of access remains a substantial challenge, and patronage, corruption, and inefficiency remain deeply entrenched in allocation of public resources.
CHAPTER FOUR: RESEARCH METHODS

This chapter explains and justifies my data collection and analysis methods. First, I discuss my research questions, data needs, and sources. Next, I explain the data collection, and methods of analysis used within the overall research project. Finally, I discuss the limitations to my approach and how such limits influence the outcome of this research project.

4.1 Data needs and sources

As previously noted, decentralization of services in developing countries produced varied outcomes. This thesis evaluates decentralization of health services in Zambia, Botswana and Chile to draw policy implications for Kenya. Decentralization of health services in Kenya is analyzed in the context of allocation of HIV& AIDS mitigation and intervention resources. This research draws on a variety of methods and data sources, including both primary and secondary sources (see table 3). To address the first question, this research evaluates secondary data on decentralization of health care in developing countries, and the changing health inequality in Kenya. The study selected two case studies of countries whose decentralization of health care services expanded the geographical coverage of those services to equitably cover the population. Different countries had different trajectories with decentralization. Nonetheless, these case studies set the context upon which to evaluate reforms in Kenya’s health sector.

The second research question required this study to assess Ministry of Health and published academic literature. Countries whose decentralization of health services
improved equality in distribution of health care services provide useful lessons that Kenya could utilize to enhance access to health services. These countries, Zambia and Botswana, achieved impressive results after decentralization the primary health services. To address question three, this study utilized GIS to map point data to highlight the spatial and temporal prevalence of HIV & AIDS across the country.

Mapping spatial prevalence of the HIV & AIDS pandemic is intended to underscore the uneven geography of the pandemic, and the health care challenges of decentralization with respect to the allocation of HIV & AIDS mitigation resources. This study accentuates western Kenya, a region with higher than national HIV & AIDS prevalence rates to further emphasize the health care challenges of decentralization. Utility of GIS to map spatial prevalence of HIV & AIDS highlights unmet needs with regard to distribution of mitigation resources. For this reason, this study believes this spatial approach will be critical to informing policy makers’ decisions, thus improving precision in targeting mitigation strategies and resources.
Table 3

Research Methods

<table>
<thead>
<tr>
<th>Data needs</th>
<th>Data sources</th>
<th>Data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ2 Secondary data on health care decentralization.</td>
<td>Ministry of Health (GoK) published data, literature, and academic literature. Secondary literature on countries that successfully decentralized health care.</td>
<td></td>
</tr>
<tr>
<td>RQ3 Primary (point) data on HIV prevalence</td>
<td>Published data US Census Bureau, 2003 Data reported to UNAIDS</td>
<td>Mapping spatial prevalence of HIV &amp; AIDS, and evaluation of the ensuing spatial and temporal trends of HIV &amp; AIDS in Kenya</td>
</tr>
</tbody>
</table>

4.2 Data collection and analysis

This thesis relied substantially on desk review but was supplemented by limited primary (sentinel) data. To analyze the outcome of reforms in the health sector, the study reviewed the works of different scholars. And to further underscore the health inequality across various regions of the country, the study highlights selected indicators of health.
The sentinel data (data based on pregnant women visiting prenatal clinics) utilized to map the spatial and temporal prevalence of HIV & AIDS were provided by Centra Technology, Inc. Centra Technology obtained the original data set from the U.S census Bureau HIV Surveillance Database (see U.S. Census Bureau 2003). The U.S. Census Bureau compiled the data from diverse studies including medical and scientific literature, conference presentations, data reported to UNAIDS by governments and data appearing in press. This surveillance data is based on pregnant women attending prenatal clinics, but their service area was not geographically defined. Thus, the adult HIV & AIDS prevalence rate for various geographic regions is based on women visiting a surveillance clinic in that region. Centra Technology geocoded the location of the surveillance sites (clinics) by adding the geographical latitude and longitude coordinates (Kalipeni and Zulu 2008). However, it is important to note two things. First, the year-by-year reporting of the HIV & AIDS prevalence rates is erratic because surveillance points increased over time. Second, the increase of surveillance points over time explains the year-to-year variation in number of points. This thesis attempted to utilize points that had almost continuous data over the surveillance, period 1990-2003.

Base data, country boundary, and provincial boundaries, were obtained from the World Resource Institute. To evaluate the spatial patterns of HIV & AIDS, annual tabular data were imported onto the GIS software as mapped points to generate maps for 1990, 1992, 1994, 1996, 1998, 2000, and 2003. Also, all points with zero prevalence rates were excluded to avoid converting points without data into spurious zero prevalence rates. The
maps generated from the GIS software visually communicate the spatial patterns of HIV & AIDS in Kenya over the surveillance period. To further illustrate the spatial-temporal trends of the pandemic across Kenya’s eight provinces, this research plotted HIV & AIDS prevalence graphs. The resultant HIV prevalence maps and graphs were exploited to communicate the worrying trends of inequalities between resource allocation decisions and the need for those resources.

4.3 Limitations of the data set

This study maps point based data to generate maps depicting the spatial prevalence of the HIV & AIDS pandemic. Lack of adequate resources to scrutinize the progress of HIV & AIDS in Kenya implies that the pandemic is not accurately tracked (UNAIDS 2004) nevertheless, the sentinel data used provides the best proxy for estimating HIV & AIDS prevalence rates in the country because they are the most widely available epidemiological data. In other words, data obtained from ANCs surveillance is considered representative of the entire population thus, used to track the national prevalence of HIV & AIDS.

Population-based prevalence surveys would provide the most useful and precise estimates, but they have only been conducted in small locations hence, not reliable to provide a countrywide aggregation (Murray and Salomon 2001). Sentinel surveillance systems used to monitor the prevalence of HIV infections are stationed throughout the country, for this reason, data from these systems provides a more reliable indicator of the general spatial and temporal trends of HIV infections. All the same, use of sentinel site
samples is limited because samples do not include men and women who do not attend prenatal clinics. And while it can be argued that all pregnant women are sexually active, not all women in the 15-49 age group are sexually active (NACC and NASCOP 2007). In addition, sentinel data does not provide precise geographic location of those infected. For these reasons, the outcomes of mapping the spatial and temporal patterns of HIV & AIDS only highlight the broader implications of decentralization of health resources but may not precisely exhibit the national HIV & AIDS prevalence.
5.1 Introduction

This chapter presents results of health sector reforms in Kenya. I utilize HIV & AIDS as a lens through which I assess the failures or successes of decentralization of primary health care in Kenya not just because the pandemic takes a substantial share of health care resources. HIV & AIDS was discovered in the 1980’s when decentralization was a “hot button” in development circles.

First, I describe the spatial trends of the HIV & AIDS scourge in Kenya. Second, I discuss the evolution of health services policy. In this section, I evaluate efforts undertaken by the government to enhance equality in distribution of health care services. Third, I explore health sector reforms in Kenya. In this section, I focus on specific strategies employed by the government in the period after the 1980’s when the World Bank and the IMF took on an active role in health sector reforms. Next, I examine differentials in distribution of health services between high and low potential districts to further highlight the state of health inequality in Kenya. I then assess the successes and failures of decentralization in relation to HIV & AIDS patterns and services. Finally, I present maps that visually convey the spatial prevalence of HIV AIDS in Kenya. I use these maps as a proxy to highlight the patterns of uneven health care spending given that investments in the health sector are closely associated with existing infrastructure. Further, I use these maps to exemplify mismatches between the high HIV & AIDS prevalence and resources devoted to provision of primary health care, and by extension
HIV mitigation. I analyze the state of provision of basic health care in light of
decentralization literature.

5.2 Spatial variation of HIV & AIDS in Kenya

Kenya is among the African nations hardest hit by the HIV & AIDS pandemic.
The first case of HIV & AIDS was diagnosed in Kenya in 1984 (Ngigi 2007). This
discovery sparked government investigations which later revealed that HIV had
extensively spread within the population (MoH 2001), and prevalence was highest among
commercial sex workers in Nairobi. The reported number of HIV infections rose
dramatically, and by 2001 an estimated 2.2 million Kenyans were living with HIV &
AIDS (MoH 2001). The rapid spread of the pandemic prompted the National AIDS and
Sexually transmitted disease Control Program (NASCOP), a program within the ministry
of health, to inaugurate the systematic HIV infection surveillance system in antenatal
clinics (ANCs) across the country.

Prevalence of the pandemic peaked in 2001 (Ngigi 2007) and since then, the
country has recorded a gradual but steady decline. The declines in prevalence is
associated with increased deaths as most people infected with HIV & AIDS lack access to
life prolonging drugs (Adari 2004), and increased mitigation efforts (MoH 2005; Ngigi
2007) that peaked with the declaration of HIV & AIDS a national disaster in 1999 by the
then president-Daniel Moi.

Emphasis on national HIV prevalence rates obscures important regional/
provincial rates. Indeed, the period up to 1999 was characterized by substantial variations
in prevalence in various provinces. Nyanza province, by the year 2000, recorded the highest estimated HIV & AIDS prevalence rate at above 10 per cent of the population in the province. The Rift Valley and Nairobi provinces exhibited moderate prevalence rates of 5 per cent and 6 per cent respectively, while Eastern and Central provinces exhibited prevalence rates less than 5 per cent of the total population in those provinces. The North Eastern province, a predominantly Islamic region consistently exhibits prevalence rates of less than 1 per cent. However, this estimate may not be accurate due to the poor state of infrastructure and high rates of insecurity, two factors that exacerbate data collection (challenges) in North Eastern Kenya. The fact that only 42 per cent of the population (1.3 million) of this region has access to health care services (MoH 2001) is descriptive of the inaccuracy inherent in this estimation. The broad provincial patterns of HIV & AIDS prevalence are illustrative of disparities in the transmission of the pandemic, and the drivers that influence the spatial distribution as well as inefficiencies in allocation of HIV mitigation resources within Kenya’s health care sector (Kimalu et al. 2004).

Estimates from ANC based surveillance data indicate that urban areas are characterized by higher rates of prevalence compared to rural areas (Nyaga et al. 2004 and Kalipeni et al. 2004). Urban areas, in the year 2000 exhibited an average prevalence rate of 17.5% compared to 13.5% for rural areas. This raises questions given the fact that urban dwellers exhibit a greater degree of awareness (through condom use) of HIV & AIDS compared to their rural counterparts (Ngigi 2007). By the year 2003, NASCOP estimated that 6.7% of Kenyan adults were HIV positive, of which urban prevalence had
dropped to 10% while that of the rural areas dropped to 5.6% (Ngigi 2007). Although Surveys indicate that prevalence of the pandemic is higher in urban areas compared to rural areas, the absolute number of HIV positive persons is higher in rural areas in view of the fact that Kenya’s population is predominantly rural (Kalipeni et al. 2004; MoH 2001). Further, those infected with the pandemic retreat to their rural homesteads thus, pushing up prevalence in absolute terms. But more importantly, the absolute number of HIV & AIDS positive individuals is likely to be higher in rural areas because of inequality in distribution of HIV related services (UNDP undated). The lack of infrastructure in remote areas implies that few institutions that deliver HIV & AIDS related services including testing and counseling, and making condoms accessible exist in rural areas.

No doubt, the country has achieved remarkable success in dissemination of HIV related information and services. In fact, awareness of the existence of the HIV pandemic within the population is approximated at over 90 per cent, yet prevalence still remains high, thus raising issues on the effectiveness of interventions utilized (Ngigi 2007). Although high HIV prevalence rates amidst high awareness rates continue to puzzle, Adari (2004) and Kalipeni et al. (2004) suggest that lack of behavior change is the main driver of the observed prevalence rates.

Regional variations in availability of health care facilities, patterns of distribution of donor funding, geographic location of non-profit organizations, distribution of government spending on health care, cost and accessibility of life enhancing drugs and
urbanization are identified in literature as some of the factors that influence spatial patterns of HIV & AIDS (Adari 2004; Nyanjom 2006; Turner 2004). While the government pumps millions of shillings into the health sector every fiscal year to fight the pandemic, mitigation and treatment of HIV & AIDS related ailments have been dismal because powerful civil servants, ministers, and other government officials divert vast resources meant to initiate HIV & AIDS related interventions to projects of their interest (Adari 2004). Misappropriation of public health funds, diversion of drugs and essential medical supplies and poor services are endemic problems within the public health system. Further, Odongo and Karanu (2004) attribute mismanagement of public health funds to institutional weaknesses (peripheral institutions lack capacity to execute the key responsibilities entrusted upon them), and failed decentralization policies (failure to provide more resources to historically marginalized regions). These resulted in mismatches between needs of the population, with regard to HIV mitigation resources, and actual resources disbursed by government to combat HIV & AIDS.

The fight against HIV & AIDS can only succeed if mitigation resources are allocated where needed the most however, evidence suggests that HIV related expenditures are only used as a proxy to justify budgetary proposals, as funds allocated to those proposals are prone to reallocation to other ‘priorities’ (Turner 2004). Consequently, the country’s health care sector has over the past few decades been overwhelmed by a sharp increase in the burden of caring for those infected with HIV & AIDS, particularly with provision of treatment to those with opportunistic infections and
implementing mitigation and prevention programs including STD control, condom promotion and distribution and health education (Nyamongo 2001 and MoH 2005). Demand for resources to combat HIV& AIDS continues to rise, and according to projections, the fight against HIV& AIDS will require an even bigger share of public health resources in future. For instance, the Ministry of Heath required approximately KES 7.7 million for HIV mitigation and treatment (alone) in the fiscal year 2000/2001 and by the year 2010, the Ministry would require close to KES 50 million (MoH 2005).

