

**CONTRIBUTION OF BUSINESS VOLUME FROM PREFERENTIAL GOVERNMENT
PROCUREMENT PROGRAMMES TO SUSTAINABILITY OF ENTREPRENEURIAL
VENTURES: CASE OF YOUTH ENTERPRISES IN KISII COUNTY**

^{1*} **Momanyi Theresa Nyatichi**
nyatichimn70@gmail.com

^{2**} **Nkirina Severina P. (PhD, MBA, MKIM)**
nkirinasp@yahoo.com

^{1,2} *Jomo Kenyatta University of Agriculture and Technology*

Abstract

Public procurement in Kenya is governed by the Public Procurement and Asset Disposal Act 2015, which basically provides procedures for efficient and disposal of assets by public entities in Kenya. A 30% procurement fraction is set aside for the disadvantaged groups to empower them and allow them to work with the government through procurement opportunities. This shields them from competition by larger organizations. The investigation for this paper was guided by the objective; to assess the contribution of volume of business on sustainability of youth enterprises in Kenya. A descriptive survey design was used to plan the investigation. A sample of 97 businesses was selected using a stratified random sampling method from a population of 133 enterprises that had participated in the government preferential procurement programme. The findings revealed that preferential government procurement opportunities have greatly improved the survival and sustainability of youth enterprises in Kisii County hence spurring the entrepreneurial drives of those involved. The volume of business handled by the youth enterprises has significantly improved as a result of increased number of tenders and increase in the monetary value of the business they handle. In conclusion, we recommend that more volume of businesses be awarded to the youths since it has a positive effect on the sustainability of youth enterprises and hence promoting entrepreneurship to the target group. Future researches can look into other country to establish the overall country effect.

Keywords: *Preferential, Procurement, Volume of Business, Youth Enterprises, Sustainability*

1.0 Introduction and Background

Public procurement is the process by which government and public entities purchase goods, services, capital and technologies for their own or public use. In Kenya, the Government is the largest single buyer of goods and services. The total volume of Public procurement in 2003-2004 was established to be 3.64 billion which is equivalent to 9% of the GDP (Independent procurement review Kenya, 2005). This is a huge amount and if it was well utilized then it could drive economic growth through greater youth participation in public procurement (OECD, 2010).

The micro and small enterprises (MSEs) sector plays a pivotal role in creating innovation, wealth, employment and economic growth in industrialized and developing countries (Robson and Bennett, 2000). For this reason their existence makes them a chosen vehicle in a number of policy fields. For example, their flexibility has placed them at the center of labor market and employment policy. They also make a major contribution to

regional development and particularly, at local level, they play a significant role in service provision enabling others to participate in the workforce (Hanley and O’Gorman, 2004).

Therefore, preferential procurement becomes a major factor as it comprises participation of programs aimed at engaging small enterprises owned by disadvantaged persons in all the types of government and non-governmental contracts. This includes people who have been discriminated against due to their age, gender and also disability.

In public finance literature, governments are involved in four major economic activities; providing the legal framework for all economic activities, redistributing income through taxation and spending; providing public goods and services freely available to the public such as national defense, public safety, education, infrastructure (bridges and roads) and purchasing goods, services and capital assets. Public procurement is meant to help the government in providing public goods and services, purchasing goods, services and capital assets. Procurement spending represents 10-20 % of GDP and up to 50% or even more of total government spending.

In the US, the main objective of the Office of Government Contracting (GC) is to create an environment by maximizing the participation of small, disadvantaged, and woman-owned businesses in federal government contract awards and large prime subcontract awards. Procurement Technical Assistance Program (PTAP) is a program that was authorized by Congress in 1985 in an effort to expand the number of businesses capable of participating in the government marketplace. Administered by the Department of Defense, Defense Logistics Agency (DLA), the program provides matching funds through cooperative agreements with state and local governments and non-profit organizations for the establishment of Procurement Technical Assistance Centers (PTACs) to provide procurement assistance. They provide local, in-person counseling and training services for individuals and also for the small business owner. They are designed to provide technical assistance to businesses that want to sell products and services to federal, state, and local governments.

