Science and Technology, Education, Agriculture, Resource Management, Governance and Culture as Catalysts for Development in Africa
Contents

Editorial..............................................................................................................................iv
Keynote Address................................................................................................................1

Factors that Influence Enrolment in Agriculture and Related Sciences in Public Universities in Kenya
Estambale, T.N Nderitu, J. H Kiarie, Njoroge Kasina J. M........................................3

The Place of Constituencies Development Fund (CdF) Under the New Constitution in Kenya
Kebenei David Kibiwott......................................................................................................26

Teachers’ Perceptions on the Effects of HIV/AIDS Pandemic on Schooling among Primary School Pupils in Rachuonyo District, Kenya
Beatrice A. Nyakan..............................................................................................................35

Effects of Coordination on strategy implementation in manufacturing firms: The Case of Manufacturing firms in Nakuru Town
Lucyann M. Karani, Asaneth C. Lagat, Lydia C. Langat..............................................49

Educating for Holistic Development in Seventh - day Adventist (SDA) Schools in Nyamira County, Kenya
Bernard Gechiko Nyabwari, Tom Nyamache, Ruth Nyambura.................................56

An Investigation into the Demand for Naturopathy Services in Urban Centres in Kenya
Tom Nyamache, Lydia Kaniu, Ruth Nyambura...............................................................79

Influence of Conversion Decision of Non-Bank Financial Institutions into Full Fledged Commercial Banks in Kenya
Tom Nyamache, Njung’e, Kamau, Ruth Nyambura, P. Y. Mishra, .........................98

Evil Eye: An African Overview
Ruth Nyambura, Tom Nyamache ..................................................................................114

The Land Question in Kenya: Ol-Kalou Salient Settlement Scheme 1965-1980
Kariuki Ngaruiya .............................................................................................................122

Factors Affecting Water Demand among Households in Nakuru Municipality, Kenya
Mathendu Sammy, M.A Mokua, PhD.................................................................130

Guidelines to Contributors.........................................................................................144

Journal of Education and Social Sciences iii
The Journal of Education and Social Sciences is a peer reviewed journal published once a year by Mount Kenya University. Judging from this issue there is no doubt that we can enter the year of jubilee with a considerable measure of confidence. The major topics in this publication include Place of Education in Africa; politics; place of culture in the modern world; advocacy for technology in institutions of higher learning; effectiveness of Science Process Skills in secondary schools; local resource management and the nature of African environment in the 21st Century.

Through the fine scholarly qualities of individual contributors to the MKU Journal of Education and Social Sciences and the uncompromisingly high standards of our peer reviewers, and the authors’ positive response to criticism, we have been able to produce the journal without frustration.

There is a lot of merit in our multi-disciplinary journal. Without very strict determination of ratios between articles from different areas of study or chosen topics, the submissions in totality have enabled us give a fare representation of issues and cross-cutting concerning in research. In Future we plan to call for papers on specific themes, top which issues particular to a certain faculty or school will be devoted.

Scholars are encouraged to team up with their peers and mentors to become creators and disseminators of new knowledge. On this basis the skills and knowledge generated will become commonly owned. Consequently this may lead some of the potential authors to select conceptual topics that focus on solutions needed in the challenges facing the modern world.

*Ruth Nyambura*

*For the Editorial*
Keynote Address

Prof. Stanley Waudo
Vice-Chancellor, MKU

Science and Technology, Education, Agriculture, Resource Management and Culture as Catalysts for Development in Africa

Science, Technology and Innovation
Vision 2030 recognizes the role of science, technology and innovation in creating a knowledge economy. Knowledge plays a central role in Wealth creation, Social welfare and International competitiveness. Knowledge must be utilized for the common good.

The four elements that determine knowledge exploitation are; Institutional policies that support, Research that generates knowledge, Incentives that promote innovation and entrepreneurship, Skilled human resource that can use knowledge for discovery, innovation and invention, technology development, effective communication infrastructure and effective innovation system. What is an innovation system?

This is a network of research centres, universities, think tanks, private and public enterprise and community groups that can generate knowledge utilize generated knowledge to make discoveries and create innovations and technologies. What hinders research and innovation? The major challenge is poor funding of research; Kenya spends 0.3 per cent of its Gross Domestic Product (GDP) on research. Is there a solution?

Strengthen partnerships to Allow pooling of resources, Making research priority need based, Creating synergy, Strengthen postgraduate training in universities,Establish a National Enterprise and Incubation Centre. The National Enterprise and Innovation Development Centre have a mandate to foster innovation, entrepreneurship and technology development through a screening process of research outputs for commercial value and to move research findings to the market for utilization.

Agriculture
Kenya’s economy depends on agriculture. Agriculture is one of the six key sectors within the economic pillar of Vision 2030. Vision 2030 sets to achieve agricultural sector growth at 7%. Agricultural sector has high economic value.
The major sub-sectors of agricultural sectors are: Dairy sub-section (worth Ksh. 100 billion in 2007), Horticulture sub-sector (worth Ksh. 65.2 billion in 2007) and Tea (worth Ksh. 46.8 billion in 2007).

Dairy sector accounts for 4.0% of the GDP and creates two million jobs in urban and rural areas throughout the milk value chain. This offers 50% of the agricultural labour force. What is the milk value chain? It is production, transport, processing, support, services such as animal feeds, manufacture, equipment supplies and animal health services. Dairy sector suffer a number of challenges which include: Over-reliance on green material cattle feed i.e. rain-fed forage, Poor extension service. Last time extension officers were hired was 1988, Underfunding. For example, a district gets Ksh. 50,000 quarterly to cater for visits to farms and stationery. Underfunding leaves farmers without extension service, 2012 severe milk shortage.

**Resource Management and Culture**

In a university setting, areas of co-operation include: student exchange, staff exchange/visiting, and study abroad programmes for students, dual credential programmes, joint research activities, library and documentation exchange, exchange of pedagogical material, joint participation in seminars and conferences and development of projects. What should be the qualifications of partners? Must be accredited institutions in teaching and research. Non-academic institutions must be performing complementary goals of teaching and research.

**Conclusion**

“Getting things done ultimately is not about power or rank. It is about passion, imagination and persistence” (Kariithi Murage Murimi).

"Journal of Education and Social Sciences"
Factors that Influence Enrolment in Agriculture and Related Sciences in Public Universities in Kenya

University of Nairobi, P. O. Box 30197, Nairobi, Kenya  
Mount Kenya University, P. O. Box 342-001000, Thika, Kenya  
Kenya Agricultural Institute, NARL, Nairobi, Kenya

Abstract
Many countries in the world attach a lot of value to higher agricultural education. It is viewed as a panacea to all challenges that may confront the agricultural sector. Whereas several approaches have been employed to ensure that numbers of students enrolling into higher agricultural education continue to grow, there is still concern that many young people are not keen to take agriculture as a lifelong career. The existing body of research has highlighted factors that influence decision making among students in their choice to study agricultural programmes. It has focused on lack of information on agricultural education, negative perceptions and lack of role models as some of the factors impacting on students’ decisions. On average, 572 students per year relative to majority of 23,790 students in other degree programmes enrolled in agriculture and related programmes. The study used both quantitative and qualitative approach based on a questionnaire distributed and completed by sampled respondents from the said universities. The exposure to agriculture was very essential in making students recognize the importance of agriculture and the motivation to choose to study it as a lifelong career. Whereas exposing students to agriculture is very important if they must choose it as a career, the results however emphasized personal interest as a key factor: It was also established that gender was not a factor in the choice to enroll into agriculture and related sciences. Recommendations for making higher agricultural education demand driven are offered based on the findings.

Key Words: Pre-university exposure and perception.

Introduction
There is declining student enrolment in higher agricultural education in many countries around the world (Mulder and Kupper, 2006). When students enrolment levels in higher agricultural education decline, the provision of human resource is compromised, which in turn affects the growth of the agricultural sector. In the developing countries, only a few students opt to take agriculture as an examinable subject at secondary level; and only one out of four (25%) intend to seek an agricultural occupation following graduation (Vandenbosch, 2006).
Data from seven African institutions indicated that between 1980s and 1990s, enrolment levels in agriculture as a share of total enrolment fell from 5.7% to 3.3% at degree level, and from 7.6% to 3.8% at postgraduate level. The decline was thus 42%, 21% and 50% for technicians, undergraduate and postgraduate levels respectively (Ngugi et al, 2005). In Kenya, the numbers of students enrolling into agriculture and related sciences are consistently going down at university level; and many of those in the agricultural programmes are there not by choice (Wesonga, 2007). Once students graduated from studying agriculture at universities in Kenya, they seem to be less interested in agriculture as they sought careers associated with urban lifestyles and wider range of chances for work. Despite declining enrolment, there is still a strong demand for human resource capacity in the agricultural sector, making employment prospects for agricultural graduates to be good. However, there are mounting obstacles encountered in attracting student enrolment into agricultural sciences. One of the objectives of the study was to identify the factors influencing potential undergraduate students in their choice to study or not to study agriculture.

**Methodology**

The population for this descriptive correlational study was 4960 of all registered bona fide undergraduate students enrolled in agriculture and related sciences, from the three purposively sampled public universities in Kenya, namely; Egerton University, University of Nairobi and Jomo Kenyatta University of Agriculture & Technology. The sample of 496 was obtained through systematic random sampling of a captive audience. Cochran’s (1977) formula for a five percent chance of error was used to determine the required sample of 357. However, due to the large defined target population of 4960, a larger sample size was thought to be desirable; and therefore, the investigators decided to use a sample of 496 which was 10% of the target population. The distribution of the sample of the study consisted of male and female population in public universities which is (61%) for males and (39%) female undergraduate students enrolled in higher education in Kenya (JAB, 2010).

The instrument for the study consisted of a self administered questionnaire of thirty-two questions. The questionnaire had both open and close ended questions divided into three sections, namely; Section A: Respondent’s data, Section B: Pre-university exposure to agriculture and Section C: Access and use of ICTs. Half of the questions were constructed using the Summated Rating Scale (Likert Scale) five point scale with anchors labeled as: Strongly Disagree = 1, Disagree = 2, Unsure = 3, Agree = 4 and Strongly Agree =5; and No Influence = 1, Little Influence = 2; Some Influence = , Much Influence = 4 and Very Much Influence = 5. The validity and reliability of the instrument was established through expert
opinion of a panel of faculties (from the Department of Agricultural Economics, University of Nairobi), literature review and pre-test of both open and close ended questions. The instrument was pilot tested for reliability using representatives of 30 undergraduate students from the College of Agriculture & Veterinary Sciences, University of Nairobi who subsequently were not included in the sample. The coefficient for internal consistency was calculated for the 100% questionnaire return rate. Using the Pearson’s Product Moment Correlation Coefficient formula, reliability coefficient of 0.732 was obtained from the pilot study.

Self-administered questionnaires were distributed to a captive audience of undergraduate students from the purposively sampled public universities. The investigators followed up and collected most of the questionnaires. In addition, two (2) Focus Group Discussions (FGDs) involving 28 participants were conducted. The investigators outlined the purpose of the study and the criteria for inclusion. The FGDs which lasted for 50 minutes each were facilitated by the investigator who took on the role of a moderator and was assisted by two (2) students who took notes. The role of the moderator was to lead the group in discussions by asking questions and directing the flow of the conversation. No tape recorder was used. All data were analyzed using the Statistical Package for Social Scientists (SPSS Version 16). Appropriate statistical procedures for description and inference were used. The Alpha level was set at the confidence level of .05.

Results and Discussions
The students who responded to the questionnaire were 74% (N=367), comprising 61.6% male and 32.4% female. The 367 respondents were broke down into 1st year undergraduates 28.3%, 2nd year 21.3%, 3rd year 18.8%, 4th year 29.7 and 5th year 1.4%. First, the views of first year students might provide the investigator with a better picture of the pre-university ICTs experience that could be built on. Secondly, fourth year students, who were finalists provided a good opportunity for understanding what ICTs needs of future students might be. However, the least represented group was the fifth year undergraduate students due to non-response which was treated as missing data and not included in the sample data. Respondents who obtained B+ and A-aggregate mean grades in KCSE were 54.2% and 31.6% respectively. Table 1 gives the details of the characteristics of respondents.
Table 1:
Characteristics of respondents enrolled in agriculture and related sciences

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents from public selected public universities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egerton University</td>
<td>192</td>
<td>52.3</td>
</tr>
<tr>
<td>University of Nairobi</td>
<td>128</td>
<td>34.9</td>
</tr>
<tr>
<td>Jomo Kenyatta University of Agriculture &amp; Technology</td>
<td>47</td>
<td>12.8</td>
</tr>
<tr>
<td>Gender as a variable in perception of agriculture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>248</td>
<td>67.6</td>
</tr>
<tr>
<td>Female</td>
<td>119</td>
<td>32.4</td>
</tr>
<tr>
<td>Aggregate mean grade in KCSE indicative of academic achievement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A (78 and above)</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td>A- (71 - 77)</td>
<td>116</td>
<td>31.6</td>
</tr>
<tr>
<td>B+ (64 - 70)</td>
<td>199</td>
<td>54.2</td>
</tr>
<tr>
<td>B (63 – 69)</td>
<td>34</td>
<td>9.3</td>
</tr>
<tr>
<td>B- (56 – 62)</td>
<td>5</td>
<td>1.4</td>
</tr>
<tr>
<td>C+ (49 - 55)</td>
<td>5</td>
<td>1.4</td>
</tr>
<tr>
<td>Degree enrolled in agriculture and related sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture general</td>
<td>132</td>
<td>36</td>
</tr>
<tr>
<td>Food Science &amp; Technology</td>
<td>116</td>
<td>31.6</td>
</tr>
<tr>
<td>Land resource &amp; Agricultural Technology</td>
<td>17</td>
<td>3.7</td>
</tr>
<tr>
<td>Animal Science</td>
<td>35</td>
<td>9.6</td>
</tr>
<tr>
<td>Plant Science</td>
<td>6</td>
<td>1.6</td>
</tr>
<tr>
<td>Agri-business</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Year of study in agriculture and related sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First year</td>
<td>104</td>
<td>28.3</td>
</tr>
<tr>
<td>Second year</td>
<td>78</td>
<td>21.3</td>
</tr>
<tr>
<td>Third year</td>
<td>69</td>
<td>18.8</td>
</tr>
<tr>
<td>Fourth year</td>
<td>109</td>
<td>29.7</td>
</tr>
<tr>
<td>Fifth year</td>
<td>5</td>
<td>1.4</td>
</tr>
</tbody>
</table>

(Source: Field data, 2010)

The study sought to establish the means through which undergraduates obtained agricultural information. It emerged that 53.4% of the respondents received agricultural information from researchers whereas 41.4% received from the press, 15.3% from extension service personnel, 14.4% from NGOs, 7.9% from farmers and 2.5% from others. This question was necessary for the intention of gauging how much undergraduate students interacted with stakeholders in agriculture. By establishing the extent of interactions, mechanisms that are ICT based would be devised to make agricultural education popular in order to attract increased enrolment. From the responses given, there is an indication of lack of interaction with farmers who are key on issues of agriculture.
Pre-university exposure to agriculture was one of the factors which was identified as crucial in decision making regarding the choice of agriculture as a lifelong career. Pre-university exposure to agriculture and related sciences was interpreted as the extent to which undergraduate students were taught agriculture at either primary or secondary school, engaged in agriculture as extra-curricular activity for example through 4K Club and having been examined in the subject at the KCSE level. Responses to questions whether they were taught agriculture, engaged in as an extra-curricular activity or examined at KCSE level shows that 64.4% had been exposed to agriculture before joining public university of their choice. ICTs have been found to open up new avenues of accessing information thereby changing the relationship between students and between students and teachers. Ng’ambi and Czerniewicz (2007) have suggested that ICTs can be used to present and provide content, assess students’ learning, provide feedback, scaffold students’ learning and enable peer to peer collaborating learning.

The study recommends that ICTs should be used in developing learning materials that animate and simulate various agricultural situations in order to promote the learning of agriculture and problem solving such as simulating weather partners and modeling of food preservation and storage. Students of agriculture and related sciences in public universities should be required to enroll in a course on computer application and vocational technical education in order to make students personally responsible for their own learning through acquisition, discovery, dialogue, practice and creative learning events associated with the media forms such as lecture notes online, streaming videos of lectures, DVD, multimedia including digital video, audio clips and animations, CD based DVD or web, hyper media, multimedia resources and information gateways, e-mail discussion forums, blogs, drill and practice, tutorial programmes, simulations, virtual environments, simple existing tools as well as specially created programmable software. Public universities should initiate joint attractive seminars, courses, competitions for high school students both at the university and directly at school, participation in specialized fairs, information leaflets, high quality presentations, fliers, brochures could improve the image of agriculture. Newspapers, journals and magazines can also influence young people who are seeking information (such as agri-business – contract farming) on which to base a decision that is important for future lives. The government should make a deliberate effort using the revenue funds for county governments to provide well equipped agricultural computer laboratories with internet and instructional materials, pre-requisite for all schools at the basic level of the first eight years.
Figure 1. shows the proportions of students who chose agriculture and related sciences as programmes of study at the selected public universities.

The computed Pearson’s Chi Square indicated that there is a highly significant relationship between pre-university exposure to agriculture and the choice to study agriculture and related sciences at the university. Therefore the null hypothesis that the likelihood that potential undergraduate students would choose to study agriculture and related sciences is not dependent on pre-university exposure to agriculture was rejected. For example, Egerton University had 40.2% of the undergraduate students who had been taught agriculture in both secondary and primary schools; and chose to enroll in agriculture and related sciences. This prior exposure could have contributed to a positive image relative to agricultural education. Besides, students who enrolled may have had a career objective which was congruent with agricultural programmes offered at public universities. This finding is crucial in determining the influence of exposing students to agriculture at an early stage and how it impacts on future career choices. Reis and Kahler(1997) while studying factors influencing enrolment in agricultural education programmes in Iowa High School recommended that agriculture instructors should share information about agriculture programmes with students, particularly “sharing goals of the programme, content and its
achievements. Leisinget. al(1992) found out that providing students with more exposure to the agriculture industry by the time they are in secondary school is likely to affect their attitudes and career choices. In addition to pre-university exposure to agriculture, other factors influenced the choice to study agriculture and related sciences. Table 3 shows the rating of influencers against the response categories which were combined into two nominal categories; namely, “No influence” and “Very much influence”. The items classified in the “No influence” interpretive category were 17. In summary, two (2) items were classified in the “Very much influence” category. From a logical point of view “Occupational/employment opportunities” and “personal interest” tended to be the most frequent responses on the factors that influence undergraduates’ choice to study agriculture and related sciences in public universities.

Table 2:
Factors perceived to influence enrolment in agriculture and related sciences

<table>
<thead>
<tr>
<th>Role model influences</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very much influence (5)</td>
</tr>
<tr>
<td>1 Graduates of universities that offer agriculture and related sciences</td>
<td>15.5</td>
</tr>
<tr>
<td>2 A student enrolled in agriculture and related sciences</td>
<td>18.3</td>
</tr>
<tr>
<td>3 A fellow student</td>
<td>25.9</td>
</tr>
<tr>
<td>4 A teacher in secondary school</td>
<td>18.0</td>
</tr>
<tr>
<td>5 Career master</td>
<td>15.8</td>
</tr>
<tr>
<td>6 Parent(s)</td>
<td>14.4</td>
</tr>
<tr>
<td>7 Guardian</td>
<td>20.2</td>
</tr>
<tr>
<td>8 Past agricultural experience</td>
<td>15.8</td>
</tr>
<tr>
<td>9 Occupational/employment opportunities</td>
<td>16.9</td>
</tr>
<tr>
<td>10 Farming background</td>
<td>14.4</td>
</tr>
<tr>
<td>11 Interest in agriculture as a subject in secondary school</td>
<td>15.5</td>
</tr>
<tr>
<td>12 Fun in agriculture in an interesting agricultural course</td>
<td>14.7</td>
</tr>
<tr>
<td>13 Personal interest</td>
<td>20.2</td>
</tr>
<tr>
<td>14 A friend</td>
<td>21.5</td>
</tr>
<tr>
<td>15 A male relative</td>
<td>24.3</td>
</tr>
<tr>
<td>16 A female relative</td>
<td>27.2</td>
</tr>
<tr>
<td>17 Agricultural club e.g., 4KClub</td>
<td>20.2</td>
</tr>
<tr>
<td>18 Agricultural shows</td>
<td>15.5</td>
</tr>
<tr>
<td>19 Local agricultural officers</td>
<td>24.0</td>
</tr>
</tbody>
</table>

**Response Scale:** Very much influence = 5, Much influence = 4, Little influence = 2, No influence = 1.
Regarding the variable of academic achievement operationalized as KCSE aggregate mean grade, Table 4 shows a cross-tabulation of degree programmes in agriculture and related sciences which the respondents had chosen as first choice and the corresponding mean grades which were obtained in KCSE. The results of the computed Pearson’s Chi Square showed that enrolment into agriculture and related sciences was dependent on KCSE aggregate mean grade obtained. The null hypothesis that the likelihood that potential undergraduate students would choose to study agriculture and related sciences is not dependent on KCSE aggregate mean grade was therefore rejected in view of the fact that selection of students to study various degree programmes at public universities is pre-determined by the JAB criteria. There is a significant relationship between KCSE mean grade and the choice to enroll in agriculture and related sciences. Majority of the respondents had B+ and A- as KCSE mean grades. KCSE mean grade tends to influence choice of agriculture and related sciences as a course of study. During selection of KCSE candidates to study agriculture at public universities, those with highest aggregate mean grade are considered for agriculture and related sciences. This finding is conversely associated with Hoover and Scanlon (1991) that students who planned to enroll in agricultural education were more likely to be academically less talented than their respective non-enrolling counterparts.

Table 3:
**Cross-tabulation of degree chosen and KCSE aggregate mean grade**

<table>
<thead>
<tr>
<th>Degree chosen</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wildlife</td>
<td>0.9</td>
<td>2.0</td>
<td>2.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>25.0</td>
<td>1.7</td>
<td>6.5</td>
<td>11.4</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td>Food Science &amp; Technology</td>
<td>5.2</td>
<td>7.0</td>
<td>5.7</td>
<td>20.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td>4.3</td>
<td>1.5</td>
<td>2.9</td>
<td>20.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horticulture</td>
<td>0.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20.0</td>
</tr>
<tr>
<td>Food Nutrition &amp; Dietetics</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agri-business</td>
<td>1.7</td>
<td>7.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Field Data, 2010)
Perception was considered a factor in the choice to enroll in agriculture and related sciences. Undergraduate students responded to a nine (9) item scale indicating the level of agreement or disagreement with each of the scale items using a five-point Likert-type scale with the following response values: Strongly Disagree=1, Disagree=2, Unsure =3, Agree=4 and Strongly Agree=5.

On one hand, a group of respondents (61.7% males and 61.3% females) showed that they strongly agreed with the impressions that agriculture had opportunities and career advancement, however, it was associated with subsistence farmers. This is an indication that agriculture as a discipline and/or enrolment into it was not immediately accounted for by the negative impressions. None of the respondents ran down agriculture as shown in Table 5.

Table 4: Undergraduate students’ perception of agriculture

<table>
<thead>
<tr>
<th>1st, 2nd, 3rd, 4th and 5th Year students’ Perception of Agriculture</th>
<th>Impression</th>
<th>Strongly agree (5)</th>
<th>Agree (4)</th>
<th>Disagree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture is rural in nature</td>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
<td>91.8</td>
</tr>
<tr>
<td>Associated with physical work</td>
<td>Positive</td>
<td></td>
<td></td>
<td>92.3</td>
<td></td>
</tr>
<tr>
<td>Has opportunities</td>
<td>Positive</td>
<td></td>
<td></td>
<td>94.2</td>
<td></td>
</tr>
<tr>
<td>Has career advancement</td>
<td>Positive</td>
<td></td>
<td></td>
<td>91.8</td>
<td></td>
</tr>
<tr>
<td>Associated with subsistence farmers</td>
<td>Positive</td>
<td></td>
<td></td>
<td>92.9</td>
<td></td>
</tr>
<tr>
<td>Has relaxation and recreational activities</td>
<td>Positive</td>
<td></td>
<td></td>
<td>92.6</td>
<td></td>
</tr>
<tr>
<td>Jobs are not salaried</td>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
<td>92.6</td>
</tr>
<tr>
<td>Negative high school experiences</td>
<td>Negative</td>
<td></td>
<td></td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>Used as a form of punishment</td>
<td>Negative</td>
<td></td>
<td></td>
<td></td>
<td>92.6%</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2010)

Response Scale: Strongly Disagree = 1, Disagree = 2, Agree = 4, Strongly Agree = 5.

Journal of Education and Social Sciences
Ranking of the pre-selected five (5) impressions which incorporated availability of information about agriculture and related sciences became crucial for the study in establishing the role information played in decision making. As shown in Table 6, the majority of the respondents (99%) ranked “the profile given to agriculture and related sciences in university career forms” as highest in discouraging enrolment in agriculture and related sciences. Also ranked highly in the same category was “there is nothing new to learn about agriculture” and “policy makers pay lip-service to agriculture and related sciences”.

Table 5:
Ranked claims perceived to discourage/encourage enrolment in agriculture and related sciences

<table>
<thead>
<tr>
<th>Claims</th>
<th>Frequency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of information about agriculture and related sciences</td>
<td>100</td>
</tr>
<tr>
<td>The profile given to agriculture and related sciences in university career forms</td>
<td>99</td>
</tr>
<tr>
<td>There is nothing new to learn about agriculture</td>
<td>99</td>
</tr>
<tr>
<td>Policy makers pay lip-service to agriculture and related sciences</td>
<td>99</td>
</tr>
<tr>
<td>Students of agriculture and related sciences do not find jobs after graduation</td>
<td>99</td>
</tr>
</tbody>
</table>

(Source: Field Data, 2010)

The data on perception was then subjected to the Pearson Chi Square test. The column percentages for male and female respondents were identical. The results of the Computed Pearson’s Chi Square as shown in Figure 2 revealed that there was no difference between male and female students in their perception of agriculture and related sciences hence the null hypothesis that the likelihood that potential undergraduate students would choose to study agriculture and related sciences is not dependent on gender was accepted.
One possible explanation for the similarity in perception of agriculture by gender could be attributed to the concerted efforts made by faculties in the selected public universities in ensuring agriculture and related sciences are popularized among undergraduate students. Students who are involved in agriculture will tend to have more positive perceptions of agriculture. This is contrary to Bell and Fritz (1992) that career, information, counseling and programming are either consciously or unconsciously influenced by the perception of “gender appropriate” occupational roles. It has been argued that students have not been able to broaden their perceptions of agriculture and its related fields, making negative images of agriculture overriding barriers to future enrolments. Participants who chose to study agriculture and related sciences out of their own volition pointed out in the Focused Group Discussions (FGDs) that gender was not an issue in their choosing agriculture as a lifelong career.

During Focused Group Discussions, respondents pointed out that agriculture was a broad course which had so much information and knowledge that opened the mind and was activity-oriented yet it was given a very low profile. However, participants reported that they perceived “shame” and “anxiety” when they had to explain to their respective communities that they “were at the university studying agriculture!” It was the opinion of the undergraduate students that agriculture needed to be appreciated as an agricultural science that led to successful business. Participants expressed views that initially agriculture had been an occupation of “a farmer with low level income or middle income crop and livestock, marginalized and associated with rural people – ‘maskini’ (meaning the poor),
livestock keepers associated with North Eastern and Eastern provinces”. Through exposure to agriculture participants expressed their newly acquired passion for agriculture and related sciences; and reiterated the need for it to be viewed as a profession like other professions; and make information available through ICTs regarding career opportunities in agriculture.

Conclusions
The exposure to agriculture was very essential in making students recognize the importance of agriculture and the motivation to choose to study it as a lifelong career. Whereas exposing students to agriculture is very important if they must choose it as a career, the results however emphasize personal interest as a key factor. It was also established that gender was not a factor in the choice to enroll into agriculture and related sciences. There was also no difference in perception of agriculture by gender.

References


JAB (2010). Unpublished Joint Admission Board documents from the University of Nairobi Secretariat.


