

Right to food and sustainable livelihoods: use of pastoral cycle approach to respond to communities' needs isiolo county,

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Abstract

The constitution of Kenya provides that each and every person has a right to adequate and quality food. Sustainable Development Goals (SDGs) 1, 2 and 6 focus on ending poverty and hunger, and availability of clean water to all people. However, all these provisions are articulated in the presence of a global environment under constant threat of degradation from extreme and uncontrolled human development. In this context, the study underscores what the Laudato Si document refers to: The earth must not live in poverty, and must therefore not be neglected, exploited and left ecologically unkempt. While Africa has experienced economic growth in the past two and half decades, the number of people still suffering from extreme hunger and poverty is unjustified; and such growth has not facilitated comprehensive cushion for marginalized groups of people. The Eastern region has failed to arrest the declining state of food security, and has even, under the now phased out Millennium Development Goals, not articulated comprehensive strategy to increase the resilience of their communities against hard core hunger. This is a contrast from the West and Southern regions where, the former successfully achieved MDG 1 while the latter seems headed there by 2020. In Kenya, millions of families still suffer food insecurity, and are thus not able to maximize their potential and contribute to their families and communities effectively. This study was carried out in Isiolo County, and aimed to a) build and strengthen the capacities of Isiolo county residents on resilience to food insecurity; b) facilitate the creation and firming of local advocacy actions on their right to food and c) promote alternative thinking like use of green technological to increase food production among target communities and protect environment from adverse global warming. The study employed mixed methods of research – qualitative and quantitative techniques. The key findings showed that drivers of change shaping global progress towards food security are multifaceted and communities are drivers to this transformational journey. This study recommends a bottom-up approach to understanding the communities' ill-being and accompanying them to realize their potential to claim their rights; hence engage with the service providers to supply the required amenities for their community transformation and sustainable development.

Key Words: Food insecurity, Pastoral cycle approach, sustainable livelihoods, pastoralist communities

INTRODUCTION

Background

There is a growing trend around the world for collaborative efforts to enhance social transformation through the SDGs. The achievement of food security plays a key role in claiming to this goal. However, since the factors contributing to food insecurity are multifaceted; a multidisciplinary approach will then be reliable in ensuring a sustainable impact. This paper then implies the use of pastoral cycle approach in responding to the challenge of food insecurity and mobilizing communities to take advocacy actions with relevant authorities for their right to food.

Kenya covers a surface area of approximately 582 Km², of which only 20% is categorized a highly potential agricultural land. Of the total land mass, 70% is under customary ownership and use, 10% is government land/reserves and 20% is privately owned (Njunguna and Baya 1999). About 85% of the population relies on agriculture for primary livelihood, yet only 88.4% of these have access to less than 3 hectares each (O'Brien, 2011). This reflects unstable situation as only 6% of the land in the country is registered under individual titles. Additionally, Kenya is ranked among the countries most vulnerable to flood insecurity and drought caused by climate change and uncontrolled human development.

Kenya is a member State to several international and regional human rights instruments such as the international Covenant on Economic, Social and Cultural Rights ratified in 1972. Despite this, the country is still struggling to realize the rights enshrined in the Covenant. A New Land Policy (NLP) which has been in the making for several years was finally adopted by parliament in December 2009. The current constitution sets out three types of land: government land, private land and trust lands which is distinguished by the NLP. The NLP also ensures that land use complies with environmental standards and that land use benefits first and foremost, the local communities. The 999 years colonial land leases are now limited to 99 years as per the National Land Policy (Bruce, 2009).

Besides, the Kenyan government has a national economic development plan 'vision 2030'. The vision considers foreign investments a key to agricultural development. Hence the Kenyan government has sought to attract investors particularly into agriculture to grow cash crops both for export and for domestic consumption. According to the Kenyan investment authority, the country has three bilateral investments treaties in force: with Germany, Italy and Netherlands. The treaties with China (2001), Switzerland (2006) and the United Kingdom (1999) has been sign but have not yet been enforced (encyclopaedia of the Nation's, 2010). The Kenya government also entered into a deal with the Qatar government and dominion from USA. The agreement were to lease part of the land in the Tana river delta and Yala wetlands swamp to these international investors for food production (Mulama, 2010).