1.2. Problem and Focus

SME participation in public procurement has been used in several countries to create markets for their goods and services. Established small, youth and women enterprises have faced unique problems, which have affected their growth and profitability, hence diminishing their ability to contribute effectively to sustainable development through public procurement (Knudsen, 2013). Some of the constraints include competition from large firms, accessing information, low quality service and products due to financial challenges and interference from dishonest middle-men who then sub-contract to SMEs (Odhiambo & Kamau, 2003).

According to the Economic Survey (2006), the sector contributed over 50 percent of new jobs created in the year 2005. Despite their significance, past statistics indicate that three out of five businesses fail within the first few months of operation (Kenya National Bureau of Statistics, 2007).

The rate of unemployment for youth is higher than the other age groups in Kenya. They are known for their energy, strength, ambition and also innovativeness. The real reason why most of them do not thrive in the business world is due to the inadequate experience and a lack of specific employment skills. Access to government procurement opportunities or preferential procurement becomes a burden lifter platform for the well informed youths. The Kenyan government implemented AGPO project where 30% of government procurement budget was preferred for youth, women and persons with disabilities. Some of the benefits for participating in the AGPO project includes; accessing credit/loans facilities namely LPO/LSO finance from the Youth Enterprise Development fund. According to the public procurement and disposal act 2005 it

stipulates that the youths participating in the program will be excluded from the requirement to get a bid bond and will instead fill in and sign a tender securing declaration form. This is because a bid bond is a guarantee that you provide to the project owner stating that you have the capability to take on and implement the project once you are selected during the bidding process, and in most cases the youths have no guarantee to offer.

Many researches carried out are on factors affecting access to government procurement opportunities for disadvantaged groups in public entities by (Ngure, 2015), constraints to small and micro enterprises participation in public procurement in Kenya by (Afande, 2015) and also influence of the implementation of access to government procurement program on business growth in youth owned enterprises by (Kipkoech, 2015). Past studies focus on the problems and the implementation of the program.

This paper looks at the contribution of the program towards the sustainability of enterprises by basically gathering information from those who have already participated in the program so that we can shed light on how beneficial these procurement opportunities have been to their business sustainability. This paper uses data from Kisii county youth enterprises that have been engaged in government procurement opportunities.

1.3. Guiding Questions

- i. To what extent does the volume of business from preferential government procurement opportunities contribute to sustainability of youth enterprises in Kenya?
- ii. To what extent does the number of tenders awarded contribute to the sustainability of youth enterprises in Kenya?
- iii. To what extent does the duration of tenders offered contribute to the sustainability of youth enterprises in Kenya?
- iv. To what extent does the monetary value of tenders contribute to the sustainability of youth enterprises in Kenya?

2.0. Theoretical Foundation and Literature Review

2. 1. Public interest theory

Public interest theory can be described as the allocation of scarce resources for individuals and collective goods. According to public interest theory, government regulation is the instrument for overcoming the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results. In the first place, regulation can improve the allocation by facilitating, maintaining, or imitating market operation.

The exchange of goods and production factors in markets assumes the definition, allocation and assertion of individual property rights and freedom to contract (Pejovich, 1979). The guarantee of property rights and any necessary enforcement of contract compliance can be more efficiently organized collectively than individually.

Small enterprises have scarce resources like employees, equipment, raw materials used to produce goods. And that is why government regulations come in handy as it uses regulation as an instrument to overcome the disadvantages of imperfect competition, unbalanced market operation, missing markets and undesirable market results by incorporating preferential procurement to all government agencies. This is by allowing the 30% preferential procurement opportunities and also allowing the small and medium enterprises to be innovative to satisfy the demands in the market.

2.2. Literature on Preferential Procurement and Volume of Business

The European Commission acknowledges that small and medium sized enterprises (SMEs) are underrepresented when it comes to bidding for and being awarded public procurement contracts. A large contract size is argued to put SMEs at a disadvantage relative to larger firms because SMEs might not have the necessary capacity and financial resources to fulfill the contract. Splitting the procurement contract into lots of limited scope is expected to induce SMEs' likelihood of participating in the auction and winning the contract (European Commission, 2011; 2012).

The implicit assumption for this argument is that SMEs are less efficient at carrying out large projects relative to large firms. Indeed, if the degree of asymmetry in the distribution of production costs for SMEs and large firms are large enough it becomes unprofitable for the least-efficient SMEs to enter into the auction, especially when there are substantial entry costs involved (Krasnokutskaya and Seim, 2011). Large projects might therefore act as a barrier to entry and consequently reduce the level of competition. The effect of procurement design on SME competition is assessed on the basis of the potential bidder's entry decision and their probability of being awarded the contract.