Challenges and Solutions Relating to Issues on Child Adoption in Kenya

Monica W. Rukwaro
Library Department, Laikipia University College.
Mobile 0723771531: E-mail: monirukwaro@yahoo.com

Abstract
Adoption as an alternative care of children is largely unknown in Kenya due to lack of provision and access of information. Yet providing care and support to 2.4 million orphans and vulnerable children (OVC) is a most daunting task for the Kenya government. Challenges to child adoption are: stigmatization of an adopted child, negative media portrayal of adoption, lack of accurate data on OVCs, lack of knowledge of the adoption process, subsuming children’s issues to the issues of gender and social development in the Ministry of Gender, Children and Social Development without giving the 18 million Kenyan children who form over half of the population the highest priority, and lengthy tedious adoption process which is difficult to understand and also costly in terms of time and finances. The solutions to challenges in child adoption in Kenya are: campaigns to bring about attitudinal change towards adoption, research to inform adoption policies, procedures and accurate databases on children, and creation of the Ministry of Children to look solely into the children issues. It is hoped that an investment in children will lay a foundation for them to become responsible adults who will contribute to national development.

Key Words: Child, Adoption, Kenya

Introduction
The Law, Meaning and Purpose of Adoption
Adoption is a legal process through which the parenting responsibilities for a child born to a parent or parents are assumed by another person. The transfer of parenting responsibility can be either voluntary or involuntary process on the part of the birth parent(s). However in either case, once the adoption is finalized, the adopted child becomes entitled to the same rights as any child who is born to the parent who holds the parenting responsibility. (Smith – Keever, 2002). Adoption is recognized under the Children’s Act 2002 and the United Nations Convention on the Rights of the Child 1989 as one of the forms of alternative care for children.
who have been temporarily or permanently deprived of their family environment, and also for children who are unable to remain in their family environment for various reasons such as death of the parents or abuse. Other forms of alternative care are fostering and guardianship. Adoption should be child centered and should only be done in the best interest of the child. (Chukwu, 2003, Hussein, 2009)

Kenya has 18 million children between the ages 0 -17 years. 8.6 million live in absolute poverty, 2.4 million are orphans and 443,000 are double orphans (a child who has lost both parents). (Joint Council of International Children’s Services, 2011)

The 2003 Demographic Health Survey found that 2.3% of boys and 1.9% of girls under age 15 are double orphans. This proportion jumps to 25% for boys and girls under age 18 who reported one or both parents dead. Some of these Orphans and Vulnerable Children (OVC) are cared for by relatives, others are being raised by Charitable Children’s Institutions (orphanages). Others are in foster care, still others are struggling to survive outside of any care and protection in child-headed households and, finally others are exploited in child labour, child prostitution or child trafficking. (Joint Council of International Children’s Services, 2011)

Providing care and support for orphans and vulnerable children (OVC) is one of the biggest challenges Kenya faces today as the growing numbers overwhelm available resources. Two ways the Kenya Government has responded to these challenges is signing the instrument of accession of the Hague Convention on Inter-country adoption and capturing the spirit of the Hague Convention in the Children’s Act and the Children Adoption Regulations of May 2005 (Awori, 2007) Adoption is therefore a solution to the Government of Kenya to provide the basic necessities to its children. The OVC are also provided with a safe and nurturing permanent family. The adopter also is able to rescue and make a difference in the life of a child. Adoption is therefore important for the government, OVC, potential adoptive parents and birth parents who are faced with unplanned and unwanted pregnancy. Only 200 adoptions are processed annually in Kenya; 50 of which are international adoptions. There is need to raise this figure in the best interest of the child (Hussein, 2009). Effective access to information on adoption could raise the number of adoptions both nationally and internationally and therefore provide an alternative home care for children who would otherwise spend their childhood in orphanages and then eventually turn to crime because they were not prepared well enough by ensuring that they acquire skills to enable them to earn a decent living when they turn 18.
Discussions
Challenges to Child Adoption in Kenya
Adoption as a legal process that permanently and irreversibly severes parental-child relationship of birth parent(s) is alien as a Kenyan indigenous child care alternative. In Kenya, no matter how long and under what circumstances a child may reside with and be nurtured by any person other than his birth parents, when the child grows up, he/she is entitled to and will most likely go back to his/her roots, if he/she happens to trace them. The traditional social stigmatization of a person who is known not to be the biological child of his/her parents can be traced from this. This contributes to negative attitude towards adoption and consequently both the adopted child and the parents keep their status a guarded secret known only to themselves. Mureithi (2009) in her study on adoptive parents views and experiences in Kenya confirms that most adoptive parents are unwilling to disclose the adoption status to the adopted children because of the way society stigmatizes adoption. This sentiment was echoed by the Chair, Adoptive Parents Association of Kenya (APK) who spoke to Daily Nation, July 13, 2011 and stated that ‘there’s still so much stigma attached to adoption. Adopted children are still viewed as second class citizens by some, and I don’t think our laws are doing enough to address this stigma’. A study done in America on attitudes, interest and motivation for adoption and foster care by Tyebjee (2003) stated that one of the factors that influence attitudes toward adoption and foster care was personal experiences with adoption. This factor initiated the most positive attitudes. If the respondent knew somebody who was an adoptive parent he/she had a more favorable attitude to adoption. In Kenya since both the adoptive parent and child never talk about their status, Kenyans are likely not to change their attitude of stigmatizing adoption unless community destigmatization campaigns are launched.

Community awareness of the positive aspects of adoption should be communicated to debunk the negative connotations associated with adoption. This can be done through word of mouth, media and service providers such as teachers and nurses. In South Africa, du Toit (2009) states that there is no culture of adoption or alternative care as children are absorbed into the community although such placements lack formal recognition. Such children are often shifted from families to families resulting in lack of permanency for the children. Adoption in Nigeria compares to Kenya and South Africa for Chukwu (2003) states that in Nigeria there is no indigenous child care alternative that is equivalent to legal adoption. This makes it difficult for Nigerians to talk of adoption openly and to stigmatize both the adopted child and the adoptive parent(s).
The media abounds in negative portrayals of abuse and maltreatment of children in the hands of adopting parents. This negative portrayal has painted adoption in a negative light. Research done by Rivers (2005) on adoption in New Orleans, America stated that media portrayal of adoption is negative because negative stories get the most audience attention. Talk shows often feature children who are desperately trying to find their birth parents. Movies depict birth parents that must make adoption placements and later regret it. Njoka (2009) avers that the level of awareness on adoption is still low in East African communities and that media reports indicated that inter country adoptions often serve the interests of adoptive parents and receiving countries rather than the best interests of the child. Children are prone to abuse in receiving countries. Negative media publicity is one sided and there is need for balanced, objective publicity on adoption to counter this and also raise Kenyans sensitization and awareness on the positive aspects on adoption.

Information on children is scanty and uncoordinated in Kenya. Njoka (2009) stated that data on children in Kenya does not tally from one institution to another such as hospital, adoption agencies and government departments. Biemba (2009) agrees that indeed there is lack of data and goes on to decry the lack of strategic information which hinders policy makers and programme leaders from making well informed decisions about the path forward. He calls for research to answer key questions and fill the most fundamental gaps in information. Data is essential especially in the wake of increasing mushrooming children’s homes as temporary places of shelter.

The Country Director of Friends for Children speaking to the Daily Nation on July 13, 2011 stated that ‘there is an estimated one million children in Kenya without identification … without documentation it makes it very complicated for these children to have identity.’

In Kenya, only 400 out of 800 children institutions are registered (Njoka, 2009). This lack of data has resulted to children being trafficked and used in various ways such as sexual objects and source of cheap or unpaid labour among others.

Children’s issues are incorporated today in Kenya in the Ministry of Gender, Children and Social Development. Kenya has 18 million children which is about a half of the country’s population. (Joint Council of International Children Services, 2010). Children’s issues which are many and diverse cannot therefore be thoroughly addressed in a ministry, which has gender and social development issues to address. Coupled with this fact is that children can be aptly described as the ‘silent majority’ for they do not have a loud mouth piece to address their
issues unlike adults who have various unions, organizations and societies through which they can channel their concerns and grievances. Consequently children’s issues are relegated to the back seat. And even in the Ministry, gender and social development may have been given a higher priority than children bearing in mind that ministries generally have inadequate finances, human and physical resources. There is a need to create a Ministry of children to look into the interest of 18 million Kenyan children and 2.4 million OVCs.

Due to widespread ignorance parents often give consent to adoption without being aware that the decision is final (Njoka, 2009). In October, (2006) Madonna got an interim order from the High court of Malawi to adopt a child. The father of the child is illiterate and relied on what the government officials told him that the papers said. He said he was told that Madonna would look after the child the way the orphanage planned to educate him and then he comes back to him. This father did not have copies of the agreement long after Madonna had flown the child to America. (Daily Nation, 23rd October, 2006). Though this case happened in Malawi, the same may have happened in Kenya.

Kenya was treated in August 2004 to a saga of miracle babies with Archbishop Deya maintaining that he can and did create “miracle babies”, for childless couples by exorcising demons to make them fertile. Deya’s wife was being questioned in relation to 21 children who were found in the couples house in Montain View, Nairobi. The children might have been got from the birth parent(s) through manipulation due to their ignorance.

The need for dissemination of information on child adoption would save many Kenyans who would want to have a child from such untruths as creation of “miracle babies” and other dubious and underhand means. Njuguna (2009) stated that lack of data on the number of children, as well as the situation of children in need of alternative family care could present a doorway for trafficking and other underhand deals. According to Ogutu (2012) Kenyans have not embraced adoption because they do not understand the procedures. He goes on to state that the area of adoption remains shrouded in mystery and that demystifying it is the key to ensuring that most abandoned children find families both locally and internationally.

Most Kenyans do not know where to start when they need to adopt a child. According to Hussein (2009) the public seeks information from sources that are not credible rather than adoption agencies. The question that begs asking is how a prospective adoptive parent(s) would know of the adoption agencies. Worse still, four of the five adoption agencies are in Nairobi and only one has a working
branch in Nakuru. Lack of information on procedures which are lengthy leads to child trafficking in a bid to short-cut the process. Mureithi (2009) stated that in her study on adoptive parents views and experiences, the parents had not started the legal process because of lack of information on the process. In a research done on Africa-American adoptive families, close to 55% of families agreed or strongly agreed with the statement “the adoption took longer than I thought”. This implies that adoption procedures are lengthy and tedious even in other parts of the world and information access on the procedures limited (Smith-Mekeever, 2002). To get all the information on the adoption procedures is difficult to comprehend for an average Kenyan and so the procedures should be translated and interpreted in the language and level that most Kenyans are able to understand.

Adoption impacts positively on the government, adoptive parents(s), the child and the birth parent and is an important issue in society. The large number of children in foster care who are in need of adoption has been an on-going problem for our child welfare professionals (Smith-Mekeever, 2002). Practical solutions to challenges on child adoption should be found. The discussion below is focused on solutions to challenges on child adoption.

Society stigmatizes adoption since it is not indigenous in Kenyan society as discussed elsewhere in this paper. Since it is an ‘alien’ issue, society has reacted to adoption by stigmatizing it. The solution lies in communication by the Department of children’s services, Ministry of Gender, Children and Social Development to portray positive aspects of adoption in order to raise society’s awareness of the positive aspects of adoption. This should also help to demystify adoption. Adoptive parents should be used to provide testimony of the success of their adoptive experience.

The Department of children should also devise media campaigns to ensure that children who are in need of alternative care are visible to the Kenyan society. Their photographs and biographies should be given in the internet, newspapers and magazines among others. This would give information to prospective adoptive parents on the available children. In these media campaigns, adoptive families could give positive testimonies in order to encourage potential adoptive families. The campaigns could also be done through public posters and flyers distributed in various public places, feature stories in newspapers, radio, and television commercials.

The community could also be reached in schools by the teachers, hospitals by nurses market places by child welfare officers and other service provision points. At the end of it all, the society would be more informed and would be aware that an adopted child deserves to be recognized, perceived and treated as any other.
Strategic research on various issues on children would result in accurate data, policies, programmes and procedures. The government and other organisations should facilitate research in order to enable informed programmes that are beneficial to the OVCs to be planned and executed. Lack of data may result in creation of orphanages that are centers of trafficking and abuse.

Research would also facilitate ways of communicating and interpreting facts on adoption to illiterate birth parents and prospective adoptive parents. This would protect parents from giving consent to adoption of their child without understanding the implications on adoption or for prospective adoptive parents starting the process on adoption without understanding its ramifications. Research should identify which information should be communicated to who and at what stage and how.

Research would also interrogate the adoptive procedures which are very lengthy and tedious at the moment and this would inform new and better procedures. The Children’s Act, 2002 should also be interrogated by research in order to amend what does not seen to be in tandem with today’s developments, for example that a single female cannot adopt a male and the vice versa.

Research should also facilitate the coming up with clear policies for government to adapt. Areas of research which should inform policies are, for example, the need for adoptive parents to be granted ‘bonding leave’ to care for their children. According to the Chair, Adoptive Parents Association of Kenya only 3 out of 300 members have received ‘bonding leave’ from their employers (Daily Nation July 13, 2011). His argument on bonding leave is that some parents who adopt children as young as 6 weeks old (who like other children that age need exclusive care for at least 3 months) would like to give their adopted children this care. Most adoptive parents would like to take care of their children at least during the first few months of life. An adoptive parents’ leave request was rejected because she had not given birth.

Children in Kenya form over half the countries population; 18 million out of 35 million (Joint Council of International Children’s Services, 2011). Children’s issues are under the Ministry of Gender, Children and Social Development. Issues on children are subsumed to this Ministry by other concerns – gender and social development- for this Ministry is stretched for human, physical and financial resources to be able to do justice to the issues of children and their welfare; yet children form ½ of Kenya’s total population. There is need for Kenya to make an investment in children by ensuring that issues on children are looked into without
being subsumed to other issues. This investment will certainly bring great returns to the country for our tomorrow is dependent on the foundation that is given to children today. A ministry solely to look into the issues of children who form over half the population of Kenya should be created and facilitated to research and set up programmes for them.

**Conclusion**
The discussion has revealed that adoption as an alternative family care is not well embraced in Kenya and the reasons for this have been discussed. With the huge burden of an ever-growing population of 2.4 million OVCs, ways of creating awareness and destigmatizing adoption as an alternative family care should be adapted so that in handling of these children, the best interest of these children will always be applied. And hopefully there would be a network which would enable and facilitate children to live in families to the extent that the existing orphanages in Kenya and the world be more than enough unlike today when the orphanages are overcrowded, lack the basic necessities of life and adequate staff.

**References**


Daily Nation (2006). Father had no idea son was to be given away. 23rd October p. 15 col. 1.

Daily Nation (2011). Every child deserves a birth certificate. 13th July p.4 col.1

Living


The Place of Constituencies Development Fund (CDF) under the New Constitution in Kenya

Kebenei David Kibiwott
Mount Kenya University

Abstract
The Constituencies Development Fund (CDF) is a new development strategy for Kenya. Adopted after the enactment of CDF Act 2003, it is a strategy that prior to enactment of the new constitution, aimed towards the achievement of sustainable development in Kenya. This paper aimed at addressing the concept of devolved funds, more so with respect to the role CDF shall play when the new devolved structures are fully operationalized. The paper analyzed historically, the concept of devolved funds in Kenya, by citing a few examples. Equally the paper then gave an insight into the CDF and the various challenges faced during implementation. Finally, the paper looked into provisions of the new constitution that are likely to accommodate the CDF without leading to legal inconsistencies. Further, this was backed by the benefits gained as a country, as a result of the fund. This was meant to strengthen the case for its retention. The paper concludes by appealing to the Government of Kenya to put in place legislative measures that would ensure CDF coexists with the devolved county governments provided for by the new constitution.

Introduction
In 1965, a Sessional paper was prepared under which Kenya would map out its course of development in the country, the Sessional Paper No. 10 of 1965 on “African Socialism and its application to Planning in Kenya”, which recognized the importance of both the public and private sectors in accelerating economic growth and development. (GOK, 1994)¹

By 1966, the economy of Kenya had a GDP growth rate in the range of 6.6 per cent. However, over the years, the economic growth started plummeting to alarming levels until in the 1970s when the so-called Ndegwa Commission was formed to look into why poverty was ravaging an otherwise well-endowed land. This led to embracement of a major programme in rural development; the

Special Rural Development Programme (SRDP). SRDP was conceived, planned and implemented by the government in collaboration with researchers from the University of Nairobi in six administrative divisions of the country. The programme didn’t yield much, as a result of: Ineffective implementation by Area Coordinators, Low involvement of the public in planning projects, Government bureaucracy which slowed down implementation. When poverty became even more acute despite the many development planning and poverty alleviation offensives, another Ndegwa Commission was formed in 1982 which recommended that the people be involved more in planning development projects in the rural areas in Kenya.

The government’s concern for accelerating development of rural areas was emphasized by the Government of Kenya (GoK) Report (1971), but it was not until 1982 that the need for strengthening districts as ideal units for plan-making and implementation was emphasized by the GoK Report of the Commission of Inquiry on the Working Party on Expenditures.

In July 1983, the District Focus for Rural Development (DFRD) came into being. This facilitated the implementation of development plans in all the districts of Kenya. Planning and action for the country’s development was moved from Nairobi to the district level hence bringing it closer to the people. Several GoK Blue Books (1983, 1985, 1987 and 1995) were published, that provided guidelines to the government field staff involved in planning and implementation activities.


The Government formulated this framework to be focused on fighting poverty and unemployment (GOK, 1999). Its main themes were: Creating an enabling environment for local and foreign investors; Rationalizing and strengthening the public sector so as to support, more effectively, private sector investment; Accelerating privatization and commerce, and increasing the autonomy of public enterprise; Assisting farmers to produce and market their produce more efficiently and profitably.

**The Economic Recovery Strategy for Wealth and Employment Creation**

Kenya’s Economic performance during the early 1980s and 1990s was perceived to be far below its potential. This programme was put in place by NARC government from 2003 to address such policy issues as free & compulsory education, health and nutrition, HIV/AIDS, labour and social security.

**Other Devolved Funds**

The Local Government Act (Cap. 265) provides for other means of devolution of funds through the Local Authorities. The Local Authorities Transfer Fund (LATF) was established in 1999 through the LATF Act No. 8 of 1998, with the objective of improving service delivery, improving financial management, and reducing the outstanding debt of local authorities. LATF, which comprises 5% of the national income tax collection in any year, currently makes up approximately 24% of local authority revenues. At least 7% of the total fund is shared equally among the country’s 175 local authorities; 60% of the fund is disbursed according to the relative population size of the local authorities. The balance is shared out based on the relative urban population densities. LATF monies are combined with local authority revenues to implement local priorities. LATF transfers 5% of central income tax revenues to local authorities to supplement revenues raised locally through land taxes (rates), single business permits and other sources.

Other Funds are: Youth Enterprise Development Fund (YEDF), Women Enterprise Development Fund (WEDF), Constituency Bursary Fund (CBF), (HIV/AIDS Fund/Global Fund), Water Services Trust Fund (WSTF), Free Primary Education Fund (FPEF), Rural Electrification Programme Levy Fund (REPLF) and National Fund for Disabled People (NFDP).

Discussion
The Constituencies Development Fund (CDF) was adopted after the enactment of CDF Act 2003. As a way forward, the Kenyan Government launched the ambitious plan to address the development problems. The shift in Government policy to the CDF identified integrated rural development as a holistic strategy for addressing multi-faceted development concerns.

The Constituencies Development Fund comprises of an annual budgetary allocation equivalent to at least 2.5% of the Government ordinary revenue. 3% is allocated to the CDF Board for administration while 97% is allocated to constituencies, such that 5% of the 97% is allocated to Emergency Reserve, 75% of the balance is allocated equally amongst all the 210 constituencies Balance of 25% is allocated based on the Constituency Poverty Index modeled by the Ministry of State for Planning, National Development & Vision 2030

CDF official records indicate that around KSh. 70,956,300,000 has been allocated to CDF since its inception, as scheduled below, per financial year; as a result, financing over 60,000 CDF projects, which are currently in various stages of completion throughout the country. A significant percentage has been completed and already in use.
The responsibility of disbursing and ensuring that constituencies use their share of the money efficiently and accountably falls within the CDF Board which replaced the National Management Committee after the CDF (2007) Amendment Act.

Each constituency on the other hand has a Constituency Development Fund Committee (CDFC), whose main responsibilities include accepting community proposals and approving them for funding, as well as overall management of the fund, alongside the CDF Account Manager and government officers at the district level. The area Member of Parliament should as well be either a member or patron.

Table 1:
Disbursement of CDF Funds from 2003-2011

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>KSh (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003/2004</td>
<td>1.260</td>
</tr>
<tr>
<td>2004/2005</td>
<td>5.600</td>
</tr>
<tr>
<td>2005/2006</td>
<td>7.245</td>
</tr>
<tr>
<td>2006/2007</td>
<td>10.038</td>
</tr>
<tr>
<td>2007/2008</td>
<td>10.100</td>
</tr>
<tr>
<td>2008/2009</td>
<td>10.100</td>
</tr>
<tr>
<td>2009/2010</td>
<td>12.329</td>
</tr>
<tr>
<td>2010/2011</td>
<td>14.283</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>70.956</strong></td>
</tr>
</tbody>
</table>

Challenges Faced in CDF Implementation
Since inception in 2003, the implementation of CDF has encountered a number of operational and policy challenges which include: Low utilization of completed facilities especially educational and health institutions and cattle dips. This is due to lack of collaboration with line ministries especially on staff requirements and low technical capacity to implement development projects, Poor community participation and weak capacity to identify viable projects. Non-adherence to laid down government procedures, rules and regulations, especially as concerns public procurement, Poor management of transition during elections, Political
interference by the sitting Members of Parliaments and political patronage at constituency/ implementation level. Misappropriation by some members of CDFC. The strategy is faced with the problem of corruption, just as in any other part of the country. Corruption is rife in funding and prioritization of development projects. The CDF has been affected mainly by financial problems. Proposals for funding may be approved, but they are never funded. This discourages locals, and the end result is disengagement in development projects. Too many small projects thinly spread with little or low impact hence white elephants. Incomplete projects have been occasioned by inadequate funding or what the author calls “balanced diet syndrome” in development. Poor remuneration or allowances to workers/committee members despite the important work they do.

A Constituency Development Fund (CDF) Report by the National Tax Payers Association (NTA) released early this month (May, 2012) revealed that KSh 363 million for CDF could not be accounted for in 34 constituencies, whereas KSh 86 million meant for CDF projects was still lying in bank accounts. NTA National Coordinator Davis Adieno, while launching the report, emphasized that,

“In our opinion, this is a lot of money to be laying around in any bank account of a constituency and we are urging Members of Parliament to move quickly to use these funds” (NTA, 2012)

Speaking while launching the report, NTA National Chairman Peter Kubebea noted that legal ambiguities and weak institutional framework had been exploited by some unscrupulous individuals who had used CDF as a political instrument and a conduit to plunder public resources.

**APPLICABILITY OF CDF UNDER THE NEW CONSTITUTION**

The New Constitution of Kenya was enacted on 27th August 2010, replacing the older one that had been in place since Independence in 1963. Its promulgation was preceded by The August 4th 2010 National Referendum which saw over 67% of Kenyan voters approve the new constitution. The constitution establishes 47 counties, each with its own government.

Section 176 (1) of the new constitution states that,

3 Everyone has been brainwashed by our leaders to believe this, “that corruption begins with you and me” I hold the contrary position. “Corruption starts from the top” If your boss was not corrupt you wouldn’t attempt to.

4 This is the kind of development that attempts to please all sectors by allocating funds virtually to every project proposed. This results to several well intended but incomplete projects, which end up not serving their original purpose. Theorists would equate it to balanced growth models.
“There shall be a County Government for each County, consisting of a County Assembly and a County Executive”

The CDF Act can still work even with the constitution. However, it would be difficult to place this as a role under the National Government where the Members of Parliament’s jurisdiction lie, since section 186 (1) provides that:

“Except as otherwise provided by this Constitution, the functions and powers of the national government and the county governments, respectively, are as set out in the Fourth Schedule”

In the said schedule, part two; article 14 stipulates one role of the County Government as

“Ensuring and coordinating the participation of communities and locations in governance at the local level and assisting communities and locations to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.”

Thus, giving a clear indication that while dealing with the specific legislations, parliament ought to put a lot of these aspects into perspective.

The constitution recognizes active participation by members of the public. CDF will be retained if actually Kenyans are of the opinion. Section 202 (1) provides guidelines on revenue sharing and states that;

“Revenue raised nationally shall be shared equitably among the national and county governments.”

And section 203 (1) states that;

“The following criteria shall be taken into account in determining the equitable shares provided for under Article 202 and in all national legislation concerning county government enacted in terms of this Chapter—

(a) the national interest …”

This translates that if the national interest is to have part of the revenue retained by CDF, Then this would prevail. It’s apparent to note that parliamentarians, who are in favour of the retention, are also vital in shaping public opinion.

Arguments Supporting Retention of CDF

To counter the various challenges earlier discussed in this paper, benefits of CDF could also be analyzed as follows:-

The Planning Minister Wycliffe Oparanya is on record having indicated the need to amend the CDF Act to be in tandem with the management of the counties, and
even increase its funding. This was a clear indication from the Government that there is goodwill on the need for the retention of the same.

- The CDF Board has already put in place a 2010 - 2014 strategic plan and service charter.

- The fund has since its inception contributed significantly to the development of the country, which people can attest to. E.g. roads, health facilities, cattle dips, schools, bursary, foot paths, bridges, electricity, sports, environmental conservation, market stalls/sheds, e.t.c

- Employment creation and business opportunities

During the launch of the CDF Board 2010 - 2014 strategic plan and service charter the Minister of Planning, National Development and Vision 2030 Mr. Oparanya enumerated the following as key benefits of the fund:

- He pointed out that the fund had since its inception contributed significantly to the development of the country.

- He said that the fund had enabled Kenyans to experience the value of government money.

“The common man and woman can now directly take part in decision making on development matters of their local areas….One of the greatest achievements of the fund has been shifting policy formulation from line ministries to communities, thereby encouraging local initiatives, ownership, participatory supervision and accountability.”

**Conclusion**

Chapter six of the constitution on leadership and integrity should be invoked, to avoid the common problems that face government funds. If this Article is implemented to the letter & spirit of the constitution, then CDF projects as they are shall spur great development at the Counties without scrapping CDF. It shall tame members of Parliament who are reported to be misusing public funds. This coupled with the Legislation and empowerment of Ethics and Anti-corruption Commission (Article 79 of the Constitution) shall also help improve accountability by public officers managing the funds.

While citing the top ten reasons by Frank Winters on why projects failed in an article that appeared on 16th April 2003 in Gantlead, Kebenei (2009) gives leadership vacuum as one of the reasons. Where there is leadership vacuum
and negative inputs are coming from those who should be leaders, it is up to the Project Manager to fill the vacuum and overcome the negativity (Kebenei, 2009:28).

The ‘Lingway’ Invisible Double Effect
Consider a community which identifies a need. In this case, the community has put forth a school as the priority. We can easily say the community is in dire need of a school. It doesn’t matter whoever or whichever manner the need is addressed, but their problem is just to have a school so as their children can utilize this service.

Supposing the community develops a proposed budget of KSh one million and the project is approved for funding, this would imply that if the project is implemented as envisaged, the community would get a school worth one million. There is a second benefit. In the event the community is given the full opportunity to participate, it translates that the one million cost of the school would be spent sourcing raw materials from the community.

For instance, a local women group is awarded tender for supplying water, whereas a youth group supplies sand and ballast, local businessmen supply cement, iron sheets and other materials. If the one million is spent within the community, they will have benefited indirectly from the one million. Note that the community ends up getting two million! A school worth one million, and a business deal worth one million!

With the county system, there is a risk in the survival of CDF; since the County has been made to be the unit of development as opposed to CDF whose main vehicle was the constituency. The government should reform the CDF strategy. This should consider the fact that members of parliament, being leaders from the community, ought to have some small fund to institutionalize their offices and protect them from vulnerability, as it was prior to launching of CDF.

The percentage fund allocation should also be increased since the number of constituencies will go up as per the new constitution. Everyone can attest that it took long for the CDF and other devolved funds legislations’ implementation to be streamlined. Scrapping them now would mean starting all over again from scratch.