Kenya’s public health structure is pyramidal (figure 5) and involves a referral system whereby Sub district and district hospitals constitute the base of the system, preceded by provincial hospitals while referral hospitals are at the apex of the system. Health extension workers provide preventive and promotive care through dispensaries and health centers, usually the first line of contact that patients have with the health care system after which they are referred to the preceding level should the need arise (Nyanjom 2006).
5.3 Evolution of health services policy in Kenya

Efforts to provide affordable and equitably distributed health care services, and realization of the role played by facilities at localities led the government to embark on the expansion of rural health care facilities (Oyaya and Rifkin 2003; Nyanjom 2006). In 1986, the government published the “National Guidelines for the Implementation of primary Health care in Kenya.” In this policy document, the government proposed a major reorganization and re-orientation of the health care system based on the principles of decentralization, equity, and community participation. The government re-emphasized its commitment to providing health care that was equitable and accessible but at the same
time, shifted part of this responsibility to consumers through cost-sharing (Oyaya and Rifkin 2003).

The 1990’s witnessed a further shift in the government’s health policy towards institutional and structural reforms, and a market orientation of the delivery of health care services as proposed by the 1993 World Development Report, *Investing in Health*. To achieve these objectives, the government adopted two international interventions; *the 1977 World Health Assembly- Health for All by the Year 2000* and *the 1981 Global Strategy for Health for All by the year 2000*, effectively ushering in a new policy direction (Mwabu 1995). In the new health policy, the government restated its commitment to providing health care that was affordable while taking steps to make services more accessible to vulnerable groups and underserved areas. The government also emphasized the role of the private sector in the provision of health care. In other words, the government committed to providing an enabling environment for the private sector and community participation in both financing and the delivery of health services (Mwabu 1995), reforms that envisioned a decentralized health service system as well as structural changes in public health management (Oyaya and Rifkin 2003). Overall, reforms entailed defining priorities, and reforming institutions that implemented policies.

The District Focus for Rural Development (DFRD) identified districts not only as the basic planning units, but also as the most effective agency for delivery of health services (Oyaya and Rifkin 2003). Against this background, the government developed a hierarchical system in which the provincial and district health care facilities were the
geographical focal points, and so embarked on a massive expansion of the health care infrastructure to cope with demand. Regardless of this ambitious decentralization of the delivery of health services to districts, the central objectives of reforms- to enhance equity, spatial coverage, and quality-remain unmet (Oyaya and Rifkin 2003) and geographical inequalities in allocation of health resources persist. Scholars argue that the government, in its pursuit of health for all only built many clinics in rural areas but never invested the necessary resources, including equipment, drugs and personnel (Kimalu et al. 2004). Besides, the government failed to invest more resources in previously marginalized areas/communities. As a result, the spatial distribution of health services remains grossly inequitable.

Distribution of health resources in favor of tertiary institutions offering curative services perpetuates health inequalities because these institutions are not only inadequate, but also located in urban areas far from the periphery (Glenngard and Maina 2007), and the cost of delivery of health services in tertiary institutions is prohibitive to the poor. Consequently The National Health Sector Strategic Plan I 1999- 2004 (NHSSP I) aimed at redistributing the allocation of health resources to invest more in primary institutions concentrated in rural areas (Glenngard and Maina 2007). Nonetheless, NHSSP I failed to achieve its objectives. Though the plan emphasized the need to prioritize primary health care, allocation of public health resources remains skewed in favor of tertiary and secondary institutions that offer curative services instead of district and local health care facilities that offer prevention and promotive services. Scholars attribute failure of the
NHSSP I proposals to lack of political commitment to reform, and weak policy implementation (lack of clear distinctions of roles and responsibilities as well as proper communication between different levels of the system) within Kenya’s health sector (Oloo et al. 2000).

The second Kenya National Health Sector Strategic Plan 2005-2010 (NHSSP II), aims at “Reversing the Declining Health Trends.” This policy document defines the vision of Kenya’s health system as “achievement of an efficient and high quality health care system that is accessible, equitable and affordable to every Kenyan household” and the mission as “to promote and participate in the provision of integrated and high quality promotive, preventive, curative and rehabilitative health care services to all Kenyans” (Glenngard and Maina 2007, 5). Like NHSSP I, this strategy aims to strengthen primary health care services and facilitate provision of low-cost and accessible services particularly in rural areas. Health Sector Strategic Plan II recognizes the urgent need to devolve more resources to rural dispensaries and health centers that offer preventive and promotive services. To achieve these proposals, NHSSP II advocates for the ambitious expansion of rural health care facilities as well as the implementation of appropriate policies and financial and organizational reforms. Quite the reverse, progress towards equality in distribution of health care services has been slow. Even worse is the fact that the skewed distribution of health resources (health care infrastructure such as clinics) leads to concentration of public health services funds in some geographic areas while others remain excluded. The lack of sufficient health facilities in some areas implies that
regions with more health care facilities, such as clinics, also benefit from increased health care investment activities (the distribution of drugs, health professionals and other vital medical supplies) a pattern that continues to fortify health inequalities (Glenngard and Maina 2007).

5.4 Evaluating decentralization of health resources in Kenya

As previously noted, decentralization undercuts geographic inequalities, and so improves equity in the distribution of services (Tiebot 1956). In the health care sector therefore, decentralization was necessary to bring health care services, spatially and institutionally, closer to users (Crook 2003). In so doing, institutions at the periphery would have the capacity to tailor primary health services to meet the specific needs of the communities. Critiques of centralized systems argued that decentralizing the health system would spur popular participation in the formulation of health policies responsive to the unique needs of the population as opposed to centralized systems considered unresponsive and geographically ‘too far’ from citizens at the periphery (rural areas) (Bardhan and Mookherejee 1998). Also, centralized systems were perceived to be riddled with corruption owing to the fact that rich autocrats and powerful political elites had the capacity to divert resources to their own narrow interests. However, as Crook (2003) points out, decentralization cannot solve the many problems of centralized systems because the pre-existing social context determines the structure and ultimately, the way the decentralized system works.
The main limitations of decentralization that undermined efforts to equitably distribute public resources include the lack of strong legislative frameworks to anchor the decentralized institutions, ‘elites capture’ of the decision-making machinery at the periphery, and disparities in regional resource endowment. These led to poor coordination of the distribution of public services, and confusion, thus weakening accountability and efficiency in delivery of services in addition to undermining the operational efficiency of the decentralized institutions (Tanzi 1996; Litvack 1996; Smith 1997; Bardhan and Mookherejee 1998; Bossert et al. 2000; Ahmad et al. 2005; Rossi 2006). Against this background, the next section will evaluate the limitations of decentralization in Kenya’s health care system in light of major themes that include; the introduction of user fees (cost-sharing), decision-making processes with regard to resource distributions, the role elites play within the decentralized system, differentials in access to health care among Kenya’s high and low potential regions, and lastly, the explosion of districts as one form of taking services closer to users.

5.4.1 Introduction of user fees and budget cuts

The government adopted the health sector reforms of the 1980’s to revitalize the fight against disease through the provision of equitable and accessible services to all (Nyanjom 2006). Reforms led to implementation of policies such as user fees, aimed at raising additional revenues and making the health sector more effective and efficient. Nevertheless, these reforms, advocated by Bretton Wood institutions, hit the country’s health system hard. As user fees, a central part of health sector reforms, exacerbated
inequality of access to primary health care services by pushing costs beyond the reach of the poor (Oyaya and Rifkin 2003), budget cuts led to crippling shortages of supplies in health care facilities across the country. Though patients pay for services in many public health facilities, they only end up receiving prescriptions without actual drugs (Kimalu et al. 2004). What’s more, users produce exercise books for writing prescriptions which they have to buy from private pharmacies, usually at exorbitant prices.

Budget cuts during the period 1991-2003 forced the government to trim its work force by 30%, cuts that particularly hit the health sector hard in the era of rising HIV & AIDS prevalence rates (Oyaya and Rifkin 2003). Likewise, the government laid off 5,300 health care staff in the period 2002-2003 and today, thousands of nurses remain unemployed, yet demand for their services is ever growing. Whereas more and more Kenyans continue to seek health services, the government is not in a position to provide adequate coverage. The government, in its own assessment (in 2006), pointed out that to effectively cope with demand for health services, the country’s health care system urgently required an additional 10,000 health professionals (Ambrose 2006). In spite of this glaring need, structural adjustment programs aimed at rolling back government wage bill impede hiring more health professionals. In these circumstances, it is hardly possible to scale up provision of services, particularly HIV & AIDS related services to match demand. In fact, Kenya falls short of the WHO recommended doctor-patient ratio of 228 per 100,000 by far. For every 169 doctors, there are 100,000 patients (Kenya German Development Cooperation 2009).
Upon realization of the negative impacts of structural adjustment programs, the government formulated the 1994 Health Policy Framework to curb rising inequalities in delivery of health services. This legislation framework institutionalized and consolidated reform proposals aimed at streamlining health care services and long-term objectives of providing universal, accessible, and affordable health care (Oyaya and Rifkin 2003; Mwabu 1995; Odongo and Karanu 2004). The government re-emphasized the need for the Ministry of Health to strengthen health service delivery at district levels. Key proposals in this Health Policy Framework include streamlining cost-sharing to recover fees, management of health services under District Health Management Teams and Boards, and the development of mechanisms to transfer funds from the Ministry of Health headquarters to district levels. However, this approach, especially in formulating a diversity of Teams and Boards to oversee delivery of health services at the periphery emphasized on expected outcomes, in the process sidestepping an important aspect of decentralization—the monitoring and evaluation of the process at various stages of implementation (Wyss and Lorenz 2004). The monitoring and evaluation teams would have been instrumental in identifying weaknesses or loopholes in the decentralization process and suggesting best approaches on how to overcome them. For this reason, failure to achieve health sector reform objectives is the result of policy measures that placed more emphasis on outcomes rather than on policy processes, as decentralization of services progressed without the prerequisite checks and balances that would have been useful for instance, in deploying more resources to previously marginalized areas.
5.4.2 Decentralization of decision-making

Despite decades of advocacy for reforms, decision-making within Kenya’s health sector remains centralized. The Ministry of Health continues to play a leading role within the decentralized structure whereby major decisions are taken at the Ministry headquarters and communicated down the hierarchy through provinces, districts and finally to local health facilities (Ndavi et al. 2009). Although decentralization aimed at strengthening district and local health facilities, the central Ministry of Health remains the hub that coordinates all activities at the periphery. Thus, decentralization in Kenya’s health sector is akin to deconcentration, the weakest form of decentralization (Litvack 2006) which theoretically redistributes authority and capacity for decision making among different levels of government (provinces and districts), but practically tightens administrative capacity and supervision of the central government ministries. This highly centralized decentralized decision-making system is a leading driver in reinforcing regional disparities in distribution of health services.

5.4.3 Health Management Teams and Boards

Efforts to streamline delivery of public health services led to the inauguration of District Health Management Boards (DHMBs) and District Health Management Teams (DHMTs). These institutions were charged with responsibilities of day-to-day operation of district health facilities (Ndavi et al. 2009) as well as enhancing community participation in the management of health resources and implementation of an essential (subsidized) health care package responsive to the needs of society. Even with these
efforts, the nature of change in Kenya’s health sector has been disquieting, with the provision of services in rural health facilities not only being poor, but also characterized by frequent stock outs and poor coordination of (drug) supplies from the Kenya Medical Supplies Agency (Ndavi et al. 2009). Also, the lack of Health management Information Systems implies that information available in databases, if there are any, are scanty and ineffectual. As a result, the ability of districts and peripheral health institutions to make timely decisions responsive to community health demands is highly curtailed.

Under the decentralized framework, the Ministry of Health retains the roles of policy formulation, coordination of activities of nongovernmental organizations as well as managing, monitoring, and evaluating policy implementation (Owino et al. 2001). The provincial tier assumes responsibilities of coordination of Provincial Health Management Teams (PHMTs), in addition to acting as an intermediary between the Ministry of Health (headquarters) and districts. PHMTs are charged with implementation of health policy, maintenance of quality standards and coordination of district health facilities and monitoring and supervising DHMBs. Similarly, DHMBS oversee functions and operations of health facilities at district levels while Village Health Committees, Health Center Management Teams, Health Center Committees, and community Health Workers provide the necessary support to implement health care initiatives intended to roll out services at the local levels. In spite of these, delivery of health services still revolves around the three main tiers, the Ministry of Health headquarters, the provincial levels, and the district levels (Owino et al. 2001). Moreover, lack of clear guidelines on
benchmarks for appointment to various boards results in (political) appointments, whereby the Ministry of Health and District Commissioners play a leading role in the vetting process. Unfortunately, qualifications and experience are hardly considered as appointments are based on political patronage (Ndavi et al. 2009) therefore, these boards are open to external influence when interest groups weigh in with their demands.