The Small Business Act of 1953 states that small businesses should receive a fair proportion of federal contracts and that small business should have the maximum practical opportunity to participate in federal contracting. The Small Business Act established the Small Business Administration (SBA) to aid small businesses and to ensure that they received a fair proportion of federal contracts. This is one of the ways the government uses to encourage and nurture small businesses.

In Kenya the initiative's task at hand is to enable youth, women and people with disability access 30% of Government Tenders. This will only be made possible through the implementation of the Presidential Directive to set aside at least 30% of government procurement opportunities for the youth, women and persons with disabilities enterprises without competition from established firms. The will empower the youth, women and persons with disability-owned enterprises by giving them more opportunities to do business with the Government. To qualify, the Public Procurement and Disposal (Preference and Reservations) Regulations, 2011, shall apply to procurements by public entities when soliciting tenders from the following target groups: Disadvantaged Groups (Youth, Women, and Persons with Disability), Small Enterprises, Micro Enterprises, Citizen Contractors, local Contractors and Citizen Contractors in Joint-venture or Sub-contracting arrangements with foreign suppliers.

When public services and goods are procured, the amount and value procured is often high. Due to both costs associated with procuring and the amount of goods or services needed to satisfy the demand in a municipality or government authority, the procurements can often cover very large amount of a good or service and also cover a large geographic area. Therefore this could hinder SMEs, both because of capacity constraints and due to their limited geographic footprint, in submitting a bid. Procuring large contracts are in the short run often beneficial for the procurer, mainly because of the administrative costs associated with each procurement. In the long run this suppresses competition and might raise prices due to the exclusion of SMEs from different markets.

It is important to estimate the value of the procurement as accurately as possible and in accordance with the valuation rules. This is because different rules may apply depending on the value of the procurement, for example, higher value procurements may be impacted by free trade agreement obligations or additional requirements relating to industry consultation or industry participation plans.

Value for money is derived from the optimal balance of benefits and costs on the basis of total cost of ownership. As such, value for money does not necessarily mean that a tender must be awarded to the lowest tenderer. Value for money is a term generally used to describe an explicit commitment to ensuring the best results possible are obtained from the money spent. In the UK Government, use of this term reflects a concern for more transparency and accountability in spending public funds, and for obtaining the maximum benefit from the resources available (Barnett et al 2010). Value for money in public procurement is achieved through pursuing the lowest whole of life cost, clearly defining relevant benefits and delivering on time. Preventing waste and fostering competition, transparency and accountability during the tendering process are key conditions to achieving value for money. Value for Money refers to a judicious, economic and efficient use of state resources at a reasonable cost. Value for money is not about achieving the lowest initial price: it is defined as the optimum combination of whole life costs and quality.

Value for Money in the public sector involves consideration of the contribution to be made to advancing government policies and priorities while achieving the best return and performance for the money being spent (Bauld & McGuinness, 2006, p. 20). This means that public procurement entities can choose to award a contract based on other criteria other than the lowest price.

2.2. Literature on Sustainability of Youth Enterprises

Sustainability is being able to continue, make something continue to exist or happen for a period of time as it endures systems and processes, (James, 2002).

Shola, (2012) suggests that there is a strong and positive correlation between entrepreneurship and the youth business sustainability. Egge, Tan, and Mohamed, (2003) in their submissions to the ASEAN forum argued that an increase in the number of youths, leads to an increase in uncertainty. Such energies may better be utilized in positively directing their skills, and their tendencies to innovate there by bringing about development. A similar analysis was also noted in study done by Walukhu, (2015).

To ensure sustainability of small enterprises in Kenya, a number of programs and facilities were needed to enhance their performance and competitiveness. In this regard, the Kenyan government developed the necessary regulatory, policy and institutional framework that lead to the development of MSEs in the country. The Micro and Small Enterprise Act was passed by parliament in 2012 and through it rules were established and institutions were created to support micro and small businesses in Kenya. Micro and Small Enterprises Authority (MSEA) was mandated to formulate and coordinate policies needed to facilitate the integration and harmonization of various public and private sector initiatives, for the promotion, development and regulation of the MSEs to become key industries of tomorrow. The MSE Act has a Micro and Small Enterprises Fund to: finance the promotion and development of MSEs; provide affordable and accessible credit to MSEs; and finance research, development, innovation and transfer of technology. (R.o.K, 2015).

