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## AFRICAN JOURNAL OF BUSINESS, ECONOMICS AND INDUSTRY (AJOBEI)

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#### Preamble

African Journal of Business, Economics and Industry (AJOBEI) is an academic peer-reviewed yearly publication for original, innovative research and academic output that contributes to growth of knowledge in Business, Economics, Industry and related discipline globally. The journal targets: Business professionals/scientists, researchers, media specialists, business students, government agencies/policymakers and citizens with a passion for contemporary business ventures.

This third edition too aims to address contemporary societal and global concerns in business and industry. It carries original full-length articles that reflect the latest research and developments in both theoretical and practical aspects of a modern business society. It promotes research awareness and compatibility platform through a concise and methodical interface to cater for all categories of scholars in business, while encouraging innovation, creativity in research catalyst by information technology and transformative leadership.

The topical issues in this journal include: Leadership and Sustainable Development in Africa: Lessons from Traditional Yoruba Society; Influence of Land Size on Household Food Security in The Tea Zones of Kirinyaga County; Effect of Value Chain Design on Performance of Improved Indigenous/Kienyenji Chicken in Kirinyaga County; Tender Leaders Behind Bars-Smokescreens of the Self-Identity of Child Inmates in Borstal Institutions of Kenya; Analysis of Selected Factors Supporting Urban Sprawl Patterns Using Analytical Hierarchy Process Model: A Case Study of Areas Surrounding Eldoret Town, Kenya; Covid – 19: Educational Setbacks, Lessons Learned and Way Forward In Kenya and, Assessment of Total Quality Management on Performance of Chuka University Library, Tharaka Nithi County, Kenya

The Journal is both in print and online versions.

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# LEADERSHIP AND SUSTAINABLE DEVELOPMENT IN AFRICA: LESSONS FROM TRADITIONAL YORUBA SOCIETY

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#### Abstract

Africa has been permeated with a high level of poverty, hunger, sicknesses, low quality of education, gender inequalities and insecurity, etc. This has made her be classified as underdeveloped. The paper posits that effective leadership is paramount to attaining sustainable development goals in Africa. It further argues that to end poverty, sicknesses and neglect of environments in the 21st Century Africa, it is highly essential to reengineer the concept of leadership that will foster development in Africa. Furthermore, it is argued that the fundamental principles of effective leadership as exemplified in traditional Yoruba society must be imbibed and displayed by current African leaders. Moreover, the paper avers that some of the fundamental principles of leadership like commitment to societal goals, equitable distribution of wealth and management of resources, maintenance of the environment, and exhibition of good character as obtained in traditional society must be reintroduced and enforced in the leadership practices of Africa. In addition, the paper advocates oath of performance and covenant of commitment which necessarily binds the leader to the society as demonstrated in traditional Yoruba society must be taken by every leader in Africa. The methodology adopted is analytical and critical. It explores conceptual analysis in discussing the myriads of problems facing Africa and how sustainable development goals can be used to combat these problems. Its critical character derives from the fact that it assesses the fundamental principles of effective leadership in traditional Yoruba societies to serve as a foundation in the quest for sustainable development in 21st century Africa. The paper recommends that lessons and inspiration from traditional Yoruba society are essential for revolutionizing leadership style in 21st century Africa in order to achieve sustainable development.

**Keywords**: Leadership, Sustainable Development, Africa, Traditional Yoruba.

#### Introduction

Nigeria is bedevilled with myriads of problems which hinder sustainable community development. These problems are numerous and include those identified by Nwakire&Umeh (2006) as poverty, crime, illiteracy, women's disempowerment, and depletion of environment. Many African nations lack the basic necessities to lift their citizens out of poverty and hunger and provide shelter and employment opportunities for them. The stark unavailability of infrastructure and resources that would enable citizens to access quality health, education and a good standard of living is worrisome.

It is surprising that after years of identifying essential ingredient for development; most African nations are still saddled with the problem of under-development. Some of these key ingredients are human capital enhancement, peace and security, a sound health system, quality education, effective and transparent governance, continuity and implementation of policies and frameworks, etc. However, despite this knowledge, Sub-Saharan Africa is still experiencing a high level of unprecedented problems and a fixed state of under-development.

The methodology employed in this study is expository and critically analytic. Critical analysis method is used to examine and break down the concepts in order to understand the meaning and nature of the concepts discussed such as leadership and development. On the other hand, the expository method is used to expound and investigate into nature of the Yoruba traditional society and the social values embedded in their customs and tradition and how such lessons that can be extracted from their culture to promote the idea of sustainable development in contemporary times.

## Sustainable Development in Africa

Despite decades of independence and development strategies and policies, many African countries experience severe socio-economic crises and political problems. Over the years, Africa has witnessed a series of development theories, agendas and approaches with the aim of increasing the standard of living and maintaining the quality of life.

The 1987, Bruntland Commission Report described the concept of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Bruntland,

1987, p. 41). The concept refers to the ability and process of achieving sustainable development.

The idea behind this is the belief that human societies ought to live and meet their own needs without having severe negative implications for the future. The need for sustainable development was borne in response to the challenges faced by the people of the world and environment. At the heart of sustainable development are 17 Sustainable Development Goals (SDGs) which call for actions to take in achieving desired better future for all through efficient use of the Earth's resources.

In 1992, in Rio De Janeiro, Brazil, about 178 countries adopted the Agenda 21, a plan of action to build a global partnership for development to improve human lives while protecting the environment (United Nations, 1992). While in September 2015, world leaders converged at the United Nations Headquarters in New York to consider and adopt a new comprehensive, ambitious and transformational development agenda. The Outcome Document adopted during the summit outlines a set of 17 Sustainable Development Goals (SDGs)and 169 targets aimed at eradicating poverty in all its forms and shifting the world into a sustainable and resilient development pathway while ensuring that 'no one is left behind.

## The goals are;

- 1. No Poverty: This deals with the problem of poverty and how to curb it.
- 2. Zero Hunger: Deals with achieving food security and improving nutrition and sustainable agriculture.
- 3. Good Health and Well-being: The importance of good health cannot be overemphasised hence the need to ensure healthy lives for all, regardless of age.
- 4. Quality Education: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.
- 5. Gender Equality: Achieve gender equality and empower all women and girls.
- 6. Clean Water and Sanitation: Ensure availability and sustainable management of water for all.
- 7. Affordable and Clean Energy: One of the environmental problems is pollution and excessive use and transmission of emission gases. On the other hand, electricity contributes to many human activities, and its lack is detrimental to economic and social well-being. The goal here is to produce and ensure access

- to affordable, reliable, sustainable and modern energy for everyone. This would also help reduce the problem of pollution and shortage of electricity.
- 8. Decent Work and Economic Growth: It is no doubt that one of the many pillars of national development and citizen growth is the economic structure of the state. Once the economy crumbles, this, in turn, affects other spheres and people involved. Hence, this SDG aims to promote inclusive and sustainable economic growth, full and productive employment and decent work for all.
- 9. Industry, Innovation and Infrastructure: To build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation.
- 10. Reduced Inequalities: Reduce inequalities within and among countries. Some of the benefits of this goal are that it fosters aid, reduces financial crisis and eases the migration of people.
- 11. Sustainable cities and communities: Make cities and human settlements inclusive, safe, resilient and sustainable.
- 12. Responsible Consumption and Production: Ensure sustainable consumption and production patterns.
- 13. Climate Action: Climate change is a global environmental issue which has diverse and severe effects on the ecosystem and the entire biodiversity. Thus, this goal calls for urgent action to combat climate change and its impact.
- 14. Life below Water: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- 15. Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.
- 16. Peace, Justice and Strong Institutions: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels.
- 17. Partnerships for the Goals: Strengthen the means of implementation and revitalise. (United Nations Department of Economic and Social Affairs, 2022).

These sustainable development goals were formulated to ensure environmental protection, social equality and economic profitability. In return, the totality of this aim will aid development in all spheres.

## Challenges of Leadership and Problems of Development in Africa

According to Tannenbaum, Weschler and Massarik (1961), leadership is the interpersonal influence exerted in a situation and directed through communication systems towards the attainment of specific goals.

While development refers to the process of positive change, growth and progress economically, politically, socially, environmentally and physically, development is a complex term, but widely used to describe improvement, especially in relation to socio-economic conditions. Development also implies a high level of security, quality standard of living, and stability in the various sectors of a nation.

Africa is described as one of the world's second-largest and the second most populous continent and blessed with land area, people, rich historical culture, and an abundance of natural resources such as gold, oil, and home to a wide array of biodiversity. It occupies about one-sixth of the earth, and early civilisation has also been traced to Africa (Sayre, 1999). Nonetheless, Africa is also heavily affected by various socio-economic, environmental and political problems.

According to the United Nations Economic Report in 2004, sub-Saharan Africa was listed as the least successful region of the world in the reduction of poverty, which was attributed to unsuccessful foreign policies and programmes as well as bad domestic government policies (United Nations, 2004).

Many African countries are experiencing various problems and challenges with their political and economic development. Coupled with the COVID-19 pandemic, many African countries have been economically crippled and relegated to recession. The issues associated with under-development in Africa can be traced to poor leadership, lack of sound governance, bad policies, and on-implementation of domestic policies.

Take a look at Mali, South Sudan, Nigeria, and Kenya, among others; the myriads of political unrest, economic decline and the unstable social situation facing these African nations can be traced to modern political leadership and lack of adequate standards.

Despite the availability of rich resources and human capital, Africa lacks decisive and selfless leaders, which is why it remains in the web of under-development and saddled with various problems such as hunger, poverty, unemployment and insecurity. The continuous state of insecurity in terms of lives, property, food and

agriculture has made the continent prone to attacks, threats to her peace and the lives of its citizens.

Over the past decades, there has been neglect from African leaders in establishing proper infrastructures, and actively effecting policies for the implementation of their proposed development agendas. The lack of sound governance can again be traced to the lack of ethical and effective leaders and public officers. Leaders who have no regard for the welfare of the people and disregard the duties associated with the offices they have been elected to occupy.

Using Nigeria as an example, Nigeria is faced with severe challenges to her development despite the policies drafted and resources that have been allocated and spent on growth strategies. Nigeria is confounded and permeated by a deep-seated crisis stemming from incompetence in leadership.

The implication of the incompetency of leaders is what results in other issues such as corruption and embezzlement of national resources, lack of adequate infrastructures such as hospitals, quality education, terrorism and banditry, increase in poverty and unemployment, insurgency, ethnic clashes and many others that currently cripple growth of the country.

Nigeria has experienced different administrations throughout the years since her independence. Nonetheless, the country has not experienced any significant change in its status as an undeveloped nation. The Nigerian government has failed to sustain its development in critical areas such as education, health, agriculture and economics, despite being blessed with both human and natural resources.

In the various democratic led administrations, there have been many attempts by past leaders to develop comprehensive plans and policies for economic growth and development. However, these policies, after passing the legislative stages, upon the allocation of resources, never bore any sustainable fruit. Instead, public leaders and officials use these avenues of policy-making, programmes, schemes and propaganda to embezzle national funds and enrich their pockets.

Development and growth have been a recurring interest to the Nigerian government and have as its objectives fostering economic growth and improving the standard of living and lives of its citizens. Suffice to say, the setbacks encountered due to inefficiency and inadequacies of its government has contributed significantly to the inability of the government to achieve the Sustainable Development Goals.

Another factor contributing to the challenge of sustainable development is ethnic politics, nepotism and godfatherism. The problem of ethnicity exacerbates the poor socio-political situation in Nigeria. Inter-ethnic clashes, ethnic-religious conflicts, and ethnic politics are some of the social and economic development problems today. Ethnic politics accounts for the lack of equality and equal distribution of resources across the nation. Ethnic politics refers to situations whereby "politicians tend to mobilise support based on an appeal to ethnic identity and people tend to support leaders from the same ethnic group" (Lynch, 2015).

This becomes a problem when political leaders begin to favour members of their ethnic group for political assignment rather than through a system of merit and due assessment. Contracts and projects are awarded based on ethnic membership rather than competence and efficiency; communities and society are developed as per the choice and origin of the political leader, thereby denying other members and regions access to the same social amenities, resources and infrastructures, breeding unhealthy competitions, social inequality and injustice.

On the other hand, nepotism and godfatherism are issues in global democratic governance in the political situation of many countries in Africa. The politics of nepotism and godfatherism remains an obstacle to achieving and maintaining sustainable policies. This has affected socio-economic and political development and continues to leave a trail of negative impact.

The underlying factor that encourages nepotism and godfatherism in Nigeria is the high level of political power and authority concentrated on specific individuals, especially past political leaders. With its demands for favour in return for the political support of those considered superiors to aspiring political aspirants, Godfatherism continues to endanger the democratic process and gives room for corruption and unaccountability of present political leaders and public officials.

Corruption is an endemic problem that Nigeria battles with administration after administration. Corruption runs through every level, from the local to federal, and every political and economic sphere is riddled with the problem of corruption. This can be attributed to the lack of transparency, accountability and the quality of the Nigerian system of government and office.

The impact of corruption and corrupt activities of public officials cannot be exhausted. When resources are allocated to implement policies and sustainable goals, it gets lost in the web of embezzlement and is never duly accounted for. Hence,

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corruption leads to economic loss and inefficiency, which undermines the implementation of the Sustainable Development Goals.

The government's failure in effecting and implementing rules that would address the problem of corruption and address the issues of transparency is itself disturbing. This is a pressing issue owing to negligence and lack of proper structures to check the excesses of the government. Corruption continues to present itself in Nigeria as one of the most significant challenges to the effort of national development.

In 2015, Nigeria adopted the Sustainable Development Goals (SDGs). The general aim of the SDGs in Africa is to end poverty, protect the natural environment and climate, and ensure a good life for all. However, on the first four goals, which are; No Poverty, Zero Hunger, Good Health and Quality Education, Nigeria, among other African nations, are yet to perform satisfactorily.

Nigeria particularly is fraught with challenges to her health and education sectors. Poverty and unemployment rise rapidly with the lack of jobs for employable youth and graduates, leading to youths involved in criminal activities such as kidnapping for ransom, armed robbery and insurgency. Lack of medical infrastructure and inaccessibility to good healthcare contributes to increase in death rates and the spread of various diseases. These factors make it impossible for Nigeria to achieve any form of development in vital areas.

#### Sustainable Development: Lessons from the Traditional Yoruba Society.

Against the deficit of growth, development and effective leadership in Nigeria and Africa in general, this paper proposes that the African government take a cue from the indigenous leadership systems.

This has become imminent as the modern system of governance has failed to satisfactorily contribute to the achievement of sustainable development across the continent. Instead, the implementation of foreign policies and governance continues to limit the agenda of development and authentic leadership.

It is no gainsaying that excellent and effective leadership is the bedrock and foundation of growth and development of any nation, and to address the endemic nature of the challenges facing Africa; there is a significant need to readdress the role and the concept of leadership.

This paper aims to examine the notion of leadership and the socio-political institution of the Yoruba people as an example and framework for effective

leadership in Nigeria and Africa. It is our belief that the indigenous political system of leadership will offer a solution to the conundrum of good governance in Nigeria and Africa as a whole.

The Yoruba people are one of the major ethnic groups in Nigeria and even in some parts of Africa, possessing a rich cultural, social, economic and political institution and tradition. Prior to colonial administration in Africa, Yoruba people led their own socio-economic and political institutions which had a well-established system of order and governance.

Although, the Yoruba political system was mostly monarchical, nevertheless, it was effective. In the Yoruba society, the *ilu* (town or settlement) is led by a monarch known as the *Oba* (King) supported by the cabinet of *Oloye* (*chiefs*). In the old Oyo empire for instance, the Oyo kingdom was led by the *Alaafin* of Oyo who is usually installed by the group known as *Afobaje*(Kingmakers)and then his chiefs, *Otun*, *Osi*, *Iyalode*, *Abobaku*, *Oyomesi*, etc.

Political authority in the Yoruba society was communal rather than individualistic. The implication of this was that the *Oba* and his chief of staff represented the interest of the people and worked in achieving them. When the king goes astray or acts in unfavourable ways that would not benefit the community, he is called to order by the chiefs. This necessitated a principle of check and balance of power and authority.

When the king fails to deliver on the promise and duties attached to his office, he could be impeached by his cabinet members and even the people themselves through a traditional method. The *Obaship* is seen as a sacred and highly spiritual position and in as much as the *obaship* was monarchical, it was not absolute nor hereditary. In this sense, the first-born son of the *Oba* could assist in political matters of the community but was not in all cases the next in line for the position.

One of the many factors that ensured effective leadership and socio-political stability in the Yoruba society is the act of oath swearing or the oath of allegiance. The swearing of oath is a religious and culturally embedded act in the Yoruba tradition. It ensured the commitment of the political individuals, leaders and rulers to keep their oath of office and diligently carry out their duties.

Furthermore, the oath of allegiance and commitment is a spiritual exercise that binds the King, particularly to his subjects and acts as a guiding factor to curtail corrupt, selfish or bad governance. The oath is taken to ensure participation and fulfilment of political roles and duties. According to Ikeora (2010) those invited to take the oath, directly submit to a supernatural tribune. It was an effective means of enacting and ensuring good morals, detecting crimes and stopping wrongdoings. This, in turn, deter leaders from engaging in questionable actions and compels them to conduct the political affairs with commitment, transparency and accountability, fear and diligence.

The act of oath-taking is a spiritual enterprise backed up by the African traditional religion and belief in deities and ancestors. It encourages the virtue of truth and trust as the individual taking the oath, is made to swear before any of the Yoruba gods, who unlike their Western counterparts do not hesitate to cast judgment on those who betray their allegiance or words. The undertaken covenant promotes social equality, justice and social order.

In this vein, Oladipupo (2012, p.131) avers that "the gods sworn to in the Yoruba societies are known for instant justice". He also notes that the effect of oath swearing and covenant-keeping goes beyond the individuals who swore to such oath but also extends to family members who share in the consequences associated with the oath.

When leaders undertake the oath-swearing process, they do so in truth, believing that they are bounded by the spiritual laws of the oath, and are ready to face the negative consequences if betrayed. Awolalu revealed this inevitability. He posits "A person who is given to oath-breaking or falsehood is believed not to be prospering in life" (Awolalu 1979, p.85 as cited in Ogunleye, 2013). It is strongly believed among the Yoruba that, anybody who swears falsely or breaks an oath to which *Ogun* (The Yoruba god of iron) is a witness cannot escape severe judgment in a ghastly accident (Awolalu 1979, as cited in Ogunleye, 2013).

Based on the foregoing, this study argues further that for effective leadership devoid of both domestic and foreign superimposition, policies and problems to sustainable development in Nigeria and Africa, lessons can be extracted from the Yoruba political socio-religious institution and culture of oath-swearing rather than the foreign religion which seems to be doing nothing in effecting actual changes and transparency of governance.

It is the submission of this research that, the fundamental principles of leadership exemplified in the Yoruba tradition such as accountability, check and balance, transparency, commitment to social goals, equality and good character should be indoctrinated into the modern political sphere and followed judiciously. In addition, the paper advocates the oath of performance and covenant of commitment which necessarily binds the leader to the society as demonstrated in traditional Yoruba society must be taken by every leader in Africa.

#### Conclusion

Until Africa, as a nation begins to produce quality, commitment and functional leaders, its development as a continent will remain stunted and slow. As argued, good and effective leadership is the pillar that holds and directs the activities and actions of any nation. If this is achieved, then the actualization of Sustainable Development Goals will be seamless, especially for African countries such as Nigeria.

African countries possess natural and human resources as well a stable environment and support, both internal and external. Initiatives and innovative policies are to be reformulated to tackle the challenges and the problems need to be addressed at the root cause. Everyone including the government, political and communal leaders ought to put their heads together, and find common grounds and a way forward. If poverty can be eradicated, employment provided, agriculture sustained and there is an overall improvement in the quality of life, then Africa will be on the path to once again becoming a global giant.

#### References

- Adeyeye, P. (2020, February, 14). *Sustainable Development*. DATAPHYTE. Available at: <a href="https://www.dataphyte.com/latest=reportseducation-development/how-is-nigeria-faring-on-the-first-four-sustainable-development-goals/">https://www.dataphyte.com/latest=reportseducation-development/how-is-nigeria-faring-on-the-first-four-sustainable-development-goals/</a>.
- Awolalu J.O. (1979). Yoruba Belief and Sacrificial Rites. London: Longman as cited in Ogunleye A.R., (2013). Covenant Keeping Among the Yoruba People: A Critique of Social-Political Transformation in Nigeria. *International Journal of Humanities and Social Science* 3 (9), 81-85
- Brundtland, G. (1987). Report of the World Commission on Environment and Development:

  Our Common Future. United Nations General Assembly Document A/42/427.

  Available at:
  - https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf
    https://onlinelibrry.wiley.com/doi/abs/10.10.1002/9781118663202wberen45
    3.
- Ikeora, M. (2016). The Role of African Traditional Religion and Juju in Human Trafficking: Implications for Anti-Trafficking. *Journal of International Women's Studies*, 17 (1),1-18. Available at: <a href="https://vc.bridgew.edu/jiws/vol17/iss1/1/">https://vc.bridgew.edu/jiws/vol17/iss1/1/</a>
- Lynch, G. (2015). Ethnic Politics. In The Wiley Blackwell Encyclopaedia of Race, Ethnicity, and Nationalism.
- Oladipupo, S.L., (2012). Nigerian Democratic Culture: Political Religion to the Rescue. *Insight Journal of Religious Studies* 6.128-137.
- Sayre, A. P. (1999). Africa. Brookfield, Conn: Twenty-First Century Books.
- Tannenbaum, R.J., Weschler, I.R., & Massarik, F. (1961). Leadership and Organization: A Behavioural Science Approach. McGraw-Hill.
- United Nations. (1992). *United Nations Conference on Environment & Development* Rio de Janerio, Brazil, 3 to 14 June 1992, Available at:

  <a href="https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf">https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf</a>.
- United Nations. (2015, September, 24). Summit Charts New Era of Sustainable Development. Available at:

- https://www.un.org/sustainabledevelopment/blog/2015/09/summit-charts-new-era-of-sustainable-development-world-leaders-to-gavel-universal-agenda-to-transform-our-world-for-people-and-planet/.
- United Nations. (2004). Economic Report on Africa 2004: Unlocking Africa's Potential in the Global Economy. Available at:
  - http://www.un.org/Depts/rcnyo/newsletters/survs/ecasurv2004.doc.
- United Nations' Department of Economic and Social Affairs, (2022, March 15). Sustainable Development Goals. Available at: https://sdgs.un.org/goals

## INFLUENCE OF LAND SIZE ON HOUSEHOLD FOOD SECURITY IN THE TEA ZONES OF KIRINYAGA COUNTY

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#### **Abstract**

Food is recognized as a basic human right and inadequate food consumption has serious implications for general body health and well-being, growth, development and cognitive ability. This implies that food insecurity, a condition in which a population does not have access to sufficient, safe and nutritious food over a given period to meet dietary needs and preferences is a threat to overall human well-being, as well as efforts geared toward poverty reduction and economic growth. A guarantee of household food security requires adequate home production of food and/or adequate economic and physical access to food. Smallholder farmers in the tea zones of Kirinyaga County have converted most of their land into tea production, while food crop production has been on the decline. Nevertheless, the extent to which this trend has affected food security is not clear. Hence, the study examined the influence of land size on household food security in the tea zone of Kirinyaga County. Descriptive cross-sectional design was applied and primary data collected through administration of questionnaires. Data was analyzed using descriptive statistics and Chi square test of association. Results of the study indicated that there was a significant association between household land size and food security. It was concluded that there was need for consideration of measures that would minimize odds of household food insecurity.

**Keywords:** Household, Food security, Land size.

#### Introduction

Food security is defined as a situation that exists when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agricultural Organization [FAO], 2003). This definition implies four salient features of food security: availability, stability, access and utilization. Food availability refers to the sufficient physical quantities of food of appropriate quality that is locally produced, stored, processed, distributed and exchanged or imported including food aid.

Global hunger, which is a consequence of food insecurity, continues to decline although 805 million people in the world today still do not have enough food to lead a healthy active life (World Food Programme [WFP], 2014). Achieving food security in its totality continues to be a challenge not only for the developing nations, but also developed world. In developed nations such as the United States of America, the problem is alleviated by providing targeted food security interventions, including food aid in the form of direct food relief, food stamps, or indirectly through subsidized food production (Sabila, 2014). In some regions of Guatemala, an estimated 75 percent of the children from infants to the ages of 6 and 7 are chronically malnourished due to food scarcity. This has been attributed to income inequality, with indigenous communities at a particular disadvantage (WFP, 2014). In Sub-Saharan Africa, the number of undernourished people and chronically hungry has been increasing from 169 million in 1992 to 246 million in 2018 (WFP, 2019). Poverty and food shortage are the main catalysts of food insecurity in Sub-Saharan Africa, where about 48.5% of the people live in poverty. This constrains the ability of farming households to invest in productive assets and agricultural technologies, resulting in insufficient agricultural productivity (World Bank, 2013). In addition, food crop production is not increasing at a rate necessary to meet population growth, which currently averages at 2.4% annually across Africa. This food scarcity continues to drive up food prices resulting in food insecurity

In Kenya, food security is a challenge. For example, between 2004 and 2008 about 33% of Kenya's population experienced chronic food insecurity (Kumba, 2015). Food security continued to deteriorate and by 2012, about 10 million people were food insecure (WFP, 2014). Inadequate food availability has been singled out as one of the most important causes of food insecurity and is attributed partly to insufficient domestic production. This has been due to low agricultural productivity and high poverty rate (over 50% of the population living below the poverty line) which limits access to food because households have no sufficient means to pay for the required food (Glopolis, 2013).

Hence, the study examined the influence of land size on household food security in tea zones of Kirinyaga zones.

#### Statement of the Problem

(Folaranmi, 2012).