5.5 Limitations of decentralization

5.5.1 Weak legal frameworks

Besides the Ministry of Health, charitable non-governmental organizations (mostly located in rural areas) and private for profit practitioners are involved in provision of health services (Owino et al. 2001). Private health providers offer their services to those who can afford them. Previous research has identified the lack of proper coordination, caused by weak or nonexistent institutional linkages, as one major challenge to the country’s health care structure. Also, lack of legal frameworks to guide relations for instance, between DHMBs and civil service employees, compromises efficiency of the health system. Though DHMBs are expected to manage the performance of civil servants, there is no legal framework to operationalize these functions. Improper legal status between various stakeholders leads to incongruities that undermine efficient delivery services. On one hand, health professionals are Public Service Commission employees, and so guided by the public service code of conduct. On the other hand, DHMBs members are political appointees yet, they expected to supervise civil servants (health care professionals) (Owino et al. 2001). DHMBs are charged with the
responsibility of managing health staff within their areas of jurisdiction though they have no authority over them, a situation that leads to responsibility (on the part of the DHMBs) without authority (over civil servants) (Owino et al. 2001). Lack of clear working relationships between Ministry of Health staff and the DHMT/Bs poses supervisory setbacks as health professionals (in protest to DHMBs) become rude and disinterested in their responsibilities. Also, the lack of integration of the roles of PHMTs and the DHMTs, yet these institutions are supposed to work closely, undermines the delivery of services. In the end, the health service delivery structure remains not only rigid but also hierarchical and exclusive.

Furthermore, the decentralized health delivery system lacks clarity of duties, responsibilities, and chain of command among different levels. On paper, the DHMBs are charged with the responsibility of overseeing the provision of health care at all district health facilities, in reality, it is the DMHTs (charged with oversight of finances) that are in control (Ndavi et al. 2009) thus, creating a situation whereby DMHTs supervise themselves. Inadequate guidance, communication and leadership from the Ministry of Health through provincial Medical Health Boards (Ndavi et al. 2009) further curtails effective and efficient performance of DHMBs. Also, the working relationship between different Management Boards and facility committees is vague, a situation responsible for causing apathy in some boards, ‘wait and see’ attitude in others and the overzealousness in the rest. In the end, efforts aimed at expanding geographical coverage
of health facilities resulted in mismatches between responsibilities at different levels of the public health system (Owino et al. 2001)

5.5.2 Elite capture

The push for decentralization of delivery of health services only translated to centralization of activities at lower tiers. Scholars attribute mismatches between resource needs and allocations within the health care system to ‘elite capture’. The political elite that emerged at the provincial and district levels (and from within PHMB/Ts and DHMB/Ts) utilize their proximity to power to influence the spatial distribution of health resources to their own interests (Owino et al. 2001; Owino and Munga 1997 and Nyanjom 2006).

5.5.3 Differentials in distribution of health services between high and low potential districts

Devolution of funds to Kenya’s arid and semi arid lands (ASALs) are erratic and characterized by noticeable deficiencies (Wiggins 1985). High potential regions, often represented by influential politicians forge strong links with the ruling elite in Nairobi and end up receiving more resources while ASALs, (usually) represented by politicians with little or no influence miss out on allocation of state resources. It is not unusual therefore, to find budget cuts to individual projects or funds switched between projects in various geographic regions. Underrepresentation of ASALs implies that only a few influential politicians would have little sympathy for health care projects planned for arid and semi arid lands (Huka et al. 2001).
Arid and semi arid regions are characterized by poor infrastructure. Consequently, health care services are delivered under difficult conditions. Health facilities are sparsely distributed and the population has to travel long distances to access public health facilities, mainly located in and around urban areas. Even so, these are hardly equipped with adequate health personnel or medical supplies (Huka et al. 2001, Opiyo et al. 2008).

Exclusion of marginalized areas from the health system is blamed on government policies that consistently failed to invest more resources in marginal areas. As Kimalu et al. (2004) note, the introduction of Nyayo Wards (hospital wards built using public funds) in the 1980’s remains informative of the government’s haphazard health services expansion efforts. Through this program, the government embarked on a massive construction of health facilities with the central goal of achieving equitable distribution of health services, especially for rural Kenyans and those in marginal lands, but without investing more health resources, equipment, medical supplies and human resources to marginalized areas/communities. Ultimately, Nyayo wards did little in expanding coverage or enhancing distribution of health services to adequately cover rural Kenyans, and those in marginalized lands.

Similarly, the Constituency Development Funds (CDF) launched in 2003, the latest program by the government aimed at achieving efficiency and equity through ironing out imbalances in allocation of state resources, has only achieved measured success (Obuya 2008). Although CDF funds have been utilized to construct thousands of health facilities in villages across the country (MoH 2008), those health facilities remain
non-operational physical structures, or remain understaffed, underutilized and lack even basic supplies (Obuya 2008). Kisumu rural constituency is a case in point in which Constituency Development Funds were used to construct health care facilities such that every home falls within five kilometers of a dispensary yet, these dispensaries lack basic medical equipment, and remain critically underserved by medical staff, hence delivery of health services is poorly coordinated (Omiti et al. 2000). Overall, these health facilities have achieved little in enhancing geographical coverage of services. What’s more, the CDF act empowers members of parliament to oversee the utility of these funds (Obuya 2008). Some politicians initiate health care projects just to score points against their opponents while consolidating support. It is not uncommon for instance, for a politician to abandon a particular health project started by an opponent for the sake of politics, yet start a similar project elsewhere within the constituency (Obuya 2008). The common tendency with projects initiated using CDF is to turn constructed facilities to the central Ministry of Health to provide the prerequisites, and this not only dissipates the scarce health care resources, but also complicates management challenges since the central Ministry has to coordinate all these projects across the 210 constituencies.

5.5.4 Explosion of districts

The creation of new districts is more associated with electioneering politics than decentralizing services. And as Kumba, Samuel noted in a *Daily Nation* article on March 30th, 2009, the explosion of new districts in recent years greatly undermines provision of services. Theoretically, new districts are created to take services closer to users, in reality
they are only calculated to consolidate political support for the ruling party. Failure to follow due process (planning) implies that newly created districts lack essential infrastructure and have to share meager health care resources with the existing ones (Opiyo et al. 2008). The haphazard creation of districts exacerbates inefficiency as well as inequalities in spatial distribution and delivery of health services. On one hand, having more districts espouses many advantages including stimulation of development and improvement of public utilities such as hospitals and equity in sharing of national resources (Daily Nation Editorial on March 28, 2009). On the other hand, the random creation of districts is a nightmare to public resource allocation planners. Theoretically, population density and geographical areas should define parameters for setting up new districts. In reality however, political expediency has taken precedence, and influential politicians literally continue to demand new districts for political ends.

5.6 Assessment of failures and successes of decentralization in relation to HIV patterns

Despite government effort to provide health care for its people, Kenya continues to record declines in health indicators, a trend that became more pronounced subsequent to the introduction of health sector reforms (Nyanjom 2006). The general burden of disease has been on the rise and the Ministry of Health is increasingly criticized for its poor organizational capacity to meet the rising health care demands, especially in this era of HIV & AIDS (Nyanjom 2006). Although reforms were meant to turn-around the health sector, hence distribute resources and services more equitably, little success has been achieved, and geographic disparities in health outcomes flourish.
By 2004, Kenya had 895 NASCOP registered facilities that offered HIV related services (Montana et al. 2007) of which 630 provided prevention of mother to child transmission (PMCT) services, 153 provided anti retroviral therapy (ART), and 395 offered voluntary counseling and testing (VCT) services. An evaluation of the distribution of facilities offering HIV related services (table 4), reveals the lack of geographic fit between the distribution of HIV related services and the distribution of the population infected or at greater risk of HIV infection.

Indeed, regions that exhibit HIV prevalence rates of over 10 per cent are smaller compared to regions characterized by HIV prevalence rates of less than 10 per cent, an observation that implies a higher HIV & AIDS concentration in smaller geographic areas (Montana et al. 2007). For instance, a 10 to 15 per cent HIV & AIDS prevalence rate was observed in a modeled area of 42,355 KM\(^2\), with a 5.5 million-population estimate. In spite of the high HIV & AIDS prevalence in this small geographic region, there was only one ART site to provide support and care for an estimated 78,878 HIV positive persons, and only 5 VCT sites and a combined 15 sites that provided VCT, ART or PMCT services. An evaluation of sites/HIV positive persons reveals that a combined 19 sites/100,000 HIV positive persons served this HIV concentration zone. Likewise, the zone with the highest HIV & AIDS prevalence rates (10-15 per cent) had an estimated population density of 2,229,070 concentrated on a small geographic area of 99,545 KM\(^2\).
### Table 4

#### Distribution of NASCOP-registered facilities in HIV prevalence Zones 2003

<table>
<thead>
<tr>
<th>Prevalence Zone</th>
<th>Area (KM²)</th>
<th>Pop. estimate</th>
<th>HIV+ persons estimate</th>
<th>ART sites</th>
<th>ART sites/100,000 HIV+ persons</th>
<th>VCT sites</th>
<th>VCT sites/100,000 HIV+ persons</th>
<th>Sites with ART, VCT OR PMTCT</th>
<th>Sites/100,000 HIV+ persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2%</td>
<td>86,430</td>
<td>113,550</td>
<td>734</td>
<td>1</td>
<td>136</td>
<td>2</td>
<td>273</td>
<td>5</td>
<td>681</td>
</tr>
<tr>
<td>2-5%</td>
<td>2,822,940</td>
<td>12,083,720</td>
<td>215,676</td>
<td>34</td>
<td>35</td>
<td>111</td>
<td>104</td>
<td>269</td>
<td>256</td>
</tr>
<tr>
<td>5-10%</td>
<td>1,211,524</td>
<td>12,693,380</td>
<td>376,607</td>
<td>100</td>
<td>52</td>
<td>233</td>
<td>121</td>
<td>512</td>
<td>267</td>
</tr>
<tr>
<td>10-15%</td>
<td>42,355</td>
<td>1,503,700</td>
<td>78,878</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>6</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td>15% or more</td>
<td>99,545</td>
<td>2,229,070</td>
<td>192,453</td>
<td>17</td>
<td>9</td>
<td>42</td>
<td>22</td>
<td>96</td>
<td>50</td>
</tr>
<tr>
<td>Modeled area</td>
<td>4,262,793</td>
<td>28,623,420</td>
<td>864,347</td>
<td>153</td>
<td>18</td>
<td>393</td>
<td>45</td>
<td>897</td>
<td>104</td>
</tr>
</tbody>
</table>

Source: Montana et al. (2007)
This area had an estimated 192,453 HIV positive persons and only 17 ART sites, translating to 9 ART sites/100,000 HIV positive persons. This region also has 42 VCT sites and a combined 96 sites that offered ART, VCT or PMTCT services. This implies that the region had 50 sites offering HIV related services/100,000 HIV positive persons.

On other hand, areas with HIV prevalence rates between 5-10 per cent have the highest number of HIV positive persons (376,607). These regions cover an area of 1,211,524 KM² with a population density estimated at 12,693,380, implying that these zones are spread over larger geographic areas. A scrutiny of the distribution of HIV services in this area reveals that the region had 100 ART sites to provide HIV related services to an estimated 376,607 HIV persons. Thus, for every 100,000 HIV positive adults, there were only 52 ART sites. Also, this region had 233 VCTs to provide Voluntary Counseling and Testing to over 12 million people, and 512 sites that offered HIV related services (ART, VCT, or PMTCT). Areas with less than 2% HIV prevalence rates are small and sparsely populated. The total modeled area with HIV prevalence less than 2% was 86,430 with an estimated population density of 113,550, of which only 734 were HIV positive. Of this HIV positive population, the region had only one ART site, two VCTs and five sites to offer ART, VCT and PMTCT services. The distribution of ART sites accentuates the variance between the need for HIV & AIDS related services and allocation of resources. A review of the distribution of ART sites indicates that out of the 153 ART sites, 100 are located in areas with HIV prevalence rates of between 5 and 10 per cent (Table 4), whereas high HIV concentration zones that that exhibit prevalence rates of more than 10
per cent are allocated only 18 of the ART sites (Montana et al. 2007). Moreover, an evaluation of the ratio of ART sites/100,000 HIV positive adults reveals persistent uneven allocation of HIV related resources. Areas with below 10 per cent HIV prevalence have more ART sites while areas with over 10 per cent HIV prevalence have few ART sites per 100,000 HIV positive adults.

The distribution of VCTs follows the same pattern of delivery of HIV & AIDS related services. Coverage of VCT sites/100,000 HIV positive adults is lower in areas with HIV prevalence rates of more than 10 per cent. An overview of VCT coverage/100,000 HIV positive persons reveals that there were six VCT centers in areas characterized by 10-15 per cent HIV prevalence rates and, 22 in areas characterized by 15 per cent or more of HIV prevalence rates. Meanwhile, the coverage was 121 in areas with 5-10 per cent HIV prevalence and 104 in areas with 2-5 per cent HIV prevalence rates. Correspondingly, the combined distribution of facilities offering HIV related services (VCTs, PMCT and ART), follows a similar pattern of uneven allocation. While Areas with prevalence rates of 10-15 per cent had a combined 19 HIV & AIDS related health facilities and areas with more than 15 per cent prevalence rates had 50 such facilities, areas with 5-10 per cent prevalence rates had 267 facilities and areas with 2-5 per cent prevalence had 256 such facilities.

In their research to explain the observed pattern of allocation of facilities offering HIV & AIDS related services, Montana et al. (2007) found out that zones of low HIV prevalence cover much larger geographic areas, thus have more of those facilities, and
areas of high HIV & AIDS concentration cover small but densely populated regions. Also, Ngigi (2007) explains the observed patterns of HIV & AIDS in terms of the (uneven) spatial distribution of the population-higher population densities, thus higher HIV prevalence rates characterize high potential regions and urban areas. However, to effectively combat the HIV & AIDS epidemic, there is need to expand the coverage of facilities offering HIV & AIDS related services relative to geographic prevalence and concentration of the pandemic. Presently, the coverage of these facilities as underscored by Montana et al. (2007) does not match demand. Fewer ART sites (centers that offer services to those already infected with the pandemic) cover high prevalence zones. This perhaps best illustrates the geographic misfit in allocation of HIV resources.