The other initiative was the Youth Enterprise Development Fund was a state corporation under the ministry of Public Service, Gender and Youth Affairs, gazetted on 8th December 2006 and transformed into a State Corporation on 11th May 2007. The fund seeks to create employment through the promotion of entrepreneurship by providing loans services to small and medium size enterprises. The specific objects of the fund are; provide loans to youth owned enterprises, provide market support to youth enterprises, facilitate youth enterprises to develop linkages with large enterprises, provide trading premises and worksites, provide business development services to youth owned enterprises and facilitate youth to obtain jobs abroad.

The Uwezo Fund is also another flagship programme for Vision 2030 aimed at enabling women, youth and Persons with Disabilities (PWDs) access finances to promote businesses and enterprises at the constituency level, thereby enhancing economic growth. The Fund was launched by His Excellency the President of the Republic of Kenya on 8th September 2013 and enacted through a Legal Notice No. 21 of the Public Finance Management Act, 2014, and published on 21st February, 2014. The Fund also seeks to expand access to finance and promote women, youth and persons living with disability led enterprises at the constituency level.

Recently the role of SMEs in economic development and employment creation has occupied most of the discussions among government, policy makers, academicians/ researchers/ scholars and economists in Kenya and other countries. A study by Kongolo (2010) established that small business owners globally have the same characteristics, face the same obstacles but differ in their understanding of how small businesses assist in economic growth. SMEs have ability to fuel economic growth because they create new jobs, expand the tax base, and are drivers of innovation. According to Beck and Levin, (2005) SMEs enhance competition and entrepreneurship hence has external benefits on economy wide efficiency, innovation and aggregate productivity. They are the primary vehicles by which new entrepreneurs provide the economy with a continuous supply of ideas, skills, and innovations. Globally there is an agreement that MSMEs hold the key to economic growth based on the fast growth of enterprises and the role of SMEs in generation of employment. According to Normah (2007) the concentration of SMEs has a close relationship with the dominant economic activities. SMEs dominate the world economies in terms of employment and number of companies, yet their full potential remains remarkably untapped (Schlogl, 2004; Omar, Arokiasamy & Ismail, 2009). This is due to a number of reasons (e.g. legal, institutional, cultural, societal etc.) which make the role of SMEs on economic development different across countries.

The research studies show that as a result of all this interventions youths who participate in preferential procurement provides one of the most prolific sources of employment not to mention the breeding ground for medium and large industries, which are critical for industrialization (RoK, 2005). According to the 2014 Economic survey, employment within the MSE sector accounts for 74.8% of the total person engaged in employment. This sector contributes up to 18.4% of the country's GDP. MSEs Sector is therefore not only a provider of goods and services but also a driver in promoting competition and innovation and enhancing the enterprise culture which is necessary for private sector development and industrialization (Republic of Kenya, 2014).

3.0. Methodology and Design

The methods adopted in this paper was the descriptive research design. A population of 133 youth enterprises were targeted and their owners or managers sampled to participate in the study. A sample of 97 respondents was sampled using stratified random sampling. A 5 point likert scaled questionnaire was used to gather data on the study variables of the contribution of volume of business in terms of number of tenders offered, duration of tenders and value of tenders in terms of monetary contribution was analyzed. SPSS version 23 was used to descriptively generate output from the data and a regression analysis gives the basis for making inferences.

4.0. Findings, Discussions and Recommendations.

4.1. General Findings.

From the findings, most of the respondents were within the age of 24-29 years of age and males dominated the group. Majority had also attained at least college level of education with very few who had primary school and below level of education. Majority of the businesses also employed below 5 employees and were in the trade

and commerce sector of the economy. The most common form of business ownership in this sample was the sole proprietorship.

4.2. Key Findings on the Contribution of Preferential Government Procurement Programmes to Business Sustainability

Youth enterprises stand to benefit from participating in the 30% procurement slot given by the government. The benefit stems from the volume of businesses that they are able to access, the duration of tenders awarded since they keep them in business as well as the monetary value accrued from these tenders. The enterprises that access these tenders are expected also to be sustainable since their investment returns are guaranteed as well as stability from large sums of money paid to them after completion.