Changes in land use and its effects on food security in Kenya is an observable phenomenon. These changes and their dynamics are multifaceted and are characterized by shifts in the utilization of land. According to 2013 report, by Alliance for Green Revolution in Africa (AGRA), smallholder farmers account for most of the cultivated land and sizable share of the agricultural production. Land access and size of holdings according to the report have been affected by a growing rural population, changes in infrastructure and market access; rapid urbanization; investment in new crops and species, and, due to new policies coming in place. For example, the influence of the devolved system of government in the land use especially in infrastructure development could be a threat to food insecurity. Therefore, subsistence farming is increasingly threatened by a combination of factors such as climate change, market forces and weak and/or inefficient farmers unions. Secondly, there are no clear institutional mechanisms to cushion local communities through well-functioning agricultural and food markets. Third, is the acquisition of farmland for other purposes such as production of bio-fuels, mineral exploration, large-scale farming for export and cutting off fertile zones have left large tracts of land hoarded by rich buyers for limited use which undermines efforts to food security. Arid and Semi-arid Lands (ASAL) in Kenya are no exception. Kenya, particularly the north accounts for about 1.6 million. There has been an increase in food insecure populations since August 2014 in the areas of Marsabit, Wajir, Isiolo and Garissa and noticeable water depletion that has necessitated 50% more trekking time for pastoral communities seeking for water points (Nyariki, 2007).

An estimated 1.1 million People are acutely exposed to ravages of food insecurity. Alongside other factors discussed above; diseases and livestock ailments; conflict scenario including the threat of Al shaabab has not made it any easier. However, in mitigating against food insecurity, both national and county governments have together adopted a relief approach, though confined in the emergency paradigm, it defeats the concept of sustainable food security. Mobilizing and activating drought emergency funds for the Arid and Semi-Arid counties and prioritizing Hunger Safety Net Programmes for the critically affected regions is commendable. However, undertaking such well-meaning interventions in the absence of a replicable resilience building strategy entrenches dependency amongst such communities. There is need that emergency oriented programmes be enshrined in a more sustainable intervention that must pursue pro-active tendencies, rather than one off projects like distribution of relief food, provision of school meals and other feeding programs. The sustainable approach feeds well in to the Malabo Declaration on “Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods” of 2014.

The Research Problem

Though the 2013 Global Hunger Index (GHI), which reflects data from the period 2008–2012, shows great improvements in global food security, there are 870 million people in the world exposed to extreme levels of hunger (GHI, 2013). The GHI score for Kenya for the periods of 1990, 1995, 2000, 2005 and 2013 are given by the report as 21.4, 21.0, 20.5, 20.2 and 18.0 respectively showing some slight improvements. However, the 2007 Economic Review of Agriculture indicated that 51 percent of Kenyan population lacked access to adequate food. The

situation seems to have worsened in 2008 and subsequent years as depicted by a high proportion of the population having no access to food in the right amounts and quality. Households are also incurring huge food bills due to the high food prices. Maize being staple food due to the food preferences is in short supply and most households have limited choices of other food stuffs.

The current food insecurity problems are attributed to several factors, including the frequent droughts in most parts of the country, high costs of domestic food production due to high costs of inputs especially fertilizer, displacement of a large number of farmers in the high potential agricultural areas following the post-election violence which occurred in early 2008, high global food prices and low purchasing power for large proportion of the population due to high level of poverty (Kenya agricultural research institute, 2012). Mobility in labour force to other more promising sectors by the youth, the fastest growing population in the country, from agriculture is also a contributing factor to the endemic food insecurity. This is attributable to low investment in agriculture, low productivity, poor markets and, consequently, poor returns of agricultural produce. According to Kenya Food Security Steering Group (KFSSG) “October To December 2013 Short Rains Season Assessment Report” the population in need of emergency humanitarian assistance (acute food insecure population) increased by more than 50 percent between August 2013 and February 2014 because of poor performance of the short rains season, increasing food prices and conflicts. Between February and August 2014, about 1.3 million people were in need of emergency humanitarian assistance.

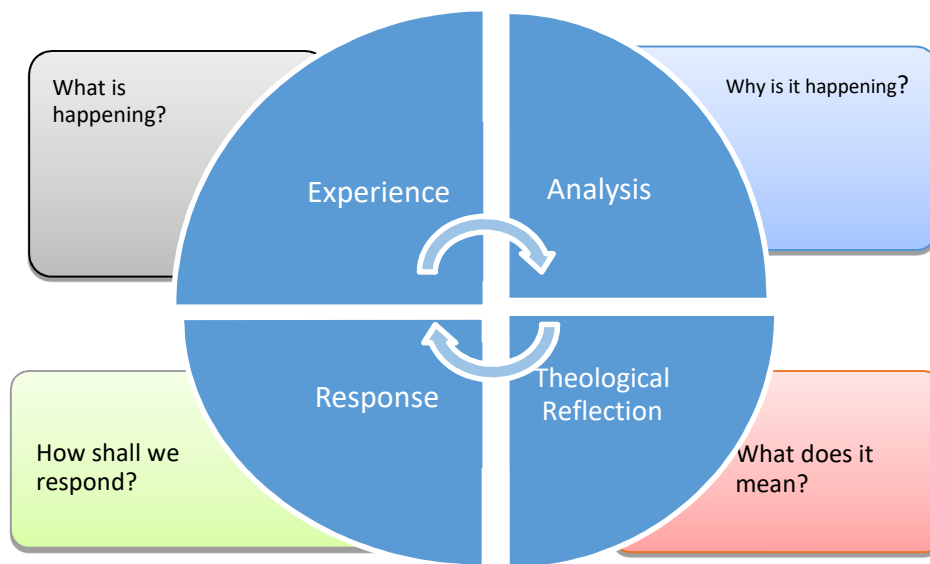
The report further points out that the national maize stock balance sheet evaluated on December 2013 and projected through March 2014 indicates that the maize availability will be 30 percent below the five year (2008-2012) average of 2.9 Million Metric Tonnes. By the end of March 2014, available stocks lasted the country only through June 2014, prompting imports to fill the deficit before the long rains harvests reach the market. Such has persisted to today where the 2017 general elections found its bases with the government being forced to subsidise the 2kg packet of maize flour. Therefore, to enhance agriculture, food security and agribusiness for community transformation, there is need to empower communities especially those in ASAL areas to build resilience to the multifaceted factors to food security, engage in advocacy for social justice as well as promoting technological interventions to increase food production and environmental conservation. A problem solving approach is then quite appropriate for an inclusive discussion and to generate sustainable solutions to the threatening food insecurity challenge.