References


Teachers’ Perceptions on the Effects of HIV/AIDS Pandemic on Schooling among Primary School Pupils in Rachuonyo District, Kenya

Beatrice A. Nyakan
Mount Kenya University
0721 473229 / 0733 316612

Abstract
Teachers are known to act as ‘surrogate’ parents to pupils as they interact with them daily for long hours. Teachers have been known to play a critical role as a source of relevant information on HIV/AIDS on pupils, as they may raise sensitive issues about sexuality with them. The teachers perceptions therefore is important in investigating the effects of HIV/AIDS on schooling. The effects of HIV/AIDS on in general and on the young people in particular has seen many school age children fail to enroll and attend school regularly or dropout of schools. Rachuonyo district is one of the most adversely affected in Kenya. This study focused on the perceptions of teachers on the effects of HIV/AIDS on schooling among primary school pupils in Rachuonyo District. Descriptive survey design was used. The target population was all primary school teachers in the district out of which 164 teachers were interviewed. They were drawn on from twenty (20) schools, which were randomly sampled from the four divisions of the district. The number of the schools sampled from each division was proportionate to the sample fraction for all the divisions. Purposive sample was used to select nine (9) teachers from each school, eight (8) class teachers and one (1) headteacher. Questionnaires were administered on the class teachers and an interview schedule conducted with the headteachers. Reliability of the questionnaire was calculated using Cronbach Alpha (□). Reliability coefficient of 0.76 was obtained. Both descriptive statistics and content analysis were used to analyze the data and on the interview data respectively. Analysis was done using Statistical Package for Social Sciences (SPSS). The findings of this study indicated that most teachers were of the perception that HIV/AIDS negatively impacted on school enrolment, attendance and dropout. However there was an increasing trend in enrolment.

Introduction
Medical researchers world over contend that HIV/AIDS has been one of the greatest challenges confronting the public health sector in the 21st century. It affects all segments of society, young and old, rich and poor, black and white (Alcarno, 2002). The disease has claimed millions of lives and infected many other millions. It is now the leading cause of death in Sub Saharan Africa (SSA).
In Kenya HIV/AIDS and related deaths is now one of the leading causes of deaths.

According to UNAIDS world Aids day Report 2011, more people than ever are living with AIDS virus but AIDS-related deaths are at their lowest since their 2005 peak – down 21 percent – due to better access to drugs that keep HIV patients alive and well for many years (AP Reuters 2011). Human Immunodeficiency Virus (HIV) that causes AIDS now infects 34 million people worldwide up from 33.3 million in the year 2009 (UNAIDS 2011). Figures in the report from UNAIDS global study in the late November 2011 shows that the number of new infections fell to 2.7 million in 2010 down from 3.1 million in 2001 while the number of people getting life-saving Aids drug rose to 6.65 million in 2010 from just 400,000 in 2003 (AP Reuters 2011).

The symptoms of HIV/AIDS were first observed on June –4 th –1980 in USA when people had not known its name. There was even perception at the time that it was infectious and it could easily be contracted, even through a handshake. When an HIV/AIDS case was first spotted in Kenya in 1978 there was a general disbelief and denial since Kenyans considered it a disease to be found only in foreign lands. It was not until late 1990s when it was declared a ‘national disaster’ by the Kenya Government (GOK, 1999).

Kenya is one of the countries with the highest HIV/AIDS prevalence in the world (UNAIDS, 2000). Kenya’s National Adult Coverage of Antiretroviral Therapy as expanded from an estimated 4 percent in 2004 to 72 percent in 2010 (NACC 2011) further notes that roughly 78 percent of pregnant women living with HIV are receiving antiretroviral treatment to prevent new HIV infections in their children compared to 21 percent in 2006. At least 114,000 babies have been born free of HIV in 2010 through the US President’s Emergency Plan for Aid Relief (Pepfar) initiative (Gration 2011).

Although a lot has been done and is still being done to arrest the situation and even though the rate of infection per day has since gone down, the effects of the disease still cannot be ignored. In Kenya HIV patients are dilemma because for the drugs to work they need balanced diets and in some areas the food is scarce therefore the balanced diet recommended is hard to come by (Nanyima, Wamuswa and Xinhua, 2011).

Although Kenya strives to attain zero HIV infections among its 40 million population there are fears because about 500,000 HIV patients do not have an access to anti-retroviral drugs and about the same number have access to drugs but some irregularly. Irregular use of drugs interferes with the immune system,
hence a number of HIV patients in Kenya are becoming immune to ARVs due to irregular use and interruptions. Research reveals that HIV resistance is mainly high in women and children (UNAIDS 2011). There has been another challenge of an increase in Counterfeit ARV drugs in Kenya, Lesotho and South Africa. These countries are ineligible to apply for Round 11 funding from the Global Funding due to dwindling financial resources. In the three countries HIV treatment coverage lies at 52 percent, 66 percent and 49 percent respectively (NACC 2011). There are fears that Kenya might reverse the gains in fighting HIV with the huge population of HIV patients failing to access ARVs (Nanjinia, Wamuswa and Xinhua, 2011).

In spite of these challenges, Kenya has made several achievements towards a fight against HIV/AIDS over the three decades the disease was spotted in her soil. For instance, she has made strides in eradicating stigma; stepped up circumcision to reduce infection; embraced voluntary testing; stabilized new infection rates and stopped mother to child infections. Nyanza province was ranked first in AIDS prevalence by Kenya AIDS indicator survey of 2007.

Even though the infection rate has reduced in this province it is still a high risk area. This makes Rachuonyo district, in Nyanza, a high risk area too. The survey also revealed that the disease robs Kenya of its daughters and sons in their prime age (20-40 years) and this has a negative impact, socially and economically, on the families concerned; the society; and the country at large. The saddest bit is that the impact of the disease starts to wear on the families much before the patient succumbs to it. It has a profound effect on education sector as the pupils from the affected homes have problems enrolling in schools, attending school regularly and quite often drop-out of school.

In Rachuonyo district alone, the number of orphans is 47,720 according to statistics at the provincial children’s office in Kisumu in 2007. This constitutes a good fraction of school going age pupils. A confession of one of the teachers in one of the primary schools in Rachuonyo district where out of a population of four hundred pupils in that school, three-quarters are orphans of either one or both parents (Neacsu 2004).

It is against this background that the study sought to investigate the perception of primary teachers since they interact with the pupils on a daily basis for longer hours, thus they have the potential role to develop appropriate interventions and create awareness before the pupils become sexually active.
Statement of the Problem
The disease HIV/AIDS, has been in existence in Kenya for close to three decades and its effects have been felt in social, economic and education sectors. It is believed that HIV/AIDS has had effect on schooling in terms of producing high number of orphaned children who have problems of enrolling in schools, attending school regularly and eventually drop-out of school. The effect is relatively high in Rachuonyo District. So far there is no documentary evidence pointing towards this. Therefore, this gives ground to investigate the perception of primary school teachers on the effects of HIV/AIDS on schooling among primary school pupils in Rachuonyo District.

Research questions
The main objective of this study was to investigate the teachers perceptions on the effects of HIV/AIDS on schooling among primary school pupils. In order to achieve an answer to the objective the following questions were framed:

i. How do teachers perceive the effects of HIV/AIDS on primary school pupils’ enrolment?
ii. How do teachers perceive the effects of HIV/AIDS on primary school pupils’ attendance?
iii. How do teachers perceive the effects of HIV/AIDS on primary school pupils’ dropout?
iv. What are the possible intervention measures that would reduce infection rates and enhance schooling of the affected pupils?

Conceptual Framework
The study used a diagrammatic representation of a conceptual framework to guide it. It was assumed that the rate of pupils’ school enrolment attendance and drop-out was influenced by or depended on the effects of HIV/AIDS, where HIV/AIDS was the independent variable. However, there were other intervening factors that could have positively or negatively influenced schooling. This included government/NGO intervention through provision of drugs, creating awareness through media campaign and education on prevention of HIV/AIDS and Visiting Voluntary Counselling Tests (VCT) centres to create awareness on one’s HIV status. Other intervening variables included cultural beliefs – “chira”, the level of income of household level and knowledge about HIV/AIDS. This study was conducted from the perception of teachers.
Figure 1: conceptual framework showing the relationship between the teachers’ perceptions on schooling.

**Methodology**

The nature of the study was aimed at getting information required by investigating the views of teachers on the effects of HIV/AIDS on pupils’ schooling. The research design that was used in this study was descriptive survey design. This research design was found to be relevant and appropriate as it could determine the nature of the prevailing conditions or relationships and practices that exist (cohen & Manion, 1987; Gall, Borg and Gall, 1996; Mugenda and Mugenda, 1999; and Wiersma and Jurs, 2005). Descriptive survey design was also appropriate because this was a non-experimental research, conducted in a natural setting with numerous variables operating simultaneously. Further, the study sample was fairly large, therefore it allowed for extensive data connection by the researcher where direct observation by the same researcher was not required or was not possible. The effect of the independent variables, which was pupils schooling enrolment attendance and drop-out).

The study was conducted in Rachuonyo district, Nyanza province. Information was gathered from teachers in public primary schools, in the four divisions (Kabondo, Kasipul, West Rachuonyo and East Karachuonyo) that make the district.

Both probability and non-probability sampling techniques were used. A sampled cross section was conducted to raise a sample of 164 teachers from the target population (2628). This sample was taken from twenty schools used as study units which were randomly sampled from the proportionate figures of the four divisions. A purposive sampling was then conducted in the twenty schools of class teachers of classes one to eight and the headteacher of the respective schools. This gave a sample size of 164 teachers constituting between 5-20 percent (precisely
7 percent) a recommended percentage for this population size, Nkapa (1992) and Wiersma and Jurs (2005). The proportional sampling is illustrated in table one.

Table 1:
Proportional distribution of schools and teachers in Rachuonyo district

<table>
<thead>
<tr>
<th>Division</th>
<th>No. of schools</th>
<th>Sample of schools</th>
<th>No. of teachers</th>
<th>Sampled teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kasipul East</td>
<td>108</td>
<td>7</td>
<td>1309</td>
<td>63</td>
</tr>
<tr>
<td>Karachuonyo</td>
<td>91</td>
<td>6</td>
<td>505</td>
<td>48</td>
</tr>
<tr>
<td>West Karachuonyo</td>
<td>73</td>
<td>4</td>
<td>332</td>
<td>30</td>
</tr>
<tr>
<td>Kabondo</td>
<td>55</td>
<td>3</td>
<td>482</td>
<td>23</td>
</tr>
</tbody>
</table>

Source: District education office – Rachuonyo (2009)

An introductory visit was made to each of the sampled schools and in each case the respondents were taken through the questionnaires to show them how to fill it. In the mean time the headteachers of every school were interviewed concurrently. The questionnaires were then collected immediately after the teachers had filled them, where possible.

Data analysis

Data analysis was done based on the objectives of the study. The descriptive information and the responses were coded and entered into the computer for analysis using Statistical Package for Social Sciences (SPSS) programme. The data was then subjected to descriptive statistics by calculating mean, frequencies and percentage of the subjects’ responses. The results were then summarized and content analysis was also applied on open-ended items.

Results and interpretation

HIV/AIDS Contribution to Pupils Schooling

The investigation on effects of HIV/AIDS on schooling whether the enrolment rate set was the same for pupils whose background was affected directly or indirectly, by HIV/AIDS, whether HIV/AIDS affected pupils’ school attendance, whether the rate of pupils’ school drop-out was more on pupils from homes with HIV/AIDS effects; and the intervention measures. Teachers responses to questions related to the key areas above were put in questions and statement forms and summarized in tables 2 to 5. Questions addressing pupils’ enrolment in relation to HIV/AIDS effects were put to the teachers as in table 2 below.
Results

Enrolment

Table 2: Class teachers’ perceptions on effects of HIV/AIDS on enrolment

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent N =164</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majority of the pupils in my class come from families not affected by HIV/AIDS</td>
<td>47.55 17.07 34.75</td>
</tr>
<tr>
<td>Stigma associated with HIV/AIDS is one of the barriers that discourage children from affected families from enrolling in schools</td>
<td>53.03 4.57 41.46</td>
</tr>
<tr>
<td>Late enrolment of pupils in my class is not related to effects of HIV/AIDS</td>
<td>57.31 12.19 29.87</td>
</tr>
</tbody>
</table>

A large percentage of teachers (47.55%) had the opinion that HIV/AIDS has contributed to decline in pupils school enrolment and a small percentage while 41.46% of the teachers had the perception that stigma associated with HIV/AIDS is one of the barriers that discourage children from affected families from enrolling in school and another 57.31% of the teachers had the perception that late enrolment in their classes is related to the effects of HIV/AIDS.

Table 3: Headteachers perceptions on effects of HIV/AIDS on enrolment

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent N=20</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS contributes to low enrolment</td>
<td>70</td>
</tr>
<tr>
<td>HIV/AIDS contributed to decreasing trends in enrolment</td>
<td>15.0</td>
</tr>
<tr>
<td>Effects of HIV is the cause of fluctuations in enrolment</td>
<td>15.0</td>
</tr>
</tbody>
</table>

Similarly 70% of the headteachers were of the perception that HIV/AIDS contribute to low pupils enrolment and only 15% perceived HIV/AIDS as a factor contributing to decreasing pupils school enrolment trend. Another 15% perceived HIV/AIDS to cause fluctuation in pupils school enrolment.

However the actual enrolment trend indicates that there is increase in enrolment as indicated in the graph below.
Questions addressing pupils’ attendance in relation to HIV/AIDS effects were put to the teachers as in table 4 below.

Table 4:
Teachers’ perception on the effect of HIV/AIDS on Pupils’ school Attendance in Rachuonyo District

<table>
<thead>
<tr>
<th>Items</th>
<th>N=164</th>
<th>No. of teachers in percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children from homes where family members are affected by HIV/AIDS are able to attend school normally</td>
<td>35.46</td>
<td>1.82 62.08</td>
</tr>
<tr>
<td>Responsibilities on pupils from homes affected by HIV/AIDS affects their school attendance</td>
<td>66.46</td>
<td>3.04 30.48</td>
</tr>
<tr>
<td>Stigma associated with HIV/AIDS cannot affect class attendance of pupils from families that are victims of the disease</td>
<td>43.91</td>
<td>3.04 53.04</td>
</tr>
</tbody>
</table>

About 62.08% against 35.46% teachers were of the perception that HIV/AIDS does not affect school attendance of pupils who come from homes where family members are affected by the disease.

Further 66.46% of teachers had the perception that responsibilities on pupils from homes affected by HIV/AIDS does not interfere with their school attendance while
30.48% felt it does interfere. However another 43.91% were of the perception that stigma associated with HIV/AIDS affect class attendance of pupils from families that are victims of the disease.

Table 5:
Headteachers’ perceptions on effects of HIV/AIDS on attendance

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent N=20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class attendance is regular</td>
<td>10.0</td>
</tr>
<tr>
<td>Class attendance is irregular</td>
<td>90.0</td>
</tr>
</tbody>
</table>

A large number of headteachers, 90%, also perceived HIV/AIDS as a factor contributing to irregular pupils school attendance. While only 10% found HIV/AIDS has no impact on pupils school attendance.

Questions addressing pupils’ drop-out in relation to HIV/AIDS effects were put to the teachers as in table 2 below.

Table 6:
Teachers’ perceptions on the effects of HIV/AIDS on pupils school dropout

<table>
<thead>
<tr>
<th>Items</th>
<th>N=164D</th>
<th>U</th>
<th>A</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>The school dropout experienced in my class can be poverty and not</td>
<td>53.04</td>
<td>18.90</td>
<td>26.22</td>
<td>1.84</td>
</tr>
<tr>
<td>problems associated with HIV/AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty experienced in most homes where pupils in my class come from</td>
<td>52.44</td>
<td>9.15</td>
<td>36.69</td>
<td>1.22</td>
</tr>
<tr>
<td>is attributed to HIV/AIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma associated with HIV/AIDS is not a reason for pupils’</td>
<td>63.41</td>
<td>9.15</td>
<td>25.00</td>
<td>2.44</td>
</tr>
<tr>
<td>dropping out of school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibilities given to pupils’ in homes affected by HIV/AIDS do</td>
<td>79.87</td>
<td>4.88</td>
<td>13.41</td>
<td>1.84</td>
</tr>
<tr>
<td>not make them drop out of school</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is no link between pupils’ school dropout and HIV/AIDS in my</td>
<td>71.33</td>
<td>5.49</td>
<td>21.94</td>
<td>1.74</td>
</tr>
<tr>
<td>class</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Research problem of pupils dropout due to HIV/AIDS was also investigated. Teacher’s responses on table 4 above shows that a larger percentage 53.04% were still of the perception that HIV/AIDS is the cause for drop-out, verses 26.22% who attributed the drop-out to poverty. However, smaller percentage (36.69%) against 53.04% were of the perception that poverty in many homes may be linked to HIV/AIDS whereas a bigger percentage 63.14% still perceive dropout as a result of stigmatization versus 25.00% who do not. Most teachers, 79.87% still
perceived dropout by pupils from homes affected by HIV/AIDS to be linked to the responsibilities given to them. Only 13.41% did not perceive otherwise.

Further only 21.94% of the teachers perceived that drop-out is not related to HIV/AIDS whereas 71.33% perceived HIV/AIDS to have a bearing on drop-out. The overall implication from the teachers response in table 4 above is that HIV/AIDS plays a major role towards pupils’ school drop-out. However, some cases of pupils drop-out may be attributed to poverty and that poverty in most homes may be an independent challenges facing various homes without necessarily having a link with HIV/AIDS.

Table 7:
Head Teachers’ perceptions on effects of HIV/AIDS on drop-out

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent N = 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV/AIDS is a major factor to school drop-out</td>
<td>60.00</td>
</tr>
<tr>
<td>Effects of HIV/AIDS to school drop-out not significant</td>
<td>20.00</td>
</tr>
<tr>
<td>Effects of HIV/AIDS to school drop-out is moderate</td>
<td>20.00</td>
</tr>
</tbody>
</table>

The headteachers perception was in conformity with the teachers perception as majority (80%) perceived the effects of HIV/AIDS to contribute to pupils school dropout either moderately or majorly.

Table 8:
Factors that Head teachers perceive affect drop-outs

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percent N= 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty, attitudes and Effects of HIV/AIDS</td>
<td>20.00</td>
</tr>
<tr>
<td>Poverty and pregnancies</td>
<td>10.00</td>
</tr>
<tr>
<td>Poverty and effects of HIV/AIDS</td>
<td>15.00</td>
</tr>
<tr>
<td>Poverty, effects of HIV/AIDS, pregnancies and early marriage</td>
<td>20.00</td>
</tr>
<tr>
<td>Pregnancies and domestic responsibilities</td>
<td>10.00</td>
</tr>
<tr>
<td>Indiscipline, early marriage and pregnancies</td>
<td>20.00</td>
</tr>
<tr>
<td>Indiscipline and poverty</td>
<td>10.00</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

The headteachers further suggested other factors they perceive as major factor that affect pupils dropout as indicated in table 8 above. The findings also indicated that HIV/AIDS effects contribute to pupils school drop-out. A study carried out by Kembe, Akach and Ilako (2004) is in conformity with the teachers views. The two further argue that a number of socio-cultural practices of the beach community that inhibits Rachuonyo district enhances the spread of HIV/AIDS. Same sentiments are shared by Greener (2008) who notes that children who loose one or both parents to HIV/AIDS are less likely to remain school or complete their education as opposed to those with parents. In a similar report from Bomet- a neighbouring district- Omonso, Nyassy and Rono (2007)
note that 10,700 children have dropped out of school due to poverty after their parents died of HIV/AIDS. Older children have a greater chance of quitting when one of the parents die or gets sick (Trofimenko 2008). Trofimenko further argues that the children are more likely to take over the tasks of the missing or sick parent and the children are less likely to be in school due to financial constraints caused by medical bills, funerals expense, that overburden the remaining parent making him/her less likely to keep the children in school.

**Discussion**
Perception of class teachers and headteachers on the effect of HIV/AIDS on enrolment is in conformity. A greater percentage of both groups attributed low enrolment to HIV/AIDS effects. However, the data collected showed increasing trend in enrolment. They attributed this positive trend in enrolment to: influx of children from urban centres upon death of their parents; Non-Governmental Organizations (NGOs) intervention to families affected by HIV/AIDS; Free Primary Education’ and internal migration after post-election violence.

In school attendance majority of the teachers (73.7%) were of the perception that HIV/AIDS affects pupils’ school attendance negatively. This views conforms with Ennew (20000), World Ban (2008). However Carr-Hilland Peat (2000) and Jayne and Yamano (2004) disagrees with this views. The research findings revealed that children, especially girls from relatively poor households are less likely to be in school in the period prior to the adult death in their households. The probability that girls from such households attend school in the one-to-two year period before the death of an adult declines from 90% to 62%.

The findings also indicated that HIV/AIDS effects contribute to pupils’ school drop-out. This view conforms with Kembe, Akach and Ilako (2004); Greener (2008); Omonso, Nyassy and Rono (2007) and Trofimenko (2008).

The study also found out that an overwhelming majority of teachers, 96.38% had the perception that material support, emotional support- through guidance and counselling – and poverty reduction strategies are the main intervention measures that could assist in ameliorating the effects of HIV/AIDS on pupils’ drop-out. Only 3.01% of teacher recommended improvement in teaching and learning environment; teachers’ perception were mainly ‘curative’ in nature.
Table 9:
Interventions suggested by class teachers on enrolment

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Percent N =164</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide material support</td>
<td>58.48</td>
</tr>
<tr>
<td>Put up more schools</td>
<td>2.54</td>
</tr>
<tr>
<td>Provide guidance and counseling</td>
<td>27.44</td>
</tr>
<tr>
<td>Provide material support and G&amp;C</td>
<td>7.88</td>
</tr>
<tr>
<td>Reduce poverty</td>
<td>1.22</td>
</tr>
<tr>
<td>Missing</td>
<td>2.44</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Teachers suggested various intervention measures to help improve pupils enrolment viz: materials support, putting up more schools, guiding and counseling the pupils, putting up various mechanisms to help reduce poverty. Similar suggestions were repeated as a mechanism of reducing pupils school attendance and dropout rate as indicated in table -10 and 11 below.

Table 10:
Interventions suggested by class teachers attendance

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Percent N =164</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide G&amp;C</td>
<td>29.87</td>
</tr>
<tr>
<td>Improve teaching and learning</td>
<td>11.63</td>
</tr>
<tr>
<td>Provide material support</td>
<td>49.38</td>
</tr>
<tr>
<td>Provide material support and G&amp;C</td>
<td>6.12</td>
</tr>
<tr>
<td>Missing</td>
<td>3.00</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 11:
Interventions suggested by class teachers on drop-out

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Percent N =164</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide G&amp;C</td>
<td>38.41</td>
</tr>
<tr>
<td>Create conducive environment for teaching and learning</td>
<td>3.01</td>
</tr>
<tr>
<td>Provide material support</td>
<td>40.22</td>
</tr>
<tr>
<td>Provide material support and G&amp;C</td>
<td>15.93</td>
</tr>
<tr>
<td>Reduce poverty and provide G&amp;C</td>
<td>1.83</td>
</tr>
<tr>
<td>Missing</td>
<td>0.61</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Findings and Conclusion
The findings of this study suggests that HIV/AIDS affects pupils’ schooling negatively. The study further revealed that there is an increasing trend in enrolment and teachers perception to this positive trend was attributed to four main factors: viz, one, influx of children from urban centres whose parents hail from the district and who get back home to live with relatives upon the death of parents. Two, support given by Non Governmental Organizations (NGOs) in the area to families affected by HIV/AIDS. Three, introduction of Free Primary Education (FPE) by the Kenya Government in the year 2003. Lastly, post election violence skirmishes which rocked the country at the beginning of the year in January –
February 2008, thus pushing urban dwellers together with their families to their rural homes. The study revealed that HIV/AIDS has not affected actual enrolment. However majority of the teachers were of the perception that HIV/AIDS has negatively impacted on school enrolment, attendance and drop-out

REFERENCES


Vulnerability: Retrieved October 14th 2006 from http://www.avert.or/aids-schools.htm


Effects of Coordination on strategy implementation in manufacturing firms: The Case of Manufacturing firms in Nakuru Town

Lucyann M.Karani1,*, Asaneth C.Lagat1, Lydia C. Langat2
*e-mail: lucyannmuthoni82@gmail; +254 (0)723213295
1Department of Commerce, Egerton University, P.O. Box 536, 20115 Egerton, Kenya
e-mail: asaneth@yahoo.com; Tel. +254(0)722-417922
2Department of Commerce, Egerton University, P.O. Box 536, 20115 Egerton, Kenya
e-mail: lydchep@gmail.com; Tel. +254(0)726-989877

Abstract
Matching structure to strategy requires making structure critical activities and organizational units the main building blocks in the organization. Coordination is one of the critical activities in any organizational strategy implementation. Internal organization of each company is somewhat peculiar, the result of many organizational decisions and performance. This study was to determine the effect of coordination on strategy implementation in manufacturing firms in Kenya. The target area of the study was Nakuru Municipality. The study population included 15 randomly picked manufacturing firms in the municipality of which have been in existence for not less than 10 years, so as to adequately determine the magnitude of strategy implementation. The 120 respondents who were the managers and supervisors in the firms’ departments provided information regarding the extent of the use of resource sharing between departments, informal contacts of employee in the firms and firms having goals which have been mutually agreed upon. The study employed a survey design. Descriptive statistics was used to analyze the data. Results of Correlation and chi-square analysis showed that coordination show significant effect on strategy implementation in manufacturing firms. Therefore, manufacturing firms should ensure that coordination is practiced.

Keywords: Coordination; Strategy implementation; Manufacturing firms

Introduction
Unofficial means of communication usually exist and companies need only more actively support activities and places where employees that normally do not work together can meet informally and share stimuli and ideas. All employees should also have equal access to corporate information, Nonaka and Takeuchi (1995) argue. Further, by being aware of ongoing activities each employee gains sufficient understanding of the capacity of the organization and is thus able to tap into the organization’s resources. However, for such unanticipated co-operation
to work, the company must adopt a policy that prioritizes internal information and knowledge sharing. All employees, including managers, must understand the importance of helping colleagues asking for advice. This, for example, implies that internal debiting should be abandoned since it only creates unnecessary overhead and administration and a reluctance to ask for help. Within-company communication is thus a success factor.

Several commentators have argued that trust is an important prerequisite for co-operative activities such as strategy implementation. As von Krogh (1998) concludes, effective knowledge creation requires mutual trust, active empathy, access to help, lenience to judgment, and courage. He claims that the notion of care encompasses these forms of behavior and their interplay, and that a change of perspective from self-commitment to other-commitment is necessary for proper strategy implementation. To achieve this, management must explicitly state that trust and openness are prioritized values. As noted by von Hippel (1988), informal know-how trading often occurs between companies – sometimes even between direct competitors. Fundamental to such networks are the unspoken, but yet strong, obligation to return a favour.

It has also been claimed that such co-operation cannot be achieved without establishing a personal relationship, preferably face to face, but it has actually been shown that trust and cooperation can be achieved and sustained not only between strangers but in fact also between enemies at war or between creatures unable to appreciate the consequences of their own behavior (Axelrod, 1984). Fundamental to the establishing of trust is instead the principle of reciprocity and the likelihood of meeting - and recognizing - the same individual again in the future. Knowing (or assuming that the probability is high) that we will meet again gives me a chance to get even, which enables me to risk trusting the other part.