Smallholder farmers in the tea zone of Kirinyaga County have converted most of their land into tea production, while food crop production has been on the decline. Nevertheless, the extent to which this trend has affected food security is not clear. According to Kirinyaga County Agriculture Annual report 2015/2016 the tea earnings for Kirinyaga County were Ksh. 4.3 billion compared to food crops earnings of Ksh. 2.1 billion. Despite this huge amount of money earned from tea, most tea farmers are in debts (KTDA Payment returns) and food security is a big problem (Ministry of Agriculture, 2015). Few studies have been conducted to establish the factors influencing food security especially in tea zone of Kirinyaga County (Ministry of Agriculture, 2015). This study assessed how land size influence household food security in the tea zone of Kirinyaga County.

## Objective of the Study

To establish the influence of land size on household food security in tea zones of Kirinyaga County.

#### Literature Review

Food security is a multidimensional concept that has evolved over time and is measured in terms of availability, stability, access, and utilization. Food security concerns started increasing in the mid-1970s when there were international food problems that were a part of global economic crisis. According to Lang'at et al., (2010), issues related to food security were macroeconomic in nature and focused mainly on ensuring the availability and price stability of foodstuffs. Saweda (2011) argued that traditionally, food security was measured in terms of food supplies, food availability, accessibility, and adequacy. Economic factors, drought and famine in some developing countries led to rethinking of food security concept. The concept of food security therefore, goes beyond availability to considerations of constraints that individual encounter to access the food (Webb, Braun & Yohannes, 2006).

According to Kirinyaga County (2013) households in tea zones generate at least 50% of their income from cash crops of which 70% is from tea. Tea prices have faced volatility globally, this poses a threat to income generation capacity in Kirinyaga County and capacity to achieve household food security. Kuhlgatz and Abdulai (2011) argues that there is an interlink between prevailing economic conditions and household income and there exists higher odds of experiencing food insecurity in those household whose income is highly affected by inflation and exchange rates. Moreover, there is no insurance of food security as household pursue production of cash crops to increase their revenue generation. Webb, et al., (2006) asserts that there is need for evaluation on respective nations food availability, utilization, stability and

access at household level. This would ensure proper plans and policies are developed to mitigate against situations of food insecurity. Further, household capacity to produce should be optimized.

According to Department for International Development of the Government of United Kingdom (DFID) (2004) the odds of achieving household food security among households was dependent on their capacity to acquire farm inputs, areas of land allocated to cash crop cultivation and ability of adopting specialized farming. The relative risk of facing food insecurity due to cash crop farming was not conclusive since in some instances it was 40% though it would rise to 70%. From these findings it was concluded that there was no guarantee of raising standards of living and alienating food security challenges due to cash cropping. There were also notable marginal benefits that were recorded among households that practiced mixed farming. These benefits were only short-lived since few farmers practicing reliable saving cultures. Moreover, there are uncertainties in markets for farm produce and they were associated with uncertain demand, financial and infrastructural aspects that have influence on household income generation capacity. Carletto, Kilic and Kirk (2009) evaluated long term impact of food crop productions as compared to cash crop production on changes in household consumption status and asset accumulation in the Central Highlands of Guatemala. Results of the study indicated that there were changes in welfare levels among households with increase on land under cash crop cultivation, adoption status, and length of period under cultivation. Moreover, significant contribution of farming differed across households. Those who had practiced cash crop farming over a long period of time gained more as compared to those who were not practicing it despite their land sizes. These findings may only be limited to Guatemala since there are other aspects that may affect household food security and they are unique to respective countries.

#### **Methods and Materials**

#### Research Design

Descriptive cross-sectional design was applied and mixed qualitative and quantitative data gathered. According to Bryman and Bell (2007), descriptive cross-sectional design has specific time frame for collection of required information that is used for examination of association between variables under examination. The design fits the study since it examined the influence of land size on household food security in Kirinyaga Tea zones.

## **Study Location**

The location of the study was Kirinyaga County, central Kenya with latitude of 0° 1" and 0° 40" South and longitudes 37° and 38° East. The County neighbours are Nyeri in North West, Murang'a in the West and Embu to the East and South. Its coverage is 1478.1 square kilometres and with a population size of 528,054 and average growth of 1.5% (Republic of Kenya, 2019). The climatic condition is tropical with equatorial rainfall pattern. The County has two rainy seasons, with long rains in March to May with an average of 2,146 mm/pa and short rains in October to November averaging 1212 mm. The average temperature ranges between 8.1°C and 30.3°C in upper and lower zones respectively during the hot season. The main economic activity and income generating activity in upper zone is tea farming. The study was executed in one of 5 tea factories in County tea zones.

#### Population of the Study

The target population of the study were smallholder tea farmers .The accessible population consisted of tea farmers from 5 KTDA Tea Factories of the tea zone of Kirinyaga County (Table 1), which included Ndima, Mununga, Kangaita, Kimunye and Thumaita with a registered population of 42,318 farmers (MOA, 2016).

#### Sample Size and Sampling Technique

The sample size was determined using an online sample size calculator by RaosoftInc (2016) with a margin of error of 5%, confidence level of 95% and a response distribution of 50%. Out of a population of 8460 tea farmers, a sample size of 368 respondents was generated .Since Kerlinger (1983) had stated that 10-30% of any homogenous group is appropriate to constitute an appropriate scientific representation of the study population, 30% of 368 respondents were selected to give a final sample size of 110 farmers from 10 tea buying centres. The final sample size constituted of 110 respondents with each of the 10 selected tea buying centres yielding 11 respondents who were randomly selected.

#### **Data Analysis and Presentation**

Data from the field was coded, keyed into the computer and cleaned to ensure accuracy. Data was analysed by use of Statistical Package for Social Sciences (SPSS) computer program. Descriptive and inferential statistics were used to analyse the results of the analysis. The analysed data was interpreted and presented in frequency tables and graphs. To measure the objective, descriptive statistics such as mean,

frequencies, percentages and standard deviations were used. Descriptive statistics was adopted to explain selected factors affecting household food security. Land size comprised of indicators like acreage of land, land size under tea and land size under food crops. Chi square test was used to examine the association between land size, land size on tea and household food security, land size on food crops and household food security.

#### **Findings and Discussions**

#### Descriptive Statistics Findings on Household Food Security

Household food security is defined as a situation that exists when all people at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (FAO, 2003). In this study, food security was referred to as the household having access, availability and stability of access of food throughout the year either purchased with income from tea or grown in their farms. Household food security was measured by adopting the household hunger scale (HHS). This was measured in terms of assessing access, availability and stability of access of food in the households. The HHS makes reference to a period of 4 weeks to assess aspects of food security. The respondents are requested to recall occurrences about food in the household.

In order, to determine household food security a five-point Likert scale was used with statements representing the three aspects of food security; access, availability and stability of access. In the scale the rating was; 1= Never, 2= Rarely, 3 = Sometimes, 4= Often and 5=Always. The first three statements in the scale represent access, the next three, availability and the last three stability of access. The findings are shown in Table 1.

Table 1: Findings on Household Food Security Access, Availability and Stability

	Z	~		0	₹	Mean	std. Jev.
Measures of food security		2	$\mathbf{s}$				<u> </u>
In the past four weeks, did you worry							
that your household would not have	5.8	13.6	20.4	34	26.2	3.6	1.2
enough food? In the past four weeks, were you or	3.6	13.6	20.4	34	26.2	3.6	1.2
any household member not able to eat							
the kinds of foods you preferred							
because of a lack of resources?	7.8	23.3	18.4	28.2	22.3	3.3	1.3
In the past four weeks, did you or any	7.0	20.0	10.1	20.2	22.0	0.0	1.0
household member have to eat a							
limited variety of foods due to a lack							
of resources?	4.9	5.8	16.5	45.6	27.2	3.8	1
In the past four weeks, did you or any							
household member have to eat some							
foods that you really did not want to							
eat because of a lack of resources to							
obtain other types of food?	10.7	18.4	22.3	20.4	28.2	3.4	1.4
In the past four weeks, did you or any							
household member have to eat a							
smaller meal than you felt you							
needed because there was not enough							
food?	8.7	9.7	11.7	36.9	33	3.8	1.3
In the past four weeks, did you or any							
household member have to eat fewer							
meals in a day because there was not	22.2	<b>4</b> F F	165	20.1	155	2	1.4
enough food?	23.3	15.5	16.5	29.1	15.5	3	1.4
In the past four weeks, did you or any household member have to eat fewer							
meals in a day because there was not enough food?	4.9	17.5	19.4	25.2	33	3.6	1.2
In the past four weeks, was there ever	4.7	17.5	17.4	25.2	33	5.0	1.2
no food to eat of any kind in your							
household because of lack of							
resources to get food?	1.9	10.7	18.4	34	35	3.9	1.1
In the past four weeks, did you or any							
household member go to sleep at							
night hungry because there was not							
enough food?	10.7	7.8	13.6	36.9	31.1	3.7	1.3
In the past four weeks, did you or any							
household member go a whole day							
and night without eating anything							
because there was not enough food?	5.8	11.7	11.7	25.2	45.6	3.9	1.3

<sup>\*</sup>N-Never, R-Rarely, S-Sometimes, O-Often & A-Always

The findings indicate that 60.2% of the respondents' households in the past four weeks were often worried that their households would not have enough food. Secondly, 50.5% of the respondents said that in the past four weeks either were or a household member was often unable to eat their preferred food due to lack of resources. Majority 72.8% respondent stated that in the past four weeks either or a household member often had to eat limited variety of food due to lack of resources. Further, 48.6% of the respondents indicated that in the past four weeks often had to eat some foods that they did not like due to lack of resources to obtain other foods. Moreover, 69.9% in the past four weeks either or household members often had to eat smaller meals than they needed because it was not enough.

Majority mean =3.9, reported that in the past four weeks either they or household members often did not have any kind of food due to lack of resources in their household. A mean of 3.7 indicates that majority either they or household members often had to go to sleep hungry due to lack of food. Majority mean = 3.9, reported that in the past four weeks either they or their household members often had to go a whole day or night without eating anything because there was no enough food. The findings showed that overall majority of households in tea zones of Kirinyaga County, often had likelihood of experiencing household food insecurity as indicated by the mean of 3.6.

Food insecurity remains a public health threat; it is widespread in developing countries, as millions of people continue to suffer from food scarcity and death due to food insecurity. Whereas a varied and balanced diet is essential to reducing the rate of malnutrition, food insecurity jeopardizes dietary intakes. Due to the high nutrient demands for growth, children are the most vulnerable. Poor nutritional status among children leads to low school admission, absenteeism, early dropout and low academic achievement, which results in reduced productivity during adulthood. The presence of food insecurity at the household level implies a high level of vulnerability to broad consequences, including psychosocial dysfunction among household members, especially children, socioeconomic predicaments and poor overall health status (Aguayo, Nair, Badgaiyan & Krishna, 2016). Food insecurity at the household level is related to several factors, including poverty, low income, level of education, household size, employment status, age, the type of household head (gender) and food price. Understanding the characteristics and determinants of household food insecurity is crucial to developing policies that address the

challenges associated with household hunger and food insecurity (Ihab, Rohana & Manan, 2015)

## Influence of Land Size on Household Food Security

The study sought to establish the influence of land size on household food security in tea zones of Kirinyaga County. The findings are presented in the following sections.

## Extent to which Land Size Influences Household Food Security

The research examined the perception of the respondents on the influence of land size on household food security. Study findings are tabulated in Table 2.

Table 2: Extent to which Land Size Influences Household Food Security

Perceptions of Respondents	Frequency	Percent
No Extent	8	7.8
Little extent	7	6.8
Moderate Extent	15	14.6
Great Extent	40	38.8
Very great extent	33	32
Total	103	100

The findings indicate that 38.8% reported that land size has great extent of influence on household food security followed by 32% who perceived that it has very great extent, 14.6% perceived moderate extent and 7.8% perceived that it has no extent. This implies that land is an important factor among small holder tea farmers in Kirinyaga County and has an influence on tea and food crops production. Moreover, land would have influence on access, availability and stability since variation of land allocation between tea and food crops can impact on household food security. The findings confirmed Karanja and Straus (1999) who argues that gross food productivity per acre is dependent on commercialization. There was an inverse effect of tea and food production while coffee and food production positively impacted each other which was attributed to mixed farming. According to Afari (2007) food security should not be pegged only on land size alone since there are those in need of foreign exchange.

#### Household Land Size

The study examined household land size in tea zone of Kirinyaga County. The findings are presented in Table 3.

Table 3: Household Land Size

	Frequency	Percent
0.26- 0.50 acres	2	1.9
0.51-0.75 acres	9	8.7
0.76-1.00 acres	31	30.1
Above 1.00 acres	61	59.2
Total	103	100

As shown majority, 59.2% of households in the tea zone of Kirinyaga County own more than an acre, followed by 30.1% who own between 0.76-1 acres and 8.7% own between 0.51 to 0.75 acres. Although, majority in tea growing zones has one acre of land and above there is need for quality decision making on land allocation so as not to constrain food crops land allocation. These results are in agreement with Afari (2007) who argues that there is causality between household land size and food security and those households who optimize their land allocated for food crops production has higher odds of food security. Moreover, this has implication on household earning capacity since households prioritizes food budgetary allocations. Though, the study concluded that land size allocation is not an insurance that household will be food secure due to other factors that may have influence on food security. The findings confirm statement by Kenya National Bureau of Statistics (KNBS, 2019) that many small-scale farmers have land sizes that are usually at most 2 acres which would be the total land owned by the household.

#### Size of Land Under Tea Production and Food Crops

Further, the study sought information on the size of land allocated for tea production and food crops. Frequency and percentages are summarized as shown in Table 4.

Table 4: Size of Land under Tea Production and Food Crops

	Land u	nder Tea	Land under	Food crops
	Frequency	Percent	Frequency	Percent
0.0 - 0.25 acres	8	7.8	3	2.9
0.26- 0.50 acres	7	6.8	12	11.7
0.51-0.75 acres	15	14.6	25	24.3
0.76-1.00 acres	40	38.8	30	29.1
Above 1.00 acres	33	32	33	32
Total	103	100	103	100

Study findings indicate that majority 38.8% of households had allocated between 0.76 to 1 acre on Tea plantation followed by 32% who has allocated above 1 acre and 14.6% had allocated 0.51 to 0.75 acres. It shows that most of the household land was

used for tea production. Majority 32% of households in the tea zones of Kirinyaga County have allocated above one acre on food crops, followed by 29% who allocated 0.76 to 1 acre, 24.3% allocated 0.51 to 0.75 acres and 14.6% have allocated less than 0.50 acres of land on food crops production. Uncontrolled allocation of household land to tea may expose them to food insecurity. The study concurs with Kuhlgatz and Abdulahi (2010) who argues that though in Ghana there is high propensity to cultivate cocoa those whose land sizes are small have preference for food crops. Further, Bashir et al., (2010) argues that food crop farming promotes food security among small scale farmers.

#### Perceptions on Land size and Household Food Security

The respondents were required to indicate their level of agreement on five-point Likert scale that ranged from strongly disagree to strongly agree. The rating ranged from 1- strongly disagree, 2-disagree, 3-moderately agree, 4-agree and 5-strongly agree. Study findings are tabulated in Table 5.

Table 5: Respondents' Perceptions on Influence of Land Size on HFS

	$^{\mathrm{SD}}$	D	MA	A	$\mathbf{S}\mathbf{A}$	Mean	Sta. Dev.
My farm size is an enough guarantee							
of food availability in my household	3.9%	4.9%	21.4%	43.7%	26.2%	3.8	1.0
I prefer growing food crops other cash							
crops because I think my farm is small	1.9%	6.8%	19.4%	34%	37.9%	4.0	1.0
I prefer cash cropping for this gives							
me adequate cash for food purchases							
for the household	0%	4.9%	15.5%	38.8%	40.8%	4.2	0.9
Size of my land and crop choice alone							
is not a sufficient condition for							
improving food by access in my							
household.	4.9%	0%	4.9%	26.2%	64.1%	4.5	1.0
I believe my farm size is adequate for							
cash crop and food crop growing for							
stability of food access in my	2 00/	2 00/	4 = = 0/	27.20/	<b>-</b> 0 <b>-</b> 0/		
household	3.9%	2.9%	15.5%	27.2%	50.5%	4.2	1.1
I prefer growing food crops as							
opposed to cash crops to guarantee	2.00/	2.00/	0.70/	000/	F0 F0/	4.0	1.0
food availability	2.9%	3.9%	9.7%	33%	50.5%	4.2	1.0
I have future plans of increasing my							
farm size for food security reasons in	2.00/	7.00/	11 70/	20.00/	E4 40/	4.0	1 1
my household	2.9%	7.8%	11.7%	23.3%	54.4%	4.2	1.1

\*SD-Strongly disagree, D-Disagree, MA-Moderately agree, A-Agree, SA-Strongly Agree The findings indicate that majority 69.9% agreed that their farm size was enough to guarantee them food availability in their households. Majority, 71.9% agreed that they prefer growing food crops rather cash crops because they think their farm is small. About 79.6% agreed that they prefer cash cropping because it gives them adequate cash for food purchases in the household thus enhancing food stability of access. Also 90.2% of respondents agreed that the size of land and crop choice alone is not a sufficient condition for improving food access in their households.

Further, 77.7% agreed and 6.8% disagreed that their households land is adequate for cash and food crops growing to stabilize food access in their household. About 83.5% agreed that they prefer growing food crops as opposed to cash crops so as to guarantee food availability. Moreover, 77.7% agreed that they have future plans of increasing their farm size for food crops production to ensure there is availability, access and stability of access of food in their households. On overall respondents agreed (mean = 4.1, standard deviation = 1) that land size has influence on their household food security in terms of availability, access and stability of access.

The study findings are in support of Afari (2007) who argues that food security in developing economies is dependent on value chain small scale farmers have on cash crops since those families that do not optimize their land allocation on food crops are exposed to household food insecurity. This was in contrast of large scale farmers whose production capacity was higher since they could practice crop rotations (Kumba, 2015). Further, farmers had affinity of engaging in cash crop farming so as to reap from foreign exchange though those with small land were disadvantaged since their production capacity was lower compared to others.

#### Influence of Household Land Size on Household Food Security

Influence of household land size on household food security was examined through use of Chi square test of association as shown in Table 6.

Table 6: Chi Square Results on Influence of Household Land Size on HFS

Food security									
		Avail	ability	Stab	oility	Access			
Household land			-		-				
size		Yes	No	Yes	No	Yes	No		
0.26- 0.50 acres	Frequency	1	1	1	1	2	0		
	Percentage	50%	50%	50%	50%	100%	0%		
0.51-0.75 acres	Frequency	4	5	6	3	6	3		
	Percentage	44%	56%	67%	33%	67%	33%		
0.76-1.00 acres	Frequency	19	12	24	7	16	15		
	Percentage	61%	39%	77%	23%	52%	48%		
Above 1.00 acres	Frequency	31	30	46	15	32	29		
	Percentage	51%	49%	75%	25%	53%	48%		
Total	Frequency	55	48	77	26	56	47		
	Percentage	53%	47%	75%	25%	54%	46%		
	_	$\chi^2 = 10.22$		22, d.f =	$\chi^2 = 12.4$	12, d.f			
		$\chi^2$ =11.108, d.f = 3		3 p value =		= 3 p value =			
		p value = 0.004		0.0	005	0.0	01		

There was significant influence of household land size on availability of food ( $\chi^2$ =11.108, d.f = 3 p value = 0.004). About 61% of those who had land size of between 0.76 and 1 acre reported that food was available. Further, household land size had significant influence on stability of household food access ( $\chi^2$ =10.22, d.f = 3 p value = 0.005). About 67% of household with at least 0.51 acres and above reported food stability. Further, household land size had no significant influence on access to household food security ( $\chi^2$ =12.412, d.f = 3 p value = 0.001). These results concur with Karanja and Strauss (1999) who argued that food productions were dependent on land size.

## Influence of Land Size under Tea Production on Household Food Security

Chi square test was used to examine the influence of land size under tea production and household food security as shown in Table 7.

Table 7: Chi-Square Results on Influence of Household Tea Production on HFS

Food security								
		Availability		<b>Stability</b>		Access		
Size of Land on Tea								
Production		Yes	No	Yes	No	Yes	No	
0.0 - 0.25 acres	Frequency	4	4	5	3	6	2	
	Percent	50%	50%	63%	38%	75%	25%	
0.26- 0.50 acres	Frequency	4	3	6	1	4	3	
	Percent	57%	43%	86%	14%	57%	43%	
0.51-0.75 acres	Frequency	8	7	12	3	10	5	
	Percent	53%	47%	80%	20%	67%	33%	
0.76-1.00 acres	Frequency	23	17	30	10	20	20	
	Percent	58%	43%	75%	25%	50%	50%	
Above 1.00 acres	Frequency	16	17	24	9	16	17	
	Percent	49%	52%	73%	27%	49%	52%	
Total	Frequency	55	48	77	26	56	47	
	Percent	53%	47%	75%	25%	54%	46%	
				$\chi^2 = 21$	.04, d.f	$\chi^2 = 23$	.08, d.f	
		$\chi^2 = 16.7$ , d.f = 4		= 4 p value =		= 4 p value =		
		p value = 0.000		0.0	000	0.0	000	

An investigation on the influence of household land size under tea production and household food security indicate that 43% of those families that had allocated 0.5 acres of land and below on tea production reported cases of food unavailability. Chi square tests indicate that size of land under tea production has significant influence on food availability ( $\chi^2=16.7$ , d.f = 4 p value = 0.000). About 75% of those who allocated 0.51 to 0.75 acres of land on tea production reported that they experienced food stability. Chi square test indicated that there was significant influence of size of land on tea production and food stability ( $\chi^2=21.04$ , d.f = 4 p value = 0.000). Further, 52% of those who had allocated tea production in land above 1 acre reported that they had no access to food in the household. Chi square results indicated that there was significant influence of size of land on tea production on food access ( $\chi^2=23.08$ , d.f = 4 p value = 0.000). These results contradict Kuhlgatz and Abdulai (2011) who argue that household production propensity is contingent to welfare that farmers receive from players in the value chain process. But this was in conflict with Bashir et al., (2010) who purported that household food security was in congruence with land allocated to cash crops due to capacity to raise funds that would be used in purchase of food stuffs.

## Influence of Land Size under Food Crops and Household Food Security

The influence of land size under food crops and household food security was examined as shown in Table 8.

Table 8: Chi Square Results on Influence of Land Size under Food Crops and HFS

Food security								
		Availability		<b>Stability</b>		Ac	ccess	
Size of Land on					-			
Food Crops		Yes	No	Yes	No	Yes	No	
0.0 - 0.25 acres	Frequency	1	2	2	1	1	2	
	Percentage	33%	67%	67%	33%	33%	67%	
0.26- 0.50 acres	Frequency	6	6	11	1	10	2	
	Percentage	50%	50%	92%	8%	83%	17%	
0.51-0.75 acres	Frequency	15	10	19	6	13	12	
	Percentage	60%	40%	76%	24%	52%	48%	
0.76-1.00 acres	Frequency	15	15	21	9	15	15	
	Percentage	50%	50%	70%	30%	50%	50%	
Above 1.00 acres	Frequency	18	15	24	9	17	16	
	Percentage	55%	46%	73%	27%	52%	49%	
Total	Frequency	55	48	77	26	56	47	
	Percentage	53%	47%	75%	25%	54%	46%	
		$\chi^2$ =11.36, d.f = 4 p value = 0.002		, ·	5, d.f = 4 = 0.000		19, d.f = 4 ne = 0.00	

It was found that 60% of households that allocated 0.51 to 0.75 acres on food crops reported cases of food availability. Chi square results indicates that there was significant influence of size of land on food crops and availability of food ( $\chi^2$ =11.36, d.f = 4 p value = 0.000). About 67% of households that allocated at most 0.25 acres on food crops reported food access. Chi square test indicate there was significant influence of size of land on food crops and household food stability ( $\chi^2$ =23.05, d.f = 4 p value = 0.000). About 83% of those who allocated 0.26 to 0.5 acres on food crops reported access of food. Chi square test indicate that there was significant influence of size of land on food crops on food access ( $\chi^2$ =14.19, d.f = 4 p value = 0.000).

#### **Conclusion and Recommendations**

Study findings indicate that there is a significant influence of land size and household food security. Hence, it can be concluded that the higher the land allocated to food crops the higher the chances of achieving household food security. Further, households should develop innovative farming models that would ensure they increase chances of achieving food security.

Since land is a fixed factor of production there is need for households in Kenya to adopt farming technologies that are geared towards value addition rather than purely primary production. Farmers should designate some land for food crops production, because this would minimize reliance on purchase of food in situations when tea income is minimal.