This section gives and discusses these findings as generated from the analysis.

The respondents were required to respond to three questions concerning the volume of business as a result of preferential procurement opportunities on a 5 point scale of 1-5 representing different aspects as; 1 represented Very low, 2 represented low, 3 represented moderate, 4 represented high and 5 represented very high. For the question concerning number of tenders as a result of preferential procurement opportunities 1 represented 1-5 tenders, 2 represented 6-10 tenders, 3 represented 11-15 tenders 4 represented 16-20 tenders and 5 represented more than 21 tenders. For the question of duration of tenders, 1 represented days, 2 represented weeks, 3 represented months, 4 represented a year and 5 above one year. Means and standard deviations were obtained and the results are tabulated in table 4.1.

Table 4.1: Volume of business descriptive statistics

Measurement Aspects	N	Minimum	Maximum	Mean	Std Dev.
Monetary value of procurement contract	73	2	5	4.08	1.010
Number of tenders Awarded	73	1	5	2.30	1.023
Duration of procurement contract	73	1	4	2.96	1.047
Valid (Listwise)	73				
Total	73				

The research findings revealed that the monetary value of procurement contracts as a result of preferential procurement opportunities had a mean of 4.08 and standard deviation of 1.010. This was an indication that majority of the respondents (59 percent) rated the monetary value as being high. The number of tenders as a result of preferential procurement opportunities had a mean of 2.30 and a standard deviation of 1.023. This was a confirmation that majority of the respondents (45 percent) indicated that they had accessed an average of 6-10 tenders as a result of preferential procurement opportunities. The duration of procurement contracts as a result of preferential procurement opportunities had a mean of 2.96 and standard deviation of 1.047. This revealed that most respondents (32 percent) indicated that the duration of the procurement contracts ran into several months.

The study also sought to establish the overall perceived contribution of volume of business due to preferential procurement opportunities on sustainability of youth enterprises in Kisii County. The respondents were required to rate the effect on a scale of 1-5 where 1 represented very low effect, 2 represented low effect, 3 represented moderate effect, 4 represented high effect and 5 represented very high effect. Frequencies and percentages were obtained from the responses and presented in table 4.2 below.

Table 4.2: Business Volume and Sustainability

Effect	Frequency	percent
Very low effect	2	2.7
Moderate effect	19	26.0
High effect	46	63.0
Very High effect	6	8.2
Total	73	100.0

It was established that majority of the respondents as represented by 63 percent, indicated that business volume as a result of preferential procurement opportunities had a high effect on the sustainability of youth enterprises in Kisii County. 26 percent of the respondents also indicate that business volume as a result of preferential procurement opportunities had a moderate effect; 8.2 percent indicated it had a very high effect and 2.7 percent indicated it had a very low effect. This implies that majority of the respondents were in agreement that business volume as a result of preferential procurement opportunities had a significant effect on sustainability of youth enterprises in Kisii County.

4.3. Correlation Analysis

In order to ascertain the relationship between preferential procurement opportunities spear headed by the government and the sustainability of youth enterprises, a correlation analysis was undertaken. The findings show a strong and positive correlation of 0.741. This implies that, if we increase the volume of businesses awarded to the youth owned enterprises, there is a very high chance that these enterprises will be enhanced and their survival rate will increase profoundly. This maybe as a result of businesses being able to get enough work to keep them afloat for most of time they are in business.

4.3 Correlation Analysis Results

Variable	Sustainability	Volume of business
Sustainability of Youth enterprises	1	
Volume of business	.741**	1
Total	73	

**Correlations Significant at 0.01

4.4. Discussions and Recommendations

From the findings its evident that accessing government procurement opportunities keeps the youth owned businesses afloat for long and hence guarantees survival rate which has been a challenge to most MSEs in Kenya.

It was also established that the volume of business transacted by youth enterprises in Kisii County had significantly increased as a result of preferential government procurement opportunities. It was also evident that the increased volume of business had a significant impact on the sustainability of youth enterprises in Kisii County. This is no strange finding when compared to the position held by the European Commission (2012) where they argued that small and medium sized enterprises (SMEs) are underrepresented when it comes to bidding for and being awarded public procurement contracts. A large contract size is argued to put SMEs at a

disadvantage relative to larger firms because SMEs might not have the necessary capacity and financial resources to fulfill the contract. Splitting the procurement contract into lots of limited scope is expected to induce SMEs' likelihood of participating in the auction and winning the contract. This implies that Youth enterprises are given the opportunity to grow the volume of business through preferential government procurement opportunities.