When people are primarily motivated by their own interest in the work and the enjoyment of that activity, they are more creative than they are when primarily driven by some goal imposed on them by others. The use of extrinsic motivation such as rewards or bonuses tend to cause a focus on the reward rather than on the task at hand, and winning the reward becomes more important than finding the most creative solution. Robinson and Stern (1997) stress the importance of intrinsic motivation and point to the strong correlation between the use of intrinsic motivation and high participation in the improvement processes. Self-initiated activities are powerful because they are driven primarily by intrinsic motivation. When employees are allowed to, and in fact encouraged to, pick and pursue their own projects, they are driven by their personal interests. Research in a corporate setting has shown that professional interests rather than espoused theory is what motivates people (Stenmark 2000)
Studies treat institutional relationships among different units/ departments and different strategy levels as a significant factor that affects the outcome of strategy implementation (Walker & Ruekert 1987) divide business strategy behaviors into three types: prospectors, differentiated defenders and low cost defenders. These distinctions are based on the strategy categories introduced by Miles & Snow (1978; prospectors, defenders, analyzers, reactors) and by Porter (1980; overall cost leadership, differentiation and focus). Walker & Ruekert (1987) stipulate that corporate-business unit relationships, inter-functional structures and processes, marketing policies and processes may all significantly influence business strategy implementation. Three aspects of the corporate-business unit relationship are especially likely to affect a units success in implementing a particular strategy: business unit autonomy, sharing programs and synergies across SBUs, as well as control and reward systems. In addition, functional competencies, allocation of resources, decision-making participation and influence, inter-functional conflict and coordination may have vastly different effects on the implementation of 13 different kinds of strategies. Walker and Ruekert (1987) assume that decision-making and coordination structures in the marketing department, and marketing policies and programs within the business unit, affect the performance of different business strategies in different ways.

Methodology
A descriptive survey was undertaken at Manufacturing firms in Nakuru municipality, in which primary data were collected from a sample frame of 120 employees using sets of structured questionnaires, the details of which are presented in Karani (2011).

The research was undertaken within Nakuru Municipality. Nakuru is in Rift Valley province, the Kenya’s largest province. Nakuru is well endowed with agricultural and tourism resources which have attracted several manufacturing firms. The study adopted the descriptive survey design. The study’s respondents were randomly picked from the managers and supervisors in Marketing department, production department, Human resource department and Accounting and Finance department in the 15 firms. Data was collected by use of questionnaires containing structured questions. The results were presented and interpreted in the form of descriptive statistics (frequencies, means, and percentages). The independent variables and dependent variable were converted into means which allowed for non-parametric test to be used in the hypothesis tests. Correlation (Spearman correlation) was used to test the study’s hypothesis.

Results and Discussions
The male gender was 71 of the total respondents which were represented by 59%.
The females were 49 of the respondents, represented by 41%. It is apparent that compared to males, women were not involved in manufacturing jobs (Table 4.1). The respondents aged 26-35 years were the majority (44.2%) of the Managers and supervisors followed by those aged 36-45 (39.3%), followed by below 25 years (13.3%) then above 45 years (3.3%) (Table 4.2). On the academic qualification of the managers and supervisors in the firms, the results indicated diploma level as a level where many management employees have reached (44.2%), followed by degree level (43.3%) followed by secondary school level (11.2%) then primary school level (8%). (Table 4.3). Category (11-15) years of working with employer had (69.0%), followed by (6-10) years (19.5%), (Table 4.4). It’s therefore showed that 11-15 years is enough time for the employee to gain experience and be able to work in managerial level.

The results in table 4.6 show respondents response in coordination in organizations. Majority of the respondents agreed on the issue of resources being shared in firms 76.3%. 14.5% moderately agreed while 8.6% disagreed. This may have been attributed by the fact that when resources are shared in organization proper communication is enhanced in an organization. These findings are in conformity with (Walker & Ruekert, 1987 and Gupta, 1987) who found out that treated institutional relationships among different units/ departments and different strategy levels as a significant factor that affects the outcome of strategy implementation.

The results show that 76.9% agreed, followed by moderately agree 11.1% , disagree agree had 12% on that people have to follow line of authority in the firms (table 4.6). This shows that people have to follow authority on every activity undertaken. The results shows that most of respondents agreed 59.5% while moderately agreed and disagree 16.4%, 24.1% respectively that firms discourage people forming informal job contacts. This means that informal jobs contact has attracted little attentions in the firms. This disagree with the study of Nonaka and Takeuchi (1995) who found that companies need only more actively support activities and places where employees that normally do not work together can meet informally and share stimuli and ideas. All employees should also have equal access to corporate information,

The findings show that majority of respondents agreed 74.6% that the firms have goals which are agreed upon by management and employee and 15.8% moderately agreed. Those who disagreed were 9.7% of the respondents .This means that the firms practice management by objective which has an advantage of motivating employees. This supports the work of Hunger and Wheelen (2008) who found that MBO links organizational objectives and the behavior of individuals. It matches
employee competencies to individual tasks within the plan. MBO assigns the best man or woman for the job. Responding to the issue of firms willing to invest resources on unrelated businesses which may be beneficial to the firm, most respondents agreed at 56% while moderately agree had 26.7% 22.4% reported disagree. This means that the firms are willing to invest resources even in areas which do not seem promising.

The results of correlation between coordination and strategy implementation was significant and positive \((r=0.230, p=0.011)\). This point to the fact that as coordination goes up strategy implementation also rises. Therefore the null hypothesis “coordination has no significant effect on strategy implementation” was accepted. The alternate hypothesis, “coordination has a significant effect on strategy implementation” was hence rejected.

Chi-square tests also show that coordination had no significant effect on strategy implementation.(table 4.3)

**Conclusion and Recommendation**
Coordination had no significance effect on strategy implementation. Coordination ranges from coordinating of human resource to capital resource. A firm sharing resources across its department encourages proper communication which in turn allows timely strategy implementation. In a firm where following of lines of authority and skipping levels is discouraged, employees feel stuck in a rigid system thereby there is less growth. When there are goals and objectives in an organization which are set by management and employees, such goals and objectives are easy to accomplish. Of course when employees are involved in setting of goals they own those goals and they are able to deliver. Coordination within a firm is very important. A firm that has coordination has quick and smooth implementation of strategies. A leader who invests resources even when the returns could take time to materialize also allows flexible organization which is able to grab opportunities as they come by. Generally, coordination has no significant effect on strategy implementation.

**Appendices**

**Table 4.1 Gender of respondent**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>71</td>
<td>59.2</td>
<td>59.2</td>
<td>59.2</td>
</tr>
<tr>
<td>Female</td>
<td>49</td>
<td>40.8</td>
<td>40.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>120</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.2
**Age of the respondents**

<table>
<thead>
<tr>
<th>Age bracket</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 25 years</td>
<td>17</td>
<td>13.2</td>
</tr>
<tr>
<td>26-35 years</td>
<td>53</td>
<td>44.2</td>
</tr>
<tr>
<td>36-45 years</td>
<td>46</td>
<td>39.3</td>
</tr>
<tr>
<td>Above 45 years</td>
<td>4</td>
<td>3.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

### Table 4.3  Education level

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school</td>
<td>1</td>
<td>.8</td>
<td>.8</td>
<td>.8</td>
</tr>
<tr>
<td>Secondary school</td>
<td>14</td>
<td>11.7</td>
<td>11.7</td>
<td>12.5</td>
</tr>
<tr>
<td>Diploma</td>
<td>52</td>
<td>44.2</td>
<td>44.2</td>
<td>55.8</td>
</tr>
<tr>
<td>Degree</td>
<td>53</td>
<td>43.3</td>
<td>43.3</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Table:4.5
**No. of years**

<table>
<thead>
<tr>
<th>No. of years</th>
<th>Frequency</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td>6-10 years</td>
<td>17</td>
<td>19.5</td>
</tr>
<tr>
<td>11-15 years</td>
<td>60</td>
<td>69.0</td>
</tr>
<tr>
<td>Over 15 years</td>
<td>5</td>
<td>5.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>87</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

### Table 4.6

<table>
<thead>
<tr>
<th></th>
<th>Allows for resource sharing</th>
<th>People have to follow lines of authority</th>
<th>People are discouraged from informal job related contacts</th>
<th>Has clear goals which have been mutually agreed upon</th>
<th>Willing to invest resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>5(4.3%)</td>
<td>7(6%)</td>
<td>12(10.3%)</td>
<td>5(4.4%)</td>
<td>16(13.8%)</td>
</tr>
<tr>
<td>Disagree</td>
<td>5(4.3%)</td>
<td>7(6.6%)</td>
<td>16(13.8%)</td>
<td>6(5.3%)</td>
<td>10(8.6%)</td>
</tr>
<tr>
<td>Moderately agree</td>
<td>17(14.5%)</td>
<td>13(11.1%)</td>
<td>19(16.4%)</td>
<td>18(15.8%)</td>
<td>25(21.6%)</td>
</tr>
<tr>
<td>Agree</td>
<td>37(31.6%)</td>
<td>44(37.6%)</td>
<td>37(31.9%)</td>
<td>46(40.4%)</td>
<td>31(26.7%)</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>53(45.3%)</td>
<td>46(39.3%)</td>
<td>32(27.6%)</td>
<td>39(34.2%)</td>
<td>34(29.3%)</td>
</tr>
</tbody>
</table>
4.7 Spearmans rho correlation

<table>
<thead>
<tr>
<th></th>
<th>Coordination</th>
<th>OSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordination</td>
<td>1.000</td>
<td>.230</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>.011</td>
</tr>
<tr>
<td>120</td>
<td>120</td>
<td></td>
</tr>
</tbody>
</table>

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

4.8 Chi-squire Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-square</td>
<td>8.209</td>
<td>4</td>
<td>.084</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>8.671</td>
<td>4</td>
<td>.070</td>
</tr>
<tr>
<td>Linear-by-Linear</td>
<td>6.576</td>
<td>1</td>
<td>.010</td>
</tr>
<tr>
<td>Association N of Valid Cases</td>
<td>120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .06.

References

Morrison and Brantner(1992).*Learning firm specific knowledge and skills.*
Educating for Holistic Development in Seventh - day Adventist (SDA) Schools in Nyamira County, Kenya
Bernard Gechiko Nyabwari
Kenyatta University

Tom Nyamache
Associate Professor of Business Finance Mt. Kenya University
P.o Box 17273,20100,Nakuru Email: tnyamache@mkuy.ac.ke
Cell: +254723282500

Ruth Nyambura
Research Scholar, Faculty of Arts and Social Sciences Department of History
Egerton University P.o Box 536, Njoro Email: mkunak2011@gmail.com
Cell: +254715133505

Abstract
Holistic education develops the moral, emotional, physical, psychological and spiritual dimensions of a person. The church has taken a fundamental role as a sponsor in Kenya since 1968 in providing holistic education in her schools. Without this education, church schools risk graduating students who are socially, spiritually, morally, physically, economically, emotionally and intellectually disintegrated. The study was about Educating for holistic development in Seventh-Day Adventist (SDA) sponsored secondary schools in Nyamira County, Kenya. Specifically the study explored the development of the SDA church’s educational philosophy, assessed efforts made in the schools to educate for holistic development, examined the SDA practices involved in the implementation of the church’s educational philosophy, investigated challenges experienced in the implementation of the philosophy and identified strategies for effective implementation of the SDA educational philosophy. Data findings and presentation focused on the overview of Holistic Education, philosophy and centrality of Christian education, church schools for holistic education and the SDA educational philosophy. Data was interpreted in the light of John P. Miller’s (1998) Holistic Curriculum theory which examines the philosophical, psychological, religious and social foundations of holistic education. Miller states that holistic education interrogates practical application of knowledge in the classroom. The study employed a descriptive research survey using purposive sampling procedure to select respondents. Data were collected from students, teachers, parents, DEOs clergy and NC Education Secretary using questionnaires, participant observation, individual in-depth interviews and focus group discussions methods. Resultant data was evaluated and analyzed using the Statistical Package for Social Sciences (SPSS) Programme. The study provides information to policymakers which emphasize the importance holistic education curriculum in secondary schools as a way of preparing them to successively face challenges of their day-to-day life.
Introduction
The definition and method of education for human beings worldwide as Giussani (2001:54, 55) posits is a subject that has received ample attention in both secular and religious specialties. Further, Giussani says that holistic education is introduction to reality as a whole. This relates to the worldwide goals of education which are geared towards producing socially, morally and mentally developed persons. Miller (1988:12), Churu (2009) and Wasanga (2004:18) observes that Christian education introduces students to the truth, develop students’ responsibility, sense of right in relation to the surrounding world and inculcation of skills necessary for life and service. Through schools Christianity further helps students to attain satisfactory social adjustment, develop a responsible attitude towards life, understand the relationship of law and freedom and a sense of dignity of honest labour. These schools as Oanda (1995:17) and Njoroge (1999:11) add also help students to develop their God-given abilities, desire to continue the process of education after school, develop physical and mental disciplines, teach the process of orderly thinking and develop a biblical life pattern. The Seventh-Day Adventist (SDA) church borrows the aforementioned worldwide Christian education goals to develop her philosophy: “Holistic Education for Learners”.

Holistic education is the basic premise that education addresses the development of the intellectual, affective, aesthetic and spiritual aspects of a person (Miller 2000:34-35). Oanda (1995), Eisler (2000), Lemkow (1990) and Miller (2000) observe that throughout the 200-year history of public schooling, a widely scattered group of critics have pointed out that the education of young human beings should involve much more than simply preparing them as future workers or citizens. Waithaka (1996) and Capra (1996) add that education should be understood as the art of cultivating the moral, emotional, physical, psychological and spiritual dimensions of developing children. He highlights that a holistic way of thinking seeks to encompass and integrate multiple layers of meaning and experience rather than defining human possibilities narrowly.

Holistic education as Wasanga (2004), Harris (1980:23-25) and Miller (1997:9,10) point out is based on the premise that each person finds identity, meaning, and purpose in life through connections to the community, to the natural world, and to spiritual values such as compassion and peace. According to Kessler (2000:89), holistic education aims to call forth from people an intrinsic reverence for life and a passionate love of learning. He observes that this is done, not through an academic “curriculum” that condenses the world into instructional packages, but through direct engagement with the environment. Miller (1988: 6, 7) and Otunga (1993) assert that holistic education nurtures a sense of wonder. Help the person feel part of the wholeness of the universe, and learning will naturally be enchanted and inviting.
Giussani (2001) makes four central claims. First, he proposes that education must be oriented toward what he describes as an experience with total reality in which Christ can come to be seen as fulfilling what it is for us to be authentically human. Second, he posits a respect for tradition as a necessary precondition for the possibility of education, since it is only from within the concrete specificity of a person’s location in a family, culture, and society that one can face the question of reality and engage it in a truly critical way. Thus, rootedness in a living tradition can serve as a way of encountering the past and as a guard against unbridled innovation or skepticism. Third, he suggests that the Christian community must play an important and intentional role in education by providing an ecclesial environment in which Christ is made known in our relationships and actions. Finally, he sees the teacher as embodying the experience of reality in a particular way, with a coherence that carries with it a certain kind of authority, though not one that is perceived as external or imposed.

**Methodology**
Data was collected using questionnaires, individual interviews, focus group discussions, and review of other available materials with relevant information for the study. The target population (N) for this study was from the 86 SDA sponsored secondary schools in Nyamira County. Specifically it targeted N=25,800 students, N=8,600 parents, N=602 teachers, N=62 clergy N=1 NC education secretary and N=5 DEOs. In total, the target population was N=35,067 people. A total of n=147 respondents was sampled from the five zones which constitute Nyamira County. The study applied a purposive sampling technique to obtain respondents for questionnaires and interviews. The table below shows sample sizes for each category.

<table>
<thead>
<tr>
<th>Zone</th>
<th>Student</th>
<th>Parents</th>
<th>Teacher</th>
<th>Clergy</th>
<th>NC Ed. Secr.</th>
<th>DEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borabu</td>
<td>11</td>
<td>4</td>
<td>12</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rigoma</td>
<td>11</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Manga</td>
<td>12</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nyamira</td>
<td>12</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Ekerenyo</td>
<td>12</td>
<td>4</td>
<td>12</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>58</strong></td>
<td><strong>20</strong></td>
<td><strong>60</strong></td>
<td><strong>6</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>

58

*Journal of Education and Social Sciences*
Results and Discussions
The study was set out to achieve the following objectives:-

i. Explore the SDA church’s mission of educating for holistic development in her church sponsored schools

ii. Assess efforts made by the SDA church sponsored secondary schools in NC to Educate for Holistic Development.

iii. Examine the SDA practices involved in the implementation of Educating for Holistic Development in church sponsored schools in NC.

iv. Investigate challenges experienced in implementation of Educating for Holistic Development in Nyamira SDA conference church sponsored secondary schools.

v. Identify ways the SDA sponsored secondary schools in NC can effectively teach for holistic development.

Philosophy and Centrality of Christian Education
The role of Christian education as most respondents noted is to enable students in church schools to grow spiritually, intellectually, physically and socially. Bogonko (1992 a: 9) and Njoroge (1999), Littlejohn, et al., (2006:18) states that Christian education enables learners to foster the aforementioned purposes in the society. These scholars add that to be of any earthly good, a person must understand the world around him/her and recognize what it needs. In this way, Christian education helps students to be able to discern what is good and evil. Spitz and Tinsley (1995:32) and Katola (1995), observe that Christian education imparts wisdom which offers students the ability to communicate and understand each other despite their social, religious, cultural and intellectual diversities. These education thinkers refer to John Sturm, the great reformation educator who said that the goal of his Christian academy was to instill “a wise and eloquent piety”.

Bogonko (1992b), Groome (1991) and Pink (1988:24-25) concur that the purpose of Christian education is to deepen spiritual understanding through belief in a divinely ordered universe as a necessary means of understanding oneself and one's place in the world. Groome (1991:14,135) believes that Christian education encourages students to interpret their lives, relate to others and engage in the world in ways that reflect a faith perspective. It aims to make fundamental differences in how people should realize their being in relation with God, self, others and the world. Groome further states that teaching Christian education
in church secondary schools should engage all dimensions and dynamics of a human being. He advocates realizing this through shared Christian praxis as purposeful human activity that holds in dialectical unity in theory and practice, critical reflection and historical engagements. Putting academic excellence at the centre that displaces Christ from it has ramification consequences.

Veith (2003), (2006) and Faber (1998) declare Christian education as having a humanizing import in people’s lives that informs and forms them in how to think critically, act responsibly and create imaginatively. Faber (1998:48-50) observes that the educators’ task in Christian schools is to invite students to imagine the consequences of their praxis and envision how an aspect of it can or should be reshaped to promote the well being of others. Veith (2006:45) discusses key principles students require to make worthwhile decisions: creation of enabling environment, accommodation of other people’s opinions, respect for other people’s choices, following authorized procedures, doing interactive interrogation and consultation, facilitating group planning, maintaining support and being willing to take initiatives.

Christian education as Wade et al., (1970:27-28) assert is Christ or God centered education offered in homes, churches or schools. These authors observe that this education takes the Bible as its primary source and the only warrant criterion for the truth. In Christian education, all presumed facts and opinions are tested by the Word of God. Understanding of the nature of biblical revelation has tremendous implications for Christian education. Hodge (2005:175) observes that biblical revelation in Christian education sets standards and provides basis for all Christian education: content taught and methods of teaching applied. He maintains that all education factors must be keeping with the reality of the Bible. The biggest challenge to Christian education as Campbell (1982) posits is secularism.

Christian education is said to be Christian when “it is an outgrown of God’s revelation … and… an outgrown of the Christian worldview” (Ilori, 2005: 146). Ilori adds that it is also Christian when its concepts are “derived directly from sources provided by Christian theology, the Bible and Christian philosophy”. Its curriculum should integrate the Bible in theory and practice with the Bible being a vital part of the content and integrated with all subject matter. Apart from being Bible based, it must be life-related. Semenye (2006: 1480) states that relevant theologically sound material that address real-life issues become the means of improving, developing and nurturing students.

Christian educators must know the purpose of Christian education and the rationale of instituting church schools. Tolbert (2000:13) says that Christian
educators should take teaching as a calling to inculcate the character of Christ in the hearts of students in the event of acquiring intellectual knowledge. He also maintains that educators in the class-room should endeavor to make students disciples of Jesus. This should be done through teaching them to love, respect and obey God and to live in accordance to Biblical principles. Deere (1983:321) concurs that even Moses as the educator for the Israelites, sought to plant the image of God among the Israelites. He adds that the priests of the tribe of Levi were to teach God’s precepts and law to Jacob and facilitate over the worship in the tabernacle (Deut 33:39). The Bible notes that the absence of teaching led to misguidance during the reign of Asa (2 Chr. 15:3). Teaching brought about revival in the time of Jehoshaphat (2 Chr. 17:7-9).

Most of the ministry of Christ on earth involved teaching (John 3:2; Mark 1:22). When He instituted what has become to be known as the great commission, teaching was a major factor in His instruction. Babeiri (1983:94) says that Jesus’ commission is applicable to all his followers involved in one command, “make disciples” which is accompanied by the participles in Greek: going, baptizing and teaching.

Hayes (1991:7-8) states that God has raised thousands of Christian schools worldwide. These schools are largely populated compared to secular ones because of the values they cuddle making parents and guardians to choose them. In these schools, students are taught risks and effects of drug abuse, sexual immorality, lack discipline and peer influences.

Defending the Christian philosophy of education, Toussaint (1983:59) declares that the Christian philosophy of education is so powerful that Christians should recognize and price it. He says the philosophy is grounded in the word of God. Gnanakan (2006) adds that the Christian philosophy of education calls for educators and students to put the Bible at the centre and evaluate all they see in the world through the ‘eye’ of God.

**Church Schools for Holistic Education**

Church schools as White (1968:123) and Stanley (2007) state have an obligation to educate students for social, spiritual, moral and mental development. The purpose of church institutions especially secondary schools is to form avenues of character moulding and formation of persons who later becomes protagonists in the society. He adds that in secondary schools, students are helped to develop a sense of ethical and moral judgment. Decline of moral values in the society reveals the church’s inconsistence in ensuring that in her institutions of learning students are adequately prepared with the right content and approach.
Explaining the strategies to attainment of multiple intelligences among students, Gardner (2006) observes that the educator’s role is to disseminate information and specific content to contribute to holistic development among students. He maintains that schools should aim at enabling learners to become critical and creative thinkers when faced with technological, social and economic challenges.

The family as an institution is charged with the responsibility of educating young people the centrality of holistic development. Discussing the role of parents, siblings and schools in moulding a child, Mweru (2008) and Guissani (2001) state that the family is extremely important in the individual’s life as it gives view of the world: interprets the meaning of reality, teaches life’s fundamentals and is generally the first place of education for a child. These authors further indicate that families and educators in church schools should collaborate to ensure consistence in holistic development content for students in both home and school. Giddens et al, (2005) add that parents and elderly persons in both the nucleus and extended families have a responsibility to form solid foundations for moral, intellectual, physical and emotional education.

Churu (2009:13) observes that in Kenya nine months are for learning and three months for holidays. She laments that educators still use the holidays to load students with academic workload in what is commonly known as tuition. Holidays which should be utilized by families to equip students with social, economic, spiritual and emotional contents are used for remedial teaching, examinations and evaluations to equip students for end-year and final examinations. Boos (2001:2-3) posits that educators have interfered with holistic development objective of church schools by solely preparing students for academic improved performance. He also maintains that church schools should create environments that educate the whole person rooted in a definitive moral code.

Church schools as education thinkers such as Semenya (2006), Guissani (2001), Mweru (2008) and Gnanakan (2007) point out are central in grounding students in social and emotional development. Novick et al (2002) observe that schools sponsored by churches have a role of cultivating emotional and intellectual competencies among students. These scholars further contend that educators have a duty of making learners to realize the need for integrated development. Churu (2009) adds that social and emotional skills taught in Catholic schools enable students to carry out certain important functions that define maturity of a person. Through church schools, she reasons that students are able to correct information about themselves, others and the environment.

Social and emotional education to students as Ogeno (2008:55-58) opines
helps them to make decisions with adequate consultation before action. Such education as he further remarks enable students to develop positive self-image, self-appreciation, self-understanding, self-forgiveness and self-acceptance. It also helps them to cope with academic, interpersonal, intercultural and social challenges. Discussing the urgency of instituting more Seventh-Day Adventist schools, Hill (2006) reflects that the future of young people depends on how their spiritual, social and emotional foundations are laid especially in their secondary schools system. He adds that secondary school education should provide academic, intra-personal, inter-personal and social skills necessary for changing times.

Formation of character among students is work of many people and institutions. For Gitome (2003) and Katola (1995), parents and teachers need to cooperate in taking responsibilities to facilitate character formation. In church schools as Getui (1993) states students should be introduced to knowledge that would make them efficient self-managers. White (1968:43-45) says that church schools should prepare students with skills to enable them adjust to all situations and make worthwhile decisions without violating rights of others. They also require from teachers and parents skills in the cultivation of pro-social values and attitudes, opportunities for participation in group work, practice of thoughtful and non-violent conflicts resolution and development of social decision making and problem solving skills. This will make them appreciate others in order to co-exist despite the social, cultural and religious diversities (Anderson, 2009:32-34).

Seventh-day Adventist Educational Philosophy
The SDA philosophy of education according to Noddings (1992:176), Nixon (1998:32) and Mcdonald (1996:87) is, “Educating for Holistic Development”. The philosophy as Knight (1998:354) posits is Christ-centered. White (1968: 15, 16) states that distinctive characteristics of Seventh-Day Adventist education in her schools are derived from the Bible. She further observes that the redemptive aim of true education is to restore human beings into the image of God. Adventist education in its broadest sense as Coffey (1996:43) and Commer (1996:12) argue is a means of restoring human beings to their original relationship with God.

Dormant (1986), Chckland (1981), Bullard (1993) and Comer (1996b) concur that Adventist education imparts more than academic knowledge; It fosters a balanced development of the whole person spiritually, intellectually, physically and socially, its time dimensions span eternity, seeks to develop a life of faith in God and respect for the dignity of all human beings, builds character akin to that of God, nurtures thinkers rather than mere reflectors of others’ thoughts, promotes loving service rather than selfish ambition, ensures maximum development of
each individual’s potential, embraces all that is true, good, and beautiful.

Adventist education’s mission as Hall (1987) and Gregory (1987) assert is to prepare people for useful and joy-filled lives, fostering friendship with God, whole-person development, Bible-based values, and selfless service in accordance with the Seventh-day Adventist mission to the world. Alexander et al (1975:11, 12) states that Adventist education is started at home which is the society’s primary and most basic educational agency. He further states that parents are the first and most influential educators and have the responsibility to reflect God’s character to their children. Greenspan (1997:76) adds that the whole familial setting shapes the values, attitudes and worldview of students.

The local church as Knight (1983) and Kindrop (1997:67,68) annotate has a major assignment in the lifelong educational enterprise. These authors insist that congregations as a community should provides an atmosphere of acceptance and love in which it discipies those within its sphere of influence in a personal faith in Jesus Christ and in a growing understanding of the Word of God. This understanding includes both an intellectual aspect and a life in harmony with God’s will. Perkins (1992:132) observes that the Christian teacher functions in the classroom as God’s minister. He adds that the greatest need of students is to accept Jesus Christ and commit to a life of Christian values and service.

Reigeluth et al (1994:164), Alexander et al (1975) and Beenson (1999:312) argue that preparing students for a life of service to their family, church, and the larger community is a primary aim of SDA schools. The world Church at all levels has oversight responsibility for the healthy functioning of life-long learning. With reference to the school as an educational agency, its functions are ideally accomplished by institutions established by the Church for that purpose (Beenson, 1999:312). Banathy (1991:3-5) articulates that the role of Seventh-day Adventist schools, colleges, and universities is to inculcate to learners the Adventist education. He says the student is the primary focus of the entire educational effort, and should be loved and accepted. The purpose of Adventist education is to help students reach their highest potential and to fulfill God’s purpose for their lives. Student outcomes constitute a significant guiding criterion in assessing the health and effectiveness of the school. Beeson (1999:65, 66) adds that the teacher holds a central place of importance. Ideally, the teacher should be both a committed Adventist Christian and an exemplary role model of the Christian graces and professional competencies.

Bronfenbner (1979:23-25) states that the Adventist education curriculum promotes academic excellence and also includes a core of general studies needed
for responsible citizenship in a given culture along with spiritual insights that inform Christian living and build the community. Such citizenship includes as Blackemore (1998:261) observes appreciation for the Christian heritage, concern for social justice, and stewardship of the environment. Blackemore continues to say that a balanced, integrated curriculum will address the major developmental needs in the spiritual, intellectual, physical, social, emotional and vocational realms.