#### References

- Bryman, A., & Bell, E. (2007). *Business research methods*. (3<sup>rd</sup> Ed.). Oxford, University Press. Corwin Press.
- Carletto, C., Kilic, T. & Kirk, A. (2009). Non-traditional crops, traditional constraints long-term welfare impacts of export crop adoption among Guatemalan smallholders. *The World Bank Research Working Paper Series*. New York.
- Cooper, D. R., & Schindler, P. S. (2008). *Business research methods*. (10<sup>th</sup> Ed.). New York: McGraw-Hill.
- FAO (2011). Executive brief: Horn of Africa, drought 2011. Accessed February 21, 2016 at: <a href="http://www.fao.org">http://www.fao.org</a>
- FAO (2014). The State of food insecurity in the World 2014. Food security report (4<sup>th</sup> Ed.). FAO, Rome.
- FAO, (2003). The state of food insecurity in the World 2002. Food security report (2<sup>nd</sup> Ed.). FAO: Rome.
- FAO, (2006). Integrated food security and Humanitarian Phase Classification (IPC) framework, ESA Policy Brief, 06-01. http://www.fao.org
- FAO, (2008). The state of food insecurity in the World: Addressing food insecurity in protracted crises. Rome. Retrieved <a href="http://www.fao.org">http://www.fao.org</a>
- Folaranmi, T. (2012). Food insecurity and malnutrition in Africa: Current trends, causes and consequences. Retrieved from <a href="https://www.consultancyafrica.com">www.consultancyafrica.com</a>
- Glopolis, V. (2013). Food security and agricultural trade in Kenya. The impact of the Economic Partnership Agreement (EPA) on food security of poor Kenyans. Prague Global Policy Institute-Glopolis.
- Kirimi, H. (2016). Kirinyaga County intergrated development plan. Kutus Government Press
- Kirimi, L. Gitau, R. & Olunga, M. (2013). Household food insecurity and commercialization among smallholder farmers in Kenya. A paper prepared for the 4<sup>th</sup> International Conference of the African Association of Agricultural Economists. Tegemeo Institute of Agricultural Policy and Development, Egerton University.
- Kuhlgatz, C. &Abdulai, A. (2011). Determinants and welfare impacts of export crop cultivation Empirical evidence from Ghana. *Paper prepared for presentation at the European Association of Agricultural Economists*. Switzerland 2011. Congress.
- Kumba, J. K. (2015). The role of household characteristics in determining food security in Kisii Central Sub-County, Kenya. *Research on Humanities and Social Sciences*, 5(7),1-3

- Lagat, B. K., Sulo, T. K. Nyangweso, P. M. Ngéno, V. K. Korir, M. K. & Kipsat, M. J. (2010). Household food security in commercialized subsistence economies: factors influencing dietary diversity of smallholder tea farmers in Nandi south, Kenya; Poster presented at the Joint African Association of Agricultural Economists (AAAE) and 48th Agricultural Economists Association of South Africa (AEASA) Conference. Cape Town: South Africa.
- Ministry of Agriculture (2011). *District Agricultural Office annual report*. Nandi South District, Kenya.
- Ministry of Agriculture (2011). *Ministry of Agriculture annual report for 2011*. Nairobi: Ministry of Agriculture.
- Ministry of Agriculture (2016). County Agricultural Office annual report. Kirinyaga County, Kenya.
- Ringeler, C., Zhu, T., Cai, X., Koo, J. & Wang, D. (2010). Climate change impacts on food security in sub-Saharan Africa: Insights from Comprehensive Climate Change Scenarios, IFPRI Discussion Paper No. 1042 Washington DC.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (5<sup>th</sup> Ed.). Chichester, West Sussex: John Wiley & Sons, Inc.
- Webb, P., Braun, J. & Yohannes, Y. (2006). *Famine in Ethiopia: Policy implication of the coping failure at national and household levels*. Research Report 92. Washington DC: International Food Policy Research Institute.
- World Bank, (2013). *Working for a World Free of Poverty*. Washington DC, World Bank. Pearson Education Inc.
- World Food Program (2009). *Kenya food security update. World food program,* New York. Pearson Professional Publications.
- World Food Program, (2019). Global food insecurity in the world. Food Security, FAO, Rome, Allyn and Bacon.

# EFFECT OF VALUE CHAIN DESIGN ON PERFORMANCE OF IMPROVED INDIGENOUS/KIENYENJI CHICKEN IN KIRINYAGA COUNTY

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#### **Abstract**

Access to inputs would aid in achievement of desired output among improved chicken farmers. Thus, the study investigated the effect of value chain design on performance of improved indigenous (kienyenji) in Kirinyaga County. Descriptive research design was applied and primary data gathered among 103 respondents. Data was analyzed using descriptive and inferential statistics. Study findings indicate that production of improved kienyenji chicken in Kirinyaga County was positively affected by inbound logistics, operating activities, outbound activities and support activities. It was concluded that there is need for provision of requisite inputs that would optimize performance of improved indigenous chicken in Kirinyaga County.

**Keywords:** Value Chain, Design, Improved Indigenous, Performance, Inbound and Outbound Logistics

#### Introduction

Agricultural activities have significant role in economic development in Kenya. This is supported by an average production of 24% and 26% directly in Gross Domestic Product (Mutua, 2018). According to KIPPRA (2013), agriculture accounts for at least 65% of total export with 18% and 60% of formal and total employment respectively. The sector is volatile since only 25% is carried out in large scale, hence most farmers are exposed to challenges that face small scale sector. Since the sector provides source of employment in rural areas there is need for optimization of its production capacity so as to achieve not only food security, but also promote growth and development in rural areas.

The average production of indigenous chicken is 30% of total meat consumed worldwide (Food and Agricultural Organization [FAO], 2012). The average number of indigenous chickens is 70% of total chicken in Africa (FAO, 2011). In Kenya, chicken farming is carried out by rural Kenyans and currently there are approximately 31 million birds. Of these 75% are indigenous, 22% are broilers and layers and at least 1% is the breeding stock (Mutua, 2018). These farming models

minimize odds of achieving optimal production capacity. The sector can achieve more value if it is managed through value chain approach.

There is need for value chain in poultry production in Makueni County. At least 10,000 farmers who have been trained by the government and non-governmental organizations on the need for safe poultry management practices and bio-security. There is limited compliance with vaccination programmes with at most 20% who have complied with farm infrastructure development (MESPT, 2015). This has been blamed to lapse in inbound activities, operational activities, outbound activities and support activities. Moreover, there are reported high mortality rates with an average of 90% within six weeks. Notable causes of these mortalities are diseases, poor housing, insufficient and unreliable water supply, parasites and lack of quality feeds. Further, there have been low compliance with biosecurity requirement among farmers (MESPT, 2015). Farmer's access to market is low, because the average price of eggs is Ksh 300 to 450 per tray and mature hens retail at Ksh.500 and cockerel at Ksh. 800. These prices are not profitable and, in most instances, breakeven point is rarely met.

The situation is different in urban areas where the demand for indigenous chicken is high. This is because of social economic characteristics, health concerns and demand for white meat (Mengesha, 2012). According to USAID (2010), increase in the level of disposable income should shift the demand for indigenous chicken up by 2020. Hence, there is need for support among small scale farmers to enhance their production capacity, protect them against scavenging low quality feed suppliers, failure to immunize and enhancement on quality of research and development to develop disease chicken treatments. (Badhaso, 2012).

Due to low inputs, there are low outputs in indigenous chicken farming. In some instances, the chicken lays first egg after 230 days others fail to achieve the desired weight of 2.2 kg and 1.6kg for male and female respectively, because small scale farmers may lack access to veterinary services, farm management skills, access to technology and lack of adequate capital to finance agricultural activities (Yitbreak, 2013). Hence, the study examined the effect of value chain design on production of improved indigenous chicken in Kirinyaga County. Specific objectives of the study were:

- i. To evaluate the effect of inbound logistics on production of improved indigenous (kienyenji)chicken in Kirinyaga County.
- ii. To examine the effect of operational activities on production of improved indigenous (kienyenji) chicken in Kirinyaga County.

- iii. To establish the effect of outbound activities on production of improved indigenous (kienyenji) chicken in Kirinyaga County.
- iv. To determine the effect of support activities on production of improved indigenous (kienyenji) chicken in Kirinyaga County.

# Concept of Value Chain

Value chain model was developed by Porter as a tool for examination of strategies that can be adopted by an organization to gain competitive advantage. The model amalgamated several management theories (Altenburg, 2006). The model advocates for network management approach with an aim of achieving competitive advantage from horizontal and vertical market linkages. Horizontal linkage is a link between two or more market participants and vertical linkages are created through interrelationship between stakeholders who are involved in different production stages.

Value chain ought to identify a product from its pre-production to consumption. Players in value chain process are raw material providers, processors, producers, suppliers and retailers. This process is relational and its success is based on capacity to optimal running of business primary activities. The chain commences with inbound logistics and terminates with service. The loop is complete through the link between pre-production stakeholders and product consumers. The flow chart is as follows:



### Figure 1: Value Chain Model

The basic principle of value chain design is that companies operate in areas where they enjoy competitive advantage and should be geared towards achievement of competitive advantage. In indigenous chicken production, inbound logistics include support and training of farmers, provision of farm input, breed selection, provision of drugs and support on feeding programs. Operations activities include collection of output, provision of storage facilities, and provision of product transport and maintenance and repairs. Outbound activities include support on market development, sales and marketing activities, consumer information gathering and customer relationship management. Marketing and sales and service include

infrastructure support, human capital development, equipment financing, provision of financial support and support of procurement practices (Tittiane, 2013).

#### Literature Review

Value chain theory and a tool for evaluation of competitive advantage and approaches can be adopted to exploit opportunities presented by it. Value chain model segregates organization activities into input process, production, marketing and distribution. Through this, organization activities are divided into different distinct activities that can aid in evaluation of differentiated approaches to achieve optimal performance (Porter, 1985). To achieve optimal performance in an organization there is need for evaluation of primary and secondary activities and differentiate them.

In agribusiness farmers are expected to invest in inbound logistics through attendance of seminars, sourcing of farming inputs, selection of breeds, support on feeding programs; operating activities through collection of outputs, access to transport, warehousing facilities ,maintenance and repair of infrastructure. Further, farmers should seek for outbound activities through support on market development, consumer information and customer relationship management. This would aid in quality production of eggs, decreased mortality rate, frequency of veterinary services and age of laying first egg.

Murangiri, Anwata and Kanui (2016) evaluated extension services provided to farmers in Katulani district in Kitui County. The research design adopted was cross sectional and primary data gathered through questionnaires among 110 poultry farmers in peri and urban areas. Descriptive statistics analyzed the data. It was documented that agricultural extension services were only available to 50% of poultry farmers. It was recommended that government policies should be fully implemented on provision of extension services among farmers. Moreover, there was a gap on provision of capacity building services that would enhance production capacity of poultry farmers.

Tittiane (2016) investigated the effect of entrepreneurial value chain on performance of small-scale dairy farmers. Purposive sampling was used in selection 50 dairy farmers in Eldoret. Primary data was collected via administration of questionnaires. Univariate and multivariate techniques analyzed the data. Study findings indicated that there was notable production improvement due to adoption of entrepreneurial value chain approach. It was recommended that to improve dairy farming among small scale farmers, there was need for adoption of value chain strategies and

introduction of policies that would support access to financing among stakeholders involved in dairy farming activities.

Bolo, Lorika and K'Obonyo (2009) investigated the effectiveness of value chain system design on performance of selected producer dairy owned groups in Kenya. Exploratory research design was applied. In depth analysis revealed that there were several value chain activities that were carried out in dairy farming. They included inbound logistics, operational activities, out bound activities and support activities. It was recommended that to operationalize operations of value chain, there was need for consideration on the role played by external stakeholders. Further, there was need for consideration of all measures that would ensure that all opportunities available among farmers were fully executed.

Emilia, Dominique, Virginia and Aneilia (2014) assessed performance of food value chains as a mechanism for identification of response mechanisms. Sustainability of value chain mechanisms was examined on dimensions such as economic, social, environmental, health and ethical. Study findings indicated that there were notable performance changes in local and global food value chain. Local performance recorded higher growth in health and social dimensions. It was recommended that there is need for creation of shared value chain that would optimize performance.

Kamau (2018) investigated the effect of improved technologies on production of small-scale holders in Kakamega and Makueni County. Exploratory research design was applied. Primary data was gathered using interviews among 384 households that were selected using multistage sampling technique. Study findings indicated that adoption of technology had positive effect on egg production. It was recommended that there was need for evaluation of policies so as to improve on quality of network among different stakeholders involved in chicken farming. Measures aimed at enhancing market access ought to be developed so as to make the venture profitable.

Magothe, Okeno, Muhuyi and Kahi (2012) evaluated current status of indigenous chicken production in Kenya. They argued that though indigenous chicken had significant role in economic and social welfare among low-income earners, indigenous chicken farming was common among low-income earners since their production costs were lower especially those who can farm them in free range. Moreover, they were most resistant to diseases, but highly infested by parasites. Due to lack of capital, optimal production would not be achieved. It was recommended that there was need for joint effort among different stakeholders so as to improve on production of indigenous chicken.

Mutua (2018) investigated challenges associated with indigenous chicken production and adoption of biosafety systems in Makueni County. Survey research design was adopted and systematic sampling applied in selection of 158 respondents from Kithungo and Mbooni sub-Counties. Primary data was gathered through administration of questionnaires. It was found that biosecurity measures adopted were on vaccination, disinfection, cleaning chicken houses and fences. These measures had effect on production. It was found that the production was hindered by inadequate biosecurity knowledge, high production cost, poor housing, inadequate housing and poor access to chicken market. It was recommended that there was need for sensitization through available networks such as radio so as to optimize production capacity of indigenous chicken farming.

Nyamweno and Olweny (2014) investigated the effect of working capital management on performance of listed companies in Kenya. Panel data of 27 listed companies was collected from 2007 to 2012. Robust generalized methods moments were fitted. Study findings indicated that there was no significant effect of days of accounts receivable and cash conversion cycle on performance. Further, there was significant effect of days of accounts payables and inventory on performance. Though, the study drew respondents from listed companies, there is need for provision of working capital services among indigenous poultry farmers in Kirinyaga county so as to enhance their production capacity.

Ali (2019) investigated the effect of working capital management on performance of listed agricultural companies in Nigeria. Panel data was gathered from agricultural listed companies from 2007 to 2016. Classical modelling indicated that accounts payable ratio negatively affected performance of listed agricultural listed companies. Accounts receivable ratio and inventory ratio positively affected performance. Cash conversion cycle negatively impacted performance of listed agricultural companies. There is need for provision of working capital support among players in agricultural sector so as to enhance performance.

Waithaka (2012) investigated relationship between working capital management and performance of listed agricultural companies in Nairobi securities exchanges. Correlation research design was applied and multiple regression model was fitted. Study findings indicated that financial performance of listed agricultural companies was affected by cash management, receivable management and inventory management. The study findings may not be generalized in small scale farmers since they may have challenges in accessing capital due to limited collateral as compared to listed agricultural companies. Further, agricultural listed companies are in

different sectors and the current empirical examination is on small scale poultry farming.

# **Conceptual Framework**

The study hypothesized that production of improved indigenous chicken in Kirinyaga County is dependent on inbound logistics, operational activities, out bound activities and support activities. The conceptualized relationship is as shown in Figure 2.

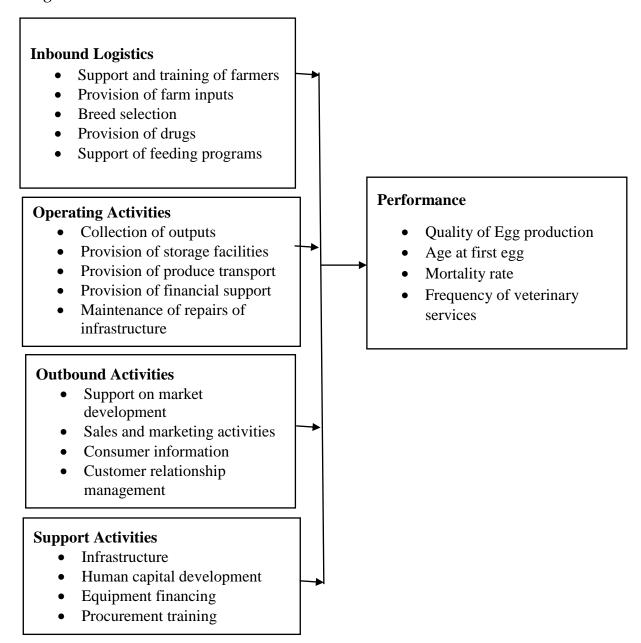


Figure 2 Conceptual Framework

# Research Methodology

The study adopted descriptive research design which according to Sekaran and Bougie (2013) is applied when the researcher aims at responding to questions on what, why and how on the variables under investigation. The study investigated the effect of value chain design on performance of indigenous chicken farming in Kirinyaga County. The choice of the research design was supported by past empirical studies such as Murangiri et al., (2016) and Magothe et al., (2012).

The target population comprised of 300 indigenous chicken farming hailing from Kirinyaga County. This was compiled through various farmers groups that have been formed to aid in value addition while souring inputs and selling their produce. In the study the sampling frame comprised of 300 farmers who were members of different farmers groups. Simple random sampling was considered, while selecting the respondents for the study. A sample of 103 respondents was considered and determined using Yamane formula (Yamane, 1967) as follows; n = N / [1 + N (e) 2] Where n is the sample size, N is the population size, and e is the level of precision.

$$n = 300 / [1 + 300(0.08)^2] = 103$$

Primary data was collected through self-administration of questionnaires with the support of research assistants. The choice of questionnaires was based on the fact that they are easy to administer. Further, some questionnaires were administered through use of phones.

Collected data was analyzed through descriptive and inferential statistics. Descriptive statistics adopted in the study include mean, standard deviation and coefficient of variation. Inferential statistics adopted in the study included correlation to show the strength of the effect of value chain design and performance. Further, multiple regression analysis was carried out to show the nature of the effect of value chain design and performance of improved indigenous chicken farming in Kirinyaga County.

# **Findings and Discussions**

The first objective of the study examined the effect of inbound logistics on performance of improved indigenous chicken in Kirinyaga County. The respondents were requested to indicate their level of agreement on five-point Likert scale ranging from strongly agree to strongly disagree. Mean, standard deviation and coefficient of variation analyzed the data. Study findings indicate that majority agreed that their group organizes training programs on chicken management (mean = 3.9, standard deviation 0.8). Secondly, there was an agreement that they frequently attend seminars on how to manage operational costs (mean = 3.8, standard deviation = 1). Thirdly, it was reported that through farmers groups they were able to access farm inputs (mean = 3.7, standard deviation = 0.6). Further, it was agreed that farmers were able to select breeds that were responsive to their needs (mean = 4.1, standard deviation = 0.5). Moreover, respondents agreed that they are able to participate in continuous improvement of their breeds through feedback (mean =3.8, standard deviation = 0.4). Farmers organization has aided farmers to access requisite drugs that are crucial in their productions process (mean =4.2, standard deviation = 0.7). Farmers are able to access quality feeds since they produce their own feeds (mean = 3.9, standard deviation = 0.7).

**Table 1: Descriptive Statistics on Inbound Logistics** 

	Mean	Std. Dev	CV
Our group organizes training programs on chicken			
management	3.9	0.8	4.9
We frequently attend seminars on how to manage			
operational costs	3.8	1	3.8
Through our group we are able to access farm inputs	3.7	0.6	6.2
Our selection of breed is based on response to our			
needs	4.1	0.5	8.2
Through our group we participate in continuous			
improvement of our breeds	3.8	0.4	9.5
We are able to access requisite drugs through our			
organization	4.2	0.7	6.0
We are able to feed our birds with quality feeds since			
we produce on our own	3.9	0.7	5.6

The second objective of the study investigated the effect of operating activities on performance of improved indigenous chicken in Kirinyaga County. Study findings in Table 2 indicate that majority agreed that they have formed platforms for eggs collection (mean = 3.6, standard deviation = 0.8) and that their collective eggs collections improve their price bargaining capacity (mean = 3.9, standard deviation = 0.7). Thirdly, majority agreed that they have managed eggs storage costs due to formation of groups (mean = 3.8, standard deviation = 0.6) and that they have managed to plan on transport and logistics of their eggs (mean = 4.1, standard deviation = 0.9). Majority mean = 3.5 stated that they have managed to access financial support through groups and a mean =3.6 stated that they have managed to maintain their infrastructure.

Table 2: Descriptive Statistics on Operating Activities

	Mean	Std. Dev	CV
We have formed eggs collection platforms	3.6	0.8	4.5
Our collective egg collection improves our price			
bargaining capacity	3.9	0.7	5.6
We have managed eggs storage costs due to formation			
of groups	3.8	0.6	6.3
We have managed to plan on transport and logistics of			
our eggs	4.1	0.9	4.6
We manage to access financial support through our			
groups	3.5	0.8	4.4
We manage to maintain our infrastructure	3.6	0.7	5.1

The third objective evaluated the effect of outbound activities on performance of improved indigenous chicken in Kirinyaga County. Findings in Table 3 indicates that majority agreed that they continuously brainstorm on market improvement strategies (mean = 4.2, standard deviation = 0.8). Secondly, majority respondents were of the view that they have formed marketing team to distribute their eggs (mean = 4.2, standard deviation = 0.7). Thirdly, majority stated that they have adopted research approach to gather their client's information (mean = 4.1, standard deviation = 0.6). Further, majority agreed that through packaging and distribution of eggs in different outlets they have managed to identify patterns (mean = 3.9, standard deviation = 0.5). Majority mean 3.8 agreed that due to professional management approach they have developed healthy relations with their customers.

**Table 3: Descriptive Statistics on Outbound Activities** 

	Mean	Std. Dev	CV
We continuously brainstorm on market improvement			
strategies	4.2	0.8	5.3
We have formed marketing team to distribute our eggs	4.2	0.7	6.0
We have adopted research approach to gather our			
client's information	4.1	0.6	6.8
Through packaging and distribution of eggs in different			
outlets we have managed to identify patterns	3.9	0.5	7.8
Due to professional management approach we have			
developed healthy relations with our customers	3.8	0.8	4.8

The fourth objective of the study evaluated the effect of support activities on performance of improved indigenous chicken in Kirinyaga County. Findings in Table 4 indicates that there was an agreement that through their group's members they have learnt how to construct quality infrastructure (mean = 3.8). Secondly, there were improvement in development of human capital as indicated by a mean of 3.9. Improved indigenous farmers have managed to access equipment through financing by financial institutions mean = 3.7. Further, there was a general agreement that through groups, farmers have learnt procurement procedures that ought to be followed. Majority mean = 4.1 respondents, stated that they have developed optimal supplier management procedures aimed at enhancing their procurement criterions mean = 4.1.

**Table 4: Descriptive Statistics on Support Activities** 

		Std.	
	Mean	Dev	CV
Through our groups we have learnt how to construct			
quality infrastructure	3.8	0.8	4.8
Through our groups we have managed to develop our			
human capacity	3.9	0.7	5.6
Through our groups we have managed to procure			
equipment through financial institutions financing	3.7	0.6	6.2
Through our groups we have learnt procurement			
approaches to be followed	3.6	0.5	7.2
We have developed optimal supplier management			
procedures	4.1	0.6	6.8

An investigation on the performance of improved indigenous chicken indicates that majority mean = 4.2 agreed that they improved on quality of their eggs. Secondly,

majority stated that on average they have managed to achieve the first egg on the 125<sup>th</sup> day. Further, there was a general agreement that they were a decrease on chicks' mortality (mean = 4.2) and that majority could access reliable veterinary services upon participation in value chain process (mean = 3.8, standard deviation = 0.8).

Table 5: Descriptive Statistics on Performance of Improved Indigenous Chicken

		Std.	
Category	Mean	Dev	CV
We have improved on quality of our eggs	4.2	0.8	5.3
We have managed to achieve first egg production by 125fh			
day	4.1	0.9	4.6
The mortality rate of our chicks has decreased	4.2	0.7	6.0
We now have reliable access to veterinary services	3.8	0.8	4.8

Correlation analysis was carried out to evaluate the strength of the effect of value chain design on performance of improved indigenous chicken in Kirinyaga County. Results in Table 4.6 indicates that there was positive and significant effect of inbound logistics on performance of improved indigenous chicken in Kirinyaga County (rho = 0.652, p value <0.05). Operating activities have a positive and significant effect on performance of improved indigenous chicken in Kirinyaga County (rho = 0.736, p value < 0.05). Outbound activities have positive and significant effect on performance of improved indigenous chicken in Kirinyaga County (rho = 0.751, p value < 0.05). Support activities have positive and significant effect on performance of improved indigenous chicken in Kirinyaga County (rho = 0.674, p value < 0.05).

**Table 6: Correlation Analysis** 

Table 0. Com	Table 6: Correlation Analysis						
Category	Correlation	Performance	Inbound logistics	Operating activities	Outbound activities	Support activities	
3	Pearson						
Performance	Correlation	1	0.652**	.736**	.751**	.674**	
	Sig. (2-tailed)		0.00	0.00	0.00	0.00	
	N		80	80	80	80	
Inbound	Pearson						
logistics	Correlation		1	.496**	.326**	.561**	
	Sig. (2-tailed)			0.00	0.003	0.00	
	N			80	80	80	
Operating	Pearson						
activities	Correlation			1	.414**	.457**	
	Sig. (2-tailed)				0.00	0.00	
	N				80	80	
Outbound	Pearson						
activities	Correlation				1	.542**	
	Sig. (2-tailed)					0.00	
	N					80	
Support	Pearson						
activities	Correlation					1	

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Model summary in Table 7 has an R squared of 0.679 that indicates that 67.9% of changes in performance of improved kienyenji chicken in Kirinyaga County can be accounted by inbound logistics, operating activities, outbound activities and supporting activities. Further, 32.1% of changes in performance can be accounted by other aspects excluded in the model.

**Table 7 Model Summary** 

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.824	0.679	0.493	0.995

Analysis of variance in Table 8, indicates that there was a significant effect of inbound logistics, operating activities, outbound activities and support activities on performance of improved kienyenji chicken in Kirinyaga County.

Table 8 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	15830.44	4	3957.61	20.206	0.000
Residual	14689.45	75	195.859		
Total	30519.89	79			

Regression coefficients results in Table 9 indicate that inbound logistics has positive and significant effect on performance of improved indigenous chicken in Kirinyaga County ( $\beta = 0.504$ , p value < 0.05). This indicates that unit increase in inbound logistics increases performance of indigenous chicken, while holding constant operating, outbound and support activities constant. Secondly, there was a positive and significant effect of operating activities on performance of improved indigenous chicken in Kirinyaga County ( $\beta$  = 0.557, p value < 0.05). This implies that unit increase in operating activities leads to an increase in performance by 0.557, while holding constant inbound logistics, outbound activities and support activities. Outbound activities have positive and significant effect on performance of improved indigenous chicken in Kirinyaga County ( $\beta$  = 0.165, p value < 0.05). This indicates that unit increase in outbound activities is associated with 0.165 units of performance while holding constant inbound logistics, operating activities and support activities. Support activities has positive and significant effect on performance of improved indigenous chicken in Kirinyaga County ( $\beta$ = 0.377, p value < 0.05). This implies that unit increase in support activities increases improved indigenous chicken performance by 0.377 units, while holding constant inbound logistics, operating activities and outbound activities.

**Table 9: Regression Coefficients** 

		G 441.1	Standardized	_	<b></b>
	Unstandardized	Coefficients	Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	37.155	6.057		6.134	0.000
Inbound logistics	0.504	0.09	0.744	5.616	0.000
Operating					
activities	0.557	0.113	0.624	4.936	0.000
Outbound					
activities	0.165	0.074	0.221	2.227	0.029
Support activities	0.377	0.086	0.479	4.387	0.000

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#### **Conclusion and Recommendations**

From the findings, it can be concluded that there is need for provision of inbound logistics through support and training of farmers, provision of farm inputs, selection of breeds, access of drugs and support through feeding programs. To optimize production of improved indigenous chicken in Kirinyaga County, there is need for involvement in operating activities such as collection of outputs, provision of storage facilities, provision of produce transport, provision of financial support and maintenance and repairs of infrastructure. Thirdly, there is need for provision of farmers' support though outbound activities such as market development, sales and marketing activities, provision of consumer information and customer relationship management.