The distribution of public health facilities per province by 2006 (Table 5) further exemplifies discrepancies in the allocation of state health care resources. Ideally, distribution of health facilities should reflect population densities (Opon 2007) and disease patterns (Table 6) however, disparities emerge when comparing disease burden against allocation of health facilities. Rift Valley, the most populous province also has the highest number of health care facilities compared to Nyanza, a province with moderate population density (Table 7) and the highest HIV& AIDS prevalence rates and other attendant diseases. In fact, Nyanza province had less than half the health facilities of the Rift Valley province. No doubt, HIV & AIDS is one of the many urgent diseases, and health researchers have been raising concerns about the attention it receives.
Similarly, Central province, with a 5.6% HIV & AIDS prevalence rate and a population of 3,918,538 is allocated 894 health care facilities compared to Nyanza, a province with a 13.1% HIV & AIDS prevalence rate, 509 health facilities and a population of 4,868,010. Worse still, Western province with a population estimate of 3,954,08 and a 4.5 per cent HIV & AIDS prevalence rate, and hence high demand for health care resources has only 385 health care facilities compared to Eastern, a province
with a population slightly over 5 million, 849 health facilities and 3.5% HIV& AIDS prevalence rate.

Table 6

HIV prevalence per province Kenya, 2002

<table>
<thead>
<tr>
<th>Province</th>
<th>Number HIV+</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td>159,000</td>
<td>7.1</td>
<td>10.9</td>
<td>9.0</td>
</tr>
<tr>
<td>Central</td>
<td>124,000</td>
<td>2.3</td>
<td>8.9</td>
<td>5.6</td>
</tr>
<tr>
<td>Coast</td>
<td>84,000</td>
<td>4.8</td>
<td>6.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Eastern</td>
<td>90,000</td>
<td>1.4</td>
<td>5.9</td>
<td>3.7</td>
</tr>
<tr>
<td>North Eastern</td>
<td>17,000</td>
<td>2.1</td>
<td>4.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Nyanza</td>
<td>292,000</td>
<td>10.2</td>
<td>16</td>
<td>13.1</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>207,000</td>
<td>3.5</td>
<td>6.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Western</td>
<td>85,000</td>
<td>3.6</td>
<td>5.4</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Table 7

Distribution of health facilities by province and facility type, 2004

<table>
<thead>
<tr>
<th>Facility type</th>
<th>Central</th>
<th>Coast</th>
<th>Eastern</th>
<th>Nairobi</th>
<th>N. East.</th>
<th>Nyanza</th>
<th>R. V</th>
<th>Western</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispensaries</td>
<td>205</td>
<td>144</td>
<td>325</td>
<td>18</td>
<td>43</td>
<td>180</td>
<td>540</td>
<td>81</td>
<td>1,527</td>
</tr>
<tr>
<td>Health centers</td>
<td>57</td>
<td>33</td>
<td>58</td>
<td>8</td>
<td>6</td>
<td>80</td>
<td>136</td>
<td>62</td>
<td>440</td>
</tr>
<tr>
<td>Dist. Hosp.</td>
<td>12</td>
<td>11</td>
<td>26</td>
<td>1</td>
<td>10</td>
<td>24</td>
<td>21</td>
<td>13</td>
<td>118</td>
</tr>
<tr>
<td>Prov. Hosp</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Nat. &amp; specialist hosp</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Rural health centers</td>
<td>1</td>
<td>15</td>
<td>7</td>
<td>-</td>
<td>5</td>
<td>6</td>
<td>12</td>
<td>7</td>
<td>53</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>277</strong></td>
<td><strong>204</strong></td>
<td><strong>418</strong></td>
<td><strong>29</strong></td>
<td><strong>65</strong></td>
<td><strong>291</strong></td>
<td><strong>710</strong></td>
<td><strong>164</strong></td>
<td><strong>2,158</strong></td>
</tr>
</tbody>
</table>

|                | 3,918,538 | 2,860,649 | 5,180,139 | 2,656,997 | 1,235,592 | 4,868,010 | 8,077,517 | 3,954,081 | 32,751,523 |
| Pop.            |           |          |          |          |          |          |        |         |        |
| Pop/ Facility   | 14,095    | 14,022   | 12,393   | 91,620   | 19,009    | 16,728    | 11,376   | 23,964   | 15,176   |
| SRM 2004 (%)    | 17.0      | 19.0     | 16.1     | 15.4     | 12.8      | 25.3      | 15.4     | 16.1     | 17.5     |


Note: SRM* – self-reported morbidity (incidence of disease)
The fact that Kenya’s public health delivery system remains focused on curative (hospital care) invariably centered in urban areas far from the periphery not only exacerbates the situation (Opon 2007) but is also suggestive of the diminutive attention the Ministry of Health pays to HIV mitigation efforts. For instance, in the fiscal year 2003/2004, the government allocated 70 per cent of the health care budget to curative care services and only 10 per cent to (rural) preventive and promotive services (Odongo and Karanu 2004; Opon 2007). Additionally, the spatial pattern of distribution of health resources/facilities and by extension HIV & AIDS mitigation resources suggests that rural based health dispensaries—the first line of contact of the population with the health care system—receive inadequate preventive and promotive public health resources. The little information available on the actual quantities of resources allocated to specific geographic regions suggests that allocations of HIV mitigation and intervention resources that target prevention of heterosexual transmissions, promotion of abstinence and faithfulness to one partner, voluntary counseling and testing, promotion of condom use, control of other sexually transmitted diseases, prevention of mother to child transmission and treatment of opportunistic infections are not based on priority areas or needs. Rather these vote heads are based on ceilings (limits) on budgets aimed at keeping spending and inflation rates low (Onyango and Njeru 2004). Perhaps, this explains the inadequate and uncoordinated responses to HIV & AIDS in Nyanza and Western provinces, areas of most need.

1 Western Kenya implies a region comprised of Nyanza and Western Provinces.
If HIV resources were allocated relative to population size, morbidity and mortality rates, then Nyanza province would receive the highest funding for HIV & AIDS mitigation (Kioko and Njeru 2004). Nonetheless, statistics from government allocation of HIV & AIDS mitigation resources in 2004 indicate that Nyanza province accounted for only 14.6 per cent of the mitigation resources while Nairobi province with a prevalence rate much lower than Nyanza (Table 6) received 26.8 per cent of HIV mitigation resources. Also, the Rift Valley province was allocated 13.1 per cent of HIV & AIDS resources twice as less as Nairobi province despite the fact that Rift Valley bears more HIV & AIDS burden compared to Nairobi. Assessing the outcome of decentralization measures in Kenya in terms of improving coverage, quality, and access to health services is complex. Nevertheless, these pointers are a good proxy for highlighting geographical biases with regard to resource allocation decisions.

To expand coverage of HIV services, improve access, thus take services closer to users, there is a need to better equip local health facilities to better handle demands that HIV & AIDS places on the health care system. Essentially, decentralization in the health care sector implies shifting resources from tertiary institutions to primary health facilities mainly located in rural areas (Kioko and Njeru 2004). Though the Kenyan government embarked on programs aimed at expanding the provision of primary health care, budget cutbacks, and mismanagement led to shortages of drugs and the eventual stalling of such programs intended to improve the spatial coverage of health services.
Health care expansion programs were also undermined by powerful politicians who saw opportunities (as the programs evolved) to enrich their constituents at the expense of the voiceless. Besides, the expansion of primary health facilities was not based on concrete development objectives (Gilson et al. 2001) rather, the programs presumed that inefficiencies, and the lack of capacity of the country’s health sector to meet demands solely arose from poor coverage. Conversely, lack of proper coordination to direct more resources from urban to rural areas where majority of the population lives, and redistributing health care resources according to population densities and disease burdens emerge as the main faults of the public health system.

Essentially, we know little about the patterns of HIV & AIDS. In the next section, mapping the spatial prevalence of HIV & AIDS is used to try fill in the major gaps in our understanding of patterns of HIV & AIDS.

5.7 Utility of geographical analysis to inform decentralization

Mapping the spatial prevalence of HIV & AIDS facilitates our understanding of its geographic distribution, and in this research, the significance of mapping spatial prevalence is critical to illuminating the health care challenges of decentralization. The primary mode of transmission of HIV is sexual intercourse with an infected partner (Turner 2004) as opposed to other diseases, for instance malaria, which is highly seasonal. No doubt, HIV & AIDS is a people-driven disease. Still, the geography of its prevalence plays an important role not just in understanding its spatial extent, but also in assessing the national coverage of HIV resources. This research utilizes GIS to map point
data, and generate maps to visually communicate the spatial circulation of HIV & AIDS. This approach will enhance better forecasting of likely trends of the disease, thus facilitate better spatial planning and formulation of timely interventions to prevent further spread of HIV & AIDS. Moreover, mapping spatial prevalence of the HIV & AIDS pandemic is an initial step towards creation of a Spatial Information System, and therefore epidemiological maps whose assessment should guide effective deployment of HIV mitigation and intervention resources. As Hugo (2000) and Moore et al. (2005) conclude, Spatial Information Systems and epidemiological maps are tools critical of immense potential in formulation of effective health policy.

5.7.1 Maps of HIV prevalence 1990-2003

These maps exemplify spatial disparities of the HIV & AIDS pandemic in Kenya. As the maps reveal, prevalence of HIV & AIDS has been on the rise since the 1990’s and that Western Kenya is the worst affected region. Figure 6 represents the maximum HIV prevalence rate during the period 1990-2003. The map shows that the country recorded maximum HIV & AIDS prevalence rates (above 28%) in Western Kenya, even though isolated parts of the Rift Valley, Central, Eastern and Coast provinces also recorded maximum HIV prevalence rates over the surveillance period (1990-2003). Excluding regions that recorded maximum prevalence, large sections of the country recorded between 5 and 19 HIV prevalence rates.
Figure 6: Maximum HIV prevalence rate in Kenya.

The Ilemi triangle is a roughly 14,000 square kilometer piece of land joining Kenya, Sudan and Ethiopia. This territory is claimed by the three countries (Mburu, undated).

Prevalence rate refers to the proportion of individuals in the population suffering from HIV & AIDS.
The graphs below, figures 7-14 reveal the HIV & AIDS prevalence rates across Kenya’s eight provinces. Although the graphs exhibit diverse patterns of prevalence across the country’s landscape, rates increased gradually since the start of surveillance and the country recorded highest prevalence rates between 1998 and 1999 before those rates declined between the 2000-2003 surveillance period.

Figure 7: HIV & AIDS prevalence rates for Nyanza Province 1990-2003.

Figure 8: HIV & AIDS prevalence for Kakamega, Western Province 1990-2003.
Figure 9: HIV & AIDS prevalence for Coast Province 1990-2003.

Figure 10: HIV & AIDS prevalence for Central Province 1990-2003.
Figure 11: HIV & AIDS prevalence for Eastern Province 1990-2003.

Figure 12: HIV & AIDS prevalence for Nairobi Province 1990-2003.
The period 1994 to 1996 marks a turning point as the pandemic seems to have established itself within the population. Other than western Kenya, parts of the Rift Valley, Nairobi, Eastern and Cost provinces documented some of the highest prevalence rates, at above 20 per cent of the overall population in those respective regions (figure 15). The pandemic seems to have hit the highest point as yet, because more sections of the country recorded more than 10 per cent HIV prevalence rates. The steady progress of
the pandemic is perhaps indicative of the lack of timely interventions, as HIV & AIDS was only declared a national disaster in 1999 by then president Daniel Moi thus, paving way for mobilization of resources to combat the pandemic (Ngigi 2007).

**Figure 15: HIV prevalence rates in Kenya.**

The surveillance period 1998-2000 (figure 16) continued to exhibit a rise in prevalence rates, and the epidemic seems to have peaked during this period. Sections of
western Kenya, Rift Valley, Central, Nairobi as well as Coast recorded prevalence rates above 20 per cent, while overall prevalence rates settled above 10 per cent. The final year of surveillance (2003) shows an overall decline in rates of prevalence. Even so, western Kenya recorded higher prevalence rates at above 25 per cent while the rest of the country recorded rates below 15 per cent. Isolated sections of the Rift valley, Western and Coast regions exhibit a 15-19 prevalence rates. Although prevalence seems to have declined at the end of surveillance, incidence is higher because pandemic is widespread in the population than ever before. In addition, the lower prevalence rates are possibly indicative of higher rates of mortality those already infected as new infections take root.
Figure 16: HIV prevalence rates in Kenya.

Indeed, the five-year spatial trends maps below (1997-2001 & 1999-2003) confirms that prevalence rates were highest in the period 1997 - 2001 (figure 17).
Figure 17: HIV & AIDS prevalence rates in Kenya
This surveillance period exhibits substantially high prevalence rates between 25-50 per cent in western Kenya. Sections of the Rift Valley, Nairobi, Central, Eastern and Coast provinces registered 20-24 per cent prevalence rates while the rest of the country, where data was available, recorded rates below 20 per cent.