The instructional program of the classroom as Bullard et.al (1993:7,9) writes places appropriate emphasis on all forms of true knowledge, purposefully integrating faith and learning. Instructional methodology will actively engage the needs and abilities of each student, giving opportunity to put what is learned into practice, and be appropriate to the discipline and to the culture. Checkland (1981:84) adds that discipline in an Adventist schools is built upon the need to restore the image of God in each student and recognizes the freedom of the will and the work of the Holy Spirit. Cibulka (1996:26) states that discipline should not to be confused with punishment which seeks the development of self-control.

Adventist education intends to produce all rounded persons. Corvey (1990:34-35) maintains that a blended emphasis of worship, study, manure work and recreation characterizes the total learning environment, with careful attention given to balance. He also believes that the campus community is pervaded by joyful spirituality, a spirit of cooperation and respect for the diversity of individuals and cultures. Banathy (1991:32-34) states that well taught Adventist education in schools, colleges, or universities of Adventists gives clear evidence that the church subscribes to her philosophy of education

Fullan (1999:54), Goleman (1995:102) and Hutchinns (1996:221) assert that the Seventh-day Adventist Church has made a commitment to provide a broad education and spiritual formation for its children, youth, and young adults within the context of the Christian worldview. These scholars further illuminate that the Church extends this same opportunity to other children and youth of the community who share similar values and ideals. Goleman (1995:105) adds that Adventist education seeks to maintain academic excellence in all teaching learning activities.

Hu (1998:2) states that secondary schools students in Adventist schools need to demonstrate competence in thinking, communication and quantitative skills along with other academic areas foundation to schooling. He says that they should also manifest interpersonal skills and emotional growth necessary for healthy relationships with their peers, family and community. Hutchinns (1996:241) says
that students need to know and practice basic principles of health and balanced living including a wise use of time and entertainment media. They should also develop an appreciation for the dignity of labor along with a general awareness of career options appropriate to their interests and God-given abilities.

The Adventist secondary school as Sarason (1990:90, 91) states builds on what has been achieved at the elementary level with a focus on values, choices, and Christ-like character. It offers students a formal and non-formal curriculum in which academic study, spiritual values, and daily life are integrated; a broad academic and vocational program leading to productive living and satisfactory career choices; avenues whereby Christian faith is made relevant to their emerging needs, leading to more mature relationships with others and with God; and an opportunity to develop a Christian lifestyle of values, service, and witness.

Sarason (1997), Snyder et al (1980) and Pinar (1975) point out that those students completing the secondary level at an Adventist school should have had an opportunity to commit their lives to God. This would make them manifest a maturing faith in Him characterized by personal devotion, public worship, and service and witness to others in fulfillment of the Church’s mission. Pinar (1975:43,44) states that the students will demonstrate competence in communication, quantitative skills, and creative thinking, along with other academic areas that are foundation to excellence in tertiary education and/or the world of work. Graduates from SDA secondary schools as Perkins (1992:32) underline should demonstrate maturity and Christ-like sensitivity within the family circle, in the choice friendships, in preparation for marriage, and in broad participation within their church and community. He further states that they should make good decisions and wise choices in ways that demonstrate their belief in the body as a temple of God. This includes careful use of time and discriminating selection of music, media, and other forms of entertainment.

Brantley (1999:15,16), Blackemore (1998:90)and Fullan (1999:46) argue that Adventist institutions of higher education provide students a unique environment for the pursuit of learning in the arts, humanities and religion, sciences and various professions, within the perspective of the Seventh-day Adventist worldview. Adventist higher education gives preference to careers that directly support the mission of the Church; recognizes the importance of the quest for truth in all its dimensions as it affects the total development of the individual in relation both to God and to fellow human beings; utilizes available resources such as revelation, reason, reflection, and research to discover truth and its implications for human life here and in the hereafter, while recognizing the limitations inherent in all human endeavors; leads students to develop lives of integrity based upon principles...
compatible with the religious, ethical, social, and service values essential to the Adventist worldview.

Blackemore (1998:78) and Snyder et al (1980:49) posit that students completing tertiary level at Adventist institutions should have had the opportunity to commit themselves to God with a desire to experience and support the message and mission of the Seventh-day Adventist Church and to live a principled life in harmony with God’s will. Snyder et al (198:42-45) adds that these students should exhibit proficiency in critical thinking, stewardship, creativity, appreciation of beauty and the natural environment, communication, and other forms of academic scholarship toward fulfillment of their vocations and life-long learning. Pinar (1975:43,44) posits that they should manifest social sensitivity and loving concern for the well-being of others in preparation for marriage and family life, citizenship within a diverse community, and fellowship within the community of God. He further underlines that they need to maintain a consistent lifestyle that demonstrates a commitment to optimal health practices essential to effective adult living. This includes careful use of time and discriminating selection of music, media, and other forms of entertainment.

Dilemma of ‘All Dimensional’ Education in Kenya
Kenya as the rest of the word has not been left out in providing the ‘all dimensional’ education. Since her independence in 1963, there have been a number of commissions set by the government to interrogate the education systems concerning provision of all round education. For instance, in 1976 the Gachathi Report recommended that secondary schools should provide education that focuses on the social, mental and moral development. This as Wasanga (2004:2) states was emphasized in Mackay Report of 1988 which introduced Social Education and Ethics to develop students on mutual social responsibility. Wasanga further notes that in spite of these reports, Kenya especially between 1991 and 2001 experienced a sequence of indiscipline cases which included rape, violence, riots, murder and wanton destruction of property among others (Std, 15.1991; D.N 2.11.1991; 16.7.1996; 20.10.1997; 12.6.1999; 15.8.2000 and 9.10.2001). Churu (2009:67) and Getui (1993:132) assert that indiscipline cases in secondary schools despite the government’s efforts to implement the commission reports is a clear indication for the need of holistic education for holistic development which includes the spiritual dimension excluded in the government reports. The Seventh-day Adventist educational philosophy is assumed to provide the holistic education if well implemented in secondary schools.
Holistic Education in the SDA Church

In the 1870s, the Seventh-day Adventist (SDA) church founders at the General Conference (GC) recognized the importance of holistic education and began to develop a denominationally-based school system. The church’s interests in education grew from the philosophy that students at all levels of schooling are uniquely valuable persons and should be educated to use their God-given capacities to become principled individuals, qualified for any position of life. Educating for holistic development was to begin in the home where the basic values of redemptive discipline and mental and physical health were to be balanced with the importance of work. Since those early days, Seventh-day Adventists have embraced the philosophy that education should be redemptive in nature, for the purpose of restoring human beings to the image of God. Mental, physical, social, and spiritual health, intellectual development, and service to humanity form a core of values that are essential aspects of the Adventist education philosophy.

The SDA church as Nyaundi (1997:121) states came to East Africa in 1906. In Kenya, its first station was in Gendia in the present day Kendu-Bay County. Bogonko (1977:112) concurs that the church was brought to Gusii in 1913 and established her first schools at Kamagambo and Nyanchwa in 1927 and 1936 respectfully. Several schools were started later as the church extended her frontiers to the interior parts of Gusii. These schools as Bogonko (1977:123) states were meant to provide holistic education to the students; education that developed students physically, morally, intellectually and spiritually. This is the kind of education which Ellen G. White who is the most eminent SDA mentor promotes among Adventists (White 1968: iii).

The SDA church through the activities of missionaries was among the chief agents in establishing formal education among the Abagusii in various ways. For instance, the church spearheaded in establishment of schools almost in every place a church was built. In these schools, the church recruited teachers who were former graduates of SDA teachers training colleges such as Nynchwa and Kamagambo. The graduate had basic training on the SDA educational philosophy and policy besides their professional training. These teachers not only offered formal education as prescribed in the school curriculum but also taught students the importance of physical work, body health, home economics, evangelism, interpersonal relationship and true worship. In the classroom, the teachers interpreted the secular curriculum in the light of Adventist philosophy of education. As a result, Adventist schools produced mentally, socially, spiritually, physically and morally developed persons. The holistic education was transformative in nature in that it developed students to become responsible socially, morally and spiritually both at school and at home (Nyaundi, 1997:122).
Educating for holistic development in Gusii continued up to the adoption of the Ominde Report (1964) which dissociated religious teaching in schools from particular objectives of any church.

In 1968 the Education Act was passed effectively trusting the main charge and control of education from the church to the Ministry of Education (MoE). The MoE that time took over management of church owned schools. This was meant to promote national unity among communities, races and religions. Despite that, churches were in the Education Act given a central role in the education system in their formerly owned schools (Education Act 1968: Section 15). Having a central role in education the SDA church became the key partner with the government in education as sponsor. As an education partner with the government, the church was given a right to maintain their philosophy of education and worship traditions.

Njoroge (1999:58) states that Christian schools should not be places where drug-peddling, wanton destruction of property and other social messes are knowledgeable. The Christian schools as Churu (2009:122) adds should be marked with Christian spirit and focus on moral formation among students. Similarly, it is assumed that SDA sponsored secondary schools are propagators of Adventist tradition and goals of education. The education is believed to underscore a wholesome development of a person: physical, social, moral, spiritual, intellectual and emotional. Contrary to the expectations in NC, the problems that face Kenyan schools are also witnessed in some SDA sponsored secondary schools. These include drugs and substance abuse, student unrest, national examination irregularities, sexual immorality and harassments, unwanted pregnancies, moral decay and abortions among others (AEU, 1999:17). The social, moral and spiritual life of graduates formerly in SDA schools in NC clearly reveals that the intended objectives of the SDA educational philosophy are not achieved. Similar to other youth in the secular society, some after completion of secondary school education engage the use and sale of drugs, drunkenness, laziness, promiscuity, prostitution, fornication, violence, stealing and misuses of family and public recourses. These experiences during and after secondary school education indicate that some SDA schools in NC do not attain the SDA goals of education geared towards producing socially, morally, spiritually, intellectually and physically established youth. Further, these situations challenge the definition, understanding and execution of the identity and mission of the church’s educational philosophy.

The SDA church in Nyamira Conference (NC) through the Education Department has a vision for the schools; Holistic development in young people. The church has the highest number of church-sponsored schools. The church observes a variety of traditions, groupings and practices which are also used as agents of
transmission of holistic education. These include, work program, nature walk, physical activities/games, Bible study groups, full day Sabbath observance, Sabbath school lesson discussion groups, mid-week prayers, week of prayer, annual camp meetings, talents afternoons, camping and campouts, pathfinder club, adventure’s club, master guides drills, Adventist youth society (AYS), community service, outreach Sabbaths, home economics and cookery, choir practices, inter-house matches and youth rallies. These practices and groups as Bullard et al (1993:9) suggest gives students opportunities to put into practice whatever is learned formally or non-formally. Further, the church recommends to the Teachers Service Commission (TSC) about who to be either the principal or the deputy in the schools through the Education Department of the church (Education Act, 1968: Section 15).

The SDA church in Nyamira Conference has education goals guided by the church’s educational philosophy: “Holistic development in young people”. In this philosophy, the church’s education policy insists on matters concerning the efficacy of her education system, discipline among students, improved academic performance and making teachers result-oriented. The church considers schools as avenues of student evangelism and centers of producing socially, morally, spiritually and mentally affluent persons. The church has a total of 86 sponsored secondary schools in the district which has a total of 115 secondary schools. The SDA sponsored secondary schools in the district since 1997 have been on record of best performers in KSCE in the county. The objective of academic achievement in the church education philosophy seems to take precedence. In view of this background information, this study will investigate factors affecting Educating for Holistic Development in SDA church sponsored schools in NC, Kenya.

Conclusion and Recommendations
Seventh-day Adventists as White (1968:234) highlights should have a system of education which inculcates holistic education to students, addressing social, spiritual and mental facets. The SDA church in NC promotes holistic education in schools and has the highest number of sponsored schools in the District. Out of one hundred and fifteen church sponsored secondary schools in the district, the SDA sponsored schools are eighty six. The SDA sponsored schools in NC are known for their best performance in Kenya national examinations. This could be a reflection of the efforts the church and the government make to ensure that the schools meet the academic objectives of education.

An analysis of the goals of SDA education indicates that the SDA sponsored schools have to respond to the basic premise of Adventist education; Educating
However, emphasis by the church has been put on examination performance which seems to attract most students to the schools. The church has not fully utilized the full right of safeguarding its traditions among which are the objectives of holistic development in education which endorse physical, moral, intellectual, social and spiritual development. Further, the church seems not to have given adequate training on holistic education’s content and relevance to the principals, deputies, teachers, students, parents and pastors who facilitate its transmission. This is because the objectives of secular education seem to override the SDA educational philosophy, traditions, practices and groupings which act as agents of transmission of the education. The secular goals are geared towards producing an intellectually developed person which qualifies someone for professionalism. This makes the stakeholders to insist more on Ministry of Education goals which target mental development. To actualize the holistic education intended for students in SDA schools in NC, the church lacks a clear policy on training teachers, pastors and parents who implement it. It also lacks a comprehensible strategy on how to evaluate students on their consistence regarding this form of education during and after completing secondary school education.

Educating for holistic development in SDA secondary schools is meant to involve students in honest, thoughtful discussion and reflection regarding the moral implications of what they see around them, what they are told, and what they personally do and experience. Inadequate implementation of this educational philosophy has solemn consequences on the students during and after secondary school education in Nyamira. For instance, some after completion of secondary school education engage in use and sale of drugs, engage in drunkenness, become dependants, involve themselves in sexual promiscuity, indulge in prostitution and fornication, instigate violence and misuse family and public recourses. This challenges the definition, understanding and realization of the distinctiveness and task of the SDA educational philosophy.

**Bibliography**

**Books**


**Journals and Daily Newspapers**


The Daily Nation

The Daily Standard

**Unpublished Works**


Reports


**Commentaries**


An Investigation into the Demand for Naturopathy Services in Urban Centres in Kenya

¹Tom Nyamache, ²Lydia Kaniu, ³Ruth Nyambura

(Corresponding Author)
Associate Professor of Business Finance Mt. Kenya University
P.o Box 17273, 20100, Nakuru, Email: tnyamache@mku.ac.ke
Cell: +254723282500

Proprietor
Gited Touch - wellness in your hands
Titan Complex, Mezzanine Floor, Chaka Road, Hurloham, Nairobi.
Email: lkaniu@giftedtouch.co.ke
Cell: 0722 627 760

Research Scholar,
Faculty of Arts and Social Sciences Department of History Egerton University
P.o Box 536, Njoro, Email: mkunak2011@gmail.com
Cell: +254715133505

&
Bernard Gechiko Nyabwari
Kenyatta University
Cell: 0727 986 378

Abstract
Small and Medium Enterprises are a vibrant and growing sector in most economies around the world. Economic conditions have spurred the rise of Small and Medium Enterprises over the last 10-15 years as seen in Africa, UK, US, Europe, Australasia. Many factors may affect the success of a Naturopathy business which falls under the above category and the emphasis was on one branch of Naturopathy called body massage therapy. The study was informed Ansoff’s growth matrix, Endogenous growth theory, Resource-Advantage theory and Hertzberg’s two factor theory. The paper was motivated and adopted a descriptive approach and the population integrated all cadres of employees in the body massage businesses based in Nairobi County. A largely pre-coded quantitative questionnaire was used to gather information from respondents. Both secondary and primary data was collected in the study and the data collected was purely quantitative and it was analyzed by descriptive analysis. The descriptive statistical tools helped the researcher to describe the data and determine the extent to be used.
findings were presented using tables and charts. This paper demonstrates that the paper generated various findings. Massage therapy services are expensive which explains why prospective clients shy away from massage therapy centers. The various aspects of pricing are areas of concern that apparently impact negatively on the growth in demand in clientele base. It was established that the general public has a negative attitude towards massage therapy mainly because they do not understand the physiological benefits of massage therapy and/or some employees and clients do not adhere to professional ethics. A code of ethics was lacking thus affecting the relationship between masseuse and clients. It came out very strongly that most of the massage therapy attendants were not skilled and lack professional training. The paper established that most therapists are trained in hair and beauty colleges which do not offer comprehensive courses in physiology and anatomy.

**Keywords:** Massage, Therapy, Masseuse, Centers

**Background Information**
Small and Medium enterprises are a vibrant and growing sector in most economies around the world and many factors may affect the success of a naturopathy business. Many body massage businesses have either failed to take off or stagnated in a number of urban centers in Kenya, a worrying trend for the business fraternity and the economy of the Nation. Although body massage therapy is a developing phenomenon in the developing countries, the importance of the same cannot be under estimated. Body massage plays a vital role in management of stress and other health conditions that face the modern society. Stress is the ‘wear and tear’ our minds and bodies experience as we attempt to cope with changing environment and has been identified as a major problem at workplace, costing employers billions of dollars a year on lost productivity and healthcare.

Growth in private sector businesses has a considerable positive effect on economic expansion in a transition-economy country. Industries experience cycles of economic growth and contraction based on many factors. These include the overall health of the markets, consumer preferences and even seemingly unrelated world news and events.

In almost all economies, small businesses are vital for sustained growth. A high failure rate is a huge negative for a developing economy with limited capital like Kenya. Small businesses are generally regarded as the driving force of economic growth, job creation, and poverty reduction in developing countries. They have been the means through which accelerated economic growth and rapid industrialization have been achieved. While the contributions of small businesses
to development are generally acknowledged, entrepreneurs face many obstacles that limit their long-term survival and development. Research on small-business development has shown that the rate of failure in developing countries is higher than in the developed world. Scholars have indicated that starting a business is a risky venture and warn that the chances of small-business owners making it past the five-year mark are very slim.

Starting and operating a small business includes a possibility of success as well as failure. Because of their small size, a simple management mistake is likely to lead to sure death of a small enterprise hence no opportunity to learn from its past mistakes. Lack of planning, improper financing and poor management have been posited as the main causes of failure of small enterprises.

Naturopathy falls under small and medium enterprises Massage therapy is the main focus in this study. Although body massage therapy is a developing phenomenon in the developing countries, the importance of the same cannot be underestimated. Body massage plays a vital role in management of stress and other health conditions that face the modern society. One of the main contributors to our everyday stress is our workplace that costs employers billions of dollars on lost productivity and healthcare. More and more employers and employees are recognizing that a regular massage can reduce the physical and mental effects of stress, thus reducing burnout and stress related diseases (Geddes & Grosset, 1997).

Despite many body massage therapy businesses effort to mitigate sicknesses and conditions through massage therapy, there are many factors that undermine this effort. It’s therefore the purpose of this study to investigate factors hindering its growth and come up with recommendations for possible adoption.

**Theoretical Framework**
This study is based on various theories especially the theories propounded in the below diagram:

![Diagram](source: Own Conceptualization)
**Conceptual Framework**

The conceptual framework below shows how the dependent variable and the independent variables relate and it gives the direction of this paper.

![Conceptual Framework Diagram](diagram)

**Independent variables** | **Dependent variable**
---|---
Pricing | Demand of Naturopathy services
Perception |  
Conceptual skills |  
Ethical aspects |  

**Source: Own Conceptualisation**

The conceptual framework above shows the conceptualization of how the dependent variable and the independent variables relate. As is seen in the chart above, the independent variables which include pricing, public perception of body massage therapy, lack of conceptual skills as well as ethical aspects among other factors will affect the productivity of body massage businesses.

**Operationalization framework**

![Operationalization Framework Diagram](diagram)

**Statistics variable** | **Parameters** | **Dependent**
---|---|---
Gender | Pricing, Perception, Conceptual | Demand of Naturopathy Services
Age |  
Income level |  
Education level |  

**Source: Own Conceptualisation**

The operational framework shows the relationship between the variables and the statistics aimed at investigating the relationship between the dependent variable, the parameters and the statistics of the study. The above framework shows the parameters and statistics influence the demand of naturopathy or massage therapy services. The statistics will act as a guide for the investigations into the factors that influences the demand of naturopathy services.
Concept of Growth
Growth is the single top strategic priority for many firms yet growth, as Simons (1999) has observed, is inherently risky. Even when supported by operational policies, growth puts pressure on a firm’s infrastructure and employees, which increases the risk of mistakes by acts of either omission or commission. These mistakes cost money and destroy value. Firm’s growth in general refers to increase in size. The most frequently used measure for growth has been change in the firm’s turnover and change in the number of employees. However, it has been found that these measures, which are frequently used in the small enterprise context, are strongly inter correlated.

Concept of Naturopathy
Health is the most natural state of being and it’s the ultimate aim of Natural healing systems that adopt a holistic view (body, mind and spirit). Most diseases are of our own making. They are the result of a long term abuse in the form of living habits, faulty nutritional patterns and health unfriendly environmental factors. We are currently witnessing the integration, on an ever-widening scale of alternative therapeutic practices and techniques into mainstream Western health care. Alternative therapies are safer and less invasive the main emphasis is laid on preventing disease and improving quality of life. The public are becoming more aware of higher success rates over conventional medicine in some mental, emotional and physical ailments.

Over the last twenty years there has been a remarkable shift in attitude and there has been a revival of interest in natural therapies because of its value and also as a move away from the side effects of conventional medicine. Prior to this, alternative medicine was viewed with skepticism and even ridiculed. Today, ordinary people, doctors and scientists are becoming more open minded - accepting, for example, that alternatives cannot always be tested in laboratories like synthetic pharmaceuticals, and, at the same time, allowing themselves rather to be increasingly impressed by results.

Medical establishments now recognise the value of alternative therapies, whether used alone or as a complement to other treatments Naturopathy (also known as naturopathic medicine or natural medicine) is an alternative medical system that focuses on natural remedies and the body’s ability to heal and maintain itself. It is the science and art of preventing, curing or alleviating ill health using treatment modalities in harmony with the laws of nature.

Naturopathy is a healing art of assisting a person in recovery from illness and maintaining well-being through stimulation, enhancement and support of the
inherent healing capacity of his or her body by using natural means (Whorton, James. C 2002). It emphasizes that the body can heal itself if it is appropriately encouraged to do so. To facilitate complete recovery the underlying cause must be addressed. Health and disease are conditions of the whole organism, a whole involving physical, emotional, genetic, environment and social factors. The physician must treat the whole person and should be a catalyst for healthful change and motivate the patient to assume responsibility for his or her own health.

Natural therapies range from those that work mainly via the body such as massage, osteopathy, chiropractic and physiotherapy; through those that deal with energy balance such as acupuncture, reflexology, homeopathy, reiki and shiatsu; those that deal with lifestyle such as diet, nutritional supplements and exercise; those that use herbs; to those that approach from the mental to emotional level such as hypnotherapy, psychotherapy and spirituality (Mark Evans, 1997). Naturopathic medicine began in the United States in the early 1900’s by a German-born healer, Benedict Lust, and was more formalized and systematized by Henry Lindlahr, MD. In his published volumes on natural therapeutics (Lindlahr, 1919), Lust defined naturopathy as the use of nontoxic healing methods derived from the best traditional healing systems from around the world.

The level of naturopathic training varies among traditional naturopaths. Traditional naturopaths may complete non-degree certificate programs or undergraduate degree programs and can certify at a practitioner level with the American Naturopathic Medical Certification Board (ANMCB) and generally refer to themselves as Naturopathic Consultants in USA. Medical Doctors with supplemental training in Naturopathy can become National Board Certified Naturopathic Physicians through the ANMCAB.

In Kenya, Kenya Institute of Alternative Medicine and NATHEPA (National Traditional Health Practitioners’ Association) currently under Ministry of National Heritage and Culture were formed in order to register genuine practitioners and protect indigenous knowledge with respect to Traditional medicine. However these bodies are weak as certification boards for therapists. The government has not yet passed a Bill to regulate practitioners in Alternative and Complementary Medicine (CAM) and most qualified therapists have certification from mainly UK, America and Indian colleges. In this study the emphasis was on one branch of Naturopathy called body massage Therapy.

**Massage therapy**

Body massage is the manipulation of the soft tissues of the body done manually or with mechanical aids. Target tissues may include muscles, tendons, ligaments, skin, joints, or other connective tissue, as well as lymphatic vessels. Massage can be applied with the hands, fingers, elbows, knees, forearm and feet.
Massage therapy is one of the oldest forms of therapy known to man and nothing can match the relaxing and invigorating power of a skillful manual massage. The use of touch to relieve aching muscles, to give comfort, to express love is as old as humankind and it is one of the most sought after treatments to alleviate stress. The relaxation and healing powers of massage have been well documented over the past 5000 years. Writings on massage have been found in many ancient civilizations including Rome, Greece, India, Japan, China, Egypt and Mesopotamia. A biblical reference from 493 BC documents daily massage with olive oil and myrrh as a part of the beauty regimen of the wives of Xerxes (Esther, 2:9-12). Hippocrates, the so called ‘father’ of medicine, writing in the 5 BC, stated that “The physician must be experienced in many things, but assuredly in rubbing. Rubbing can bind a joint too loose and loosen a joint too rigid” and suggested that the only way to health was to have a scented bath and a massage using oils every day (Mark Evans 1997).

In professional settings massage involves the client being treated while lying on a massage table, sitting in a massage chair, or lying on a comfortable mat on the floor. The massage subject may be fully or partly unclothed. Parts of the body may be covered with towels or sheets. The room should be warm and peaceful. Vegetable oil or a blend of Aromatherapy oils is used by the masseuse. There are over eighty different recognized massage modalities and most are less than 20 years old (Macgregor, 2007). Different methods are used for different body parts and effects. The 4 basic forms of massage are;
- Percussion or drumming – the movement includes pounding capping. It’s the most stimulating and recommended in areas with sufficient bulk of muscles
- Friction or pressure – the movement is done with thumb in a small, circular movement thereby reducing muscle tension.
- Petrissage or kneading – the movement include thumb kneading, draining. It’s a stronger and deeper movement and it improves blood and lymph flow and eliminates muscle fatigue.
- Effleurage or stroking – this is a very relaxing movement where the whole palm is used with more pressure applied towards the heart and less pressure applied away from the heart.

As technology evolves and our ability to measure the outcomes of new techniques increases, newer styles are developing all the time. The most Popular Body Massage Therapies are: Swedish Massage Therapy, Aromatherapy Massage, Hot Stone Massage, Deep Tissue Massage, Thai Massage, Reflexology and Sport Massage.

Knowledge of human anatomy and physiology as well as correct techniques and movements are very important when performing massage therapy. Together with
a caring attitude of the therapist and a comfortable, quiet and clean environment, massage therapy can bring about total relaxation; freeing the mind and body from stress, anxiety and tension. Physiological benefits to the body are: Triggers the release of endorphins, the body’s natural painkiller. Improves supply of oxygen and nutrients to body tissues. Improves elimination from the body of chemical waste e.g. lactic acid that can lead to pain and stiffness in the joints and muscles. Helps to ease stiff joints therefore improving mobility and flexibility. Lowers the amount of stress hormones that weaken the immune system.

**Contraindications**
Massage therapy appears to have few serious risks if it is performed by a properly trained therapist and if appropriate cautions are followed. Side effects of massage therapy may include temporary pain or discomfort, bruising, swelling, and a sensitivity or allergy to some massage oils. Massage should not be done in any area of the body with blood clots, fractures, open or healing wounds, skin infections, or weakened bones or where there has been a recent surgery. Pregnant women should consult their health care provider before using massage therapy.

**Statement of the Problem**
Despite many body massage therapy businesses effort to mitigate sicknesses and conditions through body massage therapy, there are many factors that undermine their effort hence the proposed study.

**Objectives**
This study sought to respond to the objectives and related questions:

i. To determine how body massage business is priced in Nairobi.

ii. To find out the effect of the perception of body massage in massage business in Nairobi.

iii. To determine how conceptual skills affects body massage business in Nairobi.

iv. To examine ethical issues in body massage business in Nairobi.

**Research Questions**
In order to achieve the objectives above, this study was guided by the following research questions:

i. How is the pricing of body massage business in Nairobi?

ii. What is the perception of body massage in body massage business in Nairobi?

iii. How do conceptual skills affect body massage business in Nairobi?

iv. How do ethical issues affect body massage business in Nairobi?
Methodology
Research Design
The research adopted a descriptive approach. Descriptive survey was preferred for it is used to obtain information concerning the current status of a phenomena and purposes of these methods is to describe “what exists” with respect to situational variable ,that is, it looks at relationship between and among variables.

Target Population and Sample Size
The sampling frame describes the list of all population units from which the sample is selected (Cooper & Schindler, 2003). Representative samples were used to collect information from various respondents. A sample was collected through stratified sample design. This enabled the categories of population well represented thus increasing the level of accuracy. This method was appropriate for selecting statistical items. From each stratum, the study used simple random sampling to select a sample of 120 respondents.