The study recommends the formation of farmers' cooperative societies that would aid in access of various services in value chain process and support activities that would aid in human capital development and minimize level of risk exposure among farmers. Farmers should also be induced on working capital market principles so to minimize odds associated with holding excess stock, access of cash at higher costs and likelihood of mismatch between accounts payable and receivables number of days. Further, there is need for consideration of measures aimed at matching customer needs with respective farmers' group production capacity.

#### References

- Ali, U. (2019). Impact of working capital management on financial performance of listed agricultural firms in Nigeria. Unpublished Masters' Thesis, Abubakar Tafawa Balewa University, Bauchi.
- Bolo, A. Z., Lorika M. J., & K' Obonyo, P. (2009). Effectiveness of the value chain system in the operations of selected producer-owned dairy groups in Kenya. Unpublished Masters in Business Administration Thesis, University of Nairobi.
- Emilia, S., Dominique, B., Virginia, C., & Aneilia, T. (2014). *Performance assessment of food value chains: a way to identifying the responses in terms of policy interventions*. Retrieved from https://www.google.com
- Interventions and Lessons (2011-2014). *Micro Enterprise Support ProgrammeTrust*, Nairobi, Kenya.
- Kamau, C. J. (2018). *Impact of improved poultry production technologies among smallholder indigenous chicken farmers in Kakamega and Makueni– Kenya.* Unpublished Thesis in Masters in Agribusiness, Kenyatta University.
- Magothe, T. M., Okeno, T. O., Muhuyi, W. B., &Kahi, A. K. (2012). Indigenous chicken production in Kenya: I. Current status. *World's Poultry Science Journal*, 68(12), 119-132.
- MESPT, (2015). Documentation of Indigenous Poultry Programming in Makueni County.
- Murangiri, M. R., Amwata, D. A. &Kanui, T. I. (2016). Extension Support Services among Poultry Farmers, a Case of Katulani District, Kitui County. *International Journal of Livestock Research*, 6(3), 8-15.
- Mutua, B. M. (2018). Challenges facing indigenous chicken production and adoption levels of biosecurity measures in selected areas of Makueni County, Kenya. Unpublished Masters Thesis, South Eastern Kenyan University.
- Nyamweno, C. Y., &Olweny, T. (2014). Effect of Working Capital Management on performance of Firms Listed at the Nairobi Securities Exchange. *Economics and Financial Review*, 3(11), 1-14.
- Sekaran, U., & Bougie, R. (2013). Research methods for business (6th Ed.). John Wiley & Sons Ltd.

- Titianne, D. (2013). The influence of an entrepreneurial value chain on performance of smallholder dairy farmers. *Agriculture, Forestry and Fisheries*, 2(6), 218-224.
- Waithaka, A. (2012). The relationship between working capital management practices and financial performances of agricultural companies listed at the Nairobi Securities Exchange. Unpublished Master's Thesis, University of Nairobi.
- Yamane, T., (1967). *Statistics: An introductory analysis*. (2<sup>nd</sup> Ed.). New York: Harper and Row.

# TENDER LEADERS BEHIND BARS- SMOKESCREENS OF THE SELF-IDENTITY OF CHILD INMATES IN BORSTAL INSTITUTIONS OF KENYA

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#### **Abstract**

Nurture provides leadership qualities in human beings. Nature moulds the leader. This indicates how significant childhood is. Yet children constitute vulnerable populations especially those in conflict with the law. In Kenya, such children aged 15-17 years are placed in correctional facilities known as borstal institutions. There are three such facilities in Kenya. Shikusa and Shimo La Tewa are for boys; Kamae Girls Borstal Institution is for girls. In this paper, these children will be referred to as child inmates. They make up the most vulnerable group of all inmates. This is because they are in their developmental and formative years and have not yet grown into functioning adults. Their experiences provides them the opportunities to develop their potentials such as those of leadership. Now correctional facilities are not the best place for children to learn their mistakes and make changes in their behaviour. However, there are indices, smokescreens, of leadership that can be teased from the everyday talk of child inmates. The main objective of this theoretical paper is to identify and interrogate the different forms of expressing negative self-image by the child inmates that hide their leadership potential. The paper adopts an interdisciplinary approach with applied linguistics as the cornerstone. Four theories were used to conduct the desk review. These are Discursive Psychology, Foucault's Constructionist Theory of Meaning and Representation, Discourse-Historical Approach, as well as Becker's Labelling Theory. In conclusion, it should be inmates. We discursively construct our self-identity through the negative expressions in our daily talk.

**Keywords**: Child Inmates, Indices/Smokescreens, Self-Identity, Tease Out, Vulnerable Populations.

#### Introduction

Nurture provides leadership qualities in human beings. Nature moulds the leader. This indicates how significant childhood is. Yet children constitute vulnerable populations especially those in conflict with the law. In Kenya, such children aged 15-17 years are placed in correctional facilities known as borstal institutions. There are three such facilities in Kenya. Shikusa and Shimo La Tewa Borstal Institutions are for boys. Then there is Kamae Girls Borstal Institution. In this paper, these children are referred to as child inmates. They make up the most vulnerable group of all

inmates. This is because they are in their developmental and formative years, and have not yet grown into functioning adults. Their experiences provide them the opportunities to develop their potentials such as those of leadership. Now correctional facilities are not the best place for children to learn their mistakes and make changes in their behaviour. However, there are indices, smokescreens, of leadership that can be teased from the everyday talk of child inmates.

#### Methods

Karagianni and Montgomery (2018:89) selected nine articles for their research. For this paper, sixteen works were reviewed and analysed.

# **Data Analysis**

The study was guided by four theories. These are Discursive Psychology, Foucault's Constructionist Theory of Meaning and representation, Discourse-Historical Approach, as well as Becker's Labelling Theory. In Discursive Psychology, the focus is in what people do with their talk rather than using discourse as a way of accessing what goes on in their mind. The outstanding child inmate thinks and says much about themselves (Horton-Salway, 2001:169-172). Blame management is one of the tenets of the theory. The outstanding child inmate must manage blame. Foucault's Constructionist Theory of Meaning and Representation is best illustrated through his work 'Discipline and Punish' (Foucault, 1979) which provides insight into the 'birth of the prison'. As has been indicated already, practically, the borstal institution is a prison. According to this theory, there is always more than can be seen about an issue. The child inmate has much leadership potential than the society could comprehend. Discourse-Historical Approach is problem-oriented (Wodak, 2015:1). A child inmate being outstanding despite the challenges in the borstal institution is an issue that requires interrogation. The tenets of the theory include ideology, power, history, triangulation, critique and context. The approach is premised on categorization and stereotyping. According to Becker's (1973), deviance is a consequence of external judgements, or labels. Unless the child inmate is keen, they will 'become what they are labelled' within the system. Self-identity and the behaviour of the child inmate may be determined or influenced by the terms used to describe or classify them. The label overtakes the self-identity of the labelled inmate.

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# Results and Discussion/Findings

Adolescence and Leadership

Leadership instils confidence, and helps children solve problems creatively, work in a team collaboratively. Leadership skills allow children to have control of their lives and the ability to make things happen. It gives children many opportunities to develop responsibility. They participate in new experiences with confidence and independence (extension.psu.edu). All children have the potential to develop leadership skills. This applies to child inmates committed to correctional centres-away from the society. Though away from the society, there are those who are honest; diligent; willing to serve others; good listeners; sharp decision makers; encouraging; responsible; reliable and trustworthy; collaborative and amiable; capable, positive and enthusiastic; creative and flexible; motivated and committed (http://elthamnorthps.vic.edu.au>; https://www.teachstarter.com.).

Leadership skills are important for adolescents, even child inmates. The leadership opportunities help them to learn the art of building relationships within their peers; achieving tasks effectively; providing opportunities to learn to identify and display effective communication and interpersonal skills; and more importantly defining identities. These enables them, even as child inmates, to stay authentic; keep an open mind and always listen; know how to delegate tasks to achieve common goals; seek knowledge; and quite significantly learn from mistakes to improve for the future. As a result of all these they are transparent in their actions and decisions. Good leaders will communicate with the group throughout their decision-making processes, developing trust between them and those who they represent. This is the case with the outstanding child inmate (<a href="https://www.envisionexperience.com">https://www.envisionexperience.com</a>)

Tough child inmates, they are self-sufficient; they like to dabble-they have lots of interest; they are team players-good listeners, have the potential to inspire and empower, know how to include others in their activities, ensure everybody felt comfortable...there are those inmates whom others looked up to in moments of decision making; they bare flexible; they are empathetic-having a deep comprehension of how to relate to others; they trust their intuition; they are butterflies; they know and state independent thoughts (<a href="https://101productivity.com">https://101productivity.com</a>).

Shah and Pathak (2015:48) posit that many thinkers say that good leaders are made, not born. If one has the desire and willpower, they can become an effective leader.

Good leaders develop through a never-ending process of self-study, education, training and experience. This is the case even with the child inmate within the borstal institution system. The leader is expected to be friendly, likable, attentive in class, honest and confident.

Among the ways in which leaders emerge in school settings include popularity among other students as well as initiatives students take by taking up responsibilities. The qualities and characteristics among adolescent students include respecting others; being a problem solver; maintaining discipline; being effective speakers; being courageous; being intelligent; being diligent; being wise; being helpful; being loyal; being competent; being visionary; being insightful. Shah and Pathak (2015:48-9). It is strange that the last three are of little significance to the child inmate.

Karagianni and Montgomery (2018:87) argues that there is a gap in the literature with regard to the experience of leadership among school children. Adolescents experience their first formal organization at school and models of leadership are developed from this critical period. Otieno, Kombo and Bowen (2017:47167) argue that adolescent waywardness is a major health concern. Waywardness and related crime is on the increase and are widespread in Africa. However, since adolescents are in their formative years, they deserve and require special handling (Otieno, Kombo and Bowen, 2017:47168). The term 'leadership' has different meanings among scholars. Approaches can differ in terms of their relational influence, cognitive and/or emotional abilities, character in relation to group orientation, and to appeal to self-versus collective interest. In this study, the focus is on personality characteristics, the disposition. This is mainly due to the restrictive environment of the borstal institution (Okutoyi, 2015: xii).

Karagianni and Montgomery (2018:87) elucidates that leadership is regarded in many cases as a complex, multi-component competency rather than a fixed personality trait. Children of all ages can take leadership roles. School, represented by the borstal institution system in this study, is the first formal organization that the majority of individuals experience. School is our primary organization experience in childhood and adolescence. It is communicated to children as being their most important organization experience throughout childhood.

Consequently, our primary learning about organizational culture and organizational roles begins there. For some child inmates, the experience begin in the borstal institution system; here the inmate spends a maximum of three years. Children

spend on average 15,000 hours (12 years) of the most formative years of their lives in school as an organization. It can be hypothesized that our adult organizational behaviours are rooted in how we experience school (Karagianni and Montgomery (2018:86-7). Karagianni and Montgomery (2018:87) add that secondary school students have the ability to develop leadership skills via getting along with others, working with groups through taking part in many youth leadership organisations in school, decision making, and self-awareness as well as learning the organization of self. Their self-identity is constructed through these platforms.

The emphasis in this research constitute the last three. It is useful to examine leadership during childhood and adolescence as what occurs during the developmental years can have an impact on the leadership behaviours exhibited later in the workplace as an adult. Studying adolescent displays of leadership should further our understanding of adult leaders. Shah and Pathak (48:48) surmise that the school is a microcosm of the society. Shah and Pathak (2015:51) elucidate that contemporary leadership scholars and researchers have questioned the place of leadership within the school system. However, much of the confusion surrounding leadership as a field of study may be attributed to a lack of understanding regarding trans-disciplinary, inter-disciplinary, and multi-disciplinary academic fields of study in general.

Karagianni and Montgomery (2018:89) point out that family factors mould the leadership development of adolescents. Leadership potential is greatest among the youngest siblings of the family, for children in families of four or five children, and for those children whose parents provide stimulating environments, opportunities for decision-making, encouragement and acceptance.

#### The Borstal Institution System

Okutoyi (2015:45) indicates that the borstal institution is a 'children's prison' that operates more like a school on the model of approved schools in Kenya. This is ideally; practically, it is a prison. Karagianni and Montgomery (2018:89) posit that adolescence is an important time for leadership growth. Increasing leadership in adolescence can reinforce self-esteem and be a catalyst for flourishing adulthood. Yet many adolescents are never offered the chance to act as leaders. Further, adult leadership models are often inappropriate for teenagers have unique developmental needs. Today, the lines between the 'teen' years and adulthood become blurred. It is useful to examine leadership during childhood. There is an increase in interest in adolescent leadership since adolescent leaders develop from both pro-social and anti-

social constructs. The unique power of both should be recognized. Pro-social leaders are inclusive and build affiliation; anti-social leaders are exclusive and rely on power. Some of the 'anti-social' leaders are found in borstal institutions.

The borstal institution system was intended to separate child inmates from the influence of older habitual criminals and provide education and training, in the hope that this would make inmates less likely to reoffend once released. Onderi (2017: ii) explains that the system is meant for character reformation and eventual reintegration. In the borstal system, the concept rehabilitation heavily borrows from the premise that there are some underlying factors that influence criminal behaviour. Religious attachments/association can reduce the child inmates' behaviour.

Chacha (140-1) points out that the rehabilitation of the child inmate admitted to the borstal institution system starts at the very beginning of the admission process right from the reception board to discharge. The process begins from admission of the child inmates up to and including community re-integration. The rehabilitation regime provides them with basic education to tackle illiteracy, empowering them with knowledge, and work skills for support and sustainability once they are discharged. With regard to formal education, we have class 7 and 8, as well as form one and two. There is also vocational training. Further, there are psychosocial programmes, recreation facilities and services, as well as sports and positive entertainment. Chumo (2021) concur with this. The inmates develop and implement strategies for change on the premise of these programmes (Otieno et al, 2017:47168).

#### **Conclusion and Recommendations**

Child inmates deserve and require special handling because though committed, they are in their formative years and have much leadership potential. These can be teased through analyzing their everyday talk.

It should be appreciated that the programmes within the borstal institution system should be platforms to display these potentials.

#### References

- Becker, H. S. (1973). Outsiders: studies in the Sociology of Deviance. New York: The Free Press.
- Chacha, H. (-). Treatment and Social Reintegration of Offenders: Case Study of Shikusa Borstal Institutions
- Chumo, K. J. (2021). Selected Factors Influencing Effective Management of Formal Education in Juvenile Centres: Case of Kabete and Dagoretti in Nairobi and Kiambu Counties. Laikipia University: Unpublished MA. extension.psu.edu
- Foucault, M. (1979). Discipline and Punish: the Birth of the Prison. London: Penguin Book.
- Horton-Salway, M. (2001). 'The Construction of M.E.: the Discursive action model'. In M. Wetherell, S. Taylor and S.J. Yates (eds). *Discourse as Data: A Guide to Analysis*, London: Sage in Association with the Open University, pp 147-188.

https://101productivity.com

http://elthamnorthps.vic.edu.au

https://www.envisionexperience.com

http://www.teachstarter.com

- Karagianni, D. and Montgomery, A. J. (2018). *Developing Leadership Skills among adolescents and Young Adults: a Review of Leadership Programmes* (https://doi.org/10.1080/02673843.2017.1292928)
- Octopi, A. M. (2015). Rehabilitation of Children in Conflict with the Law: A Case of Shikusa
- Borstal Institution, Kaka mega, Kenya. UON: Published MA.
- Andrei, T. (2017). Factors Influencing Rehabilitation Programs in Juvenile Correction Centres: Accuse of Shikusa Borstal Institution, Kenya. Upon: Published MA.
- Shah, S and Pathak, K. 'Exploring Important Leadership Qualities and Characteristics
- Among Adolescent Students'. 10SR Journal of Humanities and Social Science (10SR-JHSS) Volume 20. Issue 9. Ver 1. (Sept. 2015), pp 46-52. <a href="https://www.10srjournals.org">www.10srjournals.org</a>
- Otieno, R.A., Kombo, J. and Bowen, M. 'Effectiveness of BSFT in Treating Juvenile
- Delinquents and their Parents at Shikusa Borstal Institutions: A Case of Shikusa
- Borstal Institution in Kakamega County'. Elixir International Journal 107 (2017)
- 47167-47173 Wodak, R. (2015). Critical Discourse Analysis, Discourse-Historical Approach
- http://www.researchgate.net/publication/280621881

# ANALYSIS OF SELECTED FACTORS SUPPORTING URBAN SPRAWL PATTERNS USING ANALYTICAL HIERARCHY PROCESS MODEL: A CASE STUDY OF AREAS SURROUNDING ELDORET TOWN, KENYA.

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#### **Abstract**

Eldoret town is currently experiencing rapid urban growth in all directions exerting great pressure on biophysical and socio-economic environments. This is evidenced by fertile agricultural land being converted into patches of built-up areas which could lead to a decline in food production in a region that has been for a long time known as the grain basket of Kenya. This study analyzed selected supporting factors causing urban growth around Eldoret town using Analytical Hierarchy Process (AHP) model. A total of eight independent variables: ive connectivity factors that is distances to nearest roads, powerline, water line, employment centers and restricted areas; two physical factors of slope and elevation and one socio-economic factor of population density were applied in this model in order to rank them since all factors don't contribute equally to sprawling patterns. The results showed that distances to roads, powerline and water line had the highest AHP weights of 27.93%, 17.37% and 17.08% respectively and were the most significant supporting factors driving urban sprawl around Eldoret town. Physical factors of slope and elevation were the least driving factors with each having an AHP weight of 4.94%. Therefore, Uasin Gishu County government should give priorities to roads, powerline and waterline in areas planned to be urban only in order to control sprawl patterns.

**Keywords:** Analytical Hierarchy Process (Ahp), Urban Sprawl Supporting Factors

#### Introduction

One of the most rapidly growing urban phenomena in the 21st Century is emergence of sprawling settlements. Such settlements provide essential services as well as some strain on these centers. Controlling and managing the growth of such settlements requires an understanding of supporting factors that control them to minimize against the stress they cause (Federico et al. 2013). Urban sprawl exert great pressure

on biophysical and socio-economic environment and urban management challenges including increase of impervious surfaces resulting in more water runoff and hence water pollution and flooding (Wilson et al. 2003), traffic snarl-ups, solid waste management, proliferation of slums and informal settlement as well as uncontrolled urbanization as manifested by urban sprawl around its scheduled areas. Therefore factors that support urban sprawl have ignited the attention from several researchers. For instance, Webster et al. 2009 in their study of zones of rural-urban transition identified public policy as a factor that supports urban sprawl. Bhatta et al. 2010 and Siddiqui et al. 2018 in their studies of causes and consequences of urban growth and sprawl in Berlin, Germany and urban growth dynamics of an Indian metropolitan respectively found out that population is the main factor influencing urban growth in peri-urban areas. Osman et al. 2016 in his study of urban sprawl in Giza Governorate of the Greater Cairo region found that proximity to urban center was the main factor leading to sprawl. Lawanson et al. 2012 and Braimoh et al. 2007 in their studies of investigations of rural-urban linkages and spatial determinant of urban land use change in Lagos, Nigeria respectively found that migration from rural areas and affordable rent were the main influential factors to sprawling patterns. Appiah et al. 2014 in their study of determinant of peri-urbanization and land use change patterns in peri-urban Ghana found that increased demands for new housing in the city and the good accessibility as the most significant factors. Mahamud et al. 2016 in their study of identifying factors influencing urban spatial growth for the George Town Conurbation, Malasyia found three significant factors i.e. distance to public amenities, affordable housing and distance to work place.

Eldoret Town is the fifth most populated urban Centre in Kenya after Nairobi, Mombasa, Nakuru and Ruiru with its total population increasing in the recent past to 475,716 (2019, KNBS), from 289,380 (2009, KNBS) and 193,830 (1999, KNBS). At an inter-censual population growth rate of 5.096% per annum, then the total population is projected to grow to 782, 036 by the year 2029, an increase of 306,320 people despite the town being the grain basket of the country.

Therefore since models are one of the tools used by researchers to investigate the behavior of urban sprawl, this study used Analytical Hierarchy Process (AHP) to analyze selected supporting factors driving urban sprawl around Eldoret town. The findings could be useful to Uasin Gishu County government and policy makers for better planning and management of urban growth by controlling the growth of these factors and hence direct the patterns of urban sprawl.

#### **Materials and Methods**

# Study Area

The study area is located in Uasin Gishu County, Kenya, and covers 58 sub-locations. It is bounded by Latitudes 00°52′ 00″N and 00°18′00″N and Longitudes 34°51′00″E and 35°31′00″E covering approximately 1972.77 km² as shown in Figure 1.

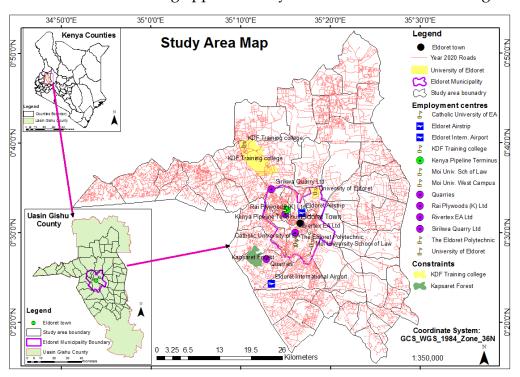


Figure 1: Location of the study area

The average rainfall ranges between 625mm to 1,560mm with two distinct peaks occurring between March and September; and May and August. Dry spells occur between November and February. The temperatures range between 7°C and 29°C. Generally, these conditions are favorable for livestock keeping, crop and fish farming. The dominant soil types are Orthic Ferralsol (Fo) and Humic Nitosols (Hn).

The Southern part is drained by Kerita, Naru and Nureri tributary rivers coming from Tingwa Forest in Keiyo Escarpment confluence forming River Kipkaren, which later confluence with River Sosiani at Kiboloss market eventually joins River Nzoia after Lugari market. The South-Western part of the area is drained by Endoroto, Kipsinandi and Ellegirini tributary rivers coming from Kaptagat Forest in Elgeyo Escarpment confluences at two river dam. The North-Western part is drained by River Chepkoilel which flows into Marura swamp which extends up to Kaprobu Bridge. After the bridge, the name changes to River Sergoit which flows through Soy Bridge to Turbo Bridge where it confluences with River Sosiani.

# **Data and Data Processing**

Literature on urban growth showed various factors that affect urban growth processes including physical factors of slope and elevation, social factors of population density and social services, political factors involving zoning policies and connection related factors i.e. distance from roads, distance from powerline, distance from waterlines, distance from employment centers, and distance from constraints to development. Due to data availability, eight factors thought to strongly influence sprawl patterns in the study area were identified. The data obtained were from both primary and secondary sources as shown in Table 2

Table 2: Characteristics of Datasets Used

S/No.	Data used	Data type	Years	Source
1.	Roads network	Primary	2000,	Digitized from their respective high
	maps $(X_1)$		2016 and	resolution google earth images
			2020	
2.	Employment	Primary	2000,	Were collected from geographic
	centers map		2016 and	locations using Mobile Mapper 50 hand
	$(X_2)$		2020	held GPS
3.	Water network	Primary	2000,	Eldoret Water and Sanitation
	maps $(X_3)$		2016 and	(ELDOWAS), GIS Department
			2020	
4.	Powerline	Primary	2000,	Kenya Power and Lighting Company,
	network map		2016 and	Facility Database (FDB), Eldoret office
	$(X_4)$		2020	
5.	Restricted areas	Primary	2020	were collected from geographic locations
	map $(X_5)$			using Mobile Mapper 50 hand held GPS
6.	Decadal	Secondary	1999,	Kenya National Bureau of Statistics
	Census data		2009 and	(KNBS)
	$(X_6)$		2019	
7.	Elevation map	Primary	2020	Obtained from 30m Digital Elevation
	$(X_7)$			Model (DEM) from Shuttle Radar
				Topography Mission (SRTM) USGS
				website (USGS,
				https://earthexplorer.usgs.gov/).
8.	Slope map (X <sub>8</sub> )	Primary	2020	Obtained from 30m Digital Elevation
				Model (DEM) from Shuttle Radar
				Topography Mission (SRTM) USGS
				website (USGS,
				https://earthexplorer.usgs.gov/).

### Data Analysis

Data analysis was carried out in three steps namely; 1) computation of factors weights, 2) creating a pairwise comparison matrix and 3) calculating consistency ratio (CR).

# **Computation of Factors Weights**

The above supporting and constraints factors maps were used in Multi Criteria Decision model and assigned weights using Analytical Hierarchy Process (AHP) model approach. The first step in AHP was to create the hierarchical structure in which the goal was to rank the eight supporting factors to determine their order of importance in contributing to urban sprawl patterns. The independent variables (X<sub>1</sub>-X<sub>8</sub>) are the supporting factors leading to growth patterns and are kept in second level. Figure 2 shows AHP structure for weighting of independent variables.