The surveillance period 1999-2003 indicates a drop in prevalence across the country except in western Kenya, the only region characterized by higher than average prevalence rates, at above 25 per cent. In fact, 15-19 prevalence rates are the highest across the provinces. This drop however is matched by a more geographically expanded HIV & AIDS prevalence, indicating that as those previously infected die off, rates of incidence (new cases) remain steady.

Mapping the spatial prevalence of the HIV & AIDS pandemic helped reveal the spatial and temporal patterns of the HIV & AIDS pandemic. This thesis used the spatial prevalence maps to highlight the relationship between health policy on one hand, and prevalence of disease (HIV & AIDS) on the other thus, linking patterns of HIV & AIDS to the health policies that have shaped the geography of distribution of resources over time. Despite the fact that western Kenya emerges as the region worst hit by the pandemic, and therefore in most need of health care resources, government health policies have failed to reflect this reality.

The Ministry of Health remains rigid, and distribution of health resources does not reflect geographic needs. Instead, allocation of public health care resources continues to be shaped by the political economy. Mapping the spatial prevalence of HIV & AIDS
provides a foundation upon which better targeting of resources mitigation resources should be based (MoH 2007). In addition, mapping the spatial prevalence of HIV & AIDS provides pertinent information to policy makers and resource planners. Therefore, the maps developed by this thesis present a realistic assessment of the spatial and temporal patterns of HIV & AIDS in Kenya, in light of the decentralization of health care services. Urgent action is needed in western Kenya.

It is difficult to map the highly dynamic political power that frequently shapes the allocation of public health resources. Also, the maps produced are only suggestive of the broader patterns on the scourge, given that population movements are not controlled. An individual may, due to reasons beyond control such as travel, decide to visit a surveillance site (testing center) out of their provinces or districts, yet surveillance sites record prevalence rates for their catchment areas. All the same, maps produced indicate that prevalence rates are conspicuously higher for western Kenya. In the next section, this study integrates back into literature emphasize the non-epidemiological drivers of health inequality that interact to sustain the higher than average geographical patterns of HIV & AIDS in western Kenya.

As previously noted, the HIV & AIDS pandemic is exceptional in its geographical spread and the contemporary socio economic conditions under which the pandemic spreads are varied. Consequently, spatial studies of patterns of HIV & AIDS need consider not only the biological and epidemiological parameters, but also the development context (Gould 2005). Therefore, Vulnerability to HIV & AIDS should be
considered in terms of both exposure and the society’s capacity to cope with in terms of administration of health care resources. No doubt, the norms that society invokes to intervene and mitigate the overwhelming impacts of the pandemic, for instance, investments in more effective and efficient health care systems, are important in understanding the spatial extent of HIV & AIDS. In the same way, the need to understand structural variables in analyses of the spatial spread of HIV & AIDS cannot be overstated.

For this reasons, efforts to understand the geographical prevalence of HIV & AIDS need to re-assess the standard biomedical and epidemiological models used to explain the spatial coverage of the pandemic (Gould 2005). HIV & AIDS is a disease deeply rooted in structural factors of history. Even though exposure to the virus is necessary for the spread of HIV, it is not in itself a sufficient condition for sustaining HIV prevalence. Structural variables for instance, equality of access to health care resources and the development context as well as issues of policy act to sustain the spread, rate and direction of the epidemic.

The structural variables are important players in epidemiology because they determine the context of the local capacity to effectively cope and manage the impacts of HIV & AIDS (Gould 2005). In other words, spatial patterns of HIV & AIDS can be explained by the uneven/inequitable distribution of health resources across the geographical landscape. The uneven allocation of health resources is a function of the existing political economy consequently, some regions have better access to benefits of
development, and therefore HIV & AIDS mitigation resources because spending in the health sector generally follows establishments of infrastructure, while others regions remain marginalized (Nyanjom 2006). The uneven allocation of health resources across the political landscape implies that the HIV & AIDS pandemic cannot be effectively tackled because allocations of health care interventions or social support services (Gould 2005) remain skewed against marginalized regions/communities. Ultimately, the need to shift explanations about the geography of HIV & AIDS from a biomedical approach to a broad governance approach has become all too apparent. The pandemic is not just a health issue, nor can it be explained purely in vulnerability terms, HIV & AIDS is a development issue.

5.8 Western Kenya: Decentralization, politicized ethnicity and the allocation of public resources

Inequalities in distribution of state resources date back to pre-independent Kenya. After independence, Kenyatta (Kenya’s first president) coerced KADU (Kenya African Democratic Union) to dissolve and join KANU (Kenya African National Union) (Murunga 2004), developments that turned Kenya into a one-party state. Kenyatta instituted a personalized regime revolving around himself and his kitchen cabinet, a regime that never condoned dissent, and economic prosperity of a region became increasingly intertwined with its politics. In other words, the state assumed a dominant role in development and the gatekeeper for the provision of basic services.
The fall-out, shortly after independence, between President Kenyatta and his vice
president Oginga Odinga, led the latter to form the Kenya Peoples Union. However,
Kenyatta banned the KPU (in 1969) and ordered the arrest and detention (without trial) of
Oginga Odinga (Makoloo 2004). These events resulted in violent protests that claimed 43
lives when Kenyatta visited Kisumu (Odinga’s political base). The ban on the KPU
reverted Kenya into a single party state in which opposition zones such as Nyanza and
western provinces marginalized from ‘national development’ plans.

The political consequences for opposition zones (exclusion from ‘national
development’) not only reinforced inequalities but also firmly set in place a two way
political relationship deeply enshrined in ethnicity, whereby the upward flow of political
support paid off by a downward flow of state resources (Mulunga 2004). During the
Kenyatta presidency, Central Kenya, the president’s political constituency received
higher allocations of state resources including education and expanded health facilities
(Ajulu 2002). By the time of his death in 1978, Kenyatta left a dictatorial and coercive
regime with a heavily centralized distribution of state resources in favor of his Central
province political constituency. Moi, upon ascension to power, perpetuated the inherited
pattern of uneven distribution of state resources, only tilting the balance to his Baringo
political base in the Rift Valley province, and to zones more receptive of his ruling party,
KANU.

The Kenyatta and Moi regimes regarded civil servants as KANU civil servants so,
being partial to KANU support bases was not against the public service code of conduct
(Makoloo 2004). As a result, political correctness and ethnicity not only developed into crucial political resources that defined the state but also a basis for social exclusion in resource allocations. These regimes used state power to reward ‘friendly zones’ (areas receptive of KANU) with resources and punish opposition zones through neglect and exclusion.

No doubt, the current patterns of regional inequalities in distribution of state resources in Kenya are deeply rooted in historically skewed policies and inequitable resource allocations (Ajulu 2000). Western Kenya always identified with opposition politics in which the KPU and Ford Kenya challenged the monolithic independence party, KANU. After the Kenyatta regime realized that it was impossible to defeat KPU in Nyanza province, his regime ceded the region to Odinga, a move that was preceded by KANU operatives starving the region of resources. The intention was to contain the KPU and force western Kenya to abandon politics of defiance. Therefore, HIV& AIDS only exacerbated the poor state of delivery of health services in a region characterized by major obstacles of access to health care orchestrated by decades of neglect (Ondimu 2002).

The health status of the population depends on the available health care facilities however, for western Kenya, distribution of such (public) facilities not only remains poor, but also severely crippled by lack of medical professionals, drugs and necessary equipment (Ondimu 2000). In a study on the Availability and Quality of Obstetric Care Services in Nyanza, Ondimu (2000) concludes that health services are far from adequate,
and although the private for profit health care providers are a critical constituency in expanding the geographical coverage of health care, their services are too expensive for a majority of the population. Besides, the private for profit health care facilities are located in and around urban areas, further excluding those in rural areas.

Western Kenya forms the bedrock of opposition politics in Kenya and so, the poor state of health care is deeply rooted in a historical legacy of marginalization (Adari et al. 2007) fuelled by the regions’ political disloyalty. The distribution of health care facilities and therefore health care resources is driven by political loyalty. This inadvertently implies that rebellious regions lag behind. Adari et al. (2007) conclude that the share of public health spending for Nyanza and Western provinces has dwindled over the past few decades compared to those of the Rift valley and Central provinces that have appreciated. These are regions that have produced presidents and the associated influential politicians.

The link between low investments in public health spending and HIV & AIDS is clear, as historically marginalized regions are also associated with higher HIV & AIDS rates, except the North Eastern province, a region characterized by high rates of insecurity and poor infrastructure. Inequalities in spatial distribution of health care facilities in Nyanza and Western provinces are responsible for the high rates of prevalence of HIV & AIDS (UNDP 2006). Reviews of other indicators of the status of health reveal that Nyanza province has the highest reported child mortality rates and the lowest life expectancy, at a meager 45 years, compared to 69 years for Central province.
Further, Nyanza province has an infant mortality rate of 77 deaths per 1,000 live births and under-five mortality stands at 115 per 1,000 live births.

An evaluation of selected health indicators across various districts reveals stark health inequalities (Table 8). In the preceding section, this study highlights selected districts in various provinces to further emphasize differentials in the status of health among different segments of the population. On one hand, in Bondo district of Nyanza province, child health statistics indicate that 24 per cent of children are too thin, 43 per cent are stunted or grow slowly while 31 per cent are under-weight (GoK 2005).

Additionally, only 45 per cent of children receive full immunization and maternal mortality was reported to be 620/1,000 live births. An evaluation of health care facilities reveals that out of the 53 health facilities, the government owns only one Hospital, 2 health centers and 14 dispensaries, all of which are poorly equipped. The cost of health care is beyond rich for the majority (poor) population. Furthermore, in 2005, the doctor to patient ratio in Bondo district was 1:24,000, and HIV & AIDS prevalence in the district in 2005 stood at 29 per cent compared to the national average 14 per cent.

In the neighboring Kisumu District, most of the health facilities are concentrated in Kisumu city (GoK 2005). This implies that the distribution of health services in rural areas is poor. The doctor/patient ratio (in 2005) was approximately 1:5,379 (Table 8). Infant mortality in Kisumu district was estimated at 90/1,000 live births while under five mortality was 110/1,000. The GoK (2005) report points out that high mortality rates are a result of inaccessible health facilities and high HIV& AIDS prevalence rates (28%).
Table 8

Selected health indicators for selected districts

<table>
<thead>
<tr>
<th>District</th>
<th>Bondo</th>
<th>Kakamega</th>
<th>Nyeri</th>
<th>Baringo</th>
<th>Maragua</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Birth Rate</td>
<td>23/1000</td>
<td>34/1,000</td>
<td>29/1,000</td>
<td>53.9/1000</td>
<td>41.6/1,000</td>
</tr>
<tr>
<td>Crude Death Rate</td>
<td>16/1000</td>
<td>13/1,000</td>
<td>8/1,000</td>
<td>10.6/1000</td>
<td>5/1,000</td>
</tr>
<tr>
<td>Life Expectancy (Years)</td>
<td>51.2</td>
<td>53</td>
<td>46</td>
<td>59</td>
<td>52</td>
</tr>
<tr>
<td>Infant Mortality Rate</td>
<td>110/1000</td>
<td>63.9/1,000</td>
<td>27/1,000</td>
<td>63/1000</td>
<td>29/1,000</td>
</tr>
<tr>
<td>Under 5 Mortality Rate</td>
<td>199/1000</td>
<td>122.5/1,000</td>
<td>34/1,000</td>
<td>80/1000</td>
<td>69/1,000</td>
</tr>
<tr>
<td>Total Fertility Rate</td>
<td>5.1</td>
<td>2.5</td>
<td>7</td>
<td>3.9</td>
<td></td>
</tr>
<tr>
<td>HIV Prevalence rate</td>
<td>23.8 %</td>
<td>17 %</td>
<td>14 %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor/ Patient Ratio</td>
<td>1:14,246</td>
<td>1 : 29,000</td>
<td>1:57,381</td>
<td>1:12,966</td>
<td></td>
</tr>
</tbody>
</table>

Source: GoK (2005)

In Kakamega district of Western province, the greatest health care challenge facing the population is inaccessibility of health services by a majority of the population (GoK 2005), the result of high costs, inadequate or poorly equipped health facilities, and professional staff shortages. The average distance to a health care facility is 10 kilometers in rural areas, but only 500 meters in urban areas. The doctor-patient ratio for Kakamega district in 2005 was at 1:14, 246. The district experiences high infant mortality rates
(63.9/1,000 live births) attributed to HIV & AIDS high prevalence rates (23.8%) and inaccessibility of health care facilities (GoK 2005).

On the other hand, Baringo District, former president Moi’s political turf had 89 health care facilities spread all over the district (GoK 2005). For Baringo, health care infrastructure is in abundance however, problems of underutilization due to lack of adequate health care professionals and essential drugs are prevalent. Nyeri district, the current president’s (Kibaki) backyard has 71 health facilities spread all over the district, and over 65% of the population has access to health care facilities located within 6 KM (GoK 2005), and a doctor to patient ratio of 1:29,000.