Data Collection Procedures
Both open and closed questions were distributed at random. For the closed questions, the respondents were to provide ‘yes’ or ‘no’ or other answers whereas open ended questions, the respondents were free to express their opinion. A maximum of three days period were given to the respondents to answer the questions before collecting them.

Data Analysis
Before processing the responses, the completed questionnaires were edited for completeness and consistency. The data were then coded to enable the responses to be grouped into various categories. Data collected was analyzed by descriptive analysis. The findings were presented using tables and charts. Data analysis used SPSS and Microsoft Excel. Tables were used to summarize responses for further analysis and facilitate comparison.

Results and Discussions
This study focuses on discussions on the four independent variables: perception, pricing, conceptual skills and ethicals and their influence on demand for Naturopathy services. The data was coded to enable the responses to be grouped into various categories. Much attention focused to the recurring responses that formed the themes of the study.

Age of massage clients
Not only do young professionals are in the massage therapy centers but also other age brackets are well represented. This gave reliability to information which was obtained from the massage therapy centers.
Fig 1 Gender

![Gender Frequency Chart]

Source: Research Data

Majority of the respondents are those between the ages of 18-25 followed by those of between age 26-35. The respondents of over 46 and above were clients who were 8 out of 10 sampled clients. It is therefore true to conclude that most of the clients who visit the massage therapy are both young and old people. However the public’s negative perception on massage therapy keeps younger generation away.

**Gender**

Massage therapy centers which are gender sensitive will look balanced in decision making as they consider all aspects of life out of the mix of employees and the end results will tend to be more perfected than massage therapy centers which employ one sex more than the other.

Figure 2: Gender

![Gender Pie Chart]

Source: Research Data
**Level of Education**

Figure 3: Educational Level

Masseurs of the KCSE qualifications are the highest with 70% while those with post secondary level of education being less than 1%, 17% had first degree and 4% had postgraduate qualifications. first degree and post graduate qualifications holders hold managerial positions in these centres while others are clients.

**Marital Status**

Table 1:

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>10</td>
</tr>
<tr>
<td>Single</td>
<td>67</td>
</tr>
<tr>
<td>Separated</td>
<td>8</td>
</tr>
<tr>
<td>Divorced</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: Research Data

Sixety seven (67 %) respondents were single, 10% were married, 8% were separated and 5% were divorced. Most of the employees of the massage therapy centers are the young who are yet to get married.

**Income Level of Massage centre Operators**

Figure 4:

Level of Income of the Respondents

Source: Researcher Data

*Journal of Education and Social Sciences*
Majority of the respondents have monthly income between KShs15,000-19,000 represented by 54%, followed by those earning over KShs20,000 and above represented by 42% while 2% earn between KShs5,000-9,000 & above, and 2% between KShs10,000-14000. Although most masseuse indicated that they are lowly paid they did not include the allowances, commissions or even tips from clients.

**Length of Service**

<table>
<thead>
<tr>
<th>Length of Service</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than a year</td>
<td>10</td>
</tr>
<tr>
<td>2-5 year</td>
<td>52</td>
</tr>
<tr>
<td>6-9 years</td>
<td>14</td>
</tr>
<tr>
<td>10 years &amp; above</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
</tr>
</tbody>
</table>

**Source: Research Data**

Majority (52) of the respondents worked for massage therapy centers between 2-5 years, followed with 14 respondents who have worked between 6-9 years, 10 had worked for less than a year and 4 worked for over 10 years. A good number seems to have looked for the massage therapy centers for years. This gave the information obtained conformity and reliability as employees’ long stay indicates continuity and consistency. However, the disadvantage with long-time employees is enveloped in the fact that they do not embrace change like the younger generation.

**Figure 5:**

Length of Service

Source: Research Data
Sixty five (65%) respondents have stayed with the firm as employees or clients between 2-5 years, 18% have been there between 6-9 years, 12% and 5% been there for less a year and over 10 years respectively.

**Rating of Charges of the Massage Therapy Service**

Table 3:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very expensive</td>
<td>9</td>
</tr>
<tr>
<td>Expensive</td>
<td>55</td>
</tr>
<tr>
<td>Reasonable</td>
<td>26</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
</tr>
</tbody>
</table>

Source: Research Data

Table indicates that the charges were expensive which explains why prospective clients shy away from massage therapy centers.

Figure 4:

**Rating of Charges of the Massage Therapy Service**

Source: Research Data

Figure shows that 61% of the respondents indicated that the services were expensive, 29% the price were reasonable while 10% indicated the services were very expensive. It can be concluded that the the services offered are expensive.

**Pricing Approaches**

This part sought to establish the respondents’ views on the pricing approaches
employed by the firms to enhance their growth. The respondents were use the following scale to rate the pricing approaches; 1=Very great extent, 2=Great extent, 3=some extent, 4=Not Great Extent, 5=Not at all. The results were as presented in the table and figure below.

Table 4: Pricing Approaches.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Enhances Growth</th>
<th>Doesn’t enhance</th>
<th>Total Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Below competition pricing</td>
<td>4</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Above competition pricing</td>
<td>16</td>
<td>40</td>
<td>6</td>
</tr>
<tr>
<td>Parity pricing</td>
<td>3</td>
<td>7</td>
<td>51</td>
</tr>
<tr>
<td>Differential pricing</td>
<td>37</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>Price optimization</td>
<td>31</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Research Data

Table 5 shows that a total average of 8 respondents indicated that the price approach is below competition pricing while 39 indicated it was not, 31 indicated it was above completion price while 19 indicated it was not. A total average of 31 indicated the pricing parity was enhanced business growth while 20 indicated it was not. A total average of 20 indicated pricing differential approach enhanced business growth while 20 had a contrary opinion. A total of 12 respondents indicated that price optimization approach enhanced business while 32 indicated it did not.

Figure 7. Pricing Approaches.

Source: Researcher Data

Figure 7 gives evidence that pricing influences the demand for massage therapy services in urban centers.
Public Perception of Massage Therapy
There was search to establish the respondents’ views on the general public’s perception of various massage therapy services offered. The respondents were asked to rate the public perception of the massage therapy services using a scale of ‘very positive’, ‘positive’, ‘suspicious’, ‘negative’ and ‘un-African’. The results were as presented in the table and figure below.

Table 5:
Public Perception of Massage Therapy
<table>
<thead>
<tr>
<th>Rating</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very positive</td>
<td>2</td>
</tr>
<tr>
<td>Positive</td>
<td>5</td>
</tr>
<tr>
<td>Suspicious</td>
<td>34</td>
</tr>
<tr>
<td>Negative</td>
<td>42</td>
</tr>
<tr>
<td>Un'African</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
</tr>
</tbody>
</table>
Source: Researcher Data

Table 8 shows respondents indicated that the pricing approaches were very positive, 5 said were positive, 34 said were suspicious, 42 said were negative and 7 said were un-African. The responses of ‘very positive’, ‘positive’ were considered to denote positive perception while the response ‘suspicious’, ‘negative’ and ‘un-African’ were considered to denote negative perception. The interpretation is that the general public has a negative attitude towards massage therapy.

Conceptual Skills
Figure 8:
Conceptual Skills

Source: Research Data

Figure 8 exhibits that demand for massage therapy service is affected by lack of conceptual skills.
Ethical Aspects

Table 6: Ethical Aspects

<table>
<thead>
<tr>
<th>Ethical aspect</th>
<th>Response Influence</th>
<th>Didn’t Influence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of confidentiality</td>
<td>Yes 60</td>
<td>No 20</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I do not know 10</td>
<td></td>
</tr>
<tr>
<td>Culture, taboos and norms that dictate the amount of body exposure</td>
<td>65</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>The gender of the masseuse if the case is one of opposite sex</td>
<td>70</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Issues of undressing limiting accessibility</td>
<td>52</td>
<td>28</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher Data

From the table above 60% of respondents indicated that lack of confidentiality would influence the demand for massage therapy services while 30% respondents indicated it does not influence. 65% respondents indicated that Culture, taboos and norms that dictate the amount of body exposure can influence the demand for massage therapy services while 25% had a divergent view. 70% respondents indicated that the gender of the masseuse if the case is one of opposite sex can influence the demand for massage therapy services while 20% had the opposite view. 52% respondents indicated that issues of undressing limiting accessibility can influence the demand for massage therapy services while 38% respondents had a divergent opinion. Some respondents complained of being compelled by their employees to engage in immoral practices by some clients. Consequently some had opted out of employment due to such situations.

Conclusions and Recommendations

There are more female employees in massage therapy centers than male. The study also established that most respondents had low levels of education. Most massage therapists are not professionally trained and have learnt basic skills through observing their colleagues at work or from colleges offering courses that are not comprehensive enough to cover units such as Professional ethics, counseling, physiology and anatomy.

A good number seems to have worked in the massage therapy centers for years. Majority of the respondents were young and single. The massage therapy services are expensive which explains why prospective clients shy away from massage therapy centers. The various aspects of pricing are areas of concern that apparently impact negatively on the growth in demand in clientele base.

It was established that the general public has a negative attitude towards massage
therapy. Ethical codes and policies are lacking or inadequate resulting to unprofessional client-employee relationship which creates a negative publicity thus damaging the profession.

The findings discussed above evolved the following recommendations which touch on all aspects of the variables examined in the study and in line with research objectives, research questions and the conceptual framework. As stated earlier, the study will enlighten business owners on how to improve their businesses’ productivity and performance by confronting the challenges and possibly adopting some of the recommendations articulated in the study.

The government needs to come up with a Bill to regulate practitioners in Alternative and Complementary Medicine (CAM). A certification association is required to register genuine therapists.

The management of the centers needs to put measures in place to work on their pricing to suit the needs and expectations of their clients. Business plans should be embraced that includes strategies on how one intends to grow the business. Managers should invest in research to develop an understanding of price elasticity.

Management and stakeholders need to address public perception by embarking on public education campaigns through word of mouth, publicity articles in the print media, TV, radio etc. on benefits of massage as a therapy. The use of opinion leaders, celebrities who shape the consumer behavior can help boost the negative image and perception of massage therapy. The stakeholders must put measures in place to improve the skills of the staff. The training institutes in Kenya need to have a more comprehensive course in anatomy, physiology and professional ethics.

 Therapists should strive for professional excellence and should acknowledge the confidential nature of the professional relationship with clients and respect each client’s right to privacy. Business should be conducted with honesty and integrity and therapists must not engage in any sexual conduct or sexual activities involving their clients.

References


Influence of Conversion Decision of Non-Bank Financial Institutions into Full Fledged Commercial Banks in Kenya

Corresponding Author
Tom Nyamache, School of Business and Public Management, MKU
Email: mokweri@gmail.com,
Cell: +254723282500

Njung’e Kamau, Family Bank
Cell: +254724 261 461

Ruth Nyambura, Research Scholar, Egerton University
Email: runyams@yahoo.com,
Cell: +254715133505

P. Y. Mishra, Devi Ahilya University Indore (MP) India
Email: pymishra@yahoo.com,
Cell: +919827225858

Abstract
Conversion of non-banking financial institutions to fully fledged commercial banks is very critical to share holders, the board’s management and staff, customers, general public, the economy notwithstanding. This conversion has however never been without challenges. This paper therefore examines the factors affecting non-bank financial institutions conversion into fledged commercial banks in Kenya. While a lot of studies may have been done regarding the general performance by banks and non-banks financial institutions, none has so far specifically highlighted the factors that affect their conversion decisions, yet factors affecting the decision undertaken during this process are a major challenge to those undergoing the process. In order to achieve the objectives, a survey of the four banks that fall under this category namely, K-Rep, Family Bank Limited, Equity Bank, and East Africa Building Society (EABS) Banking Limited and whose headquarters are situated within the Nairobi geographical region comprise the target population of the study. Convenient samples of three branches (the head office and two other branches) were purposely selected from each institution. From each branch four key conversion decision makers were purposely selected to participate in the significance of study. Overall, the total sample size comprised of forty-eight (48) respondents.

Key Words: Banks, Financial Institutions, Commercial

Introduction
As envisaged by Archrol (1991), the last two decades have witnessed dramatic
changes in the business and turbulence. This turbulence in the business environment which is created by macro-environmental changes, namely, technological advances and globalization, poses challenges that are to be addressed by marketing practitioners because the issues have a role in driving the marketing practice. According to Reich (1991), borderless markets emerge when four flows of products/services; people, money and information are driven by market practices and without government intervention. In this borderless economy, marketing practices related to procurement, marketing mix and customer understanding are bound to change. The traditional beliefs about the role of the market economy and private enterprises across the world have been changing over the last decade. This has resulted in privatization of the public sector, less regulation of most industries and development of pro-competitive policies to encourage innovation and the efficiency of different sectors of the economy, across the globe (Reich, 1991). Research has shown that efficiency in the banking sector is recognized by bankers as a precondition for macroeconomic stability and important for effective monetary policy execution (Hartmann, 2004; Ngalande, 2003). In addition, a banking sector’s ability to allocate credit efficiency is expected to have positive implications for economic growth (Glabis, 1997).

For the better part of the last three years, Kenyan banks have enjoyed huge profits, greater than other sectors of the economy. A review of all the 44 banks currently operating in Kenya reveals that the banking sector is realizing robust growth (Market intelligence: Banking survey, 2006). In 2005, profits before tax amounted to ksh. 19.5 billion Compared to ksh. 15.5 billion in the year 2004, a growth of 27.72%. in aggregate, profits for the sector have increased consistently from ksh. 8.9 billion in 2001 to the current level, a growth rate of 119%. Total assets in this sector have now reached ksh. 648 billion, a growth rate of 11% from ksh. 584 billion in 2004. Customer deposits were ksh. 483 billion in 2005 compared to ksh. 442 billion in 2004, a growth rate of 9.3% (Market intelligence: Banking survey, 2005).

Overall, in 2004 and 2005, the banking industry grew by a margin between 11% and 17.6% while the economy grew by 5% and 4.3% respectively. This is an indication that the banking sector is accounting for an increasing share of national output over other sectors of the economy collectively (Market intelligence: Banking Survey, 2005). The growth indicates that banking entrepreneurs have great investment attention in this sector, to the extent that most institutions that once operated as non-bank financial institutions have shown an increasing trend of transforming themselves into fully fledged commercial banks. However, these attempts have met more facilities than success leading to eminent closures.
Non-bank financial institutions in Kenya are licensed and regulated by Central Bank of Kenya (CBK) like other commercial banks. Over the years the non-bank financial institutions in Kenya have been faced with many operational problems and challenges. During the 1980’s, there were over 30 existing non-bank financial institutions with the main objective of taking savings deposits and lending money to members or customers to purchase land and buy houses. Most of them collapsed and wound up during the 1990’s as they attempted to transform themselves to cope with the liberalized economy and the banking legislation on the services they could provide. The government enacted the Building Society’s Act Cap 489 in the early 1990s giving them new powers to provide a wider range of financial services. In the years that followed, several other amendments were made on products and services the non-bank financial institutions could offer in addition to providing arrangements to convert into public limited companies and become fully fledged commercial banks.

Statement of the problem
A lot of study review general performance of banks and non-banks financial institutions but non highlights factors that affect their conversion decisions in Kenya, hence the study.

Objectives of the study
General Objective
The general objective was to access the factors affecting conversion decisions of non-bank financial institutions into fully fledged commercial banks in Kenya.

Specific Objectives
(i) Establish whether CBK regulations affect conversion of non-bank financial institutions to fully fledged commercial banks.

(ii) Establish whether ownership and corporate governance of non-bank financial institutions affect their conversion to fully fledged commercial banks.

(iii) Establish whether level of skills and training affect non-bank financial institutions conversion ability.

(iv) Establish the role of Information Communication Technology (ICT) level in the process of non-bank financial institutions’ conversion into running fully fledged commercial banking.

(v) Determine the policy and procedural measures necessary for smooth conversion from a non-bank financial institution to a fully fledged commercial bank.
Significance of the Study
Conversion of non-bank financial institutions to fully fledged commercial banks is critical in ensuring that there is a level playing ground in the banking sector and elimination of exploitation of the common mwananchi by the multinational banks which used to charge very high fees for their services. It is therefore hoped that this study will be important to first, the top management of the yet to convert non-bank financial institutions, those already converted but still experiencing turbulent times, the shareholders, and the government of Kenya in general as far as poverty alleviation strategy is concerned.

The study analysis has relevant findings on issues relating to non bank financial institutions conversion. The study will also add knowledge to the existing literature in the banking industry to serve as reference points for other researchers who would wish to conduct further research in the area.

The Scope of the Study
The study focused on the four selected former non-bank financial operating within the Nairobi geographical area. The main focus was factors influencing the conversion decisions of the non financial institutions into commercial banks.

Literature Review
Various Authors have looked different aspects of performance in banking industry. For instance, Sathye (2001) studied the sources of inefficiency in Australian banks,

Tripe (2003) also explored efficiency of New Zealand banks through time. The only known closest study to this one is by Neal (2004) who looked for differences in efficiency between different types of banks, and investigated scale effects.

Methodology
Research Design
This provides the methodology of the study and covers the research design, target population, sample design, data collection methods, data analysis and expected output.

The study adopted a descriptive research design, which involved a visit to the respondents in their natural environment to explain their experiences regarding various variables. Descriptive research is defined as a process of collecting data to test hypothesis or answer questions concerning the current status of the subject of study (Mugenda and Mugenda, 2003) and it also determines and reports how things are or happened. It seeks to provide insights into research problems by describing the variables of interest with a view of defining, estimating, predicting,
and examining associated variables. In this particular study, the design was sought to validate the conceptual framework model as well as establishing any other factors influencing the conversion process. The validity of the conceptual framework was tested through incorporation of the independent variables as research questions in the data collection instruments (Campbell et al, 1963).

**Data Collection tools and Procedures**
Data was obtained mainly by use of the questionnaire method to collect quantitative and qualitative data. The questionnaires had both open and closed ended questions. Interviews were also considered especially for those who needed clarification on filling of the questionnaires. Secondary data was obtained from books, internet, and other publications on issues related to the problem. The questionnaires was developed and administered to the selected respondents. A pilot study was carried out before the main research in order to determine the reliability of each section of the research instruments. It also helped to improve data collection and to revise the instruments where necessary.

**Results & Discussions**
**Bank Performance Theories**
There seems to have been research leading to theoretical development in the general banking industry as compared to the non-bank financial institutions’ performance. Theoretically the bank’s characteristics that might affect performance are not universally ascertained. First, the Tier One Capital (TOC) approach, as defined by the Bank for International Settlements, includes common stock, disclosed reserves, and retained earnings (Basle Committee on Banking Supervision, 1998). This item has become an important feature to assess bank’s strengths. The second approach is the total bank assets (TBA). This is the key item extensively researched and it calculates the growth rates of bank tier one capital and assets (GTOC and GTBA respectively) as well as the volatility of these growth rates, as revealed by their standard deviation for the period under consideration.

In another theoretical perspective, Keeton (1999) argues that an increase in loan growth is likely to lead to higher loan losses only if the source of the faster loan growth is a shift in the supply of the bank credit. However, the link between loan growth and loan losses is far from airtight, as there are numerous other factors involved.

Other recent bank performance theories have simply grouped performance factors into those within the bank the bank and for those outside it. For instance Alhadeff and Alhadeff (1964), Rhoades and Yeats (1974), Tschoegl (1983), and
Akhavein et al. (1997), include bank size in the growth regression. These authors therefore used performance variables namely growth of bank assets (GTBA) and tier-one capital (GTOC), the volatility of the growth in bank assets (VTOC), tier-one bank capital (VTOC), and banks’ pre tax profits (VPTP), as well as banks’ capital to asset ratios (CAR), and the return to equity of the banks (ROE) to estimate growth.

**Measuring Performance Based on Bank’s Internal Factors**
The potential internal factors under a bank’s control that may influence efficiency (Keeton, 1999) are as discussed below.

**Information Systems**
The way a bank structures its processes should have implications on its performance. Most banks have structured their processes according to their various lines of business such as banking, property, insurance services and even postal operations and logistics among others. This increases their ability to compete, satisfy their customers, and complete transactions accurately and address other sets of business problems (Frei, Harker and Hunter, 1998 and KPMG, 2004c). The efficiency of these processes should also have implications on the bank’s overall efficiency. It has been found in some studies that the alignment of technology, capital investments and human resources with appropriate delivery processes appears to be a more appropriate strategy to increasing efficiency in the banking industry (Frei, Harker and Hunter, 1998). Due to the importance of designing and structuring interacting processes, it is not uncommon for banks to hire managers from manufacturing enterprises to drive the process alignment of technology, human resource management (HRM) and strategy.

More importantly, it is obvious today that the level of adoption and application of ICT may also affect the efficiency of a bank. ICT is used by banks’ management and staff to transform “raw” inputs into useful inputs. It adds value by creating new source of information in an organization, rather than simply automating existing processes (Zuboff, 1985). It is viewed within a bank at two main levels.

Firstly there is overall investment in ICT. The banking sector in Kenya is continuously undertaking technology infrastructure projects, platform automating and information and transaction process upgrading. These are aimed at integrating the traditional front-office and back-office systems to reduce costs and enable the operation of smaller bank branches with fewer but more highly qualified staff.

Secondly, there is ICT functionality deployed in the production and service delivery process, which focuses on its ability to perform certain functions.
within the organization. The purchase of a computer in itself adds nothing to the productive capability of an organization. It is only after this computer has been integrated into the production technology of the firm that it adds value - the same is true of labor and other capital inputs (Frei, Harker and Hunter, 1998). The selection of ICT into effective ICT aimed at generating higher profit, which has implications on bank efficiency.

An important factor for consideration in this study is availability of automated teller machines (ATMs). This is because this factor may influence performance in the banking by affecting the cost of and revenue generated by the channel used to provide financial services. The Cooperative Banks use automated teller machines (ATMS) in Kenya to provide financial services to their clients. The increase in service delivery channels are the result of pressures from a globalised financial services industry, opportunities provided by advances in ICT and innovations in financial engineering (Frei, Harker and Hunter, 1998).

**Branch Locations**

Branches are the traditional channel used by banks for financial service provision. However, due to their fixed location their outreach is limited to the local clientele in their immediate surroundings. For most branch employees time spent with customers focuses on simple, transaction-oriented activities and basic servicing of accounts rather than on activities that are likely to lead to sales opportunities (Frei, Harker and Hunter, 1998). The pace of innovation in financial engineering and advances in ICT has brought the traditional role of branches into question. The future of branches does not lie in their elimination in favor of new service delivery channels but in transforming them into sales as opposed to service centers (Athansssopoulos, Soteriusos and Zenois, 1997). This will involve designing processes to supplement or improve employee-customer interaction that will allow bank branch employees to increase their cross-selling efforts, in addition to assessing and meeting customers’ needs.

In addition, technological advances have assisted in reducing the cost of branch networks and allowed them to expand faster into new area. This has mainly been through setting up ATMs and mobile agencies have further reduced the cost incurred by setting up fixed ATM centers that are usually found outside bank branches.

**Risk Management**

To ensure that banks maintain their customer protection objectives and control for systemic risk, which refers to the risk that the liquidity crunch problems of a few institutions spread to many other institutions that are otherwise solvent and
liquid (Berger and Humphrey, 1997). This will require banks to better align their regulatory capital to the underlying risks (Saidenburg and Schuermn, 2003). To the extent that banks can lend to less risky investment opportunities, the potential of loss is reduced, which leads to more stable profit levels and less variation in efficiency.

These risk-based capital allocation systems are designed based on the assumption that capital market frictions, such as limited public information, costly renegotiations due to defaults and agency problems between managers and outside investors, exist and drive a wedge between the cost of internal and external funds. To the extent that these frictions lead to credit constraints, allocating capital from a central office to a diverse set of projects based on an ordinal measure of the values of the project, can increase investment efficiency (James, 1996).

The move of the capital allocation decision to the bank’s headquarters or holding company makes no difference to capital budgeting decisions and investments activity because the final effect of whether a bank varies leverage to business units on the basis that they can influence i.e. business risk (James, 1996). According to James (1996) a bank’s risk can be divided into four types as follows:

(i). Credit risk refers to the risk of loss due to borrower default or failure to pay on contractual obligation in the full amount or on time. It is one source of reluctance in lending to marginal, small-scale enterprises. (ii). Business risk refers to the uncertainty of the revenues and expenses associated with activities such as loan origination, servicing and data processing. It depends on X-efficiency. (iii). Market risk refers to the risk of loss due to changes in the market price of a publicly traded bank’s assets and obligations such as foreign exchange risk, interest-rate risk and options risk on mortgages and deposits. The bank’s treasury unit is responsible for hedging against market risk. (iv). Country risk refers to the risk of loss on cross-border and sovereign exposures due to governmental actions such as the suspension of hard currency payments, radical devaluation of the currency and nationalization of assets held as investments.

To the extent that the riskier divisions face higher capital charge from head office, business unit managers may be tempted to understate the risk of their division. This behavior can be mitigated by evaluating the realized outcomes of a position relative to management forecasts, as part of the performance evaluation system of senior management (James, 1996).

**Distribution by Gender**

There are more men than women in decision making. The reason is that men are risk takers as compared to women.
Table 1.1: Response Rate

<table>
<thead>
<tr>
<th>Name of Bank</th>
<th>Sample Size</th>
<th>Returned Questionnaires</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Bank Limited</td>
<td>12</td>
<td>11</td>
<td>91.7%</td>
</tr>
<tr>
<td>Equity Bank Limited</td>
<td>12</td>
<td>9</td>
<td>75.0%</td>
</tr>
<tr>
<td>EABS Bank Limited</td>
<td>12</td>
<td>5</td>
<td>41.7%</td>
</tr>
<tr>
<td>K-Rep Bank Limited</td>
<td>12</td>
<td>8</td>
<td>66.7%</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>33</td>
<td>68.8%</td>
</tr>
</tbody>
</table>

Source: Survey Data (2007)

Distribution by Age
Most decision makers in the banking industry are mature and understand undertakings. 62% were youthful (30 – 39 years). This could be interpreted that banking sector decision in Kenya are highly dominated by youthful professionals.

Figure 1.2 Distribution of Respondents by Age

![Distribution of Respondents by Age](image)

Source: Survey Data (2007)

Education Level
Top decision makers of institutions are highly qualified (62%) in running institutions. They easily implement policies.
Most of the senior Staff Management have had enough experience in Banking and hence instrumental in the change of Management process.

Table 1.4
Distribution of Length of Service

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of service in the Institution</td>
<td>33</td>
<td>2</td>
<td>9</td>
<td>5.2308</td>
<td>2.61896</td>
</tr>
<tr>
<td>Length of involvement in Management</td>
<td>33</td>
<td>1</td>
<td>7</td>
<td>2.5385</td>
<td>1.94145</td>
</tr>
</tbody>
</table>

Source: Survey Data (2007)

**CBK Regulations on Conversion of Non-bank Financial Institutions**
Majority (95.8%) are aware of conversions whereas 4.17% are ignorant of CBK’s conversion approach.
CBK’s regulations and bureaucracies largely affect conversion of non-bank financial institutions to full fledge commercial banks. That institutions must comply with CBKs policies e.g. compliance on returns on liquidity, insider borrowing, capital structure among other issues.

**Benefits of Conversant to Commercial Bank**
There is need for a wider range in products and services (87.9%) which in turn leads to a bigger market from the customer as opposed to non – bank financial institutions where it deals with their members only. Further, participation in clearing house (48.5%) which fraudsters clearance of cheques within shorter period and participation in international trading (77.6%) thereby attracting more revenue for the bank. This means bankers already know the benefits for conversion and hence highly motivated to move their institutions to the full-fledged banking status.