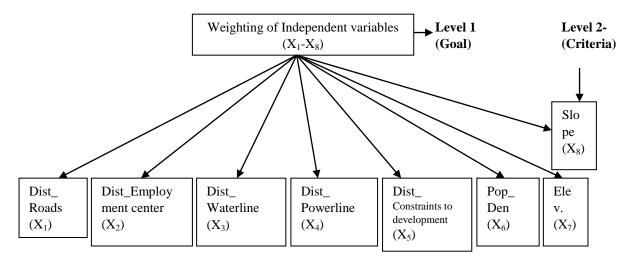


Figure 2: Analytical Hierarchy Process (AHP) Structure

#### **Creating a Pairwise Comparison Matrix**

In the second step, a pairwise comparison matrix was created which gives the relative importance of independent variables with respect to the goal. For example, how importance is distance to road when ranking the variables. This pairwise comparison matrix was created with the help of scale of relative importance from Saaty's 9 point pairwise comparison table as shown in Table 2 and its length is equivalent to the number of independent variables/criteria used in the decision making process. For this study, it was an 8 by 8 matrix as seen in Table 3

Table 3: Saaty's 9 Point Pairwise Comparison Table

Intensity of	Definition	Explanation
importance		•
1	Equal importance	Equal importance or indifference
3	Weak importance of one	Experience and judgement slightly
	over another	favor one activity over another
5	Essential or strong	Experience and judgement strongly
	importance	favor one activity over another
7	Very strong or	An activity is favored very strongly
	demonstrated importance	over another; its dominance is
	-	demonstrated in practice
9	Absolute importance	The evidence favoring one activity over
	-	another is of highest possible order of
		affirmation
2,4,6	Intermediate values	-
	between adjacent scale	
	values	
1/3, 1/5, 1/7,	Values for inverse	-
1/9	comparison	

Source: Saaty (1980)

The value in the pairwise matrix was based on the expert's/decision maker's judgment on urban sprawl supporting factors. The diagonal elements were assigned a value of one (1) because each factor is of equal importance to itself, for example, distance to road  $(X_1)$  will be of equal importance to distance to road  $(X_1)$ . The pairwise comparison matrix begins from second row of the first column. If distance to road is considered to be of 'weak to strong importance' than distance to employment centers, a value of four (4) is entered in row two of column one and its fraction (1/4) is entered in row two of column one. Therefore if employment center is equivalent to n value, then distance to road will be 4n value. The row element (4n) was divided by column element (n) i.e. 4n/n=4. Then dividing the column element by row element i.e. n/4n=1/4. The pairwise comparison process is continued until all possible criteria pairs are evaluated. The lower triangular half is the reciprocal of the upper triangular hence only one is filled to get the values for the other. The values in pairwise comparison table is then entered into AHP model in order to normalize them resulting into a normalized pairwise comparison matrix produced by dividing all column elements by the sum of the column. The criteria weights were calculated by averaging all elements in a row using IDRISI Weights command from the principal eigenvector (Eastman et al. 1993).

# **Calculating Consistency Ratio (CR)**

In order to check whether the calculated criteria weights are correct, consistency was calculated by multiplying column values in the pairwise comparison matrix which is not normalized with the criteria values (Saaty, 1980). The row values were summed to get weighted sum values. Each row weighted sum value was divided by each row criteria value and calculating the average summation the results to get the lambda. The consistency index (CI) was then calculated using the formula lambda minus n divided by n-1 where n=8 number of supporting factors.

Finally consistency ratio (CR) was calculated by dividing the CI with random index (RI) which is the consistency of index of randomly generated pairwise matrix.

#### **Results and Discussions**

#### 1. Results

# Pairwise Comparison Matrix

This section shows the results of how the eight factors are of equal importance (value 1), equal to weak importance (value 2), weak importance (value 3), weak to strong importance (value 4), strong importance (value 5) and very strong importance (value 7) with their reciprocal importance to each other as in Table 3.1.

**Table 4:** Pairwise Comparison Matrix

	<b>X</b> <sub>1</sub>	X <sub>2</sub>	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$	$X_8$
$X_1$	1	4n/n=4	3	2	2	1	7	7
$X_2$	n/4n=1/4	1	1/2	1	3	1	3	3
$X_3$	1/3	2	1	1	3	1	3	3
$\chi_4$	1/2	1	2	1	4	5	2	2
$X_5$	1/2	1/3	1/4	1/3	1	1	1	1
$X_6$	1	1	1/5	1/4	1	1	3	3
$X_7$	1/7	1/3	1/2	1/2	1	1/3	1	1
$X_8$	1/7	1/3	1/2	1/2	1	1/3	1	1

#### Consistency Ration (CR)

The calculated consistency ratio value was 0.10 as shown in Figure 4. The standards for consistency ratio is that it should be less than (<0.10) and since the calculated CR was 0.10, hence the suitability of the defined weighting scheme was confirmed (Boroushaki et al., 2008) and assumed that the matrix was reasonably consistent. If the calculated CR is higher than the standard CR, the matrix is re-evaluated (Eastman et al., 1993). The criteria weights calculated above were used to make a decision/

rank the independent variables in the order that each contributes to urban sprawl growth patterns. The method is iterative since it allows those assigning weights a chance to revise their previous pairwise comparison table on the basis of criteria (Eastman et al., 1993). Factors with higher weights are statistically more important.

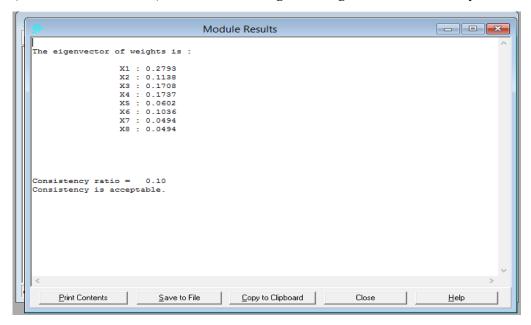


Figure 3: Eigenvectors of Weights

# Ranking of urban sprawl supporting factors

The findings of AHP, indicates distance to roads (X1) 27.93% contributes more to urban sprawl growth patterns in the study area as shown in Table 4.

Table 4: Ranked AHP Weights of Supporting Factors

S/No.	Supporting Factors	AHP Weight for each Factor
1.	Distance to roads $(X_1)$	27.93%
2.	Distance to powerline (X <sub>4)</sub>	17.37%
3.	Distance to waterline (X <sub>3</sub> )	17.08%
4.	Distance to employment center (X <sub>2</sub> )	11.38%
5.	Population density (X <sub>6</sub> )	10.36%
6.	Distance to restricted areas (X <sub>5</sub> )	6.02%
7.	Elevation $(X_7)$	4.94%
8.	Slope (X <sub>8</sub> )	4.94%

#### Discussion

The findings showed higher AHP weights for distance to roads. This result agreed with that of Mohammad et al. (2013) in his study of urban growth simulation through cellular automata, AHP and GIS in Isfahan. This can be due to the fact that

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when sprawl is taking place in the study area, roads are created for accessibility purposes.

The findings show lesser weights for population density than expected. When compared with results of similar studies by Muhammad et al. (2019) in his study of analyzing the driving factors causing urban expansion in the peri-urban areas using logistic regression in greater Cairo region, he found out that population density had a weight of 0.933 hence contradicted since it had a greater effect on urban expansion. The findings by Maher et al. (2017) in a study of improving the capability of an integrated CA-Markov model to simulate spatio-temporal urban growth trends using an Analytical Hierarchy Process and Frequency Ratio in Malasyia found out that population density had a lesser AHP weight of 0.42 compared to slope with 0.83. The reason for lesser AHP weight for population density in the study area can be linked to the fact that Eldoret town is still urbanizing hence there is still more space for settlement.

#### **Conclusions and Recommendations**

#### **Conclusions**

From the findings, the following factors are most significant in growth of urban sprawl patterns in the study area; distance to roads  $(X_1)$  27.93% contributes more to urban sprawl patterns followed by distance to powerline  $(X_4)$  17.37%, then distance to waterline  $(X_3)$  17.08%, distance to employment centres  $(X_2)$  11.38% is fourth, population density  $(X_6)$  10.36% is fifth, and the weakest are distance to constraints to development  $(X_5)$  6.02% being sixth with elevation  $(X_7)$  and slope  $(X_8)$  being seventh since they have similar weights of 4.94%.

#### Recommendations

This study recommends that Uasin Gishu County government should not give priority to transportation network in areas not determined for development to control sprawl and provide such utilities in areas destined for development in order to protect agricultural land since sprawl areas are found in areas connected by roads.

#### References

- Appiah, D. O., Bugri, J. T., Forkuo, E. K., & Boateng, P. K. (2014). Determinants of peri-urbanization and land use change patterns in peri-urban Ghana. *Journal of Sustainable Development*, 7(6), 95.
- Barnes, K.B., Morgan III, J.M., Roberge, M.C., Lowe, S., (2001). *Sprawl development: its patterns, consequences, and measurement.* Towson University, Towson.
- Barnes, K. B., Morgan III, J. M., Roberge, M. C., & Lowe, S. (2001). *Sprawl development: its patterns, consequences, and measurement.* Towson University, Towson, 1, 24.
- Bhatta, B. (2009) Analysis of urban growth pattern using remote sensing and GIS: a case study of Kolkata, India, *International Journal of Remote Sensing*, 30:18, 4733-4746, DOI: 10.1080/01431160802651967
- Bhatta, B. Causes and Consequences of Urban Growth and Sprawl. In Analysis of Urban Growth and Sprawl from Remote Sensing Data; *Springer: Berlin/Heidelberg, Germany, (2010); pp. 17–37.*
- Bhatta, B. (2010). Analysis of urban growth and sprawl from remote sensing data. Springer Science & Business Media. Springer: Berlin/Heidelberg, Germany, (2010)
- Cohen, J. E. (2003). Human population: the next half century. *Science*, 302(5648), 1172-1175.
- eCognition, 2014: User Guide, Defiens Imaging GmbH, Munich
- Kenya. January, 2001. *Kenya Population and Housing Census, (1999)*. Central Bureau of Statistics, Ministry of Finance and Planning.
- Kenya. August, 2010. *Kenya Population and Housing Census*, 2009. Kenya National Bureau of Statistics, Ministry of Finance and Planning.
- Kenya. December, 2019. *Kenya Population and Housing Census, (2019)*. Kenya National Bureau of Statistics, Ministry of Finance and Planning.
- KNBS, 2009: *Kenya Population & Housing Census* Volume 1A and KNBS, (1999): Population & Housing Census Volume 1
- Li, C., Wang, J., Wang, L., Hu, L., & Gong, P. (2014). Comparison of classification algorithms and training sample sizes in urban land classification with Landsat thematic mapper imagery. *Remote sensing*, 6(2), 964-983.
- Maher, M. A. (2017) Improving the capability of an integrated CA-Markov model to simulate spatio-temporal urban growth trends using an Analytical

- Hierarchy Process and Frequency Ratio. *International Journal of Applied Earth Observation and Geoinformation*
- Mahamud, M.A.; Samat, N.; Mohd Noor, N. Identifying Factors Influencing Urban Spatial Growth for The George Town Conurbation. Plan. *Malays*. J. (2016), 14. [CrossRef]
- Muhammad, A. (2010) Methodology for identifying urban growth potential using land use and population data: A case study of Islamabad Zone IV. International Society for Environmental Information Sciences (2010) Annual Conference (ISEIS)
- Mwasi, B. N. (2004). Landscape Change Dynamics in a Semi-arid Part of Baringo District, Kenya, Based on Landsat-TM Data and GIS Analysis. Amsterdam, The Netherland: Universiteit van Amsterdam, IBED.
- Osman, T.; Divigalpitiya, P.; Arima, T. (2016) Driving Factors of Urban Sprawl in Giza Governorate of the Greater Cairo Metropolitan Region Using a Logistic Regression Model. *Int. J. Urban Sci.*, 20, 206–225. [CrossRef]
- Osman, T., Divigalpitiya, P., & Arima, T. (2016). Driving factors of urban sprawl in Giza Governorate of Greater Cairo Metropolitan Region using AHP method. *Land Use Policy*, 58, 21-31.
- Sari, F. (2020). Assessment of land-use change effects on future beekeeping suitability via CA-Markov prediction model. *Journal of Apicultural Science*, 64(2), 263-276.
- Siddiqui, A.; Siddiqui, A.; Maithani, S.; Jha, A.K.; Kumar, P.; Srivastav, S.K. Urban Growth Dynamics of an Indian Metropolitan Using CA Markov and Logistic Regression. Egypt. J. Remote Sens. Space Sci. 2018, 21, 229–236. [CrossRef]
- Uasin Gishu County .Land Use Regulatory Framework 2014-2017
- Xu et al., (2007). Extraction of Built up land features from Landsat Imagery a Thematic oriented index combination technique. *American Society of Photogrammetry & Remote Sensing*
- Zhang et al., (2014). *Urban built up area extraction from multivariate texture*: ISSN 2072-4292. Retrieved from:
- <u>Urban Built-Up Area Extraction from Landsat TM/ETM+ ... MDPI</u>
  <a href="https://www.mdpi.com">https://www.mdpi.com</a>

# COVID – 19: EDUCATIONAL SETBACKS, LESSONS LEARNED AND WAY FORWARD IN KENYA

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#### **Abstract**

The COVID – 19 pandemic and its effects on education is a new phenomenon at global level. In Kenya, the situation in schools is not only challenging, but has exposed many obstacles to learners, teachers and parents alike. This paper employs a literature review methodology with study objectives exploring a myriad of educational setbacks and challenges experienced by schools as a result of COVID - 19. It highlights some educational needs exposed by COVID - 19 including: economic and social challenges to learners and parents, schools forced to put up remote or online learning infrastructures, showing the huge difference between public and private schools, children's reading skills dropped by 68%, changed school calendar and disrupted term dates and gendered impact of school closures which had a negative effect on girls. In addition, the changing roles of the teacher and the need to increase parental involvement in the education of their children are explored including the lessons that, "one size fits all" type of education does not apply in schools any more. Lastly, the paper takes a closer look at the way forward in form of what the Kenyan government has done to calm things down in schools during COVID - 19. While many schools have worked hard to make technology available for their teachers and learners, there is need to recognize that online learning is here to stay and anything being done to support remote learning is a step to the right direction.

**Keywords:** COVID-19, Educational Setbacks, Remote Learning; Teachers' Roles, Lessons Learned, Parental Involvement, Way Forward for Schools.

# Introduction

The Kenyan Government like other governments globally places a high premium on education and training of all citizens as a vital tool in the attainment of the Kenya's Vision twenty thirty, a catalyst to achieving the 'Big 4 agenda' and SDG 4 on education. Every country, Kenya inclusive works hard to ensure quality, equity, access and relevant

development of education, skills and training to all citizens for national development in each and every sector (Ministry of Education Sessional Paper, 2019). However, COVID – 19 related challenges rolled back many educational gains on both global and national levels, leading to an almost complete halt of school activities. According to a UNESCO (2020) report, about 2 billion learners were out of school by April 2020 with many international examination bodies in basic, middle and college levels suspending their examinations due to school closures.

# **Study Objectives**

The research was guided by the following objectives:

- 1. To establish the setbacks brought about by COVID 19 pandemic to schools
- 2. To examine the changing roles of teachers and the lessons learned
- 3. To determine the way forward for schools after COVID -19

# Methodology

The study reviewed existing literature, observation, and used personal experiences as educators in developing the research.

# Setbacks brought about by COVID – 19 pandemic to schools in Kenya

The COVID – 19 pandemic brought about many setbacks that affected schools in both negative and positive ways. First, economic and social challenges to learners and parents were experienced. Secondly, schools had to change from face to face learning to online learning where learning institutions were forced to step up remote or online learning structures and enhance technological skills of both learners and teachers. In addition, the difference between public versus international or private schools during COVID-19 pandemic were exposed, basic reading skills by children dropped by 68% leading to increased learning gaps, school calendar were changed, thus disrupting the term dates and school closures negatively affected girls.

# Economic and social challenges to learners and parents

According to Areba (2020), parents were not able to finance school related expenses during the COVID – 19 pandemic including learning materials, school meals, uniform, fares to and from school, school kits and other related supplied. Consequently, the Kenyan government asked schools and colleges to embrace remote learning through online education delivery. Schools adopted the use of radio programs, television programs and internet learning especially in those areas with internet network coverage. In some other parts of the country (UNOCHA, 2020), several agencies came together to provide COVID – 19 response activities

including: providing learners with information about available radio programs, back to school campaigns to prevent school dropout, school fumigation, hygiene support and hand washing guidelines.

Areba and Gathuru et al. studies give a list of other education and school related areas that were affected by COVID – 19 including digital learning, learner debt, learner homelessness, food insecurity, poor access to childcare, health care, internet, housing, sexual exploitation especially to the underprivileged in the urban centres and poor disability services (Areba, 2020; Gathuru & Mweyeri, 2021). All theses had serious negative effects to underprivileged children and their households. Consequently, learning, nutritional care and child-care were disrupted due to human and financial challenges which were made worse by cessation of movement and lock-downs incapacitating people's ability to work.

# Stepping up remote/online learning in learning institutions

Remote learning was the only way out to continue learning during the pandemic, teachers and learners were grounded due to cessation of movement, lockdown and social distancing protocols. According to MoE (2020), Kenyan government came up with a 3-factor approach in support of those who had to work or suspected to be vulnerable including: adhering to international and national guidelines for social distancing, quarantine and self-isolation. In addition, the Ministry of Education through Kenya Institute of Curriculum Development (KICD) developed some online content and programs for school going age which were accessible from home through different channels: TV, radio, phone apps and internet to ensure continued learning (MoE, 2020). Among the challenges reported by the school fraternity in implementing the government measures include: prolonged school closures that were not expected with little planning for such an eventuality, marginalized children were unable to access the TV, radio and online content by the Ministry of Education (MoE, 2020; Gathuru & Mweyeri, 2021). There was no supply of ICT tools such as computers or phones for schools to foster online learning in Kenya (Ngari & Ndung'u, 2020). According to Mabeya (2020), the groups that were totally locked out of access included and not limited to: learners with disabilities, those in urban slums, informal settlements; marginalized groups, remote locations, asylum seekers and refugees, and those whose families have lost livelihoods as a result of job cuts or businesses closures.

With internet learning, parents were forced to invest in online learning gadgets for their children comprising of: smart phones, computers, electronic tablets and laptops to ensure access to online classes (Mukora, Njeru & Syekei, 2020). The demand for learners to acquire some learning tools including laptops, smartphones and others exposed the challenge of educational inequality in access and quality among marginal groups and poor households in

the country. According to Human Rights Watch (2020), among the many online learning platforms that Kenyan schools employed comprise of: Zoom, Esoma, Eneza Education, Longhorn, Ubongo Kids and Google Classroom, and online learning resources from Longhorn publishers, the Zeraki Learning App, National Geographic Kids, Kytabu and eLimu, among others.

The challenge of making online learning a reality in Africa and Kenya in particular was and still remains an uphill task as depicted by a UNESCO report (Abidjan, 2020). The report further stated that, 89% of leaners in many countries in Africa lack access to home computers, 82% lack internet connectivity and over 56 million learners live in places with no mobile networks (Abidjan, 2020). In Kenya, the Nation Media Team found out that only 17 million Kenyan leaners mostly in urban centers were able to access digital gadgets when schools closed down and those from rural areas were left out. Learners with disabilities were not catered for with much online content remaining inaccessible to them.

# Public versus international/ private schools during COVID-19 pandemic

Learning went on without disruption in private schools in Kenya while a majority of the public ones faced sphere closures. Although public schools in the country struggled to put up remote-learning structures and received support from KICD especially in rural schools during COVID – 19 pandemic, international schools did not face any challenge. They just switched from face to face classes to online learning (Gathuru & Mweyeri, 2021). How did they navigate the change? Schools offering International systems of education in Kenya were and are adequately equipped with online learning resources, internet and digital structures. Therefore, COVID – 19 did not have much effect on their learning. International schools are attended by children from affluent families who are in a position to pay hefty amounts of school levies enabling purchase of digital learning equipment. Also, affluent families possess digital devices that could be used for learning from home and when physical classes ceased, online classes started immediately without interruption. In addition, some private schools followed the same route because they were already equipped with computer labs and internet connectivity. Although some private schools needed to train their teachers on how to develop and deliver online classes digitally (Gathuru & Mweyeri, 2021), others closed down completely because they could not afford many school related levies and the laid down COVID – 19 protocols and standards. For example, keeping social distance in some schools implied constructing new classrooms, constructing new dormitories, administrative blocks and buying new desks which was a costly affair (Abidjan, 2020).

Remote learning during COVID – 19 pandemic period had its fair share of challenges including a wide learning gap between disadvantaged groups leading to digital divide

(Abidjan, 2020; MoE, 2020; Gathuru & Mweyeri, 2021). Another challenge reported in remote learning in private schools was inadequate progress and success despite its adoption. Studies associate the slow progress and success in schools with lack of teacher skills in technological competencies required in online teaching combined with poor internet coverage in remote regions (Human Rights Watch 2020). It should be noted that not all private schools in the country were able to make the switch to remote learning. Barasa (2021) pointed out that many local private schools in Kenya lacked the economic muscle to support digital learning and teacher salaries during the pandemic. Barasa's study adds that, Kenya lacks a government-based financial support system for private schools. Therefore, these private schools heavy depend on students' tuition fees – making them financially vulnerable during pandemics such as COVID – 19. In such private schools, closing down was the only option.

As they say, every dark cloud has a silver lining. UNESCO (2020) recognizes the likelihood of a permanent shift from face to face to digital learning, working, conducting meetings and other forms of learning taking remote learning to another level. The education fraternity learned the use of online tools and resources in learning, a skills which needs to be sustained. In future, schools and other institutions may never again suffer a great deal of closures bringing them down to their knees. To beat future crises that could lead to total lockdowns, schools and all other learning institutions need to heavily increase internet access for all children including those in low-income countries, remote areas, non-formal settlements and hard to reach places where it is currently very limited. Furthermore (UNESCO, 2020), as digital learning materials and technology progress, attention must be paid to ensuring that they are accessible to learners with functional difficulties and other marginalized groups, and are also culturally and linguistically appropriate.

# Basic reading skills by children dropped by 68% leading to increased learning gap

UNICEF (2020) states that basic reading skills among learners in 12 countries globally went down (dropped) by 68% due to COVID – 19 lockdowns which forced children to stay out of school. Kenya is among these 12 countries captured by the UNICEF (2020) study where the effects of staying away from school by children for over a year rolled back their reading and numeracy abilities. This implies that some learning went with the pandemic especially because very few children are able to learn outside the classroom. At the same time, remote learning was not widely spread owing to poor internet infrastructure and connectivity mostly in rural parts of the country.

Gathuru and Mweyeri (2021) state that staying away from school and inability to access online learning by many learners lead to an increase in learning gap. Inadequate internet connectivity and unreliable electricity connectivity in rural areas and in non-formal

settlements in urban areas were among the major causes of children in these areas being left behind in learning. Expensive school-related bills such as daily internet bundles, learning tools – smartphones and laptops were also mentioned as a barrier to some parents from poor households. These factors combined to increase the learning gap between children from poor households and those who could afford it. Particularly, the cost of internet remains prohibitive in Kenya calling for the need to provide free internet to schools and colleges.

#### Changed school calendar and disrupted term dates

When the first case of COVID -19 pandemic was reported in the country, the Government of Kenya (GOK) launched numerous initiatives to curb its spread. Some of the measures included limiting in-person school instruction, revising academic calendars, and postponing national examinations (Girls Center, 2022). The GOK created health and safety guidelines for school re-openings and sponsored remote and technology-mediated learning tools and programming. Since the schools' opening in January 2021, the school calendar and term dates have never gone back to their normal seasons like before COVID – 19 pandemic where each class/ grade was fully covered in 3 terms in a year. Today, schools are still trying to recover the loss of time and learning. While some grades reported in 2022 for their 2<sup>nd</sup> term sessions. others were reporting back to take examinations which are normally taken before the December holidays. In addition, term dates have been revised where school holidays are shorter than before: one week, two weeks, ten days and so on. Both teachers and learners are tired and fatiqued with little-to-no time to rest. Schools are facing many indiscipline cases and mental health related challenges among learners. Despite the calendar changes, short end of term breaks, complex work of managing different groups of learners and social challenges drugs and substance abuse, Gathuru and Mweyeri (2021) concludes that school communities in Kenya have have adopted the mode of 'Aluta continua' without giving up.

# Gendered impact of COVID-19 and school closures

Girl Center (2022) reported the undesirable outcomes of school closures in relation to COVID – 19 pandemic in Kenya which negative affected girls and young people in rural areas. School closures exposed adolescent girls to mental health issues, insecurity, early marriage and gender based violence leading to teenage pregnancies (Girl Center, 2022). However, the Center lamented about the Government of Kenya and non-state actors' inability to fully mitigate the impacts of school closures for adolescents, teachers and schools. To alleviate the negative impacts of school closures to school going children, Girl Center (2022) proposed the need for continued efforts to understand the implications of school closures and to support vulnerable students in the country.

High levels of school drop-out were reported after schools re-opened. UNICEF (2020) states that most children who went home due to school closures resulting from COVID – 19 were not able to return to school altogether. According to this UNICEF report, 16% of Kenyan learners aged between 10-19 years did not return to school after re-opining. The number was higher in girls than boys particularly due to teenage pregnancies. According to Baker (2020), children who are from poor households, underprivileged, homeless, from non-formal settlements in urban areas and from remote rural places were 5 times likely not to report back to schools after the COVID-19 closures and the impact often remains a life-long disadvantage due to the lost opportunity.

# Teachers' lessons and changing roles

Today, it is glaringly evident that the teacher who was in the classroom before COVID - 19 pandemic is no longer the same today. Teachers have been "taken to hell and back," especially as they had to learn new skills, new methods of teaching, new ways of relating with their learners and parents including handing mental health issues related to extensive school closured. As the changing roles of teachers came into force, some lesson also came along with it.

# Teachers' changing roles

Online teaching has greatly changed the teachers' roles from the "fountain of knowledge" to a facilitator and a learner in the classroom (Pokhrel & Chhetri, 2021). While teachers before COVID – 19 pandemic had their notes, lesson plans and list of class activities ready, this has changed a lot with online learning. Today, the online teacher is obliged to develop creative initiatives which assist in overcoming limitations of virtual learning (Doucet et al., 2020). The online teacher is kept on toes in looking for new knowledge and ideas of engaging and motivating the learning. According to Pokhrel and Chhetri (2021),

Teachers are actively collaborating with one another at a local or international level to improve online teaching methods. There are incomparable opportunities for cooperation, creative solutions and willingness to learn from others and try new tools as educators, parents and students share similar experiences. Many educational organizations are offering their tools and solutions for free to help and support teaching and learning in a more interactive and engaging environment. Online learning has provided the opportunity to teach and learn in innovative ways unlike the teaching and learning experiences in the normal classroom setting. (p. 138).