Although the government embraced reforms, and committed itself to providing services equitably and enhancing equality in terms of (geographical) distribution, these objectives remain unmet. The selected health indicators (table 8) highlight inequalities in delivery of health services across different sections of the population. For instance, whereas Bondo and Kakamega districts of western Kenya recorded Crude Death Rates of 16/1,000 and 13/1,000, Nyeri and Maragua Districts in Central province had 8/1,000 and 5/1,000 respectively. In addition, while Bondo and Kakamega districts recorded Infant Mortality Rates of 110/1,000 and 63.9/1,000 respectively, Nyeri and Maragua districts recorded 27/1,000 and 29/1,000 in that order. Under-five Mortality Rates follow similar patterns, whereby Bondo recorded 199/1,000 and Kakamega 122.5/1,000 whereas in Nyeri and Maragua, the rates were 34/1000 and 69/1,000 respectively.
Over the past few decades, Kenya’s health sector has experienced budget cuts amidst rising burden of disease, and reforms failed to revitalize the organizational capacity of the health sector to improve geographical targeting of health services consequently, inefficiency, corruption, and lack of coordination remain deeply entrenched in the system. Efforts to restructure the health care system to have a leaner and more efficient Ministry of Health in charge of policy and regulation while improving the capacity of district tiers to provide health services responsive to needs at the periphery only seem to have achieved measured success. Certainly, policies formulated by the government consistently failed to invest more resources in historically marginalized regions to balance the need for and availability of services. Uneven patterns of population distribution are instrumental in explaining the allocation of health resources, whereby marginal lands cover larger geographic areas, still a closer evaluation distribution of health services reveals conspicuous inequalities even in those regions as inhabitants travel longer distances to get to poorly equipped public health services. It is therefore evident that decentralization policies only perpetuated historical inequalities in allocation of state resources.

5.9 The Decentralization Framework

Decentralization policies were intended to reduce health inequalities by decreasing the level of influence of central governments on the periphery while promoting autonomy of the sub-regional institutions (Kalin 1999). Advocates advanced the argument that central governments were far from citizens and failure to distribute
services equitably was not the result of lack of resources rather, the inefficient allocation of existing resources.

The desire to take services closer to users, hence develop more efficient systems of allocation of public resources led to the clamor for decentralization (Crook 2003; Blair 1997; Bardhan and Mookherejee 1998). These advocates argued that decentralized systems would be more accessible and quick to respond to local needs as opposed to central systems. Within the health sector, expectations were that decentralization would devote more resources where needed the most (Bossert 1998).

This research used decentralization as a framework for evaluation of the outcomes of reforms in Kenya’s health sector. The importance of this approach lies in the fact that the spread of HIV & AIDS is geographically uneven so, prevalence is higher in some regions compared to others. This research therefore used this geographical dimension to examine whether decentralization achieved the broader health sector reform objectives including better targeting of resources to enhance equality in terms of geographical distribution of services, and improve accountability and allocative efficiency in the administration of public health resources, especially with regard to the fight against HIV & AIDS.

As previously noted, the government of Kenya declared HIV & AIDS a national disaster in 1999 (Cheluget et al. 2006). This declaration required all ministries to establish AIDS Control Units (ACUs) to fight the pandemic. In spite of those increased efforts from the national government, prevalence of HIV & AIDS remained high,
indicating that incidence was on the rise. Mapping spatial prevalence of the pandemic using sentinel data depicts considerable variations year to year, and this makes it difficult to detect precise trends. Nevertheless, the overall patterns observed strongly suggest a national decline in prevalence after 1998.

Declines in the prevalence, especially in sites that recorded the highest rates through the 90’s are attributed to AIDS deaths (Cheluget et al. 2006; Adari et al. 2007) as an estimated 10 per cent of infected adults die each year, while new infections (incidence) stand at 6 per cent. Incidence rates were higher before 2000, but since then, HIV & AIDS deaths are higher. At the start of the surveillance period, prevalence rates were higher in Western Kenya, and parts of the Coast region. Prevalence of the HIV & AIDS pandemic continued to rise through the 90’s, even though the rise was uneven since Western Kenya recorded higher than average prevalence rates throughout the surveillance period. The country recorded general declines in prevalence starting 1999 through the end of the surveillance period, 2003.

Condom promotion and other interventions for instance, VCTs, and services to prevent mother to child transmissions, have expanded rapidly in recent years. Even so, efforts to expand the geographical coverage of health services have a long history in Kenya. For instance, after discovery of the pandemic in Kenya in the early 1980s, the government first launched intervention and prevention programs in Nairobi (Cheluget et al. 2006). These clinics recorded early successes in combating the pandemic. Indeed, women attending ANCs exhibited diminutive risks to HIV because of lower rates of
infection with other sexually transmitted diseases. The fact that HIV & AIDS remains a
tremendous public health challenge deeply rooted in geographical inequalities in Kenya
powerfully suggests that mitigation and intervention programs are ineffective. In the next
section, this research integrates back into literature to underscore the drivers behind failed
decentralization policies that give rise to inequalities in health.

5.10 Decentralization and Health Sector Reforms Kenya

One of the core objectives of health sector reform was to decentralize the public
health system to improve distribution of and quality of services. To achieve this, the
government formulated a range of policies, however these were either laden with inherent
missteps that undermined the very objectives they were supposed to advance, or were
undercut by corruption and lack of political will. According scholars, there is little
evidence that policies and programs embraced by the government (as highlighted in a
multiplicity of documents) beginning with the KANU manifesto of 1963 (shortly after
independence), Sessional paper No. 10 of 1965 on African Socialism and its Applications
to Planning in Kenya, the District Focus for Rural Development of 1983, Sessional Paper
No. 1 of 1986 on Economic Management for Renewed Growth, The Social Dimensions
of Development, the Welfare Monitoring Surveys, the National Poverty Eradication Plan
and the Constituency Development Fund substantially improved equality in distribution
of public resources (Omiti et al. 2002; Oyaya and Rifkin 2003; Obuya 2008). These
measures failed to take practical steps in redistributing more state resources to poorer
areas, especially arid and semi arid lands.
Institutions formulated within the health system to improve efficiency and responsiveness of services failed to revitalize the delivery of health services (Maina and Kibua 2005). The PHMB/Ts, DHMB/Ts and Village Health Teams assumed a greater responsibility in the running of health care facilities under their jurisdiction. According to expectations, these institutions would provide an enabling environment for the health system to be responsive to the needs of users at the periphery, thus solve challenges of geographical inequality in distribution of health services. However, these institutions failed to function efficiently and effectively, and lack of accountability and efficiency continue to undermine delivery of health services.

Moreover, PHMB/Ts, DBMB/T and village health teams are political appointees, yet the health professionals they are supposed to supervise are civil service employees (Omiti et al. 2002). These political appointees, in many circumstances, possess no experience on issues of public health, but are supposed to oversee the provision of health services. This creates conflicts in the coordination of services, ultimately undermining the ability of these Boards to provide the necessary checks and balances as their members allegiance is to their appointing authority, instead of the broader priorities of health sector reform. More importantly, the lack of proper legal frameworks to guide relations between the Ministry of Health and the decentralized institutions exacerbated coordination challenges. Lack of proper working relationships between the various institutions involved in the delivery of health services leads to conflicts that work at cross-purposes with the objectives of health sector reform. The range of institutions created in the
process of reforms were intended to streamline operations through infusion of the necessary checks and balances within the health sector, thus improve coverage, efficiency and accountability. Instead, restructuring the delivery of health services seems to have exacerbated confusion, overlaps, and conflicts, and ultimately, access to health care services remains conspicuously unequal (Kalin 1999).

Certainly, formulation of these institutions, and implementation of strategic plans (the Kenya Health Policy framework and National Health Strategic Plans I and II) underscores both the importance attached to institutions at the district levels and below as the strategic institutions directly responsible for delivery of health services to the country’s mainly rural population (Maina and Kibua 2005), and also the government’s commitment to decentralizing provision of health services to the periphery. Nonetheless, the Ministry of Health continues to register complaints of graft at lower tiers, where decentralization was supposed to enhance equality and promote allocative efficiency and accountability. Corruption continues to undermine the principles of efficiency and equity in allocation of health resources and services to various regions (Wunsch 2001). In decentralizing the delivery of health services, proximity to the decision-making organs within the health care system and geography are two factors that should guide distribution of resources. In practice however, elites captured resource-allocation as well as the decision-making mechanisms at the periphery. In the end, they manipulate the loopholes, and weak monitoring and evaluation structures of the decentralized system to distribute resources to their own narrow interests (Maina and Kibua 2005).
The approach used by the government in the quest for reforms set in motion a series of missteps that successively undermined reform objectives (Oloo et al. 2000). For instance, the government’s strategy in adopting reform points to the reasoning that the country’s health sector had resources and the fundamental problem was mismanagement of these resources. Formulation of various teams and boards from the provincial to the village level typifies this logic. However, geographical imbalances in Kenya’s health sector do not only arise from mismanagement of resources, rather the lack of infrastructure in marginal areas and poor coordination of the decentralized system. The sector required deliberate steps to invest more resources in historically marginalized areas (Oyaya and Rifkin 2003).

Further, instead of the government directing more resources to the health sector to boost geographical coverage of services, it was forced to roll back funding in accordance with proposals from the Bretton Wood institutions to keep inflationary rates low. More worrying however, is the fact that the health sector allocates a greater proportion of these resources to salaries leaving insignificant capital for (include sentence saying health workers are still underpaid) expansion of the delivery of health services, yet any investments to increase geographical coverage of health care services (establish the necessary institutional infrastructure) demands vast amounts of capital (Oyaya and Rifkin 2003). This does not imply that health care professionals are over-paid. In fact, these professional are over-worked and underpaid, hence the exodus to countries that offer better terms of service.
Deliberate measures to strengthen institutions at the periphery are imperative so that those institutions assume leading roles in delivery of services (Rossi 2005). Even though Kenya’s health sector embraced reforms, genuine authority for decision making was not ceded to peripheral health care institutions. Major decisions with regard to health care still revolve around the central Ministry of Health and communication of health policy is ‘top down’ instead of ‘bottom up’ where locals participate through village and district health institutions in the formulation of health policies responsive to their needs (Ahmad et al. 2005). Devolution of genuine authority never accompanied reforms, a prerequisite to build institutional capacity so that local institutions met the surge in demand for decision-making and efficiency in delivery of services. Lack of involvement of users in health policy formulation reduced beneficiaries of health sector reform to passive participants, yet user participation in the new system was a core objective advanced by proponents of decentralization.

Lack of strong institutional capacities and administrative frameworks within the decentralized system exacerbated coordination challenges, hence erratic patterns of distribution of health services (Ahmad et al. 2005). Deficiency of proper coordination in Kenya’s decentralized health system not only leads to confusion, but also weakens the delivery of health services at the periphery. Weaknesses in the procurement system result in frequently stock outs of essential drugs from the Kenya Medical Supplies. Thus, it is not surprising that many of the rural health care facilities lack even the basic supplies. In fact, under ordinary circumstances, local institutions prescribe the necessary drugs and
patients have to buy these from private pharmacies. This fuels inequality because inhabitants of low potential districts, where up to 80 per cent of the population lives below the poverty line cannot afford to buy prescriptions (Maina and Kibua 2005). The introduction, suspension and reintroduction of user fees is instructive of the complex epidemiological, social and political conditions under which health sector reforms were initiated (Oyaya and Rifkin 2003). Contraction in growth of government services and increases in poverty rates characterize the period of implementation of health sector reforms. According to estimates, over 50 per cent of Kenyans lived in poverty during the late 1980’s through the 90’s. Worse still, in the country’s arid and semi arid regions, up to 80 per cent of the population lived in abject poverty. Cost-sharing measures therefore, were a disastrous strategy under such high incidences of poverty, as costs soared beyond the reach of the poor (Litvack et al. 1998; Smith 2007).

Reform policies sidetracked the government focus from its ‘needs based’ to a ‘resource based’ demand driven approach, which according to the compelling report from the World Bank (1993), *Investing in Health*, would make the provision of health care more cost effective and equitably accessible. This report emphasized the need for the adoption of a market-oriented system whereby market forces would offer consumers choice, in the process produce better quality of health care services tailored to the demands of users. In adopting this approach, the government failed to reconcile with the realities of the rising numbers of the population (consumers) falling below the poverty line, and the increasingly harsh economic climate of the late 1980s and 90’s. These
realities imply that families would have fewer resources at their disposal to purchase health care services (Oyaya and Rifkin 2003). More importantly, this market driven approach negates the very principle of equity to which the government committed itself. Certainly, equity cannot be realized in a market driven environment with differentials in purchasing power between various geographic regions of the country. In other words, this demand driven approach left no mechanisms to appropriate a greater proportion of public health care resources to areas of most need to equalize their demands and access to health care. What this implies therefore, is that decentralization intensified inequality of (geographical) access to health services as regions of endemic poverty, such as ASALs remained excluded, yet reforms were intended to be inclusive (Oyaya and Rifkin 2003).

Reforms failed to shift spending in the health sector down the pyramid, from the apex to the broad base. As observed in the allocation of HIV & AIDS resources, distribution remains based on ceilings and concerns to maintain low inflationary rates instead of disease burdens (Omiti et al. 2002). Lack of adequate resources at the base accounts for failure of the health sector reforms to address the persistent health care challenges. The highly centralized ‘decentralized’ health care system starves peripheral institutions of necessary resources to cater for the increased demands on the health system in this era of HIV & AIDS. Kenya has never been short of policies however, failure of these policies to address the underlying health inequalities best underscores their inherent limitations (Omiti et al. 2002). Kenya’s political class has over time fallen short of the will to take deliberate initiatives to address inequalities. Certainly, many
blame *Sessional paper No. 10 of 1965 on African Socialism and its Applications to Planning in Kenya* for the existing inequalities in distribution of state resources today, yet this policy document only laid the foundations for uneven development that have been perpetuated by successive regimes. Political party manifestos are illustrative of the lack of seriousness and authenticity of policies proposed (Omiti et al. 2002). Though many of these Manifestos emphasize the need to invest more resources at the base to meet increased need for health services, parties disregard them soon after elections, and practical steps to address geographical disparities in coverage of health services not initiated.