**Table 1.6**
**Most Important Benefits of Conversion to a Commercial Bank**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to a wider range of products and services</td>
<td>29</td>
<td>87.9</td>
</tr>
<tr>
<td>Avenue to bigger markets such as international trading</td>
<td>25</td>
<td>77.6</td>
</tr>
<tr>
<td>Permission to participate in clearing house</td>
<td>16</td>
<td>48.5</td>
</tr>
<tr>
<td>Level ground for competition in other banks</td>
<td>9</td>
<td>27.3</td>
</tr>
</tbody>
</table>

Source: Survey Data (2007)
Challenges Facing Conversion of Non–Bank Financial Institutions

Regarding the challenges facing non–bank financials non–bank financial institution conversion to fully fledged commercial banks, the responses are as summarized in table 9.6 below. High capital base requirement emerged to be the major challenge facing non–bank financial institution conversion to fully fledged commercial banks. The CBK has set the minimum requirement now at 1 billion Kenya shillings. Strict regulations and bureaucracies of CBK have been a challenge according to responses. Image building is also seen as a challenge as most customers still prefer to the established banking institutions and therefore neglecting the recently converted non banking institutions to convince them that they too offer services similar and in fact at times better than the other banks. An example is Family Bank where the management has been in forefront to advise the clients that it has features just like any other banking institution in Kenya. Change of core banking system is costly as the systems in running the non bank institutions is different from that of banks. The various products and services demands need for a stable system as requirement from CBK. This results show that a part from other internal environments challenges that are obviously under control of the candidate institutions managements, the role of CBK in the banking sector is very important and may need to be re-examined from time to time to encourage performance of the banking sector.

Table 1.7
Challenges Facing Conversion of Non–Bank Financial Institutions

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>High capital base</td>
<td>27</td>
<td>81.8</td>
</tr>
<tr>
<td>Strict regulation and bureaucracy of CBK</td>
<td>24</td>
<td>72.7</td>
</tr>
<tr>
<td>Change of core banking system is costly</td>
<td>19</td>
<td>57.6</td>
</tr>
<tr>
<td>Ownership</td>
<td>15</td>
<td>45.5</td>
</tr>
<tr>
<td>Image building</td>
<td>12</td>
<td>36.4</td>
</tr>
<tr>
<td>Process of conversion very long</td>
<td>8</td>
<td>24.2</td>
</tr>
<tr>
<td>Competition from other established commercial banks</td>
<td>5</td>
<td>15.2</td>
</tr>
</tbody>
</table>

Source: Survey Data (2007)

Difference between non Bank Financial Institutions and Commercial Banks

The differences between non–bank financial institutions and commercial banks are outlined in table 9.7 below. Majority (79%) of the respondents could only recall that banks have a wider range of products and services that non–bank financial institutions with a few (36%) citing that the regulatory authorities
are different because they are each controlled by a different Act of Parliament. Overall, the results indicated that the management of the non-bank financial institutions is different from that of a commercial bank, the capital requirements are also different and hence there is a clear difference between non-bank financial institutions and commercial banks.

Table 1.8. Difference between non Bank Financial Institutions and Commercial Banks

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks have a wider range of products and services than a building society</td>
<td>26</td>
<td>78.8</td>
</tr>
<tr>
<td>The capital requirements are different</td>
<td>25</td>
<td>75.7</td>
</tr>
<tr>
<td>Controlled by different acts of parliament</td>
<td>23</td>
<td>69.7</td>
</tr>
<tr>
<td>Management of the building society is different from that of a commercial bank</td>
<td>15</td>
<td>45.5</td>
</tr>
<tr>
<td>Regulatory authorities are different</td>
<td>12</td>
<td>36.4</td>
</tr>
</tbody>
</table>

Source: Survey Data (2007)

Ownership and Corporate Governance of Non-bank Financial Institutions
Most non-bank Financial Institutions have to perform a lot of restructuring and internal process reengineering for them to qualify to convert to commercial banks as per the CBK rules.

Figure 1.9. Non-bank Financial Institutions Strength in Corporate Governance to Operate a Bank

Source: Survey Data (2007)
Ownership of Non-bank Financial Institutions Impacts Heavily on their Corporate Structure

Their reasons varied as some indicated the regulations of CBK where in most cases non financial institution were privately owned while the regulation stipulates that the banks must be limited companies. Other issues are such as high cost of conversion, and rigidness and personalized control by the ownership of non banking structure. This confirms the fact that serious corporate changes have to take place which may affect the stakeholders’ in various ways. This role presents the most difficult part on the conversion managers or change agents because of the perceived risks and fears.

Figure 2.0
Effects of Ownership of Non-bank Financial Institutions on Conversion

Levels of Skills and Training Required on Conversion

The respondents were asked whether the non-bank financial institutions have the skilled personnel to run the institution on conversion. Nearly half (45.15%) of the respondents agree to the statement while 38.45% disagreed. However, 15.4% of the respondent are neutral on the statement. This cast doubt as to availability of the required skills to convert into commercial banks meaning the institutions have to acquire the necessary skills as part of the process.

Figure 2.1, Non-Bank Institutions Personnel Skills on Conversion

There are highly skilled personnel to run non-bank institution on conversion
Role of ICT Level in the Process of Non-Bank Institutions
All the respondents agreed that the level of computerization of the non-bank institution affect conversion to a very large extent. This is obviously because on conversion clientele, product and service range increase hence level of Information Technology must be enhanced in form of electronic banking among other strategies. Respondents were in unison that ICT plays a very crucial part in the integration and competition once conversion process is complete and therefore non-bank financial institutions should embrace it.

Level of Existence of Policies and Procedures and Risk Management Framework
Adequate internal policies, procedures and risk management frameworks need to be put in place prior to conversion so as to ensure smooth process on conversion. Among the reasons given for this include the need to mitigate any risks such as losses to depositors and guide staff members to ensure the banks meet international standards.

Conclusion
The response rate from the study stood at 68.9% where majority of the respondents were highly educated people. CBK plays the most important role in conversion process, hence highly affecting conversion decision. Institutions near for conversions do not have strong corporate governance structures to operate in. We showed, that there are no enough skilled personnel in the non commercial banks to effect the conversion process calling for urgent recruitment. ICT is very crucial as a strategic asset. Much is dependent so much on ICT in form of ATMs, e-banking among other facilities. The study alludes that the process of conversion takes rather too long by sharpening internal policies, procedures and risk management frameworks.

Recommendations
Decision makers should include both genders, CBK’s role should be re-examined on regulations and policy frameworks, institutions ready for conversion should be aware that it takes more than licensing from CBK to ensure full conversion process, non bank financial institutions that wish to convert must plan to have policies, procedures, and risk management frameworks in place as pre-requisites before requesting for conversion from CBK, the government of Kenya should ensure effective and efficient infrastructure is laid down to support the banking sector.
References


Evil Eye: An African Overview
1Ruth Nyambura, 2Tom Nyamache, 3Bernard Gechiko

(Corresponding Author)
Research Scholar,
Faculty of Arts and Social Sciences
Department of History
Egerton University
P.O Box 536, Njoro
Email: mkunak2011@gmail.com

Associate Professor of Business Finance
Mt. Kenya University
P.O Box 17273, 20100,Nakuru
Email: tnyamache@mku.ac.ke
Cell: +254723282500
&
Bernard Gechiko Nyabwari
Kenyatta University
Cell:0727 986 378

Abstract
The belief of evil eye exists in Africa. It designates a complex system of beliefs and behaviours, protection and cure centering on the belief in a harmful power that is projected through the direct gaze of a person. Some people have the power and some do not. This power is stimulated by envy, anger or malice. Children, the elderly and sick people are especially vulnerable. This paper provides a historical and religious overview of evil eye practices in Africa. Evil eye offers a credible explanation for misfortune, and sociologically it has been seen to have “social control” functions, making people mindful of their social manners lest they be suspected. Evil eye belief complex is a variant of classical witchcraft beliefs, but in many areas it coexists with witches or beliefs in various beings of the night that do all the evil things attributed to witches elsewhere. The article is descriptive and relied largely on published works. The paper is an insight into the diverse African cultural practices in the era of globalization.

Key words: Evil eye, Africa, culture,

Introduction
Beliefs and trusts have been inseparable from human beings right from their origin. One can find a chain of formalities and rites among the present day’s civilized people and the root of which goes back to centuries. To identify those believes, there is need to investigate their pasts. Researchers pursue the origin
of the concept of the evil eye in the apprehensions of early men. They believe that our predecessors were ignorant to the causes of the natural occurrences around them, they were frightened and were often in pursuit of safe havens that they could first present explanation to this phenomena, second this could take them away from loneliness and assure them with powerful backup and thirdly it showed a window of hope for safeguarding their desires and expectations and bringing them out of despair and loneliness. With the advancement of the society, growth of knowledge and belief patterns, people found answers to what their predecessors were unknown. Bad spirit and gods descended from inhuman domain to the human body that had penetrating eyes. Those were the evil eyes (Gholam, 2009).

Thus evil eye belief is a widespread superstition according to which envious people can cause harm by a mere glance at coveted objects or their owners. Throughout history, man has thought that nearly every adversity was a direct result of a fateful glance caused by jealousy, envy, or frustration. Unusual eyes could cause harm to the object of their attention. In ancient America a person with a squint or a cataract would be considered to have the signs of the evil eye (Elworthy, 1986).

Foster (1972) argues that the evil eye and the fear of envy are clearly connected through the idea of visibility. It is through observation of other people’s material wealth that a person evaluates his own relative standing. For this reason concealment is one of the typical envy-avoiding strategies among the evil eye believers. In the same vein Sharbatiyan (2005) collaborates Foster’s opinion but adds that the evil eye necessarily does not have envy. A glimpse of a close friend can inflict the same effects. With this, evil eye therefore is a kind of injury and bad luck affecting a person or a thing through a glance full of love, admiration, jealousy and amazement. (Sharbatiyan, 2005).

Ancient Egyptians believed that there were three types of evil eyes. The first were unconscious evil eyes. These harm people and things, without intending to. The second type intended to harm. The third one was unseen, hidden evil which was the most scaring one. It was believed that, this eye saw all the wickedness in the world and removed poverty and ignorance (Peek, 2004).

**Objectives**

The following objectives guided the study:
1. To describe how Africans perceive the concept of the evil eye
2. To assess the influence of religion on African believe in the evil eye
3. To highlight the measures put across to curb the evil eye
Research Questions
This study was premised on the following questions
1. How do Africans perceive the concept of evil eye?
2. Do religious and cultural factors impact on the perceptions of believes held by Africans?
3. Is there cure for evil eye?

Discussion
In many African cultures the concept of the evil eyes is part of the belief systems. It is believed that a person can give someone else an evil eye either purposefully or inadvertently by directing comments of praise at that person, thereby causing harm or illness to befall them. For example, one does not tell a person that she looks beautiful, because that could bring on the evil eye (Abu, 2005).

Right from the formation of social set up, the evil eye has mostly been interpreted as bad intention and envy. With this, people are often frightened from the envious eyes hence; hide their beauties and assets from the sight of others. According to them, the evil eye might endanger their valuable and beautiful things that attract others. As such, children, domestic animals and agricultural fields/orchards are counted as the most endangered entities (Harris, 1977).

There are various thoughts about who and what types of people have an evil eye. Usually an envious person is said to harm the subject of his glance. Among the Kikuyu, If certain persons are met the first thing in the morning, you will be unlucky for the whole of that day in all you do. If the evil-eyed comes in to rest, and looks fixedly on anything, on cattle or on a child, there is doom in the glance: a fatality which cannot be evaded except by a powerful counter-charm. Worse is if the evil-eyed mutters a verse over a sleeping child, that child will assuredly die, for the incantation is of the devil, and no charm has power to resist it or turn away the evil. To avoid being suspected of having the evil eye, it is necessary at once, when looking at a child, to say “God bless it.” When passing a farmyard where the cows are collected for milking, to say, “The blessing of God be on you and on all your labours” (Cagnolo, 2006).

The Ashanti of West Africa believe that a poor or hungry person can cause stomach ache by watching someone eat (Peek, 2004). Similarly among the Karo, old barren women are likely to cause harm toward others with children. An old woman dissatisfied with her lot in life or an unusual looking person might be endowed with the power. Sometimes, a child whose mother had unfulfilled longings during pregnancy will grow up to have the evil eye (Fisher, 2002). In Chad animals assume the evil eye. Certain birds, tigers, and snakes all hold the
power of evil over their prey. Interestingly Peek (2004) noted that in nearly all cultures, ghosts and goblins are not considered to have the power of the evil eye (Peek, 2004).

Children are the most attractive subject for an evil eye. In pre-colonial Nigeria and Ghana, babies were hidden indoors with their mothers for several months before being presented to the community. The mothers marked or covered them with dirt or had an egg broken over their heads to appear unattractive. In Ethiopia among the Amhara, temporary names were given to the new babies till the age of five to protect them from the evil visitors and strangers (Abu, 2005). Krobo women on the other hand were warned not to look at a hare during pregnancy or their child would be born with a harelip. Birthmarks and other deformities were attributed to the evil eye (Opoku, 1978).

Brides are a natural object of envy. Nunn & Lenard (2000) reports that the most probable explanation of a bride wearing a veil is to avoid the evil eye. In South Africa, a substitute bride was used during the wedding rehearsal, and often the bridesmaids were dressed in identical gowns in an attempt to foil the evil eye. Peek (2004) notes that the custom of throwing rice at the newly married couple is derived from ancient American cultures in which bowls of rice were thrown in order to distract attention from the bride and groom.

**Religious Perspective of Evil Eye**

Religion was the first thoughtful effort of men for their accessibility to a kind of security in the world. Religious precedence is as old as the emergence of humanity on earth. Religion is a manifestation of human belief or attention towards unity of being or supernatural power (Bayernas, 2006). Religion was believed to explain the root of evil. For example ancient Egyptians, believed in Satan or evil soul and harms they incurred to human being. As such, one of the obligations of a pious Egyptian was to always utter a particular verse not only to ward off satanic effects but to attract offerings towards him (Gholam, 2009).

Evil eye in Christianity is considered dangerous and seen as an actual manifestation of the battle that goes on in the spiritual world. Christianity warns its believers to protect themselves from getting affected by envy and not to use the eye for evil or negative purposes on others. There are several references to the concept of evil eye and Christian principles in the bible. For example in Matthew 20:15, Jesus made reference to the believe in the parable of the labourer in the vineyard. In this parable, the owner of the land used the term “evil eye” when he asked the workers about their complaints because of the land owner’s generosity. Several other verses include: Proverbs 23:6, Luke 11:34, Deuteronomy 28: 54 (Foster, 1972).
In Islamic faith, witchcraft and sorcery is described by the Arabic term *sihr*. According to Eldam (2003), *sihr* can be equated with the English word witchcraft. Witchcraft beliefs are evident in the Holy Koran, “…Suleiman (Solomon) did not disbelieve, but the devils disbelieved teaching men magic…” The Koran also states, “I take refuge with the Lord of the daybreak from the evil of what he has created, from the evil of darkness when it gathers, from the evil of the women who blow on knots, from the evil of an envier when he envies.” Given the acknowledgment of witchcraft in the Koran, and given that the Koran is a major influence in the lives of Muslims, belief in witchcraft will most likely influence the perceptions of health and illness of Muslim individuals. The evil eye is cited as having an influence on the behaviour of many Muslims. It is transmitted by a malicious look from the envier or from excessive staring. The evil eye can thus be considered as stemming from the ill-will or envious nature of human beings (Abu, 2005).

The concept of the evil eye also features in Hindu belief and is thought to be closely linked to witchcraft. As elaborated by Abu (2005) the evil eye is related to the concept of witchcraft in the sense that it can be considered as the “capacity to cause supernatural harm.” According to Hindu belief, the evil eye can result in bad luck, broken marriages and even death. A change in character or appearance is possible, and a loss of appetite are common symptoms of the evil eye. In addition, the evil eye is believed to have the power to cause minor illnesses in children (Dwyer, 2003).

**Impact of Evil eye to African communities**

Harris (1977) affirms that the impact of the evil eye is not directly related to the faculty of sight, for it can be inflicted by an envious person who happens to be blind, or who simply hears a description of the object without actually seeing it, just as it can be caused by excessive praise without a blessing. And while the evil eye may harm someone via physical contact or a face-to-face encounter, this is not a precondition for the effect either, it is enough for the impure spirit to direct its energy towards the person, animal or object it wishes to affect.

As stated by Joshi et al (2006), accidents, sicknesses, death and other events have been thought to be caused by witches. The symptoms caused by witchcraft include feeling sluggish and ill, suffering severe body pains, headaches and excessive fevers (Dwyer, 2003). Skin disease, infertility, nightmares and insomnia are also believed to be caused by witches. Psychological symptoms like lethargy, weakness and loss of appetite may also be experienced. Thus psychological as well as somatic symptoms are featured in evil eye cases. According to most Bantus believes the evil eye can result in bad luck, broken
marriages and even death (Peek, 2004). A change in character or appearance is possible, and a loss of appetite is a common symptom of the evil eye. In addition, the evil eye is believed to have the power to cause illnesses and deaths of the newborn (Peek, 2004).

**Prevention/Cure from the evil eye**

Protection from these negative effects of the evil eye can be achieved through prayers, incantations and seeking refuge with a supernatural being. For this reason the Muslims seek the guidance of Allah by saying the prayers called the “Throne Verse” (Ayit al-Kursi) and the two Suras: “The Daybreak” (al-Falaq) and “Mankind” (al-Nas) (Quran 2: 255, 113: 1-5 and 114:1-6). The two Suras, known as al-Mu awadhatayn, are supplications for refuge and protection. Another treatment for the evil eye is the charro (ruqya) that the angel named Jibril said for the Prophet:

> In the name of Allah I recite this ruqya over you. From every ill which can harm you, from the evil of every soul [nafs] and envious eye, Allah heals you. In the name of Allah I recite this ruqya over you (Eldam, 2003, p. 67).

Foster (1972) asserts that sometimes the person afflicted by the evil eye is healed by washing himself, since the evil eye resembles a blazing torch (shu’lat nar), so that washing or ablution by water is used to extinguish it. Indeed, medication works through its opposite (dawa’ al-shay’ bi-didihi). Another incantation that made oblique reference to this “blazing torch” is one mentioned by al-Jawziyya concerning al-Tayyahi (a Bedouin traveler).

Many Africans strongly believe in the healing powers of different plants, particularly roots. They also believe in the power of some plants to ward off snakes and to cure them from snakebites. Some Africans return to their country when they are ill in order to receive this traditional healing. Folk medical therapeutic burning (moxibustion), has been observed in children from East Africa. Burns along the abdomen, wrists, elbows, and ankles may be administered to treat any cause of jaundice. Among diverse communities from East Africa, burning is also used to treat abdominal problems resulting from the “evil eye.” These burn injuries are clearly inscribed, appearing like cigarette burns. They could be confused with abusive injuries if the family’s cultural beliefs and native country’s medical practices are not considered (Peek, 2004).

In the traditional Oromo culture of Ethiopia, illness and misfortune may be considered a punishment from Waaqa for sins a person has committed, and the “evil eye” may be seen as a malevolent influence caused by an individual and
resulting in disease, especially in vulnerable young infants. For some Somalis, traditional medicine modalities include fire-burning, herbal remedies, spell-casting, and prayer. Fire-burning is a procedure where a stick from a special tree is heated till it glows and then applied to the skin in order to cure the illness. Seizures are treated with herbs and readings from the Koran. Stomachaches and backaches are treated with the herb known as habakhedi, while rashes and sore throats are treated with a tea made from the herb dinse. Traditional doctors also cure illnesses caused by spirits, such as fever, headache, dizziness, and weakness. The illness is cured by a healing ceremony designed to appease the spirits. These ceremonies involve reading the Koran, eating special foods, and burning incenses (Gholam, 2009).

Other forms of treatment has roots in the various practices and teachings of the African folklore and incorporates the use of a variety of natural substances; for example, bali, senna, honey, black cumin, chicory, ginger, marjorum, saffron, vinegar, pigs oil or animal fat, kerosene and water-cress. These natural substances are used to treat a variety of physical and psychological ailments (Peek, 2004). The snake is a powerful symbol used to guard against evil. Egyptian hieroglyphics and Biblical writings record both the worship and hatred of snakes in accordance with various dynasties and political powers. The ancient Egyptians looked on the snake as a symbol of health and healing because it could shed and regenerate its skin. Many patients suffering depression due to the evil eye were put into temple healing rooms containing snakes to shock them out of their stupor (Bohigian, 1997).

Many devices such as amulets, talismans, inscriptions, phrases, and customs have been adopted to protect both the living and the dead from the powerful influences of the evil eye. Blue was the favored colour because of the availability of lapis. It was the color of the sky and heaven and therefore the home of the gods. Amulets with blue beads were put around the necks and wrists of newborns, particularly newborn boys, causing the color blue to be associated with baby boys. Among South Africans blue beads are shaped in the form of eyes and worn to avoid the evil glance (Nunn & Leonard, 2000).

**Conclusion and Recommendation**
The concept of the evil eye has influenced present day, medicine, and social customs. Since there is no scientific studies that have been put across to explain the root cause of evil eye in African communities there is need to research more on this concept.
References


The Land Question in Kenya: Ol-Kalou Salient Settlement
Scheme 1965-1980
Kariuki Ngaruiya
Laikipia University College
Department of Philosophy, History and Religion

Abstract
This paper examined the performance of Ol-Kalou salient which was part of the Million-Acre programme from 1965 to 1995. The study looked at the origin of the schemes and went on to consider their implementation and development. The study area was occupied by three groups of people at different times. These were the Maasai during the pre-colonial period, the white settlers after establishment of the British rule and African farmers after independence. The performance of the Ol-Kalou Salient was viewed within the idealism of co-operative movement and Nyereres’ dialogical model to establish its performance and to evaluate whether lack of involvement of the members in the management contributed to its failure. The study identified 105 respondents by purposive sampling technique out of the 2,500 original members. This information was supplemented by archival and secondary sources from Kenya National Archives and Ol-Kalou Salient. The findings from this study revealed that there was mismanagement and misappropriation of funds and assets meant for development of the projects. It was revealed that dishonest officials used to exchange their low breeds of cattle with the Salient high breed animals. On the positive side the researcher noted that the scheme offered services that benefited its members such as formal education, transport, health services and water. The study also examined the monopolistic nature of co-operatives and how they affected access to the market for the products for they acted as private enterprises thus exploited the settlers. It is further noted that although all the settlers had equal opportunities as time passed by, social differentiation among them occurred depending on how the settlers’ responded to the opportunities offered by the co-operative. It is recommended that farmers should be involved in decision making and proper channels of communication should be put in place to handle conflicts of interests if co-operatives were to be sustained.

Introduction
The land transfer programme after independence was prompted by the political and economic needs of Africans. The African Land and Development Board (ALDEV) at some point had dismissed the population problem and blamed it fully on the arrangement of the land,¹ though population in the African areas continued to increase and this aggravated the already existing land problem. The myth advanced for many years that only European farming was a success was dealt a great blow when African small holders started to successfully grow crops such as coffee, tea and the improvised dairy farming under the Swynnerton plan.
The Swynerton plan introduced in 1954 advocated for land reforms to quell the political dissent and to contribute to the formation of a stable African middle class.²

It was in an attempt to implement the plan that the Million Acre Scheme was introduced as a national programme for socio-economic development and land transfer to small-holder farmers in Kenya. As the scheme was defined in 1962, it was a high density settlement providing for the settlement of 200,000 acres per annum of mixed farming land over a period of five years.³ This term has subsequently been used to include certain other schemes which were started during the first phase of implementation, for example, the yeoman and large scale co-operatives and ranches.⁴

In January 1960, the State of Emergency, which had been declared in October 1952, ended. A lengthy conference followed at Lancaster House in London to negotiate a new constitution. All previous discriminatory legislation, including the Kenya (Highlands Order In Council, 1939) which had defined the highlands and established the highlands Board, giving it power to control the sale of land within the highlands and thus keeping them “white” was amended. In its place, the Kenya (land) Order-in-Council, 1960, was promulgated, ordering that where, at any time after 13th October, 1959, any land was subject to any restrictive racial covenant, such restriction should be void.⁵

The opening of the white highlands to Africans took place in 1960, with the amendment of the laws that had excluded African land ownership as stated above. In order to implement the newly declared agricultural development policy based on a racially integrated farming system in the highlands, the British and the colonial government embarked on the resettlement schemes. After the discussion at Lancaster Conference, a working programme on the transfer of land to Africans was established.⁶ This was financed by the International Bank for Reconstruction and Development (IBRD) and the Colonial (later Commonwealth) Development Corporation (CDC).

By involving the international bodies in the loan schemes to Kenya for buying land in the white highlands, Britain hoped to ward off the possibility of financial default.⁷ This however puzzled the freedom fighters that were informed by Jomo Kenyatta that it only amounted to compensation to the settlers for developing the land. Both Bildad Kaggia and Oginga Odinga remained strongly opposed to the land compromise before and after independence.⁸ The International Bank for Reconstruction and Development (IBRD) and Overseas Development Corporation (ODC), committed their investment to the extent that such investment would ensure continued high level agricultural development to guarantee loan repayment.⁹

Journal of Education and Social Sciences

123
1.2 ORIGIN OF THE OL-KALOU SALIENT

In 1964/1965 the Central Land Board, as agents for the Settlement Fund Trustees, bought 80 large scale farms in one block totaling 52,758 hectares in the area lying between Thomsons falls, since renamed Nyahururu, and Gilgil. At the time of independence, 12th December 1963, most of the 80 farms were in an abandoned or run-down state. A large number of the owners were originally Boers from South Africa. These settlers had left South Africa after Anglo-Boer war of 1899-1902. Some had trecked from Transvaal to Arusha while others had travelled direct to Kenya. Farms were either in the hands of Nairobi lawyers who remained on and who were empowered to negotiate talks of land transfer agreements on behalf of their clients.

It had been anticipated that European settlers who cultivated there would continue farming. This, however, proved impossible after settlement schemes were established on each side of the Salient region. Having been sandwiched between Kikuyu settlement schemes on the Kinangop and Ol-joro-orok areas, the white settlers feared that they could be invaded by landless Kikuyu making the land unproductive. The white settlers therefore wished to have their land purchased. While the white settlers feared invasion, the Kenya government wondered what would happen if the white settlers left abruptly. To avoid any disorderly departure or occupation of that land, the Ol-Kalou Salient was bought and in-corporated into the Million Acre Scheme and a new form of settlement scheme initiated.

In 1963, due to the area’s unsuitability for sub-division because of infertile soils, the Prime Minister Jomo Kenyatta, announced a special programme for the transfer of the Ol-Kalou Salient to Africans. The land in the Salient was always difficult to farm, varying between the wet heavy clay soils near Lake Ol-Bolosat to very broken rock outcrops further south around Oleondo Station. The land was divided into nineteen units each under a farm manager on behalf of a co-operative society made up of the labour force that existed before the takeover. Therefore, priority in settler selection was given to labourers who had worked on European farms in the salient. Any remaining plots were given to labourers displaced by settlement schemes elsewhere in Nyandarua district and to skilled craftsmen like carpenters, capable of making a valuable contribution to the co-operative farm.

The members of the co-operative society were allocated two and half acres each to produce food crops for their subsistence and were also employed in the co-operative society. The co-operative society was devoted both to livestock rearing and production of wheat, oats, maize, potatoes, pyrethrum and barley. These settlers were supposed to live in a village within the farm but not permitted to rear livestock to avoid theft of co-operative animals. The initial members at the
creation of the Ol-Kalou Salient were two thousand five hundred. This meant that only the head of a household was counted. The rest of his family was not considered.\textsuperscript{26}

1.3 STRUCTURE OF THE OL-KALOU SALIENT

There was the general manager who was an employee of the Ministry of settlement who was the chief accounting officer. Below him was the deputy or assistant general manager who was to represent or act as the manager in his absence. The manager chaired all the meetings and was responsible for issuing policy on matters pertaining to the operations of the salient. Below the assistant manager was the administrative manager. He was in-charge of hiring employees of the Ol-kalou Salient and would also advice the managers on the promotions and demotions of the employees.

There was also livestock development manager. He was in-charge of all the livestock which included dairy cows, beef, pigs and sheep. Below him were the livestock officers in each of the nineteen units of the salient. They kept records of the animals available at any time. They organized for the deworming and other treatments of the livestock. The livestock manager would prepare weekly and monthly reports where he would also receive reports from each of the 19 units. It was the duty of each livestock officer at the unit level to note the number of births and deaths in his unit and forward such information to the livestock manager.