On the changing roles of teachers, they were transformed to lifelong learners.

# "One shoe fits all" Phenomenon no longer working in schools

Globally, many schools were majorly using a common way of teaching where business was as usual – children were grouped according to their ages and taught in the same class. However, although many countries invested on remote learning using TV, radio and electronic gadgets during the pandemic, emerging evidence suggests that substantial learning was lost during the school closures. As such, teachers have learned a lesson with COVID – 19 that things have to change in order to recover the learning lost during school disruptions (Angrist, 2022). With the learning crises ushered in by the pandemic, teachers need to transform from assessing learning levels, regrouping children by level rather than grade and age, and targeting instruction. Angrist insists that learners need to get comfortable about being in class again, about being with their peers and about the teacher taking them through some concepts before they start learning again. For this to happen, the syllabus and the curriculum have to be shelved for a later date because learners may not learn in their groups according to age any more. They may need to be regrouped in terms of what they know and what they have forgotten. They may need to be grouped to revise and remind themselves what they forgot during the long pandemic closures. According to Angrist, teachers have got to be creative by making remote education a vehicle to make up for learning lost during school disruptions.

# Teachers' lesson: Technology not sufficient for effective remote learning

A great lesson for teachers employing e-learning is that technology for remote learning in schools is important but it is not sufficient (Pokhrel & Chhetri, 2021), other factors need to be taken into consideration for effective learning to occur. The following are some of those factors:

- Teachers' level of exposure to online teaching
- The strength of online teaching infrastructure
- Use of suitable and relevant pedagogy for online education may depend on the expertise and exposure to information and communications technology (ICT) for both educators and the learners.
- *Uncertainty about online assessments* there is no agreed upon process and supervision method yet, a lot of trial and error going on in learning institutions. There is uncertainty and confusion among the teachers, students and parents.
- Cost of internet continuous access to face to face online interactions for learning consumes more data packages becoming a disadvantage to learners from poor backgrounds. Teachers get confused weather to pre-record lessons and share with

- learners or to go for the zoom calls and Google meet classrooms where every learner can respond to discussions in real time.
- *Teacher creativity in online teaching* great online experience heavily depends on the teachers' creativity in making learning more interactive and interesting including collaborations with other teachers to share skills and ideas.

All these factors need to be taken into consideration by teachers and all other stakeholders for effective remote learning to take place in schools.

### **Way Forward for Schools**

Being in school during COVID-19 was spreading fear and panic to teachers, learners, parents and education officers in Kenya and the world over. In order to calm people down and to make learning possible, governments in collaboration with development partners worked together to provide credible information about the pandemic. In Kenya, some of the methods used to make schooling possible during school closures and now after school reopening by the government and the community at large include: gaining insights on facts about COVID – 19 pandemic, the COVID-19 emergency response plan by the Kenyan Government, tax relief and waivers on computers, broadband and free learning gadgets in public schools and increased parental involvement in the education of children. The following section explains each method and how it was used as a way forward.

# Gaining insights on facts about COVID – 19 pandemic

Desperate times calls for desperate measures – the government and other stakeholders worked together to gain and share insights on facts about COVID – 19 pandemic with the public and educational institutions in the country with the belief that, knowledge is power. Barasa (2021) states that educational experts and other stakeholders in the education arena contacted reports and documents reviews from a couple of sources to gain insights, plans, technology-based solutions and workable solutions adopted by the government and other bodies to mitigate the COVID – 19 pandemic. The document were from different sources and not limited to;

Records of the Ministry of Education, Science and Technology; COVID-19 guidelines applicable to education; KICD COVID-19 pandemic mitigation documents; education-related legislation and policies; Kenya Gazette notices; directives of the President and the Cabinet Secretary of the Ministry of Education, Science and Technology; reports of international organizations, including the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations

Office for the Coordination of Humanitarian Affairs (UNOCHA); and reports of the Kenya Education in Emergencies Working Group (p. 2).

Armed with this kind of analysis, several organizations were able to offer some hope to many children and parents who had started getting into a panic mode.

# COVID-19 Emergency Response Plan

The Government of Kenya, through the Ministry of Education, Science and Technology took up the role of coordination and keep check on the education sector response and recovery efforts with support from development partners. The government - development partners' collaboration gave birth to strategic COVID-19 emergency response plan. The COVID -19 emergency response plan was geared towards upholding access to quality, equitable and inclusive education for all. The Emergency Response Plan covered:

Time period from 1 June 2020 to 30 December 2021. It spells out short-, medium- and long-term mitigation measures in the education sector. In the short-term, it focuses on ensuring access to learning through remote, alternative and distance learning solutions. In the medium-term, it aims to assist learners that have fallen behind in their learning. In the long-term, it is designed to develop capacities to mitigate future shocks to the education system (Barasa, 2021, p. 3).

Through this emergency plan, learning through remote, alternative and distance learning solutions were put in place, but not without a fair share of challenges as discussed in another section of this paper. The TVET institutions in the country were not left behind in the digitization of learning agenda. All learning institutions were encouraged to initiate their own COVID-19 emergency response plans to mimic the national one, but on school level.

#### Tax relief and waivers on learning gadgets and broadband

There is need to provide workable programs for online learning in the country. The government should device a way of massively producing free learning gadgets as well as provision of internet services even in the marginalized areas which have suffered limited internet and electricity connectivity (Gathuru & Mweyeri, 2021). The Kenya Information and Communication Act of 2020 is monitoring progress on information and communication technology (ICT) infrastructural improvement and working towards improving online learning at all levels of education in Kenya (Government of Kenya, 2020). The government is looking into reducing or waiving taxes on computers and broadband for affordable computing in the country. Tax waivers on computers and broadband will go a long way in enabling schools to acquire necessary equipment, access online content and launch online learning

programmes (Mukora, Njeru & Syekei, 2020). Another very important gesture that was a great relief to parents was tax relief policy to all Kenyans by the president. The President of the Republic of Kenya introduced a tax relief policy with the aim of easing the financial burden among Kenyans on income tax, corporate tax and value added tax. Although tax relief was not directly focusing on education, parents and other stakeholders were able to support their families including school children.

Further, Mukora, et al. suggest that the government should offer incentives to tech-preneurs and tech-companies to support development of online computer-based training services in the country. This move will attract local public and private investment in online learning, while guaranteeing the availability of computer-based gadgets to facilitate digitalization in the education sector, as well as ease access and increase educational inclusion of vulnerable and marginalized groups. Other methods on making online and remote learning more sustainable and cheaper to many learners in Kenya could be done in partnership with all media houses to share some courses on TV. Also, uploading instruction materials on YouTube and sharing electronic textbooks and articles would help in learning. Tax waiver was not only extended to electronic gadgets. The President of the Republic of Kenya introduced a tax relief policy with the aim of easing the financial burden among Kenyans on income tax, corporate tax and value added tax.

#### Increased parental involvement in the education of children

All parents were quite worried about their children and their learning. Some were not able to access internet for online learning, but some were. It was discovered that online learning needed more supervision than the face to face schooling. However, there is minimal supervision to children taking online classes (Ngari & Ndung'u, 2020). Where possible, parents and teachers needed and still need support in terms of computer skills training to be in a position to supervise online learning. The more parents are involved in the learning of their children, the more they appreciate the schooling process and the role of teachers. Learners making use of electrical gadgets and internet need to be trained about online safety, a role which parents and teachers are well placed with the ability to regulate internet access. Also, there is need to train more ICT experts to supervise online learning as well as offer training on the same to learners (Mabeya, 2020). According to many parents, they were not able to supervise online learning especially because they lacked the necessary skills. Lack of supervision experts forced schools not offer examinations to students. Others feared online learning nursing the fear that online learning is time consuming.

## **Conclusion**

In conclusion, this paper explored the effects of the COVID – 19 pandemic on education in Kenya which is a new phenomenon to all on a global level. The researchers insist that the situation in schools was not only challenging, but exposed many challenges facing learners, teachers and parents. This paper has employed a literature review methodology, highlighted study objectives and explored a number of educational setbacks and challenges that schools had to grapple with at the peak of COVID – 19. It has dealt with some educational needs exposed by COVID – 19 including: economic and social challenges to learners and parents, forcing schools to put up remote or online learning infrastructures, showing the huge difference between public and private schools and exposing 68% drop in children's reading skills in the country. Also, there were changes in school calendar which disrupted term dates, gendered impact of school closures which had a negative effects on the girl-child, the changing roles of the teacher and the need to increase parental involvement in the education of children. One key lessons for teachers and schools is that, "one size fits all" type of education does not apply in schools any more. Lastly, but not least, the paper underscored the way forward for schools based on: what the government has done to calm things down in schools during COVID – 19, schools having to work harder to make learning technology available for teachers and learners and the need to strengthen online learning with the recognition that it is here to stay.

## References

- Abidjan, T. (2020). With Lockdowns Africa Gears up for Remote schooling; Daily Nation April 24<sup>th</sup> Nation Media Group, Nairobi, Kenya.
- Adarkwah, M. A. (2021). An Outbreak of Online Learning in the COVID-19 Outbreak in Sub-Saharan Africa: Prospects and Challenges, Retrieved from: https://eric.ed.gov on July 8, 2022.
- Angrist, N. (2022). What COVID 19 Taught Educators: Creative remote education can make up for learning lost during school disruptions. Available at: https://www.imf.org/en/Publications/fandd/issues/2022/06/what-the-pandemic-taught-educators-angrist
- Areba, G. N. (2020). COVID-19 Pandemic Impact on Kenyan Education Sector: Learner Challenges and Mitigations. *Journal of Research Innovations and Implications in Education*, 4(2), 128-139.
- Baker, J. (2020). "*The kids who will never return to school after COVID-19*". The Sydney Morning Herald. Retrieved from https://www.smh.com.au/national.
- Barasa, P. L. (2021). Digitization in teaching and education in the context of COVID-19: Kenya Digitalization, the future of work and the teaching profession project. With support from GIZ and ILO, International Labour Office, Geneva.
- Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020). Thinking about pedagogy in an unfolding pandemic (An Independent Report on Approaches to Distance Learning during COVID-19 School Closure). Work of Education International and UNESCO. <a href="https://issuu.com/educationinternational/docs/2020\_research\_covid-19\_eng">https://issuu.com/educationinternational/docs/2020\_research\_covid-19\_eng</a>
- Gathuru, G. & Mweyeri, M. (2021). The Impact of Covid-19 on Education in Kenya. Institute of Economic Affairs. Retrieved from: https://ieakenya.or.ke/blog/the-impact-of-covid-19-on-education-in-kenya/Girl Center (2022). Gendered Effects of Covid-19 School Closures: Kenya Case Study. Girl Center Research Brief No. 11 March 2022. Retrieved from: https://www.popcouncil.org/uploads/pdfs/2022SBSR\_GIRLCenterResearchBrief-11.pdf
- Government of Kenya (2020). Digital Economy Strategy: Draft 1. Ministry of Information, Communication, Technology, Innovation and Youth Affairs.
- Human Rights Watch. (2020). *Impact of COVID-19 on Children's Education in Africa.*Submission to the African Committee of Experts on the Rights and Welfare of the Child,
  35th Ordinary Session, 31 August to 4 September 2020.
- Kools, M., & Stoll, L. (2016). What makes a school a learning organization? Paris: OECD (*Education Working Paper No. 137*).

- Le Grange, L. (2020). *Covid-19 pandemic and the prospects of education in South Africa. Prospects.*https://doi.org/10.1007/s11125-020-09514-w
- Mabeya, M. T. (2020). Distance learning during COVID-19 crisis: Primary and secondary school Parents experiences in. *East African Journal of Education Studies*, 2(1), 173-186. doi:10.37 284/eajes.2.1.249
- Mukora, A., R. Njeru, J. & Syekei. J. (2020a). "Publication of the National Information
- Communication and Technology Policy Guidelines, 2020." Bowmans, 1 September. Available at: https://www.bowman slaw.com/insights/technology-media-and-telecommunications/publication-of-the-national -information-communication-and-technology-policy-guidelines-2020/.
- Ngari, S. M., & Ndung'u, S. W. (2020). Disaster management preparedness in the education sector in Kenya A case of the COVID-19 pandemic. Editon Cons. J. Educ. Manag. Leadership, 1(1), 86-96. doi:10.51317/ecjeml.v1i1.192.
- Onyango, M. A., Resnick, K., Davis, A., & Shah, R. R. (2019). Gender-based violence among adolescent girls and young women: A neglected consequence of the West African Ebola outbreak. *In Pregnant in the Time of Ebola* (pp. 121–132). Springer.
- Pokhrel, S. & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *Higher Education for the Future* 8(1), 133-141.
- UNICEF (2020). Are children really learning: Exploring foundational skills in the midst of a learning crisis. Retrieved from: https://www.unicef-irc.org/publications/1393
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). (2020). *Kenya Situation Report*, 20 October 2020.

# THE EFFECT OF MANAGEMENT DEVELOPMENT PRACTICES ON SERVICE DELIVERY IN HIGHER EDUCATION INSTITUTIONS: LITERATURE REVIEW

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#### Abstract

In tandem with the global changes, higher institutions of education strive to gain competitive advantage from the human resources who are the only source of differentiation and sustainable advantage that organization can have. Employee development increases performance based on global changes that are rendering obsolete some of the original professional skills and knowledge. The purpose of this paper was to review literature on the management development practices especially coaching, mentoring, supervision and role playing from various studies. From the literature reviewed, the study established that management development is critical to the performance of employee and recommends a further research on the role of management development on service delivery in higher institutions of education in Kenya.

**Keywords:** Universities, Coaching, Guidance and Counseling, Mentoring

# **Background Information**

Management development practices are significant in the performance of employees in the organization since they enhance employee abilities, capabilities, and skills which make employee distinct in performance from others. Management development practices include Supervision, coaching, mentoring and role playing. Supervision is described as the process of directing or guiding people to accomplish the goals of the organization in which they work. Mentoring is the transfer of tacit knowledge and enacting of professional standards, Coaching is the art of facilitating the enhanced performance and development of others, while Role playing is a development techniques that attempt to capture and bring forth decision making situations to the employee being developed. Management development practices are exemplified as reflective relationships providing learning environment and resulting in sense-making and knowledge construction (Grant, 2003, Askeland, 2009). The study reviewed literature based on the four management development practices that is coaching, mentoring, supervision and role playing.

Coaching is an employee developmental practice used as a management contrivance in businesses. It is an open-ended practice which scrutinizes present conditions, sets performance goals and implements a preconceived idea for obtaining the objective (Contua & Kauffman, 2009). It operates alongside related activities, namely mentoring, role playing and supervision as a key developmental method. Brockbank (2008) adds that coaching accomplish results when a rapport is based on mutual respect and conventional between the coach and coachee. It is seen as an extremely personalized one to one individual development programme centered on possibilities and potential. Coaching involves making it possible learning rather than teaching and enables coachees to unlock their potential and make the most of their performance. It also uses deductive (drawing it out) method since the coach is required to be an expert on the topic and brief understanding of the topic does help, but can sometimes be a problem. The individual is the one who primarily benefits from a coaching relationship. It also suffice to note that measuring of coaching session takes place in minutes. It can also take place at any time, sessions are generally informal, but can be formal and a working relationship between coach and coachee.

Supervision is explained as the practice of directing or guiding people to accomplish the goals of the organization in which they work. It includes monitoring, assessing performance, competence levels and alignment to organizational policy. Caroll (2006) summarizes that managerial models prescribe that supervisors define and communicate job requirements and expectations, plan, organize and control the job tasks, provide job-related instructions, and manage the performance by arranging the environment, evaluation, corrective and formative feedback and providing consequences for poor performance.

Haggard (2011), posits that mentoring is a compassionate and caring interpersonal relationship involving an experienced, more knowledgeable practitioner and a less experienced, less knowledgeable individual. The Chartered Institute of Personnel and Development, UK (2008), defines mentoring as the long-term passing of support, guidance and advice. Generally, however, it is regarded as a means to foster individual growth mainly dependent on the relationship between the mentor and the mentee (Eby&Allen, 2010, & Haggard 2011)

Role-playing is a management development practice where participants act out a situation by assuming the roles of the characters involved. The situation is one in which has interaction between two people or within a group. It should be specially prepared with briefs written for each participant explaining the situation and, broadly, their role in it. Alternatively, role playing could emerge naturally from a case study when the trainees are asked to test their solution by playing the parts of those concerned. It is also used to give

managers, team leaders practice in dealing with face-to-face situations such as interviewing, conducting a performance review meeting, counseling, coaching, dealing with a grievance, leading a group or running a meeting. It develops interactive skills and gives people insight into the way in which people behave and feel. The technique of 'role reversal', in which a pair playing, say, a manager and a team leader run through the case and then exchange roles and repeat it, gives extra insight into the feelings involved and the skills required (Baugh & Elland, 2007).

Role-playing enables trainees to get expert advice and constructive criticism from the trainer and their colleagues in a protected training situation. It can helps to increase confidence as well as developing skills in handling people. The main difficulties are either that trainees are embarrassed or that they do not take the exercise seriously and overplay their parts.

#### **Management Development Practices**

Management development is the process by which persons advance their capabilities and abilities to be able to perform efficiently in their management task. The duty of management is observed as a trivial and ignominious career, barely meriting unrelenting analysis. Yet, in spite of this identity predicament, it might be argued that managers are a fundamental part of the employees therefore there is need to enhance their abilities and capabilities to perform. Management development comes in handy in enhancing the capacities of the individuals. The Kenya Higher education institutions are critical since they are mandated to transfer knowledge to students through teaching and research.

Management development brings about employee empowerment and involvement. It is management's response to increasingly complex and competitive environment. Empowerment has emerged as a construct deemed critical to organizational innovativeness and effectiveness, as such empowerment initiatives should be geared towards changing the role of managers.

There is need to equip the management employees to be able to execute their roles effectively since management development is linked to matching of the individuals capabilities to the need of the organization. Development occurs when there is an increase in understanding which is effectively united with the conceptual indulgent that can illuminate it, giving increased confidence to act and distinguish how such stroke communicates to its context. It is done through the practice of various activities which include, mentoring, coaching, role playing and supervision (Claire, 2006). A key presumption is that empowered employees perform better than the less empowered. Management development therefore brings

about employee's feelings of "being empowered" and this can be attributed to increased autonomy, participation in decision making and accessing of information.

Management development needs to promote creativity, guarantee ingenuity and figure out the entire managerial knowledge that endow the organization with exclusivity and distinguish it from the others. It is no longer the duty and privilege of those in skilled labour, but it is becoming the duty and need of everybody (Cambell, 2013). It also equips the employees with relevant skills, abilities, knowledge and capabilities that enable them to perform in the roles within the organization, once the employee are able to handle their roles with easy then they derive job satisfaction which in turn brings about employee engagement and finally employee service delivery. In the public university setting, management development plays a big role in setting the parameter for training and research. This leads to reciprocal relationships in reverse causality between management development influence performances (Claire, 2006).

# **Service Delivery**

Service delivery is crucial to the survival of any institution. Performance measures are needed for decision making regarding the human resource in an organization. Askeland, (2009) argues that there is no correct definition of performance and suggest that conflicts between managerial perspectives be recognized. The classical approach to organization performance is best described by Alvesson, (2003) who came up with seven measures of performance in a model measuring Performance Management Process. The model proposes that the performance of an organization is a complex interrelationship among several performance criteria: effectiveness, efficiency, quality of products, productivity, and quality of work life, innovation and profitability. Busse, (2009) view an organization as a system which receives inputs and then adds value to the output. As such organizational performance can be judged in terms of whether or not an organization achieves the various set of objectives. These objective may be financial or non-financial such as customer satisfaction, employee satisfaction, research and resource output.

The debate on organizational performance is inconclusive, different organizations use varying measures of performance depending on the area of operation. The measures may be quantitative or qualitative in nature. Cambell, (2013) conceptualized financial measurements as an objective of planning. Financial measures were widely used for a long time, but in the recent years, researches have proved that other measures have to be incorporated. Apart from financial measures, there is the balance scorecard which considers other non-financial measures of performance such as internal business process, learning and growth and

customer perspective. Claire, (2006) measured organizational performance on eight performance areas including constituent satisfaction, reputation, internal process effectiveness, perceived potential for growth, attraction of funding and skilled human resources, diffusion of influence and administrative competence.

#### **Employee Performance**

Employee performance is normally looked at in terms of outcomes. However, it can also be looked at in terms of behavior (Armstrong, 2000) stated that employee's performance is measured against the performance standards set by the organization. There are a number of measures that can be taken into consideration when measuring performance for example using of productivity, efficiency, effectiveness, quality and profitability measures as briefly explained hereafter. Profitability is the ability to earn profits consistently over a period of time. It is expressed as the ratio of gross profit to sales or return on capital employed. Efficiency and effectiveness - efficiency is the ability to produce the desired outcomes by using as minimal resources as possible, while effectiveness is the ability of employees to meet the desired objectives or target. Productivity is expressed as a ratio of output to that of input. It is a measure of how the individual, organization and industry converts input resources into goods and services. The measure of how much output is produced per unit of resources employed. Quality is the characteristic of products or services that bear an ability to satisfy the stated or implied needs (Armstrong, 2000).

It is increasingly achieving better products and services at a progressively more competitive price. As noted by Grant, (2003), it is the responsibility of the company managers to ensure that the organizations strive to and thus achieve high performance levels. This therefore implies that managers have to set the desired levels of performance for any periods in question. This they can do by for example setting goals and standards against which individual performance can be measured. Companies ensure that their employees are contributing to producing high quality products and/or services through the process of employee performance management. This management process encourages employees to get involved in planning for the company, and therefore participates by having a role in the entire process thus creating motivation for high performance levels. It is important to note that performance management includes activities that ensure that organizational goals are being consistently met in an effective and efficient manner. Performance management can focus on performance of the employees, a department, processes to build a product or service, etc. Earlier research on productivity of workers has showed that employees who are satisfied with their job will have higher job performance, and thus supreme job retention,

than those who are not happy with their jobs. Further still, employee performance is higher in happy and satisfied workers and the management finds it easy to motivate high performers to attain firm targets.

#### **Quantitative Performance**

Human resource is one of the primary sources of competitive advantage in an organization. Scholars (Armstrong, 2010) concur that adopting best human resources practices lead to enhanced performance. Performance depends on the personal traits, mental abilities and eagerness to be integrated with institutional purpose of each individual. Performance assessment is important to the operation of organization in that employees are able to take the result of performance assessment to improve their performance. This can be done through participating in the training and development, decision–making, access to information and management support as part of empowerment.

Competitiveness and efficiency in the workplace is important today than ever before, for work process are becoming more complex, competitive, challenging work conditions, and global challenges. To increase efficiency and competitiveness in the organization requires an empowered human resource. Quantitative measure was adopted in this study to measure employee performance.

#### **Qualitative Performance**

Performance measure is the process of using a tool or procedure to measure a system. Performance measure results describe an observed level of performance such as for example number of publications per year or how many customer complaints were recorded within a given period. The qualitative measures are more subjective in nature, because they are more concerned with measuring changes in peoples" behavior. They seek to impact and measure long term effect. The individual measures of performance could be in terms of quality, flexibility and cost, innovativeness, time, delivery of service, reliability among others. Organizations are concerned with sustaining high levels of performance through people. To sustain high performance means giving close attention to the type of staff and to how best they can be motivated. This enhanced performance can be achieved through such means as recognition for achievement, incentives both intrinsic and extrinsic, leadership, autonomy, and involvement in decision making. The aim is to create a work environment that will enable individuals to deliver results in accordance with organization expectations (Armstrong, 2010); as such performance measures used have to be considered carefully. He

further argues that the human resource systems may facilitate the development of human resource competencies through employee involvement and commitment.

Qualitative measures adopted in this study include non-financial measures namely: adherence to budget, sustainable revenue base, employee satisfaction, publications, and customer satisfaction. These measures were considered in view that universities are public institutions funded by the Government of Kenya.

#### Theoretical Framework

The study was anchored on Human Capital Theory developed by Smith (1776) and reinvigorated by Schultz (1961) postulates that training and development are a form of investment in human beings as used by Jex, (2000). The underlying belief then is that development creates assets in the form of knowledge and skills, which in turn increases the productivity of the worker. Skilled human resource has been able to acquire these skills as a result of staff development programs or investment in the existing human resource through appropriate on-the job training both within and outside the organization for example seminars, workshops, conferences, and by creating conducive environment through appropriate welfare care like promotion.

Human capital theory proposes that people's skills, experience, and knowledge are a form of capital that returns are earned from investments made by the employer or employee to develop these attributes. The Human capital theory holds that employees should invest in specific training and further initiation of more promotion opportunities to enhance employees' career path prospects. Thus, the human capital perspective at the level of the University, due to its emphasis on skills and performance, appears to offer more support for generalized investments in the human resources.

The human capital perspective is also illustrative of the employee's point of view. He contends that employees are not costs, factors of production, or assets, but rather investors in a business. They invest their own human capital, and they expect a return on their investment. The predisposition for an employee to invest their time in an organization is based on sense of commitment. Nevertheless, staff development programs may be viewed as generalized investments in human capital. Such investments can reassure employees that the expenditure of their time in the organization will contribute to their development and thus improve employee commitment and loyalty. Staff development programs can give organizations a competitive advantage by linking the strategic interests of the organization with the interests of their employees. For the employee, human capital theory justifies time

spent at the workplace on regenerative activities. Training has thus, added value to human resource hence become skilled.

#### Literature Review

Alevesson, (2003) in his study identified a conceptual framework for measuring the business impact of coaching. In an exploratory study using twelve matched coach/coachee pairs of successful coaching engagements, Alevesson concluded that for coaching to have a direct and clear impact on business, certain conditions need to exist: (i) that there are specific actions for which the executive alone is responsible for, (ii) that in the absence of coaching the executive would perform those actions incorrectly and, (iii) that in the presence of coaching, the executive performs those actions correctly. In essence, coaching should have a positive impact if it improves decision making in ways that otherwise would not happen. The primary conclusion of this study was that the degree of business impact is related to role, task complexity and interdependence of the organizational environment and individual performance, factors which Alevesson points out need to be addressed when designing and evaluating coaching engagements. Alevesson concluded, that whilst coaching did appear to have a positive impact on performance, it may best impact on business when combined with other interventions. He did however, point out the clear limitations of his research in that the sample size (n=12) was too low to allow any definitive conclusions, or for any wider generalizations to be made.