The study further established that the preferential government procurement opportunities had a strong positive and significant relationship with sustainability of youth enterprises in Kisii County. The results are in line with RoK (2005) where it was found that youths who participate in preferential procurement provides one of the most prolific sources of employment not to mention the breeding ground for medium and large industries, which are critical for industrialization.

This paper therefore concludes that the volume of business accessed by young people as a result of preferential government procurement is important in contributing to their sustainability. If businesses are sustained it implies that they will be here for long and hence ensuring the young people are kept busy which translates to less problems associated with idleness.

Since volume of business goes with increased income, longer contracts and number of contracts, it means young people can also meet their financial obligations as well as engage other youths when they have more work that runs for longer durations.

5.0. Future Research

This study was a case study of Kisii County. A comparative study may be carried out to compare the situation in Kisii County and other counties in the Country. This will assist in ascertaining whether there are any similarities or differences concerning the subject of preferential government procurement opportunities and their contribution to sustainability of youth enterprises.

References

- Afande, F. (2015) *Constraints to Small and Micro Enterprises' Participation in Public Procurement in Kenya: A Case of Cleaning Services Industry in Kisii Central Business District. Journal of Marketing and Consumer Research ISSN 2422-8451 An International Peer-reviewed Journal Vol.11, 2015*
- Bauld, S., & McGuinness, K. (2006). *Value for money. Summit, 9,20*
- Bennett, R., & Robinson, S. L. (2000). *Development of a measure of workplace deviance. Journal of applied Psychology, 85,349-360*
- EGGE, K., TAN, W. L., & MOHAMED, O. (2003). *Boosting technopreneurship through business plans contests: Malaysia's venture 2001&2002 competitions. In Hawaii International conference on business:18(20)*
- Hanley, M. & O'Gorman B. (2004). *'Local interpretation of national micro-enterprise policy: To what extent has it impacted on local enterprise development?' International Journal of Entrepreneurial Behaviour and Research, Vol. 10 No. 5, 2004 pp. 305-324.*
- James, R. (2002). *People and Change: Exploring Capacity Building in African NGOs. Oxford:*
- Kongolo, M. (2010). *Job creation verses job shedding and the role of SME's in economic development. African Journal of Business Management, 4,11:2288-2295*

- Krasnokutskaya, E., and Seim, K. (2011) "Bid preference programs and participation in highway procurement auction heterogeneity." Review of economic studies, Vol 78:pp 293-327*
- Normah Mohd Aris. (2007) SMEs: Building blocks for economic growth. Paper presented in national statistics Conference 4-5 September 2006. Department of statistics*
- Odhiambo, W., & Kamau, P. (2003). Public Procurement: lessons from Kenya, Tanzania and Uganda. Research programme on the integration of developing countries into the world of trading system: OECD Development Center*
- OECD, (2010). High growth enterprises: What governments can do to make a difference, OECD studies on SMEs and entrepreneurship. OECD Publishing, Paris*
- Omar, S., Arokiasamy, L., & Ismail, M. (2009) The background and challenges faced by the small medium enterprises. A human resource development perspective. International Journal of Business and Management, 4(10)*
- Pejovich, Svetozar (1979). Fundamentals of Economics: a Property Rights Approach, Dallas, Fisher Institute.*
- Republic of Kenya (2005). 'Sessional Paper No. 2 of 2005: Development of small and micro enterprises for wealth and employment creation for poverty reduction' Government Printer, Kisii.*
- Republic of Kenya (2005). The Public Procurement and Disposal Act 2005, Government Printer, Kisii.*
- Schlogl, H. (2004) small and medium enterprises: seizing the potential. Organizational for economic cooperation and development, No. 243 pp 46-48*
- Shola, (2012). Entrepreneurship, Mumbai, Doshi Publishers*
- Walukhu, M. (2015). Sustainability of youth enterprises funded projects: A case of selected projects in Mombasa County, Kenya. University of Nairobi*