The donor syndrome has also played a substantial role in undermining expansion of health services. With the advent of reforms, donor institutions assumed a leading role in the public health sector. Despite the unique challenges the health care system faced in terms of geographical coverage of health services, donor institutions forced down blanket polices, and the country had to comply to qualify for further credit (Omiti et al. 2002). This implies that the government had little leeway in negotiating support for improving primary health care on its terms yet, the donor-driven health sector reforms lacked responsiveness to local health needs.

Implementation reforms proceeded without integration of local institutions, and more importantly, the private health service providers (Maina and Kibua 2005). Thus, Ministry of Health formulated policies to regulate health services providers without soliciting necessary input from non-state actors, regardless of the fact that the private
sector (NGOs, bilateral aid agencies and faith-based institutions) has grown exponentially, and its role providing health services cannot be over emphasized. In fact, private providers offer health services to those in distant places where the public health system lacks necessary infrastructure. Furthermore, since the introduction of Structural Adjustment Programs, the government has become less significant as a provider of basic services. Non-state health providers account for approximately 50% of the total health expenditure, implying that the state accounts for less than the remainder (50%) because users are charged a cost-sharing for services in public health facilities.

Failure to integrate the private sector in the provision of services is a strategic lapse that leaves the sector objectives unregulated, regardless of the immense potential that the government could utilize. The government failed to recognize the reality that though prudent management of resources was necessary to improve performance of the health system, the private health sector offers great potential, and actively engaging this sector would avail sufficient resources to enhance both quality and equitable access to health services under new management structures (Omiti et al. 2002).

District Focus for Rural Development, a program aimed at shifting the planning and implementation of government policies from the central to sub-regional governments, succeeded in redistributing health sector resources however, the objectives of this redistribution were aimed at strengthening the ruling party’s (KANU) political base in minority areas (Crook 2003). The government deployed resources to previously hostile areas to court political support, and in the end, these ‘development’ efforts
excluded areas unreceptive to the ruling party. In this manner, the government used decentralized structures to consolidate and strengthen the base of the ruling party and to build new regional support bases, a strategy that only exacerbated uneven distribution of resources.

Scarcity of data on health care spending implies that analyses on whether health sector reforms fundamentally altered patterns of health inequalities can only be suggestive. Even so, in spite of the measures the government implemented to provide quality and more equitably distributed health care services, success has been less than impressive. Significant geographic disparities exist, and the government continues to struggle to provide health care services not only to a rapidly growing but also increasingly poor population. The poor institutional and organizational capacity of the public health care sector in the face of increased burden of disease is further evidence that reforms only fortified historical inequalities in health outcomes.

5.11 Policy implications for Kenya

Health care reformers in Kenya could learn some valuable lessons from countries that have had measured success with regard to decentralization of the delivery of primary health services. Certainly, systematic evidence of the success or failure of decentralization is scarce, and indicators used to qualify successes or failures of decentralization are only suggestive. Moreover, different countries had different political experiences with the process of decentralization. While Zambia and Botswana’s political class led the way for reforms hence providing the necessary support, commitment to
reforms from Kenya’s political elite was less than forthcoming. And so the failure of health sector reforms to achieve expected outcomes in Kenya is not the result of a simple lack of ideas, rather the result of complex historical and political experiences that have characterized governance in contemporary Kenya. For instance, Zambia’s Ministry of Health worked closely with private providers to expand the geographical coverage of services, but implementation of health sector reforms in Kenya progressed exclusive of the private sector. Therefore, it would not be prudent to draw parallels between different countries without taking the historical and political contexts into consideration. Even so, Kenya could learn a number of specific lessons from the broader synopsis of the approach adopted by Zambia and Botswana, countries considered to have successfully implemented health sector reform.

Zambia, in decentralizing the provision of primary health care allotted preferential amounts of resources to institutions at the periphery (Blas and Limbambala 2001). This logic underscores the fact that health care institutions at the periphery form the first line of contact of the population with the health care system, and a majority of the population in Africa resides in rural areas. Thus from early stages, the government of Zambia committed itself to implementing the health sector reforms proposed and advocated by the World Bank and the IMF. In so doing, the government committed itself to overhauling the public health system to achieve equity and improve on the quality of care provided. Consequently, Zambia’s Ministry of health developed the Health Management Information Systems (HMIS), a utility that covers all primary health facilities. This
approach enabled the Zambia to identify inefficiencies in the health care system, consequently design solutions.

The HMIS enabled Zambia to devolve health resources more effectively and efficiently, and today, Zambia allocates health care resources and therefore HIV & AIDS mitigation resources more equitably to the base where they are needed the most. This approach makes Zambia’s health care system allocate more resources to prevention programs especially in rural areas as opposed to curative programs. Kenya’s Ministry of Health requires a HMIS for all public health institutions at the periphery, especially at a time when HIV & AIDS has evolved to be one of the most challenging development crises to the country. The HIMS will help collect vital statistics that would help the government better target allocation of public health resources.

The strong political commitment from the government of Zambia to health sector reform exemplifies the need for Kenya’s political class to adopt a common approach to restore confidence from bother bilateral and multi lateral development partners. Unequivocal commitment to health sector reform by the country’s political class facilitated a strong partnership between Zambia and its development partners, the critical constituency that provided the prerequisite technical support and resources to meet challenges of health sector reforms (MoH 2007). Similarly, strong political commitment was instrumental in the success of health sector reform in Botswana. Decentralizing the provision of primary health care to districts enabled Botswana to roll out a well-coordinated antiretroviral distribution network. Botswana’s utility of the decentralized
institutions to train nurses and other health care workers to deliver critical HIV & AIDS services at their local health care institutions provides a classical approach that Kenya could adopt to help train health care staff on the provision of HIV & AIDS services. Thus, the government of Kenya should commit to reinvigorate the health sector. Specifically, the government should devolve more resources including health care professionals, drug supplies and the necessary equipment to dispensaries and other local health institutions to empower them provide the necessary care to HIV patients. In addition, the government must reposition HIV/ AIDS as a central problem that should be addressed at the local health care facilities.

Zambia developed an essential health care package (available at all primary health facilities) which included HIV/ AIDS care (Mwangelwa 2000). This enabled the country spread coverage of HIV/ AIDS care to all sections of the population especially those in rural areas. Kenya could develop such as essential package of care that should be highly subsidized and available at all primary health facilities. Health care staff at all local institutions should be able to provide basic HIV & AIDS care, and to roll out other HIV mitigation programs such as prevention initiatives. To raise more revenue for prevention initiative, Kenya’s primary health facilities should emulate Zambia by selling advertising space on facility walls, or renting out premises to within the institutions to private pharmacies.

Kenya should also forge a strong partnership with mission hospitals (faith-based providers) to spread coverage of health facilities. This would be a particularly significant
step for Kenya because many of these faith based institutions tend to be located in the rural areas (Hanson et al. 2001), hence a strong partnership will enable the government to consolidate delivery of primary health care, thus ensure objectives of such faith based institutions, with regard to the provision of primary health care, are in tandem with the Ministry of Health objectives. Also, Partnerships with faith-based institutions would provide government with the prerequisite infrastructure to spread health care to far-flung areas that have been neglected over time. Moreover, the government, in efforts to expand coverage of health care should also emulate Zambia by funding faith based institutions and mission hospitals while insisting that these institutions streamline their objectives with those of the Ministry of Health.

Zambia’s system of resource allocation remains instructive and could be used to revitalize Kenya’s health sector to make it more responsive to the needs of the citizenry. Zambia’s formula for allocation of public health resources to different geographic regions considers population density Vis a Vis disease burden as opposed to Kenya’s system that largely relies on ceilings and historical patterns of healthcare spending (Onyango and Njeru 2004), a formula that is often blamed for the mismatches between resource allocation health care needs.

In Botswana’s 1970-1975 and 1973-1978 development plans (Mills et al. 1990), the government mandated local authorities to build health care centers across the country. This provided the vital infrastructure to spread coverage of health care. However, it is in the 1985-1991 development plans that the role of districts in decision making- a critical
constituent of success in the decentralization of healthcare- was enhanced. The outcome of this plan was more responsibilities delegated to local governments with regard to the provision of primary health care, as Botswana’s Ministry of Health retained the role of supervision and quality assurance. Within this framework, local institutions had the support and responsibility not only to provide primary health care according to need, but also to tailor the essential package to suit the needs of the population. Kenya could draw useful lessons from the need to decentralize greater authority to local institutions to enable them tailor services according to the needs of the citizenry. Strong collaboration between district development committees, district extension teams, village extension teams and the various committees from the central government that contributed to the success of decentralization in Botswana would particularly be informative to Kenya given the poor coordination that characterizes different levels of administration of state resources leading to wastage and gross inefficiencies. Perhaps, most important is the need for Kenya to re-orient its health system from the current focus on a curative approach to provide more integrated preventive and promotive services (UNDP 2006). Kenya’s Health Sector Reforms led to the emergence of two parallel systems- the private sector that provides better quality health care but is unaffordable to the majority, and the public health care system, though subsidized fails to meet the health care needs of the population (Gideon 2007). Thus, reforms failed to improve equity, instead these reforms continue to fuel a growing exclusion of the poor from the health system.
Despite implementation of Health Sector Reforms, the distribution of health care resources and therefore services continues to worsen, and the health outcomes of those at the periphery continue to deteriorate Maina and Kibua (2005). Reforms failed to improve geographical access to services. Even with decentralization of health services to facilitate strong and precise action against disease (World Bank Report 1993), precise targeting of health care resources in the fight against HIV & AIDS remains defective. The approach of the government in the quest for reforms seems to have been the first misstep that set in series of successive false starts.

After review of literature from a diversity of scholars on whether decentralization improved geographical coverage and equality to health services in Kenya, results indicate that the country’s approach failed to expand the geographical coverage of services to districts and lower tiers to equitably cover the population. The health care system not only remains inefficient, but also characterized by a rigid decision-making structure, weak coordination, and inequitable resource allocations. Further, the health care system continues to be unresponsive to needs of users, and major decision-making still takes place at the central Ministry of Health, not at the decentralized institutions. This lack of decentralization of decision-making authority to the lower tiers undermines peripheral institutions charged with the responsibility of delivering health services. The donor-led Health Sector Reforms failed to equalize the distribution of public health care services. In other words, the reforms progressed without proper perspective of the historical context of geographical inequalities in access to health services, because some sections of the
country (ASALs) are poorer compared to others (high potential areas). Any efforts to enhance equality of access to health care services should have focused on pumping more public health resources to geographically marginalized regions instead, donors insisted on (universal) implementation of reforms, whereby market influences would offer consumers choice, and in so doing, make the health care system responsive to the needs at the periphery. This logic failed to reconcile with the fact that poorer sections of the population would further be marginalized by market forces, as their ability to pay for services would only be diminutive. Furthermore, reforms failed to incorporate the private sector, in spite of the resources the sector enjoys. The HIV & AIDS pandemic places an ever-increasing demand on the health care sector, for this reason, incorporating the private health care sector would avail immense opportunity to diversify funding mechanisms for implementation of a diversity of mitigation strategies and the delivery of care for those already infected.
CHAPTER SIX: CONCLUSION

This thesis utilized the decentralization framework to evaluate whether health sector reforms fundamentally altered patterns of health inequality in Kenya. The HIV & AIDS pandemic was used as a lens through which to illuminate health care challenges of decentralization for two reasons. One, the pandemic consumes vast health care resources and two, HIV & AIDS was discovered in the 1980’s when health sector reforms were introduced. After an extensive evaluation of literature, diminutive evidence emerges that health sector reforms have succeeded in altering patterns of health inequality.

6.1 Has decentralization fundamentally altered patterns of health inequality in Kenya?

The uneven outcomes in health status across Kenya’s geographical landscape are deeply intertwined with the historical and political development of the country. Investments in health care were often based on political calculations instead of solid development objectives, and failure of successive development policies to correct historical imbalances in allocation of health care resources continues to perpetuate inequalities in health outcomes. By and large, the uneven availability of health care facilities and the concomitant patterns of health care funding emerged as the main drivers of inequality in health outcomes. Indeed, regions that exhibit higher than national average HIV prevalence rates (western Kenya) are also associated with diminished allocations of health care resources, excluding the North Eastern part of Kenya, a region characterized by poor infrastructure and high rates of insecurity.
To expand geographical coverage of services to all sections of the population, improved accountability, allocative efficiency as well as popular participation through decentralized decision-making structures with regard to formulation of health policy were considered imperative. Reforms were intended to enhance input from the periphery and so make formulation of health policy a bottom-up, instead of a top down process. Nevertheless, restructuring achieved little in expanding the geographical coverage of health care services. Further, the health care system remains rigid, and health policy formulation takes place at the Ministry of Health before being communicated down the system. Policies formulated to shift health care spending from curative services (usually centered around urban areas) to promotive services, thus avail more resources to expand coverage of health facilities failed to achieve those objectives. Similarly, institutions formulated within the health sector to strengthen accountability, guarantee popular participation, and streamline the delivery of primary health services fell to manipulation from politicians and the local political elites. And an inept political leadership that upheld narrow interests further centralized the decision-making authority at the periphery, effectively depriving policies the necessary will, and promoting high-level mismanagement of public health resources.