Askeland, (2009) evaluated a coaching programme carried out in a large real estate firm with sales staff, which was aimed at improving sales performance and dealing with high attrition rates of new staff. The programme addressed behavioural issues relating to communication and selling skills and cognitive issues relating to fears of rejection. The positive outcomes were increased property listings, increased sales and higher staff satisfaction as a result of the coaching. Whilst this study was significant in that it provides evidence of positive benefits and outcomes from coaching, it may be critiqued for lack of detail. For example, they mention cognitive issues relating to the fear of rejection, but then fail to outline specifically which cognitive skills they refer to and do not discuss the methods used to initiate change, therefore limiting the ability of the study to apportion success to coaching alone.

Further evidence of coaching effectiveness has been reported by Brockbank (2008) whose study details the aims of a coaching intervention on a manager with a focus on enhancing inter and intra-personal skills through development of communication skills. Although the

nature of the outcome measured was only qualitative, substantial improvements appear to have been made, with enhanced team performance and less interpersonal conflict reported. This case study however, does not provide any significant empirical data, and the evidence provided was highly subjective, offering no real analysis of the factors which contributed to the impact of coaching. It presented no hard measures of outcomes and offered only anecdotal evidence of effectiveness, therefore limiting both reliability and validity.

Again with only qualitative outcomes available presented data on a coaching intervention which focused on developing a manager's values, vision and cognitive skills, however very little visible change in the coachee's performance was noted. When the coaching was redirected to make the behavioural elements more explicit, the coachee reported a positive impact in terms of increased confidence, being more proactive and less discomfort with conflict. However, this study suffers from the same criticism of those previously, in that the sample size was small, there was a lack of detail, a lack of reliable evidence, and no mention of the theoretical models underpinning the research.

Coaching outcomes lead to improved interpersonal skills, and better working relationships in higher education employees presented through a case study of one to one coaching using 360 degree assessments and 'loops' of feedback. Whilst this study does highlight some positive effects of coaching, the account is highly anecdotal and adopts a practitioner approach, offering a practical guide to coaching for coaching consultants. The study provided insufficient detail of any hard evidence to substantiate the outcomes and therefore remained highly subjective. It also failed to make any links to theoretical underpinnings, to support or justify any conclusions.

Griffiths & Campbel, (2009) conducted a study of the effect of mentoring skills on employee performance in higher education, the outcome in their evaluation of a mentoring skills programme for sales managers. The aim of the mentoring was to enhance sales manager's mentoring skills and significant increases in these skills were reported, whereby seventy percent of employees commented that they had seen a positive change in their managers. Although no performance sales measures were recorded, Griffiths & Campbel (2009) did conclude that mentoring was a complex interaction. Another example of mentoring effectiveness was found in the qualitative evidence presented by Fenwick, (2007) who measured the positive, affective reactions and self reported learning and behaviour changes of seventy five executives. Outcomes revealed increases in self-confidence, self-awareness and sensitivity towards others, where participants rated the overall effectiveness of the mentoring experience as very satisfactory on a five point scale. Another major type of

learning or attitude change that was reported in their study was increased flexibility and adaptability in relationships with others, and increases in 'on the job' performance. A major criticism in both these studies, as with many of the previous ones, is that they follow a trend of reporting on outcomes and lack of critical analysis of the specific factors which influence outcomes, and therefore offer a superficial account and evaluation.

Several other studies using self-report methodologies to investigate mentoring effectiveness include; an assessment of business benefits and return on investment, whereby seventy seven per cent of respondents indicated significant or very significant impact on at least one of the nine business measures and another study which reported 63 % sustained behavioural changes as a result of mentoring, 43% increased self-awareness and understanding, and 45% believed that they were more effective leaders as a result of mentoring, reporting that they had more self-confidence and were more motivated (Brown & Leong, 2009). However, whilst these accounts of mentoring outcomes are positive and lend some support for the benefits of mentoring, many of these studies lack academic rigour, in that they are often based on subjective evidence, small sample sizes, or fail to justify results through statistical analysis, reporting on percentages rather than statistically significant results .More attempts to link outcomes to theory and validate outcomes through rigorous examination of the evidence are needed, in order to draw more reliable conclusions from the results (Contu & Wilmont, 2003).

Czarniwska, (2000) conducted a study using a more rigorous design, which included a quasi-experimental, pre/post control group design, of the impact of mentoring on improving multisource rating over a one year period, involving 1,361 managers, revealed that those manager who worked with a mentor were more likely than other managers to set specific goals, to solicit ideas for improvements from supervisors and to receive improved ratings from direct reports and supervisors (Czarniwska, 2000). The outcomes of this study are important for mentoring research in that they are amongst the few which elicit ratings from multi-sources, including supervisor, direct reports and peer views, which broaden the research. A potential flaw in this research however, lies in the fact that the multi-source feedback was not kept confidential, which makes it difficult to eliminate bias in the results. If decision makers responsible for promotion had access to multi-source feedback and the respondents were aware of this, it could be argued that employees accountability for improved performance was already high, thus reducing the potential of this research to attribute performance improvements to mentoring alone.

Grant, (2010) conducted a study on "the Mentor Experience in a First-year Teacher Induction Programme: Implications for Professional and Personal Growth". The purpose of this study was to investigate the influence that a first-year teacher induction programme has on the personal and professional growth and development of teacher-mentors. Also investigated were theoretical constructs that were useful in understanding and refining the teacher-mentor experience. During the first year of teacher's induction program, teacher mentors attributed to participation some personal and professional meanings. There were certain other findings as well but the mentors did not recognize them through recognized and improved teaching techniques, which help them in improving their personal skills fulfilled leadership opportunities, required respect and appreciation for others and a heightened awareness of the needs of others.

Kegan & Lahey, (2001) conducted a study on "Higher Education and Teacher Induction: The Role of Higher Education and the Residency Programme in Oklahoma". Early beginning teacher induction programs were predominately based on a deficit model, while later programmes followed a more developmental model. Some conflicting perceptions across the groups regarding the value of higher education were indicated in the study. The representatives of higher education perceived that their contribution was much higher than other three groups. Regarding the role of higher education, it was found, through this study that some of the mandatory requirements were not available, similarly, a shared understanding was not found about the program components among resident program participants.

Berglund & Werr, (2000) conducted a study on effectiveness of supervision on a Master's programme, the study revealed that participants using external supervisors received higher grades than those using peer supervisors, Whilst this research did produce some evidence of effectiveness of supervision, it could be argued that the sample used, i.e. Master's students was not typical of executive supervision participants and therefore, raises the question of replication within the work environment.

Another significant piece of research which has attracted some attention in the supervision literature is an unpublished master's thesis by Fenwick, (2007). The purpose of this study was to examine the effectiveness of the supervision process. Results revealed that executives reported increased levels of satisfaction with supervision outcomes and believed that supervision had a positive impact on their life. This study also highlighted the role of self-efficacy, communication style and interpersonal style as being important components of the

supervision process, which were measured by self-awareness and responsibility. These factors are particularly significant to this thesis as they lend support for the need of further analysis into these specific areas of research. This research does not however, provide sufficient detail about how self-efficacy or communication was measured and whether this was done in a systematic way, therefore limiting the potential to make more accurate judgments about the implications of the results.

Carter & Little, (2007) conducted a research in a survey commissioned by a global company for high potential employees in higher education wanting to develop emotional competence through supervision. The survey included a sample of thirty three participants. The supervision used within the institution for high potential employees was underpinned by some robust theoretical models originating from the field of clinical psychotherapy, and the supervision process used followed a four stage process. A large focus of the programme was to enhance emotional competence to support effective leadership, whereby some of the reported outcomes included: (i) more effective leaders; (2) improved interpersonal skills (enhanced listening, achieving more buy-in); (3) increased commitment to the company; (4) increased performance management; (5) increased productivity; (6) positive impact on the company's bottom line. Whilst many of these outcomes are positive indicators of effective supervision and lend support, in particular, to the role of an insight-oriented approach to supervision underpinned by self-awareness, the study may however be criticized on several levels: for lacking empirical rigour by not providing more robust data of results and measurements; providing limited evidence of statistical analysis; performance improvement measures appeared to be self-report measures supplied by the supervision only; all of which weaken the validity of the results for wider use and points to the true absence of good, controlled-variable research.

Crist & Taner, (2003) conducted a study on "The Role Play Expectations and Predictions of Trends for Human Resource Development at Large Public Universities within the Southern Regional Education Board (SREB) Area". This study was designed to identify the role expectations, reporting hierarchy, years in role and trends in human resource development in large public universities within the Southern Regional Education Board (SREB) geographic area. The study involved 174 employees as respondents, library method and questionnaire were used. The questionnaire was developed in 3 parts: management training with 46, performance with 15 and 4 questions for demographic characteristics and was handed out to employees. For assessing questionnaire validity the experts' opinions was requested and to confirm its reliability Cronbach's alpha method was applied. The reliability results calculated 0.81 and 0.79 for management training and organizational performance

accordingly which were above the reasonable threshold (0.7). So the reliability of questionnaires was proved. The data was tested using the linear regression analysis to look at the influences of intellectual capital to the performance of the respondents.

The study findings indicated that the respondents felt the greatest average institutional emphasis was on those roles where the delivery and the support of existing HRD programs and services were involved; while the least average institutional stress was on the roles of involving and assisting individual employees with their developmental needs; as organizational are determined on the basis of these needs. The study identified a gap to be filled in the existing Role Expectations and Predictions of Trends for Human Resource Development can be evaluated and the new change regarding its needs can also be identified.

Jou & Bauer, (2000) conducted a study on "The Perceived Effectiveness of Professional Development and Role playing Practice to Achieve Computer proficiency by Instructional Personnel in School Divisions across the Commonwealth of Virginia". This study examined the effectiveness of professional development and role playing practices for assisting instructional personnel in achieving computer proficiency. Participants were from 135 school divisions. Division technology coordinators shared their instructional approaches to prepare teachers for the states evaluation of their computer competence. The study utilized a survey design and both close and open ended questionnaire.

The study findings indicated that there is a general agreement regarding the need of on-site role playing and in-site role playing, summer training camps and training on integrating technology into the curriculum, Similarly teacher to teacher support role playing, in this regard was considered to be most effective, within the campus resource application proved far more economical as compared to the use of external role players and consultants.

Grant, (2003) conducted a study on "The Experiences of Participating in Role playing: A Study of Human Resource Development experts in Taiwan universities". The aim of the study was to gain a deep understanding of the meaning and the nature of the selected human resource development (HRD) professionals' experience of participating in role playing. The research used Hermeneutic phenomenology method as the research methodology. A group of fourteen members of the Human Resource Development Association of Republic of China (Taiwan) were invited by the researcher purposefully, and the participants were given different tasks related to HRD, giving them an opportunity in the

field to work on it where they gave a research text drawn by the researcher from them through face to face conversational interviews on the basis of some open ended questions. All the respondents were interviewed twice. The study brought out a critical understanding on the experiences from the HRD professionals on the importance of role playing in the organization.

# Research Gap

Whilst most of these studies do offer some contribution to evaluating management development practices effectiveness, by reporting on coaching, supervision, mentoring and role-playing outcomes, overall, there are some general criticisms which apply: (1) they offer a superficial account of management development practices; (2) there is a general lack of consideration for theoretical underpinnings; (3) there is a lack of detail describing the methodologies and analytical models used for analysis; (4) there is a lack of evaluation of factors critical for success, or which influence success and; (5) there is also a distinct lack of comment regarding management development from a higher institution of learning perspective, therefore failing to consider the role of management development practices in influencing management employee performance or service delivery. These represent a real gap in the management development practices research literature, which this current study seeks to address.

#### Discussion

**AJOBEI** 

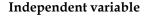
A review of the literature on management development practices effectiveness indicates several key issues: from a Human Resource Management perspective there are problems associated with evaluating management development effectiveness; evidence is often subjective (Gallacher,2007), there is a lack of standardization and clarity of definitions, and often sample sizes are small (Kilburg, 2000; Kegan & Lahey, 2001). Theoretical models to measure effectiveness are useful for identifying factors which are thought to be relevant for measuring management development effectiveness (Grant, 2010; Kilburg, 2000), and although other outcomes have been discussed; satisfaction (Askeland, 2009), and increases in self-confidence, self-awareness and sensitivity towards others (Busse, 2009), measurements of management development practices outcomes have been dominated by performance measures (Brockbank, 2008). In view of their contribution to organizational effectiveness (Carter & Little, 2007) it appears that organizational commitment and organizational citizenship behaviour are additional measures that are worth considering to evaluate management development effectiveness, yet to date little research has been carried out in this area.

A review of the empirical evidence reveals that there are very few studies which demonstrate effectiveness in management development practices (Clutterbuck, 2005; Grant, 2003; Fenwick, 2007) although some of the positive outcomes of management development practices that have been reported include; increases in performance (Baugh, Fagenson & Elland, 2007; Grant, 2010); enhanced interpersonal communication and working relationships (Kilburg, 2000; Fenwick, 2007); increased self-confidence and self-awareness (Griffiths & Campbell, 2009); improved goal setting (Berglund & Werr, 2000); and increased satisfaction, where the importance of self-efficacy and communication skills have also been highlighted (Brown & Leong, 2009). Factors which are thought to be of particular importance with regards the employee include: engagement and commitment (Clutterbuck, 2005); the employee's attitude and openness to feedback (Czarniawska, 2000); receptiveness to change and motivation (Busse, 2009); and buy-in and willingness to participate (Contu & Willmott, 2003), all of which have been linked to success. Management development practices are to a large extent applied on a case-by-case basis and used as a remedial tool with its purpose vaguely defined, but its potential is greater. Both secondary and primary data provide evidence that management development, performed according to definitions, always generates value equivalent or larger than its costs. The value of the investment is perceived to be proportionate to its purpose and to the level at which individual goals are set.

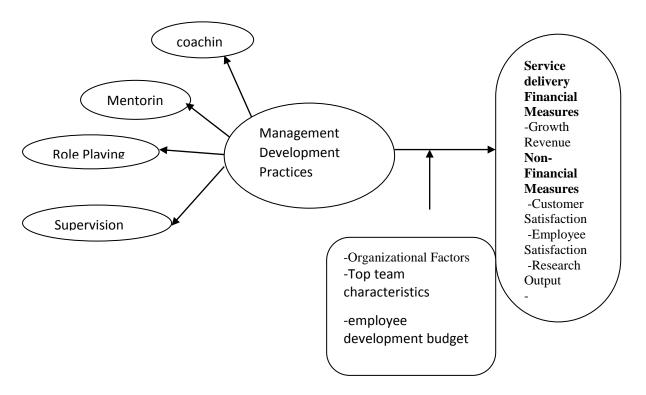
In the study, two gaps between the literature and research data are identified: 1) the importance of the management development and 2) the major benefits to be expected from management development practices on employee performance. While management development was expected to impact on the results of employee performance, the study results indicated less impact. Later this has been explained by the differences in the level at which goals were set. The second gap may be a trend, with the present focus more concerned with the development of managerial skills, but the literature stating that management development supports the development of all skills with lasting results. In addition, the skills acquired are lasting and most often management development leads to self-learning, which in turn generates self-acting behaviour. This indicates a potential to use management development practices beyond its present application.

# **Study Model**

The study adopts the following model showing the relationship between management development practices and service delivery characterized by mentoring, coaching, supervision and Role playing on service delivery indicated by financial and non financial measures.



#### Dependent Variable



# **Moderating Variable**

Figure 1: Model showing the relationship between management development practices on service.

### Conclusion

It is evident that most valuable asset available to an organization is its people. Indeed there is a paradigm shift from human resource to human capital which consists of the knowledge, skills and abilities of the people employed in organization which is indicative of their value. The costs of management turnover, such as subsequent recruiting expenses, disruptions of course offerings, discontinuities in departmental and planning, and loss of advisors, are borne at individual, departmental and institutional levels and have an impact on quality of services and the image of the institution. Lack of management development has several disadvantages such as costs related to decreased organizational loyalty, loss of knowledge and experience regarding the institution, and increase in time and cost in training and developing novice employees. In the higher education institutions, the departure of some employees means that the synergies that come with a group of academics working together is diminished, and the impact and scope of knowledge production and dissemination is lessened.

#### References

- Alvesson, M. (2003) 'Beyond Neopositivism, Romantics, and Localists: A Reflexive Approach to Interviews in Organizational Research', *Academy of Management Review*, 28/1: 13 33
- Askeland, M.K. (2009) 'A Reflexive Inquiry into the Ideologies and Theoretical Assumptions of Coaching, Coaching: An International Journal of Theory, Research and Practice, 2/1: 65-75
- Baugh, S.G., Fagenson-Eland, E.A. (2007) 'Formal Mentoring Programs: A 'Poor Cousin' to Informal Relationships?', In B. R. Ragins & K. E. Kram (Eds.), *The Handbook of Mentoring at Work: Theory, Research and Practice*, 234 251
- Brockbank, A. (2008) 'Is the Coaching Fit for Purpose?' Coaching: An International Journal of Theory, Research and Practice,1:2, 132-144
- Brown, R. T., Daly, B. P., Leong, F.T.L. (2009) 'Mentoring in Research: A Developmental Approach', *Professional Psychology: Research and Practice*, 40: 306-313.
- Brown, D. (1985) 'The Pre-service Training and Supervision of Consultants', *The Counseling Psychologist*, 13: 410 425
- Busse, S. (2009) 'Supervision between Critical Reflection and Practical Action', *Journal of Social Work Practice*, 23/2: 159-173
- Caroll, M. (2006) 'Supervising Executive Coaches', Therapy Today, 17/5: 47 49
- Carter, S. M., Little, M. (2007) 'Justifying Knowledge, Justifying Method, Taking Action: Epistemologies, Methodologies, and Methods in Qualitative Research', *Qualitative Health Research*, 17/10: 1316-1328
- Chartered Institute of Personnel and Development (2008) 'Coaching and Buying Coaching Services', *Guide*
- Chao, G. T. (2007) 'Mentoring and Organizational Socialization: Networks for Work Adjustment', In B. R. Ragins & K. E. Kram (Eds.), *The Handbook of Mentoring at Work: Theory, Research and Practice*, 179-196
- Clutterbuck, D. & Lane, G. (2005) The Situational Mentor, London
- Clutterbuck, D. (2005) 'Establishing and Maintaining Mentoring Relationships: An Overview of Mentor and Mentee Competencies', SA Journal of Human Resource Management, 3/3: 2-9
- Contu, A, Willmott, H. (2003) 'Re-embedding Situatedeness: The Importance of Power Relations in Learning Theory', Organization Science, 14: 283-296. Copeland S. (2005) Counseling Supervision in Organizations: Professional and Ethical Dilemmas Explored, London
- Coutu, D., Kauffman C. (2009) 'What Coaches Can Do for You: Special Issue on Transforming Leaders', *Harvard Business Review*, and 87/1: 91-98

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- Crist, J.D., Taner, C. (2003) 'Interpretation/Analysis Methods in Hermeneutic Interpretive Phenomenology', *Nursing Research*, 52/3: 202 205
- Czarniawska, B. (2000) 'The Use of Narrative in Organization Research', GRI Report 2000:5
- Eby, L.T. (2007) 'Understanding Relational Problems in Mentoring', In B. R. Ragins & K. E. Kram (Eds.), *The Handbook of Mentoring at Work: Theory, Research and Practice*, 323-344.
- Eby, L.T., Rhodes, J., Allen, T.D. (2010) 'Definition and Evolution of Mentoring', In T. D. Allen & L. T. Eby (Eds.), *Blackwell Handbook of Mentoring: A Multidisciplinary Approach*, 7-20.
- Fenwick, T. (2007) 'Knowledge Workers In-Between: Network Identities', *Journal of Organizational Change Management*, 20/4: 509-524
- Gallacher, K. K. (2007) 'Supervision, Mentoring, Coaching: Methods for Supporting Personnel Development', In P. J. Winton, J. A. McCollum, & C. Catlett (Eds.), *Reforming Personnel Preparation in Early Intervention: Issues, Models, and Practical Strategies*, 191-214
- Grant, A. M. (2003) 'The Impact of Life Coaching on Goal Attainment, Metacognition, and Mental Health', *Social Behavior and Personality*, 31/3: 253-264.
- Grant, A.M. (2010) 'It Takes Time: A Stages of Change Perspective on the Adoption of Workplace Coaching', *Journal of Change Management*, 10/1: 61 77
- Griffiths, K., Campbell, M. (2009) 'Discovering, Applying and Integrating: The Process of Learning in Coaching', *International Journal for Evidence Based Coaching and Mentoring*, 7/2: 16-31
- Haggard, D.L. (2011) 'Who Is a Mentor? A Review of Evolving Definitions and Implications for Research', *Journal of Management*, 37/1: 280-304
- Kegan, R., Lahey, L.L (2001) How The way We Talk Can Change the Way We Work: Seven Languages for Transformation, John Wiley and Sons Kegan, R., Lahey, L.L (2009) Immunity to Change: How to Overcome and Unlock Potential in Yourself and Your Organization, Harvard Business School Publishing Corporation
- Kilburg, R. R. (2000) 'Executive Coaching: Developing Managerial Wisdom in a World of Chaos', *American Psychological Association*, and xiv: 213-231

# EFFECT OF HUMAN RESOURCE PRACTICES ON ORGANIZATIONAL CITIZENSHIP BEHAVIOR DEVELOPMENT

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#### **Abstract**

The importance of organizational citizenship behaviour in organizations cannot be over emphasized. The development of organizational citizenship behavior (OCB) is critical in giving an organization competitive advantage. This study was aimed at establishing the impact of HR practices on the development of OCB. The study was carried out in two organizations namely: Delmonte Kenya Ltd. and Nampak Kenya Ltd. A sample of 243 respondents was used. The study adopted descriptive research design. It was found out that there was a significant positive correlation between performance management and reward management and OCB. OCB was found to explain 31.6% of the variation in performance management and reward management.

**Keywords:** Organizational Citizenship Behaviour, Performance Management, Reward Management.

#### Introduction

The advent of COVID-19 has thrown organizations into a state of disarray. Many organizations have been struggling to survive with some at the brink of collapse. To remain afloat, organizations have had to restructure. Many employees worldwide have faced the axe of their employers as a panacea to economic turmoil. According to Federation of Kenya Employers, between March and August 2020, 604 firms in Kenya had sent workers home due to the corona virus pandemic. The Kenya National Bureau of Statistics estimated that around 1.7 million people had been made jobless and the figure could have been higher than this.

The survival of an organization largely depends on the nature of the workforce. It has been reported that employees are a critical asset that gives an organization competitive advantage. If an organization prides itself in having employees who are ready to go beyond the call of duty, then, survival is almost predictable and guaranteed. Going beyond one's job description is referred to as organizational citizenship behavior (OCB). The human resource practices employed in an organization can enhance the development of OCB or inhibit. Managers and

researchers have noticed the importance of OCB as a critical perquisite to organizational achievement and effectiveness (Qawasmeh, 2018).

# **Objectives**

The objectives of the study were:

- 1. To find out the effect of performance management on the development of organizational citizenship behavior.
- 2. To determine the effect of reward management on the development of organizational citizenship behavior.

#### Literature review

Organizational citizenship behaviour (OCB) is used to describe all the positive and constructive employee actions and behaviors that are not part of their formal job description. It has to do with anything that employees do, out of their own free will that supports their colleagues and benefits the entire organization. OCB is not something that employees are required to do as part of their job and neither is it part of their contractual tasks. A worker's willingness to commit oneself to an organization is absolutely fundamental to reaching the organizational goals. Williams and Anderson (1991) identified two broad categories of organizational citizenship behavior namely OCB O- behaviors that benefit the organization in general, and OCB I- behaviors that immediately benefit specific individual.

OCB is a critical behavior of employees which is not included in the formal job description, but is necessary for achieving the organizational objectives through its social and psychological traits provided by strong HR practices (Asim et al., 2012). OCB has been cited as a significant factor which reinforces knowledge sharing among employees, job performance or the productivity of the organization as a whole (Podsakoff, et al., 2009). Stimulating citizenship behaviors in employees is critical. HR practices have been said to play an important role (Turek & Wojtczuk-Turek, 2015).

Organ (1988) was the first to define as organizational citizenship behavior as an individual behavior which is not rewarded by a formal reward system resulting in effectiveness. He identified five different types of organizational citizenship behavior namely altruism, courtesy, sportsmanship, conscientiousness and civic virtue. Altruism in the workplace occurs when an employee helps or assists another employee without expecting anything in return. Courtesy is polite and considerate behavior towards other people, in this case, other

employees. Sportsmanship is about an employee's ability to be a good loser. It's about being able to deal with situations that don't go as planned. Conscientiousness is behavior that involves a certain level of self-control and discipline and goes beyond the minimum requirements. Civic virtue is about how well someone represents the organization they work for.

#### **HRM Practices**

HRM practices are practices which an organization uses to manage their employees by facilitating the development of competencies that are firm specific and by generating organizational knowledge needed to sustain competitive advantage (Nikolett & Nawangsari, 2019).

### **Performance Management**

Performance management has been defined as the systematic process for improving organizational performance through developing the performance of individuals and teams (Armstrong, 2006). It is about getting better results by understanding and managing performance within an agreed framework of planned goals, standards and competency requirements. It is concerned with the strategic alignment of one's work to the group and organizational goals.

Folger and Konovsky (1989) and MacKenzie et al. (1993) found a significant relationship between performance appraisals (PA) with OCB. Ahmad (2011), Wei et al, (2012), Guyo (2015), Fajar (2017) and Nikolett and Nawangsari (2019) found performance appraisal to be significantly and positively related with OCB. Ahmad et al. (2011) stated that performance appraisal system (PAS) and OCB owned a very complex relationship. As such, an effective appraisal system can contribute towards OCB. Cloninger et al. (2011) was of same opinion as Ahmad et al. (2011), stating that appraisal system must be able to encourage cooperation instead of competition for OCB to take place.