For crop production there was the farm manager who was in-charge of the farms. The Ol-Kalou Salient had been divided into 7 farms with seven farm managers. The farms were known as Muruai, Ol-Kalou, Kaimbaga, Ndemi, Ol-Joro-orok, Mawingu and Kirima.\textsuperscript{27} These farms varied in terms of acreage and the type of produce. The farm manager would supervise the cultivation of various crops such as wheat, pyrethrum barley and also horticulture. He would oversee the planting, weeding and harvesting processes. It was also their duty to keep records of the farm implements and other such related records of their farms.\textsuperscript{28}

There was the machinery manager who was in charge of all the Ol-Kalou Salient machines and repairs. He was based at the headquarters of the Ol-kalou Salient. He had his assistants who did the manual work of maintaining the machines including the Salient cars. He would procure spare parts and ensure that the machines were in good working conditions to avoid any interruptions in the running of the salient activities. Finally there was the transport manager in charge of all the motor-vehicles and movement of the members of staff at any given time. This was an elaborate department with proper laid down working procedures. All the salient motor-vehicles had a yellow strip to identify them from the rest. They also bore the government registration number plates. All vehicles left the
premises after they were issued a work ticket signed by the transport manager to prevent misuse of vehicles.

1.4 PROBLEMS THE SETTLERS FACED IN THE EARLY 1960S AT OL-KALOU SALIENT

Settlers in the Ol-Kalou Salient encountered a combination of problems in the early years of settlement. They ranged from marshy land, attacks by hippopotamus from Lake Ol-Bolosat to lack of capital, low wages and poor shelter. After a long period of mechanization by the white settlers, the Ol-Kalou salient became flat making the water flow and drainage poor. When the settlers were allocated farms they had to find ways of draining the water because it was making the crops rot. Settlers with farms at the fringes of Lake Ol-Bolosat were constantly attacked by hippopotamus from the lake. The attack was mostly on their food crops in their small farms. The hippos would also attack the members thereby making any movement by the members’ very difficult during the days and nights. The members were paid 60 shillings every month for the labour provided on the farms. Most of the members at the time of allocation of these plots couldn’t have managed to raise the initial fee of 500 KShs. So it was agreed that the balance would be paid by installments from their salaries. It is from the 60 shillings that the members were also expected to feed, develop their plots and educate their children. To many it was very heavy burden and some families had their children drop out of school. Hardships even forced families to separate. Lack of capital was the most severe problem the members of the Ol-Kalou Salient faced. Majority of them were people with no basic skills and were forced by circumstances to do odd jobs just to help them have food on their tables. The government did not give them development loans like other settlers. So with no developmental loan from the government, it was hard to undertake any improvement of their farms. Most of them used to clear bushes and get tree barks to make the walls of their makeshifts. The area experiences cold due to night frosts on the lowlands of the salient. The two and half acre plot was for their subsistence but the rest was worked as co-operative farming.

The polygamous family had very difficult time at the Ol-Kalou Salient because the land was too small for the family to grow enough food from it. The two wives would in most cases be unable to put up together, leading to separation or fights every now and then.

HORTICULTURE

The Ol-Kalou Salient has suitable climatic conditions for horticultural crops especially cabbages, peas and temperate fruits. Cabbages and kales are grown by the members on their small plots mainly for domestic consumption. The report of the Mission on Land Settlement in Kenya, of 1966 recognized the contribution
that horticultural crops would make to the settlement economy if there was proper marketing of the produce. However, the horticultural farming did not perform well in Ol-Kalou Salient due to a number of problems. Most of the produce as Kamau Kiragu, noted would rot in the farms due to lack of the market. Secondly, it was expensive to venture in horticultural farming for it required an irrigated land and a lot of training for the members which was expensive to the Salient. Transport was another problem that hindered the production of horticulture. Most of the roads at Ol-Kalou salient were not well maintained and this would make the farms inaccessible. The produce would also not get into the market in time and as such most of it got spoilt either on the farms or on its way to the market.

SHEEP REARING
Not all the units of the Ol-Kalou Salient were able to rear sheep due weather and unavailability of fodder for the sheep. Thus only units 207, 336 and 337 that reared sheep. According to J.N Kabiti a farmer observed that some problems such as shortage of water for the sheep, attack by an out break of Blue tongue disease especially in units 331 in 1966-1967 affected the sheep. He also noted that his office would not get some necessary equipment in time like the castration rubbers and this affected their planned work schedule.

PYRETHRUM
In addition to the managerial and marketing problems, the pyrethrum industry was hard hit by inadequate rainfall in the mid 1970’s. This lowered the yields discouraging the members further from growing it. Acreage under pyrethrum was reduced and the land was either left fallow or put under food crop cultivation. With such uneconomic returns, the Ol-Kalou Salient decided to reduce the acreage of pyrethrum. In some units it was completely uprooted. This period came to be referred as “Ugwati” (danger) by the members of the Ol-Kalou Salient particularly in the Ol-joro-orok farm because of the problems they encountered. The poor returns of pyrethrum dealt the Ol-Kalou Salient a big blow especially to members with big families who would come with the family members to pick the flowers, but earn very little. Most of the family members experienced a lot of hardships as they had to look for other alternatives to earn their living.

WHEAT
The marketing and payment procedures for wheat in the Ol-kalou Salient further discouraged its growth. While all wheat growers were supposed to sell their produce through the Co-operative Society, some sold it to private traders to get faster payment, thus avoiding the loan repayment which was regularly deducted by the Co-operative Society. This situation was aggravated by the manner in which AFC, being the rightful buying agent of the government processed the payment. The AFC directly paid to the Co-operative Farming Unit Society. The Society
would then pay the settlers according to their sale. But before the payment was remitted to the Society, the AFC ensured that all the MFR debts were deducted irrespective of how individual wheat growers would be paid. What this meant was that farmers whose harvest exceeded the value of debts shown in their accounts could not receive any cash payment until they met the deficits in the accounts of those who had little yields. In cases where the deficit was too high, no member received cash payment. Such a situation demoralized the initiative of successful growers, and caused considerable stress among members, especially when the deficiency on wheat production was covered by the society from the proceeds of others crops. In doing so, one group of farmers was subsidizing another. Wheat farming became unprofitable to the successful growers, forcing them to abandon it.

**CONCLUSION**

This article found that there was laxity in the enforcement of the settlement policy as when the officers at the top and on the ground could not keep track of the performance of the programme and hence no evaluation was done to assess the impact of the programme on the settlers in time. The programme was made to appear more of being interested in satisfying a certain group interest particularly the managers, but was less concerned with the members who actually were the majority. The article discovered that it was not only the laxity in enforcing the policy that was at fault but more still, the problem of actual settlement planning and its implementation. It has been noted that the planning did not take cognizance of several factors such as the size of the family and family needs such as the paying of school fees. The settlement planners generalized that all the settlers needs were equal yet there were obvious differences.

This article recommends that some experimentation be done in the field of horticulture production, apiculture and aquaculture. The researcher noted there were individuals who have already engaged in apiculture and aquaculture though they were using traditional methods. Such individuals should be assisted either by giving them loans to purchase modern inputs or else the government can give them such inputs at a subsidized fee to encourage them venture into such and complete with others. The researcher also recommends that some experimentation be done in the field of horticultural production with a view to introducing horticultural crops such as French beans, chillies, flowers and onions perhaps even tomatoes which have a ready market overseas. The researcher noted that the flower farming was thriving well though it was hindered by some factors such as poor roads and long journeys to Nairobi for export. The researcher recommends that the Nyahururu Airstrip can be upgraded to handle bigger cargo planes to ferry such produce and it will also have reduced the costs of production thus encouraging more farmers to venture into it.
End Notes


3. Ibid., 500-570.

4. Ibid.


7. Odinga O., Not yet Uhuru, 258-263.


11. Ibid., 130 – 140.


16. Ibid., 502

17. Ibid., 504

18. Ibid., 505.

19. Leo, C. Land and class, 94


22. Five year Review,2

23. Ibid., 2

24. Ibid., .3

25. Ibid., 3


27. Ibid., 52

Factors Affecting Water Demand among Households in Nakuru Municipality, Kenya

Mathendu Sammy
Faculty of Environment and Resource Development
Department of Environmental Science
Egerton University, Njoro

Abstract
The quantity and quality of water allocated and used by households is an important aspect of domestic water supply which influences hygiene and the social wellbeing of humanity. In 1985, it was estimated that 25% of the urban population in developing countries lacked access to safe water. In Nakuru Municipality, it is estimated that the current level of water supply is about 48%, which is below the national average of 60%. The circumstances behind this problem are not clear and needed further investigation. The broad objective of this study was to investigate the water supply and demand situation within Nakuru Municipality. The study was done in three estates namely; Milimani, Shabab and Kaptembwo which represent different income levels. The research employed social survey techniques with both quantitative and qualitative data being collected. Primary data was collected using oral interviews, questionnaires, key informants, and observations. Stratified random sampling techniques were applied in collecting data from households and data analysis was done using the computer based Statistical Package for Social Sciences (SPSS). Household size and education level were found to directly influence the amount of water needed by households. However, income ($t=0.966; p=0.335$) and occupation ($t=0.722; p=0.471$) levels did not have a significant effect on the amount of water used. The findings further showed that 75% of the residents in the Municipality use less than the average amount of water suggested by the World Health Organization (50 litres per day). The results also showed that 22% of the households used between 9 and 14 litres of water daily while 15% used between 14 and 27 litres. Only 25% of the respondents mostly from Milimani used more than 27 litres of water per day. The study concluded that the amount of water available for distribution falls short of demand and hence the need for new water sources.

Key Words: Household, Water Supply, Water Demand, Allocation
Introduction

The blue planet that is our fragile and precious home has vast water resources but only a fraction of these resources are of fresh water (Sylvain, 2006). It is that small volume of freshwater that must meet the needs of billions of people, animals and plants. Water an environmental life support systems forms the backbone of growth and prosperity since industrial, farming and domestic activities require water. In the absence of water, humanity and other living things are threatened with extinction (Odongo and Mungai, 2002). The total amount of water supply globally remains almost constant and therefore if well managed is able to meet these various demands (Wright, 2005). Overall, the amount of fresh water on the planet is adequate to meet human needs even taking future population growth into account. This projection does not however take into consideration the distribution of water resources in relation to human population (Wright, 2005).

Domestic water supply is one of the fundamental requirements for sustenance of human life. Without water, life cannot be sustained beyond a few days and the lack of access to adequate water supplies leads to the spread of diseases (Odongo and Mungai, 2002). Children bear the greatest health burden associated with poor water and sanitation. Diarrheal diseases related to inadequate water supply, sanitation and hygiene account for 1.73 million deaths each year and contribute to over 54 million Disability Adjusted Life Years, a total equivalent to 3.7% of the global burden of disease (WHO, 2002).

The UN Mar del Plata Water Conference held in 1977 supported the targets set in the 1976 UN Vancouver Conference and recommended that the period from 1981 to 1990 should be declared the International Drinking Water Supply and Sanitation Decade (IDWSSD) (Clarke, 1991, McDonald and Kay (1988). The United Nations (1997) declared that all people, regardless of their social or economic status, have a right to clean drinking water and basic sanitation needed to prevent communicable diseases and provide for basic human dignity. The World Health Organization, (2001) considers 1000m³ of water per person per year to be the minimum level below which most countries are likely to experience chronic shortages on a scale that will impede development and harm human health (WB, 2006). Some 45 countries, most of them in Africa and Middle East, were considered water stressed by UNEP, (2006). In other economically less developed countries in Sub-Saharan Africa and Latin America, the problem is accessibility and not the quantity of water (Tudor, 2003). In these countries, water management has often been an ad hoc response to particular pressing problems with only limited number of countries promoting water management at the national level.

The demand for water within the Nakuru Municipality by households and
institutions currently stands at 75,000 cubic metres of water per day (NEMP, 2007). This leaves the town with a deficit of 25,000 cubic metres daily since the supply is estimated at 50,000 cubic metres per day (NAWASSCO, 2006). In line with the Water Act 2002, the Rift Valley Water Services Board (RVWSB) has the legal responsibility of ensuring efficient and economical provision of water in its area of jurisdiction. Rift Valley Water Services Board was established through Kenya Gazette Notice No. 1715 of 12th March 2004. It is estimated that the boreholes and some two surface water sources supply 35,000 cubic meters per day exclusive of losses to the Nakuru Municipality. Bulk transfer of water from River Thurasha is managed by the Rift Valley Water Services Board (RVWSB), from which Nakuru Water and Sewerage Services buys and supplies to Nakuru residents (NAWASSCO 2006).

The Water Act (2002) mandates the Water Services Board to contract a Water Service Provider. Within the Nakuru Municipality, Nakuru Water and Sewerage Services is the agent contracted as a Water Service Provider by the Rift Valley Water and Services Board. Among other responsibilities for this agent is the operation and maintenance of facilities as well as the billing and collection of revenue. Water Service Provider status is mandatory for those water boards providing water services to more than 20 households, supplying more than 15,000 - 25,000 litres per day of water for domestic purposes or supplying more than 100,000 litres of water per day for any use (NAWASSCO 2006).

The need to improve the availability of water to the poor has not gone unnoticed by the world’s governments. At the World Summit on Sustainable Development, governments agreed to halve the number of people without access to basic sanitation and who cannot access or afford safe drinking water by 2015 (Tudor, 2003). In 1996, the First World Water Forum in Marrakech requested the World Water Council to develop a World Water Vision for the year 2015. The exercise led to the preparation of Water Visions at global, regional, sub-regional and national levels and corresponding Frameworks of Action (Tudor, 2003). These visions were designed to generate massive public awareness of the risk of inaction. The ultimate goal was to generate the political commitment needed to turn the increased public awareness on the water issue into effective action for the benefit of all. Globally, many water supply agencies are struggling to cope with vandalism to existing networks and illegal connections (WMO, No. 974).

**Research Methodology**

This study employed a social survey research design based on qualitative and quantitative approaches. The responses from the study objectives generated essential quantitative data on water use within the Nakuru Municipality. The
study was conducted in Nakuru which received its township status in 1904 and became a Municipality in 1952. It is located 160 km North West of Nairobi and is the fourth largest urban centre in Kenya after Nairobi, Mombasa and Kisumu. Nakuru town is located in the Rift Valley Province of Kenya. The study area was the Nakuru Municipality which lies at an altitude of 1859 metres above sea level. It lies at grid reference 0°19’- 0°24’ S / 36°04’-36°07 E and has many industries and a high population growth rate. Agriculture, manufacturing and tourism are the backbone of the economy of Nakuru since it is a high rainfall potential area compared to the rest of the country.

During the past 30 years, the population of Nakuru Municipality increased with a factor of five. In 1969, the population was 47,151 (Kenya, 1970), increasing to 92,851 in 1979 (Kenya, 1981), 163, 982 in 1989 (Kenya, 1994), 239,000 in 1999 and 473,288 in 2009 (KNBS, 2010). Nakuru Municipality is densely populated (1076 persons per square km, KNBS, 2006) with a multi-racial population estimated at 282,433 people (KNBS, 2006). Out of these, 138,533 are females and 143,880 are males residing in 83,577 households (KNBS, 2006). The estates considered in this study were Milimani, Kaptembwo and Shabab. Administratively, Milimani lies within Afraha sub-location in the Central location, Kaptembwo is found in the larger Kaptembwo location while Shabab is in Koinange location. Figure 3 below represents the location of the study area in regional context, the various surface water bodies as well as the specific estates from where data was collected.
Figure 1: Nakuru Municipality in Regional Context
Source: Nakuru Local Urban Observatory Project
Figure 2: Location of Research sites in Nakuru Municipality
Source: Nakuru Local Urban Observatory Project
Results and Discussion

The main household characteristics considered in this research were age, gender, household size and composition, income level, occupation and education level. The household size and composition were considered in order to determine how they impacted on water consumption and/or demand. Household size and its gender parity were important parameters considered since they affect the amount of water demanded. From figure 3, 58.4% of the respondents were aged between 23 and 40 years. Of these, 34.6% were females with the males accounting for 23.9%. This could be because data collection was mainly carried out during the day when most males were at work. Due to gender roles, it was mostly women who were found at home during the day. In total, all the women interviewed accounted for 63.4% while the males constituted 36.6%. This shows that gender is often an important factor in explaining water use, but “the direction of the influence depends on the specific cultural context”. For example, according to the World Bank (1993), female respondents’ willingness to pay for water exceeds that of men in Tanzania and vice versa in Haiti.

Figure 3: Age and Gender Categories at the study sites

Source: Field Survey, 2011

Household perception on water quality can affect the amount of water demanded. From Figure 4, 53.9% of the households considered the water they used to be clean and safe. However, 23% said they did not consider the water to be clean and safe while a further 23% said they were not sure. The data also showed that 93.5% of the respondents said they did not treat the water further but rather consume it as supplied by NAWASSCO since they considered it to be from certified sources.
This was collaborated by secondary data obtained from NAWASSCO water quality monitoring laboratory. Water samples are periodically tested both at the source and at chosen consumer sampling points. The most common parameters/substances tested include water temperature, turbidity color, PH, chloride, fluoride, heavy metals and conductivity. The values obtained are then assessed against Kenyan water quality standards as dictated by the Kenya Beaural of Standards. Most of the substances tested during the research period were within the set Kenyan standards. However, most sample sites registered high fluoride levels which NAWASSCO officials said they do further treatment to achieve the set standards. According to Table 1, this perception contributed to 93% of the respondents in Shabab, and 88% of those in Milimani relying on municipal piped water. However, the number of those relying on municipal piped water from Kaptembwo was found to be only 48.7%. Those without piped water said that they got their water from bicycle vendors.

Table 1:
Municipal water use by location

<table>
<thead>
<tr>
<th>Residential area</th>
<th>Municipal piped water</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (%)</td>
<td>No (%)</td>
</tr>
<tr>
<td>Kaptembwo</td>
<td>48.7</td>
<td>51.3</td>
</tr>
<tr>
<td>Milimani</td>
<td>88</td>
<td>12</td>
</tr>
<tr>
<td>Shabab</td>
<td>93</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011

The socioeconomic factors affecting water demand considered in this study were age, household size and composition, education level, income level and occupation. Education level of households has a direct bearing on the type of water use.
jobs they have, the amount of money they earn and hence where they are likely to stay within the Municipality. Occupation influences the household’s income and hence the amount of funds available to spend on water. Financial hardships may be an incentive for water consumers to cut back on essential water use, probably resulting in damage to personal and public health. Table 2 shows the impact of these socio-economic factors on demand for water within the Nakuru Municipality.

Table 2: Socio-Economic factors influencing Water Demand

<table>
<thead>
<tr>
<th>Socio-economic factor</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.145</td>
<td>0.802</td>
<td>2.675</td>
<td>0.008</td>
<td>0.566 - 3.725</td>
</tr>
<tr>
<td>Age</td>
<td>0.092</td>
<td>0.136</td>
<td>0.040</td>
<td>0.674</td>
<td>0.501 - 0.176 - 0.359</td>
</tr>
<tr>
<td>Household size</td>
<td>0.648</td>
<td>0.094</td>
<td>0.411</td>
<td>6.892</td>
<td>0.000 - 0.463 - 0.834</td>
</tr>
<tr>
<td>Male’s education level</td>
<td>-0.082</td>
<td>0.156</td>
<td>-0.033</td>
<td>-0.523</td>
<td>0.601 - 0.389 - 0.226</td>
</tr>
<tr>
<td>Male’s income level</td>
<td>0.068</td>
<td>0.070</td>
<td>0.062</td>
<td>0.966</td>
<td>0.335 - 0.070 - 0.206</td>
</tr>
<tr>
<td>Father’s occupation</td>
<td>0.052</td>
<td>0.071</td>
<td>0.043</td>
<td>0.722</td>
<td>0.471 - 0.089 - 0.192</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011

Household average size incorporates not only individuals related by blood but also those who are related by marriage and distance relations. Household size is an important consideration in household water use as it impacts on hygiene and human health. As shown in the Table, household size with a t-value of 6.9 (p = 0.001) has a significant impact on water demand implying that the larger the family size the more the amount of water consumed or demanded. Shonnanar (2007) observed a similar relationship between household size and the demand for water. The amount of water demanded or consumed in a household may also increase when the number of young, elderly and invalids is higher (WHO, 2008). This has been attributed to the fact that more water will be required to maintain a
high level of hygiene for these vulnerable groups. Additionally, these dependents require a higher frequency of cooking, bathing and laundry and hence more water will be used. Table 3 shows a negative t-value for education level. This is so because water is a basic commodity and hence its demand is not dependent on one’s education level. This reasoning would also be used to explain why there were no significant relationships between occupation and water and income level.

On average, the modal class for household size was found to be 3 to 4 members and this accounted for 35.2% of the total households while those with 5 to 6 members constituted 32.6%. These averages are close to the national figure for household size of 5.1 (Ministry of Planning and National Development, 2007) and are shown in Table 3 below. About twenty one (21.1%) of the respondents indicated there were more than seven occupants per household. This was attributed to big families and staying relatives especially in the Kaptembwo estate and the presence of more than one house help and/or garden boys in the Milimani estate. It was found out that the higher the number of occupants in a household, the more the water they consumed and vice versa.

Table 3:
Average household size

<table>
<thead>
<tr>
<th>Household size</th>
<th>No. of HH (Respondents)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>34</td>
<td>13.6</td>
</tr>
<tr>
<td>3-4</td>
<td>103</td>
<td>41.2</td>
</tr>
<tr>
<td>5-6</td>
<td>93</td>
<td>37.2</td>
</tr>
<tr>
<td>7-8</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>9-10</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>above 10</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>250</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011

The household education attainment was also studied and was described as either being illiterate, having adult education, or having acquired primary level, secondary level or tertiary level. This was done in order to make inferences on possible water use benefits of higher education. Increased educational attainment would suggest that the household recognizes the value of water and thus invest on water saving technologies. Thompson et al (2001) notes that in East Africa, average water consumed by households with higher education levels was found to be marginally higher than those households with less education. Higher levels of education were an indicator of higher income which gives the residents in high income estates a higher propensity to consume water. Education level for both the males and females from the various households was assessed against their areas of residence as shown in the cross tabulations in Tables 4 and 5.

Table 4:
These statistics indicate that there is a weak relationship between the place of residence and the level of education for the parents in the households. A greater percentage of females and males in Milimani had secondary and tertiary education compared to Shabab and Kaptembwo estates. The only 12 illiterate males and females were recorded in Kaptembwo and Shabab estates as reflected in Table 5 and 6 respectively. The levels of adult education were highest in females and again mostly concentrated in Kaptembwo and a few in Shabab. These findings agree with those of Thompson, (2001) since it was found out that the amount of water consumed in Milimani is marginally higher than that in Shabab and Kaptembwo estates. Despite the disparity in education levels in the three estates, the amount of water demanded did not reflect this. This is because water is a basic commodity whose requirement does not depend on education level.

Table 5:
Female’s education level

<table>
<thead>
<tr>
<th>Female’s education level</th>
<th>Residential Area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kaptembwo</td>
<td>Milimani</td>
</tr>
<tr>
<td>Illiterate</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Adult education</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Primary</td>
<td>101</td>
<td>54.3</td>
</tr>
<tr>
<td>Secondary</td>
<td>52</td>
<td>30</td>
</tr>
<tr>
<td>Tertiary</td>
<td>16</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td>186</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2011

This study endeavored to assess if there was any relationship between occupation
level and water demand. Figure 5 shows the occupation levels for males within Nakuru Municipality. 37.7% of the males were self employed with 29.0% being casual laborers, 22.6% having white collar jobs and 9.7% being jobless. Of the residents 1% were school going children. 89.3% of the residents were secularly employed and expressed their willingness to pay for whatever amount of water they needed for their use. Therefore, their occupations did not significantly affect the amount of water demanded. Kabeya (2000) on a study in Kisumu Municipality concluded that the amount of water demanded by residents within the Municipality was not a reflection of the type of occupation of the individual households.

The economic performance of a community can be assessed by the occupation of the residents. Cairncross and Feachem (1993) and Well (1998) suggest that where water is purchased, the price may be a limiting factor on the quantity of water used. However, Cairncross and Kinnear (1992) show that the price of water purchased from vendors in Khartoum, Sudan, did not lead to a significant reduction in the quantity of water procured. Cairncross and Kinnear (1992) further suggest that in poorer communities, where an increasing proportion of household income must be spent on acquiring water, the only major item of expenditure available for sacrifice was the food budget and therefore it was probable that high costs of water were contributing to under-nutrition. Residents who were connected to water networks, and who had not had a problem in water supply, showed more willingness to pay. Osama (2007) reports similar results in his work on affordability and willingness to pay in Palestine.

![Figure 5: Occupation Levels for Males](image.png)

Source: Field Survey, 2011

**Conclusion**

Among the various socio-economic factors affecting water demand, household
size was found to be the most significant. Education level, income level and occupation had no significant effect on the amount of water demanded. This is because water is a basic commodity whose demand is not bound by these factors. The perception of the respondents as to whether the water source was clean was found to affect water demand. It was also established that willingness to pay for the service was not related to income. Most respondents were ready to pay for whatever amount of water they needed if such amount were available.

**Recommendations**

The amount of household water consumption was found to be less than internationally recommended averages. The Municipal council/NAWASSCO should Prioritize the allocation of water to low income communities. The local trust fund or constituency development fund could be invoked to improve on water services since any form of development is premised on water availability. Reduce water prices for the urban- poor to ensure that they have adequate and affordable water.

Build community based institutions for policing of water misuse which awards those who give confidential reports leading to water recovery or the apprehension of illegal water users. Adopt water demand management measures that can help reduce wastage. Such measure may include leakage detection, reduction of illegal connections and in-house retrofitting. They can also manage demand by applying water pricing measures such as tariff structure and water metering to each household.

Invest in Education and information. This is an important management tool which can be used through raising public awareness and entrenching the same in in-school education. Improve the billing system. This can also help them to address illegal connections if all consumers are captured. This will enhance revenue collection which can be ploughed back to improve water services. Improve water treatment especially on chemical substances such as Fluoride which was found in many samples.

**References**


NEMP, (2007), *Our Water, Our Life; The Nakuru Perspective.* Municipal council of Nakuru, Department of Environment, and pollution control section.


Shonnar, B.E. (2007), Households’ Affordability and Willingness to Pay for Water and Wastewater Services in Ramallah and Al-Bireh District, Palestine


Tudor, R. (2003), *Fresh Water Future.* Tudor Rose Holding


WHO (2008), Safer water, better health – Costs, benefits and sustainability of interventions to protect and promote health. WHO, Geneva, Swizerland


Guidelines to Contributors

The Journal uses a style that combines ideas drawn from the American Psychological Association (APA). What follows below is a summary of the basic information that potential contributors to the journal must be in possession of. These instructions will apply to all future contributions of research articles, theoretical papers and book reviews.

General organization of Papers
All contributions should be formatted to be compatible with Microsoft Word. Note only English spelling is acceptable for consideration. The font, pagination and general appearance of the paper should be organized as follows:

Typing
The paper should be typed (10-15 pages)

Font
The paper should be written in Times New Roman font size 12 point.

Line spacing
The paper should be 1.5 spaced.

Pagination
The page number should be set at the bottom and at the centre of each page.

The Title Page of the Paper
The title of the paper should be bold –faced and should be centred and placed at the top of the first page of the paper. It should not be capitalized in its entirety. The initials of the first and last words should be capitalized, as should all other words except conjunctions, articles and prepositions. A space should be skipped, followed by the authors name, also centred but without any space in between, should be placed some of the author’s particulars. The institution and the department of the author should be indicated.

Abstract
It should be written in italics beneath the title “abstract” which should be bold and set at the left-hand margin

The Body of the Paper

Introduction
The paper should include an introductory passage, under the sub-title “Introduction.”

Discussion
The body should consist of discussion, conclusion and recommendations, implications and references. All discussions should be referenced. Full references should be listed at the end of the paper conforming to the APA format. For example:

Book

Book Chapters

Dissertation

Journal Articles

A Publication fee will be charged as determined by the printer’s quotation before the manuscript is published. The editorial board will communicate the amount to the first author.

For any inquiries or further information please contact: Research and Publications Department, Mount Kenya University, Nakuru Campus, P.O Box , Nakuru, Email address: mkunak2011@gmail.com Mob. No. 0715 133 505