Reforms heralded cut backs in government spending on social services, and a market orientation of health care services, at a time when the health care sector required more resources to fight the HIV & AIDS pandemic. Reduced government funding of the health care system and the subsequent introduction of cost-sharing contradicted the
government’s commitment to expanding the geographical coverage of health facilities, and ensuring and preserving equality in distribution of health services. And the re-orientation of the health care system to a market approach not only negated the principle of equality, but also failed to reconcile with the harsh economic realities of rising poverty rates. Certainly, equality cannot be obtained in a market oriented system.

The Lack of political will greatly undermined implementation of health sector reforms. The District Focus for Rural Development framework best illustrates the lack of resolve for reforms. Despite the government recognizing districts as the strategic geographical points for effective and efficient delivery of health services, hence equitable distribution of health care, the political class failed to devote more resources to formerly marginalized regions to bring them to pace with the rest of the country. Instead, the program was manipulated by the political elite within the ruling party (KANU) to redistribute resources to regions in which they courted political support. And successive policies have failed to commit more health care resources to historically marginalized areas. The Constituency Development Fund (launched in 2003) embodies the government’s latest program to promote equitable distribution of public resources yet, this program has failed to commit more resources to marginal lands. Consequently, the CDF program, like all the other decentralization policies continues to fuel inequalities in health outcomes.

Re-structuring was meant to improve capacity of the health care system to meet needs. However, the ‘new’ system does not seem to achieve the target of providing
equitably distributed health care services. In fact, since implementation of reforms, the health outcomes for the Kenyan population seems to be on the decline as well as the services provided, and the ever growing population and burden of diseases, as a result of HIV & AIDS only exacerbate the situation. And today, the HIV & AIDS pandemic is not just a health problem, it is a development crisis whose geographical distribution is explained by the allocation of health care resources. But data on health care spending is difficult to find. Nonetheless, the limited information available captures the skewed allocation of HIV & AIDS mitigation resources. Nyanza province, and indeed western Kenya, the region with higher than national HIV & AIDS prevalence rates does not receive the highest HIV & AIDS mitigation and intervention resources. Instead, Nairobi, the Rift Valley and Central provinces receive higher allocations of HIV & AIDS mitigation resources. Nairobi is Kenya’s capital and the Rift Valley and Central provinces are not just associated with influential politicians but also former presidents. Central Kenya is also the political backyard of the current president, Mwai Kibaki. It is therefore hard to miss the link between the political economy and the allocation of resources.

6.2 Policy implications for Kenya

Implementation of decentralization policies never produced similar results across the developing world. Different countries had unique trajectories, so it would be unwise to argue that Kenya could emulate the approaches taken by Zambia and Botswana in decentralizing the delivery of health care services. Nevertheless, Kenya could emulate the
broader framework utilized by those countries, and tamper it with the political realities on the ground. For instance, Zambia’s Ministry of Health cultivated a healthy relationship with donor countries, through improved accountability. This in turn translated into a decisive advantage for Zambia as donor agencies availed the necessary monetary resources to support the expanded delivery of health care services based on the principles of reform. Towards that end, Kenya’s Ministry of Health needs to take decisive steps aimed at improving accountability and efficiency.

Zambia’s Ministry of Health was also proactive in raising additional funds to meet increased responsibilities in an era of reduced government funding. The Ministry of Health strengthened partnerships with faith based institutions, providing them with funding at the same time insisting that those institutions align their objectives with those of the national Ministry of Health. This is a strategy that Kenya could easily emulate. No doubt, the political will to implement this policy may not be forthcoming. Nevertheless, the Ministry of Health ought to enter into negotiations with umbrella bodies of faith-based institutions to harness their potential, given that such institutions tend to be located at the periphery where government infrastructure is insufficient.

Kenya’s Ministry of Health needs to re-structure itself so that more resources are committed to promotive and preventive services. These services, usually offered at the base, would make delivery of health care more effective because the base of the healthcare system is the first line of contact of the population with the health care system. Also, the Ministry of Health needs to streamline operations between the various Teams,
Boards and health care professionals because conflicts between these Teams and Boards hamper effective delivery of health care services.

Besides, the Health Management Teams and Boards formulated to oversee delivery of health care services should have been composed and headed purely by health care professionals instead of political appointees. Appointment of medical professionals to these Teams and Boards would have kept politics, and the attendant conflicts out of the delivery of health care services. Perhaps, health care professionals would have been more effective in communicating policy changes to fellow professionals as opposed to political appointees who came with their attendant biases. Additionally, entrusting the composition of management Teams and Boards to health care professionals would have made them own the process of reform, and therefore identify with associated challenges. If health care professionals identified with the challenges of reforms, then the apathy and conflicts between health care professionals and ill-equipped political appointees trying to communicate policy changes would have been circumvented. The notion health care professionals are a crucial resource in implementation of reforms is indisputable, hence giving them a greater voice in management of delivery of services would have been produced better results.

And to effectively and efficiently allocate health care resources the Ministry of Health needs to develop an allocation formula based not just on population densities of particular regions, but also the burden of disease. Certainly, the political realities on the ground are complicated and any resource allocation policy proposals are bound to be
fiercely contested. Nonetheless, the Ministry of Health needs to develop such proposals as an initial step towards equitable distribution of health care resources.

Kenya’s implementation of health sector reforms emphasized on expected outcomes. This approach not only sidestepped an important aspect of reform-evaluation of progress towards realization of objectives of reform, but also failed to prioritize other critical components of the health care system, including the development of health care professionals to cope with increased burden of disease, especially with the emergence of HIV & AIDS. The HIV & AIDS pandemic weakens the body’s immune system thus, reforms should have committed more resources towards developing health care staff to cope with the resultant increased burden of disease. Instead of laying off health care professionals, the Ministry of Health should have recruited and trained community health care workers to offer critical HIV & AIDS services at local health care facilities. This strategy would effectively decongest major public hospitals in which HIV & AIDS patients do not just occupy bed spaces, but also continue to consume health care resources that could be re-directed to expand coverage of health care to the periphery where a majority of the poor cannot afford to pay hospital bills.

To hasten progress towards achievement of equity in delivery of health care, the Ministry of Health needs to recruit community nurses through the district and lower administrative levels. Community nurses should then be bound by contract to serve in their areas of recruitment for a specific period of time, before seeking to transfer stations. Such a policy would lead to higher rates of retention of health care professionals in
underserved areas (ASALs). Certainly, political variables play into the deployment of health care professionals. Also, newly employed health professionals may not readily accept deployment to hardship areas. Thus, the key to improving health care in underserved areas would be recruitment of community nurses through districts and divisions.

Improvement of geographical coverage of health care services undoubtedly requires a greater degree of planning of health services. And so Policies from the Ministry of Health need to draw a greater correlation between the resources expended and the expected outcomes. The fact that Kenya can only develop as a country accentuates the need for the Ministry of Health to allocate more resources to underserved areas through better planning and laying the benchmarks for evaluation of progress. And the government needs to formulate mechanisms to cushion historically marginalized communities from further marginalization in a market oriented system. To achieve this, the Ministry of Health needs to adhere to specificity through formulation of (subsidized) health care packages based on health needs of various geographic regions. For instance, HIV & AIDS is a leading health care problem in western Kenya, thus a subsidized health care package for this region should reflect this reality, while a package for North Eastern Kenya should be reflective of the immediate burden of disease.

Also, the Ministry of Health needs to re-evaluate policy formulation with a view to scaling-up involvement of the local community. This would open up channels for the ministry to set targets to be met as it responds to needs. What’s more, the Ministry of
health needs to modernize and adopt 21st Century technology. Towards this end, the ministry needs to develop a web-based Health Management System that allows health professionals to share a common pool of data from diverse locations. A HMIS will not only modernize record keeping, but will also improve monitoring of diseases, thus improve efficiency.

There is need for the law-making arm of government to formulate legislation that not just declares equitable access to health care a fundamental human right, but also sets the stage for compulsory minimum social insurance. These measures will push the government to take serious steps towards reducing inequality, including allocating more resources to underserved areas. And the need for legislation promoting development of traditional medicine as integral part of health system is all too apparent. Regulated development of traditional medicine would be critical to enhancing coverage of health care services in areas not adequately served by the public health system.

And so the view that the solution to Kenya’s health care crisis lies in decentralization cannot be disputed. Moreover, the need to use the meagre public health care resources more effectively and efficiently sums not just the need to bring real decision-making closer to users of health care services, but also the need to invest more resources in developing capacity for local and regional health care institutions to provide quality and equitably distributed health care services. But to provide quality health care requires resources to be channelled to where needed the most. To achieve this, the health
care system would require stronger legal frameworks that anchor decentralized institutions, and devolution of genuine authority to local and regional institutions.

6.3 Can geographical analyses of HIV & AIDS refine our understanding of the pandemic and illuminate health care challenges of decentralization?

Mapping the spatial prevalence of HIV & AIDS visually illustrates the mismatch between prevalence of HIV & AIDS and the allocation of mitigation resources across the country’s landscape. While the maps illustrated a higher prevalence of the HIV & AIDS pandemic in western Kenya, literature points to a pattern of allocation of HIV & AIDS mitigation resources largely determined by the political economy. Accordingly, the geographical approach utilized in this thesis provides policy makers and administrators of health care programs a realistic analysis of the geographical distribution of HIV & AIDS, thus facilitating a shift from historical health care spending patterns to more efficient and effective resource allocation models.

To equalize health outcomes, provision of adequate primary care is imperative. In Kenya, geographical coverage of health care, and therefore HIV & AIDS mitigation resources is inadequate. Although national HIV & AIDS prevalence rates have been falling, within country rates reveals that the pandemic remains well established. What’s more, in spite of the increasingly high proportion of the population aware of their HIV status, progress towards containing the pandemic is slow, prevalence remains high, and the need for operational health providing institutions for the poor majority at the periphery cannot be gainsaid. And to synchronize need with delivery of health care
services, there is urgent need to step up the national response to HIV& AIDS. As such policy makers should adopt this approach to build a revamped national strategy that realistically addresses the geographical as well as the development dimensions of the HIV& AIDS pandemic, thus eliminate disparities between need for and allocation of interventions and mitigation resources.

Overall, it is difficult to conclusively argue that decentralization of health care services failed to realize expected outcomes. Difficulties in obtaining standardized data on allocation of health care resources complicate systematic analyses of the outcomes of decentralization. Furthermore, the introduction of Structural Adjustment Programs ushered in a new chapter in the delivery of health care services whereby the government’s role is increasingly diminished. All the same, the little available data strongly suggest that reforms failed to achieve expected outcomes.

6.4 Implications for future research

There is need for more field research to investigate issues of access to health care services. This research should not just evaluate the health care services that the government provides against the actual need for those services, but also other providers involved in delivery of health care. This investigation should go beyond the national focus and evaluate various regions with the aim of developing a better understanding of inequalities in distribution of health care facilities and the concomitant services.

Spatial analyses has a yet-to-be exploited potential in addressing inequalities in health care. Utility of these tools remains critical for geographical targeting of resources
for cost-effective intervention programs because they allow for a standardized program surveillance and implementation based on needs (Clements et al. 2006). Thus, to eradicate inequalities, spatial analyses tools provide a useful yardstick for future disease surveillance and program implementation efforts in Kenya. Towards this end, mapping spatial prevalence of disease is an innovative approach that provides decision support to policy makers. The scope of this approach needs to be expanded develop a web based health information mapping tool that provides a better analysis of health inequality. There is need to infuse ‘map thinking’ approaches to disease interventions in Kenya. Spatial analyses tools provide a decisive advantage in public resource allocations for policy makers and health managers, who lack the necessary expertise in public health or epidemiology, but need to manage health intervention programs (Wardlaw et al., undated).

Investments in more sentinel sites would provide better data sets to enable spatial interpolation of prevalence of HIV & AIDS. Interpolation of spatial prevalence rates of the pandemic using geostatistical methods such as Inverse Distance Weighting and Krigging will not just produce better epidemiological maps, but will enable prediction of future trends through spatial modeling in areas that lack HIV & AIDS prevalence data. Illumination of future trends of disease would set in motion the necessary mitigation strategies. Better data sets also offer the potential to collect information on other diseases through the lens of HIV & AIDS. These are diseases associated with HIV & AIDS, for instance TB and STDs. And so, policy makers will always be a step ahead in formulation
of health policy. In sum, to win the battle against health inequalities in allocation of health resources implies great infusion of refined efficiency in resource allocation. Development and utility of web-based epidemiological maps will trail this blaze and make a real difference on the ground.
REFERENCES


Atun, Rifat. 2004. What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services? Tanaka Business School, London: Health Evidence Network.


Berman, Peter and Bossert, Thomas. 2000. A Decade of Health Sector Reform in Developing Countries: What have we Learned? International Health Systems Group. A paper prepared for the DDM Symposium: “Appraising a Decade of Health Sector Reform in Developing Countries” March, 15 2000. Washington, D.C.


national Library of Australia, National Library Theater, Canberra: University of Adelaide.


Opiyo, Pamella, Yamano, Takashi, Jayne, Ts. 2008. HIV/ AIDS and Home-Based Health Care. International Journal for Equity in Health 7: (8)


UNDP. Undated. The Implications of HIV/AIDS for Rural Development Policy and Programming: Focus on Sub-Saharan Africa. Study paper No. 6. UNDP.

Verhuel, Ellen and Rowson, Mike. 2001. Poverty reduction strategy papers: *It is too soon to say whether this new approach to aid will improve health.* BMJ journals 323: 120-121.