Organ (1990) opined that performance appraisal (PA) plays an important role in developing OCB since the criteria in PA is seen to educate employees on which behaviour the organization valued highly. Folger et al. (1989) established that employees who perceived their organization to be having fair and equitable appraisal tend to show more OCB. This enhances, organization's performance and effectiveness.

# **Reward Management**

Reward Management has to do with the formulation and implementation of strategies and policies aimed at rewarding people fairly, equitably and consistently in accordance with their

value to the organization (*Armstrong & Murlis*, 2007). Reward management assists in improving and maintaining a company's performance. Reward management is strategic and serves the purposes of motivating, attracting, and sustaining the employees. It meets the needs of both the organization and its stakeholders (Armstrong, 2006).

A good reward system helps keep employees happy, loyal to the company, and eager to move up the career ladder. Certain rewards like public recognition and additional pay motivate employees to work harder. Rewards can either be extrinsic or intrinsic rewards. Extrinsic rewards are external to the work itself. Examples are wages and salary, fringe benefits, promotions, and recognition and praise from others. Intrinsic rewards on the other hand represent rewards that are directly related to performing the job. They include feelings of task accomplishment, autonomy, and personal growth and development that come from the job.

Compensation and reward system have been identified to have a positive association with OCB (Deckop et al., 1999). Sinnappan and Amulraj (2014) found a significant relationship between rewards and recognition. This shows that when employees receive rewards and recognition from their organization, they will feel obliged to respond with higher levels of engagement (Sinnappan & Amulraj, 2014). Nikolett and Nawangsari (2019) found that compensation and rewards had a positive significant relationship with OCB (r = 0.668, p = 0.000 < 0.001). Fajar (2017) found that compensation is significantly and positively related with OCB (p = 1.445, p < 0.05). Compensation and benefits may help in attracting and retaining employees. Guyo (2015) found a positive correlation between performance and reward management and OCB (p = 0.852). Results showed that performance and reward management explained 71.2% of the variation in OCB.

High compensation contributes to higher OCB by communicating to the employees that they are being valued by the organization and are important to the organization. This in turn encourages employees to contribute extra effort in their job, hence contributing toward OCB (Ahmad, 2013). An attractive remuneration package, rewards and benefits would increase the employees' level of commitment with the organization (Lee et al., 2006). Improving rewards and recognition organization is likely to improve organizational citizenship behavior of employees (Sinnappan & Amulraj (2014).

# Methodology

The research design adopted for this study was descriptive research design. A sample of 243 respondents was drawn from Delmonte Kenya Limited and Nampak Kenya Limited.

## Findings and discussions

Table 1	: Correlations			
		OCBD	PM	RM
OCBD	Pearson Correlation	1	.539 <sup>**</sup>	.451 <sup>**</sup>
	Sig. (2-tailed)		.000	.000
	N	243	243	243
PM	Pearson Correlation	.539 <sup>**</sup>	1	.598**
	Sig. (2-tailed)	.000		.000
	N	243	243	243
RM	Pearson Correlation	.451 <sup>**</sup>	.598**	1
	Sig. (2-tailed)	.000	.000	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows that there is a significant moderate positive correlation (r = 0.539; p-value <0.001) between performance management and OCB. Hypothesis H0<sub>1</sub> is therefore rejected and concluded that performance management has a significant effect on organizational citizenship behavior development. The table also shows there is a significant moderate positive correlation (r = 0.451; p-value <0.001) between reward management and OCB. Hypothesis H0<sub>2</sub> is therefore rejected and concluded that reward management has a significant effect on organizational citizenship behavior development. These findings are similar to those found by Ahmed (2011), Wei et al. (2012), Guyo (2015) and Nikolett and Nawangsari (2019) who found that reward management had a significant effect on OCB development.

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**Table: 3: Multiple Linear Regression Analysis Coefficients** 

Table	2: ANOVA					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.859	2	14.930	55.483	.000 <sup>b</sup>
	Residual	64.579	240	.269		
	Total	94.439	242			

a. Dependent Variable: OCBD

b. Predictors: (Constant), PM, RM

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.916	.187		10.249	.000
	RM	.207	.069	.200	3.007	.003
	PM	.324	.051	.419	6.293	.000

a. Dependent Variable: OCBD

$$Y = \beta_0 + \beta_1 X_2 + \beta_2 X_2 + \varepsilon$$

Y= Organizational Citizenship Behaviour

X<sub>1</sub>=Reward Management

X<sub>2</sub>=Performance Management

 $\beta_0$ = a constant which denotes organization Citizenship Behavior that is independent of HR practices

 $\beta_1$  &  $\beta_1$ = intercepts for the independent variable

ε=Error term

Under the model Y=  $\beta_0+\beta_1$  X<sub>1</sub>+  $\beta_2$  X<sub>2</sub>+  $\epsilon$ , the model was found to be valid (F (2,240) =55.483, p-value<0.001) as indicated in Table 2. The fitted model equation is: Y=1.916+ 0.207X<sub>1</sub>+0.324X<sub>2</sub> +  $\epsilon$ 

The model equation shows that standardized OCB will increase by 0.207 units with one unit increase in standardized reward management keeping the other variables constant. Standardized OCB will increase by 0.324 units with an increase of one unit in standardized performance management, keeping the other variables constant.

The regression results of reward management and performance management against OCB are presented in Table 4.

**Table 4: Model Summary** 

			Adjusted R	Std. Error of the
Model	R	R Square	Square	Estimate
1	.562 <sup>a</sup>	.316	.310	.51873

a. Predictors: (Constant), PM, RM

Table 4 shows that reward management and performance management explain 31.6% of the variation in OCBD. This means that 68.4% of the variation in OCB is explained by factors outside the model. This shows that performance management and reward management (HR practices) significantly affect organizational citizenship behavior development. These results are in agreement with results obtained by Guyo (2015).

## Conclusion

A significant positive relationship has been found between performance management and OCB on one hand and reward management and OCB on the other. Reward management and performance management explain 31.6% of the variation in OCB development.

## **Implications for managers**

A positive significant relationship has been found between performance management and reward management and OCB development. Managers should be greatly concerned about these two human resource practices. Efforts should be made to ensure that the performance management system is strategic and tailored to meet the needs of both organizations and employees. An effective performance management system would facilitate the development of OCB. Equally, the reward system adopted should be perceived by the workers to be fair, equitable and competitive. This would make the employees feel they are valued. In turn, employees would give their best which is a critical component of OCB development.

#### References

- Ahmad, K.Z. (2011). The association between training and organizational citizenship behavior in the digital world. *Communications of the IBIMA*, 11(20), 1-17.
- Ahmad, R. (2013), Compensation system and organizational commitment: The case of Langkawi hotels. *Proceeding of the Global Conference on Business, Economics and Social Sciences*, 1(1), 448-466.
- Ahmed, N.O.A. (2016). Impact of Human Resource Management Practices on Organizational Citizenship Behavior: An Empirical Investigation from Banking Sector of Sudan. *International Review of Management and Marketing*, 6(4), 964-973.
- Deckop, J.R., Mangel, R., Cirka, C.C. (1999). Research notes. Getting more than you pay for: Organizational Citizenship Behaviour and pay-for-performance plans. *Academy of Management Journal*, 42(4), 420-428.
- Armstrong, A. (2006). A Handbook of Human Resource Management. London: Kogan Page.
- Armstrong, M. & Murlis, H. (2007). Reward management: a handbook of remuneration strategy and practice (5th ed.). London: Kogan Page. ISBN 978-0749439842.
- Asim, M., Muhammed, A. S; Ali, I; Syed, M.A.J (2012). Impact of HR Practices on Organizational Citizenship Behavior and Mediating Effect of Organizational Commitment in NGO's of Pakistan, *World Applied Sciences Journal*, Vol (18), No (7), 901-908.
- Fajar, A. P & Soeling, P.D. (2017). The Effect of HRM Practices on Employee Organizational Citizenship Behavior in ICT Companies. *Advances in Social Science*, *Education and Humanities Research*, volume 167.
- Ghani, B. & Rasheed, K. (2020). The HR Practices and Organizational Citizenship Behavior International Journal of Management Sciences and Business Research, ISSN (2226-8235) Vol-9, Issue 1 http://www.ijmsbr.com
- Günay, G.Y. (2018). Relationship between Job Satisfaction, Organizational Citizenship Behavior and Employee Performance: Sample of Edirne Financial Office Employees in Turkey. *American International Journal of Contemporary Research* Vol. 8, No. 1. ISSN 2162-139X

- Guy,P., Michel, T. (2007), The Influence of High-Involvement Human Resources Practices Procedural Justice, Organizational Commitment, and Citizenship Behaviors on Information Technology Professionals' Turnover Intentions. *Group & Organization Management*, 32 (3), 326-35.
- Guyo, A. G. (2015). Role of human resource management in development of organizational citizenship behavior among the civil servants in Kenya. Unpublished Ph.D Thesis, Jomo Kenyatta University of Agriculture of Technology.
- Harsasi, M., Muzammil, M. & Radeswandri (2017). The Effects of Applying Good Human Resources Management Practices on Organizational Citizenship Behavior. *Review of Integrative Business and Economics Research*, Vol. 6, Issue 4.
- Jain, S. & Jain, R. (2014). "Organizational Citizenship Behaviour and HRM Practices in Indian Banks," *The Indian Journal of Industrial Relations*, 50(2), 2014, pp. 257–269.
- MacKenzie, S.B., Podsakoff, P.M. & Fetter, R. (1993. The impact of organizational citizenship behavior on evaluations of salesperson performance. *The Journal of Marketing*, 1(15), 70-80.
- Nikolett, V. & Nawangsari, L.C. (2019) Impact of Human Resource Management Practices: Factors Influencing Organizational Citizenship Behavior at Kelapa Gading Mall. *International Journal of Scientific and Research Publications*, 9(2), ISSN 2250-3153 http://dx.doi.org/10.29322/IJSRP.9.02.2019.p8628 www.ijsrp.org.
- Organ, D. W. (1988). Organizational Citizenship Behavior: The Good Soldier Syndrome. Lexington, MA: Lexington Books.
- Podsakoff, P. M., Mackenzie, S. B., Paine, J. B., Bachrach, D. G. (2000). Organizational Citizenship Behaviors: A Critical Review of the Theoritical and Empirical Literature and Suggestions for Future Research. *Journal of Management*, 26(3) 513-563.
- Podsakoff, N. P., Whiting, S. W., Podsakoff, P. M., & Blume, B. D. (2009). Individual- and organizational-level consequences of organizational citizenship behaviors: A meta-analysis. *Journal of Applied Psychology*, 94, 122–141.
- Rahman, M.H.A. & Karim, D.N (2019). The effect of performance appraisal on organizational citizenship behaviour (OCB): A study on the Islamic Banks in Bangladesh. *Bangladesh Journal of Public Administration*, vol. 25, no. 2, pp. 17-43

- Sinnappan, L.P. & Amulraj, M. (2014). Impact of Rewards and Recognition and Empowerment on Organizational Citizenship Behaviors among Technical Engineers. *Management Studies and Economic Systems (MSES)*, 1 (2), 89-95
- Turek, D & Wojtczuk-Turek, A. (2015). HRM practices influence organizational citizenship behavior? mediating the role of person-organizational fit. *Management, Knowledge and Learning Joint International Conference*.
- Williams, L. J., and Stella E. A. (1991). 'Job satisfaction and organizational commitment as predictors of organizational citizenship and in role behavior'. *Journal of Management* 17: 601–617
- Wei, Z., Mian, Z., Hai L. (2012), "Performance appraisal process and organizational citizenship behavior", *Journal of Managerial Psychology*, Vol. 27 Iss: 7 pp. 732 752.

# ASSESSMENT OF TOTAL QUALITY MANAGEMENT ON PERFORMANCE OF CHUKA UNIVERSITY LIBRARY, THARAKA NITHI COUNTY, KENYA

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#### **Abstract**

Academic libraries are service oriented organs whose focus is to fulfill users' information needs and demands. Library patrons have different information needs that if not effectively attended to, can lead to information obesity especially with the current massive information available on the internet. This therefore calls for total quality service provision in libraries for ongoing improvement. Total quality management (TQM) is an approach that ensures that all members of an organization work together to continuously improve in the processes, products, services and the culture in which they operate. This leads to long-term success through customer satisfaction. The aim of the study was to assess application of total quality management on performance of library operations and services at Chuka university library. The study was guided by three objectives namely; to identify TQM practices employed at Chuka University library; to determine the relationship between TQM and performance and to establish TQM strategies that could improve performance at library. Mixed methods using an online survey questionnaire and interviews were employed for data collection from a total sample of 200 respondents that comprised of library staff and users. Quantitative data was statistically analysed while qualitative data was thematically processed. The findings of the study reviewed that library management at Chuka University employs total quality management that included provision of effective, efficient quality and timely services geared towards improvement of organizational performance and customer service. The study concludes by recommending various strategies including fact based decision making, strategic and systematic approaches to be adopted for enhanced continuous service delivery at the University library. However, to ensure effective total quality practices effective communication, employee involvement and good leadership are prerogative.

**Keywords:** Library, Performance, Total Quality Management, University, User Satisfaction

#### Introduction

Total quality management (TQM) is a management approach that originated in the 1950s (Munyao, 2017). TQM practice ensures that all members of the organization work together to continuously improve in their culture of operation. TQM strives to ensure long-term success in an organization through customer satisfaction. This is because customer loyalty is achieved when organizations uphold quality in all operations and processes right from the first time. The key objective of TQM is "doing the right things, right the first time, every time". According to Chanda et al. (2015), TQM was originally applied in the manufacturing industries, but it is now becoming recognized as a generic management tool applicable in service, public sector organizations and libraries and information centres for competitive advantage.

Many organizations have embraced quality excellence as a standard for operating business. This is realized through various TQM elements namely; customer focus, total employee involvement, integrated system, continuous involvement, fact decision making and continuous communication (Dei and Anane, 2020). To ensure application of these practices, good leadership in an organization is required. This will translate into many benefits that include: high productivity, increased innovativeness, improved employee morale and improved customer satisfaction.

#### **Background Information**

Library operations refer to functional services provided to patrons. This is split into three key areas namely; Technical services that are responsible for the selection, ordering, payment and processing of information materials; readers service that are intended to oversee day to day user support aimed at maximizing utilization of information resources and provision of excellent library services. Chanda et al. (2015) posits that llibrary operations should be provided in such a way that patrons enjoy library services to thrill them to utilize library resources more and more after every library experience. The road map to this is to improve performance through application of TQM practices.

The role of academic libraries is to offer quality services that helps the library and the parent institution to attain her goals in teaching, learning and research. Technological changes have promoted information explosion that has not only provided enormous information to users, but it has left them confused. Information obesity has forced some users to access unauthenticated sources of information. It is for this reason that libraries in universities have to provide quality services to the users on a continuous bases.

## **Objectives**

The study sought to achieve three objectives namely;

- 1. To identify TQM practices employed at Chuka University library
- 2. To determine the relationship between TQM and performance
- 3. To establish TQM strategies that improve performance for the library.

#### **Review of Literature**

#### **Total Quality Management Practices**

Continuity of every organization is highly dependent on royal customers. To this, it is the responsibility of organization to meet the needs of her clients. This calls for continuous efforts to apply total quality management practices in all process, products and services. Dei and Anane (2020) posits that activities applied should satisfy customers efficiently and cost effectively by maximizing potential of all employees in a continuing drive of improvement.

Quality in libraries and information centres refers to provision and delivery of the right information to the right person at the right place and at the right time (Dei and Anane, 2020). It is critical that libraries develop systems, strategies and philosophy that will enhance quality. According to American society of quality (2018), there should be guiding principles to enhance quality in libraries and this should include good leadership, employee empowerment, strategic quality planning, customer delight and continuous improvement.

## The relationship between Total Quality Management and library performance

All aspects of library management that include administration, collection development and services to users need adequate attention from management for effective and efficient services to patrons. TQM is therefore the best approach that libraries should adopt according to the needs and demands of users. Abera et al (2021) notes that complementing of TQM requires patience to provide the right direction and guarantee of high quality services. Effectiveness of TQM practices in libraries will improve delivery of services to users which will make them desire to interact with the information sources provided in knowledge hubs.

## Total quality management strategies

It is the intention of any existing library to keep improving its performance to the satisfaction of patrons and meeting set goals. This requires well thought out and working strategies as far as management is concerned. Success of TQM in libraries requires implementation of key strategies that include improvement of internal systems, standardization of work, satisfaction of customers and human resource management among other others.

## Improvement of internal systems

Success of TQM in libraries is dependent on a culture that ensure effective customer satisfaction, continuous improvement, problem solving and team work (Subbiah, 2020). Libraries considering implementation of TQM need to identify and take into account their organization cultures. Such ideal culture include an open and cooperative culture that have to be created and maintained by the top management.

#### Standardization of work

Processes in libraries need to be standardized to effectively determine how operations and activities are organized, how they flow from one stage to another and how needs of the patrons are met. Subbiah (2020) notes that identification and evaluation of critical processes that drive an organization are vital for continuous improvement of systems that are fundamental to TQM.

## Satisfaction of customers

Right from the beginning, key focus in libraries should be to meet the expectation of the users. The objective of each library should be to provide quality to the existing customer's right from the first time and all the time. This requires commitment from the management, staff, funds and time.

#### Human resource management

TQM is a people centered approach to management. This involves commitment of every employee. Full employee commitment can only be achieved by appropriate human resource management structures. These includes timely and proper communication channels, cordial manager's relationship with the subordinates and employee participation in decision making.

## Methodology

A descriptive research design was used for the study and a mixed method approach employed. An online survey questionnaire and interviews were used for data collection from a target population of 400. Sample size of 200 respondents that comprised of library staff and users was used for the study and was determined using the Krejcie and Morgan (1970) sample size table for small sample. Random sampling method was used to select 196 users respondents for the questionnaire while purposive sampling was used to select 4 head of library sections for the interview. Quantitative data was statistically analysed while qualitative data was analysed using thematic analysis. Information was presented using pie charts, tables and graphs.

## Findings of the Study

#### Response Rate

The response rate for the study was 61 (31%) for quantitative response. On the other hand, qualitative response was 2 (50%) which was adequate to analyse data and present research findings for the study. The response rate was made up of 59 % males and 41 % females as shown on figure 1. The responses from the interview schedule composed of were two respondents who were available for the interview. Their responses are identified as interviewee 1 and 2.

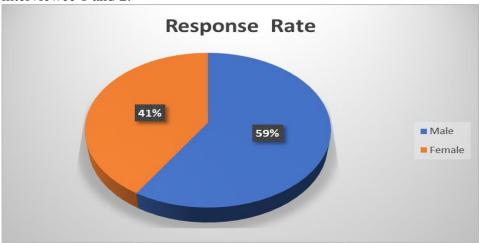


Figure 1: Response Rate

## Department of the Respondents

The findings of the study showed that majority of the respondents belonged to the faculty of humanities and social sciences 37 (61 %); agriculture and environmental studies had 13 (21 %) while the minority of the respondents 11 (18%) belonged to the faculty of nursing and public health. The highest percentage of respondents belonged to the faculty of humanities and social sciences.

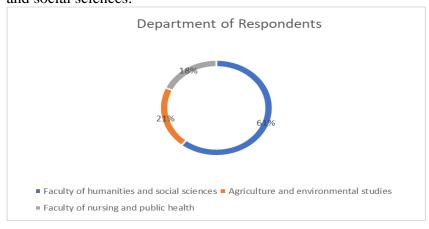


Figure 2: Department of Respondents

## Frequency of Library Visits

The findings of the study reviewed that majority of the respondents 25 (42 %) visits the library several times a week; 15 (23%) visits the library once a week; 9 (15%) rarely visit the library; 7 (12 %) visit the library once a month; 3 (5%) visits the library daily; while minority of respondents 2 (3%) never visits the library. These findings imply that most of the respondents frequently visits the library hence they are aware about total quality management practices that are provided in the library.

*Interviewee 1*: "The patrons visit the library basing on their individual needs. There are those that visit daily, once a week, several times a week and most especially during examination periods".

Interviewee 2: "Visits in the library varies from one user to another. What has been evidenced is a high flow of patrons during the middle of the semester and towards the end of the semester when examinations are ongoing.

## Extent of satisfaction in library operations

The findings of the study indicated that majority of the respondents 29 (46%) were fairly satisfied with operations in the library; 12 (20%) of the respondents were neutrally satisfied; 10 (16%) were fairly dissatisfied; 7 (12%) were very satisfied while minority 3 (6%) of respondents were very dissatisfied. Having majority of the respondents being fairly satisfied implies that total quality management is practiced at Chuka library. This meant that adequate TQM practices the library has employed has led to improved services and patrons satisfaction.

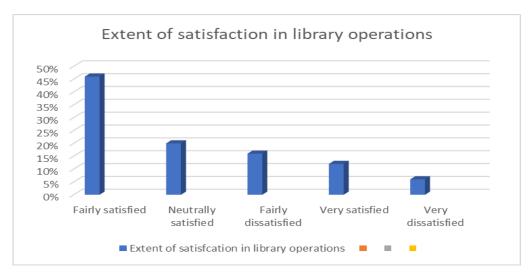


Figure 3: Extent of satisfaction in library operations

#### **Total Quality Management Practices**

The findings of the study reviewed existence of total quality management practices at Chuka university library. Majority of the respondents 22 (44 %) identified continuous improvement

as a key practice. Other existing quality management practices were rated at different percentages as follows: continuous communication 13 (24%); customer focus and quality leadership 12 (14%); integrated system, team work and staff commitment tied at 10 (12%), while fact based decision making was rated by minority of respondents 4 (6 %). These findings imply that application of total quality management practices are done at different ratings at Chuka university library.

*Interviewee 1*: "Chuka university library has employed total quality management practices that include customer focus, continuous communication, organization culture among other".

Interviewee 2: "There are very effective total quality management practices that the library has adopted that include: based decision making, excellent leadership, staff commitment and continuous communication"

These findings are in line with those of Abera, et al (2021) who established that committed leadership, continuous improvement, team work are key practices that enhance patrons satisfaction.

## Effectiveness of Total Quality Management Practices

Effectiveness of various total quality management practices at Chuka university library were rated by the respondents where by effectiveness in meeting user needs, usability of existing integrated systems, continuous improvement for a better library were all averagely rated, while effective communication was rated low; effective leadership was highly rated; organization culture was highly rated and staff attitude and commitment was rated very low.

## Relationship between Total Quality Management and Library Performance

It was exciting to find out that all the respondents agreed that total quality management affects performance of the library. Further to that, the effect of total quality management on performance had varying percentages whereby: efficient library operations and services had the highest rating by majority of the respondents 25 (50%); improved performance 20 (30 %); meeting user needs 10 (12%) and minority of respondents 6(8 %) identified better user attention.

*Interviewee 1*: "Total quality management as a leadership tool greatly affects every performance in the library in terms of effectiveness and efficiency".

*Interviewee 2:* "Total quality management has a direct effects in library performance. It affects effectiveness and meeting needs of the user"; "when total quality management is not applied in libraries, there is poor performance and users are not satisfied".

Total Quality Management Strategies

The findings of the study reviewed various strategies that have been applied at Chuka university library to improve library performance. Majority of the respondents 28 (32%) identified continuous improvement; good organizational culture 12 (27 %); excellent leadership 10 (22%); total employee inclusion 8 (10 %), while minority of the respondents 3 (9 %) identified systems audit.

*Interviewee 1*: "Excellent leadership, organization culture and continuous improvement are applied in the library"; however other strategies should be adopted such as employee inclusion and system audit".

*Interviewee* 2: "Excellent leadership and continuous improvement are applied in the library" further to that system audit should be adopted".

These findings echoes the sentiments of Mania (2017) that provision of quality service is an excursion that never ends and there are always opportunities for improvement on a continuous basis.

#### **Conclusion and Recommendations**

#### Conclusion

In order to operate on improved performance in libraries, there is need to have a high level of awareness about total quality management practices, understand benefits of effective quality management practices that can be applied to improve performance in libraries and adopt a positive attitude in accepting changes on the same. The study advises information professionals to be responsive, resourced and expeditiously embrace total quality management as an effective tool that improves operations and services. The study provides a benchmark for further research and exploration locally, in the region and even globally.

The study concluded that total quality management practices are employed at Chuka university library for effective operations and services provision. Therefore, there need for continuous improvement for improved services to the users and to ensure effective TQM practices for improved performance in academic libraries, effective communication, employee involvement and good leadership are prerogative.

#### Recommendations

The study recommends enhanced strategies for better performance that include:

- 1) Provide opportunities for professional development through training to enhance customer service skills.
- 2) Provide upgraded computers to enhance customer satisfaction.
- 3) Enhance continuous improvement thought adoption of new technology.
- 4) Adoption of strategic, systematic approach and systems audit.

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#### References

- American society of quality (2018). What is total quality management (TQM)? Available at: https://asq.org/quality resources/total-quality-management
- Baer, s., Hafiz, N., Adel, H, Maria, M. (2021). Awareness and implementation of total quality management: Medical libraries perspective philosophy and practice. Available at: https://digitalcommons.unl.edu/libphilprac/5213
- Chandra, J. Bute, S. & Kwanza, G. (2015). An analysis of total quality management (TQM) practices in Zambian secondary schools. The *TQM journal*, 27 (6), pp.716-731.
- Dei, J. & Anne, L. (2020). Total quality management in libraries and information centers. International journal of Academic multidisciplinary research 4(11), 78-83.
- Gathoni, N. &Walt, T. (2019). Evaluating library service quality at the Aga Khan University library: Application of total quality management approach. *Journal of librarianship and Information Science*, *51*(1), 123-136.
- Krejcie, R. and Morgan, D. (1970). Determining sample size for research activities. Educational and psychological measurement (30): 607-610.
- Munyao, M. (2017). Total quality management for user satisfaction in library operations and services with reference to USIU-Africa Library. [Unpublished dissertation]. The University of Nairobi.
- Ram, D. (2018). Application of total quality management in university libraries. *International journal of Research in Humanities and social studies*, 5 (10), pp25-31.
- Subbiah, N. (2020). Total quality management in libraries and information centre. *A journal of library and information science* 4 (1): 28-31.



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