Objective of the Research

This study sought to address the gap of engaging the local communities for alternative livelihoods given the multifaceted factors which threaten right to food and sustainable livelihoods in Isiolo County. This research based advocacy aimed at: strengthening capacities of Isiolo county residents on resilience to food insecurity, facilitating the creation and firming of local advocacy actions on their right to food, promoting alternative thinking through green technological interventions that increase food production and protect environment from adverse global warming.

THE THEORETICAL FRAMEWORK

According to Bodewes (2005) Pastoral cycle is a pastoral theology method developed by Joe Holland & Peter Henriot SJ to assist groups responding to social issues. It is widely used by social justice workers around the world since the booklet *Social Analysis* was published by the Centre of Concern in 1980. A revised and expanded edition of *Social Analysis: Linking Faith & Justice* was published by Orbis in 1983. It has roots in the ‘see, judge, act’ method of Cardinal Joseph Cardijn; the ‘hermeneutic circle’ of Juan Luis Segundo; the methodology of modern Catholic Social Teaching; and the spirituality of St. Ignatius of Loyola (Holland & Henriot, 1983). It is a flexible framework that can be used for pastoral, academic or community action purposes (Cranton, 2006). It is not a closed circle. Action leads to a new reality, a new experience to be examined. The following diagram describes a pastoral cycle framework.



The pastoral cycle framework seeks to answer four key questions: What is happening? Why is it happening? What does it mean? How shall we respond? The first question seeks to open “small holes” of entering into people’s experience and it involves a lot of dialogue with the people as they slowly and keenly unveil their experience up to the core of their understanding. It creates a chain of their reality in search of the underlying truth. Here the generated information is purely qualitative. The second question seeks to identify facts of the perceived reality using systematic method of study. Here the facilitator of the community engages the wisdom of science in explain the reality (Hope & Timmel, 1995).

The third question takes the community into a deep reflection of the reality in reference of their faith tradition. This enables them to identify with the challenges, awakening them to new thinking

and understanding of the same lived challenge (Jeketule et.al, 2012). The discussion by Einstein, whose essay “Science and Religion” was published in 1954 finds a round table. Through the support of the Social Transformation agents, the communities are able to understand the statement by Einstein that, “Science without religion is lame & religion without science is blind.” This means that science and religion are harmonious though they have a distinct but complementary tasks: science helps us understand the physical structure of the reality, while religion deals with human values, morals, and meanings connected to the reality (Trooper, 1964). The community realizes their power and capacity to make a move towards a positive response to improve their lives and the society at large (Holland, 2006). A new worldview gets formed and worldview provides the much needed foundation for new behaviour, attitude, thought and assumptions which govern how peoples’ lives and the underlying set of ideas that enables people to cope with life and seek for their rights in a given society (Kuhn, 2012).

RESEARCH DESIGN AND METHODOLOGY

To further understand the gap of responding to the threat of food insecurity in ASAL areas, literature review realized that the cause to the phenomenon has multifaceted factors. However, the response has been one way hence leaving behind important wisdom – the community, towards enhancing sustainable livelihoods. The study used survey research design which involved gathering data that describe events and then organized, tabulated, depicted, and described the data collection. It also used visual aids such as graphs and charts to aid in understanding the data distribution. Quantitative method was used to collect data that included the use of questionnaires. The study also used qualitative research method to explore the research problem in depth, to generate a deeper understanding of the full range of opinions and experiences on the problem. Focus group discussions and key informant interviews were of great use here.

This research targeted individual and groups engaged in agricultural activities like livestock keeping/pastoralism and crop farming. The sample size was broken into 100 respondents for quantitative data 5 key informant interviews with professional and people of experience in the thematic area and 2 focused group discussions to generate the qualitative findings. The key informants included scholars, senior government officials (county and national government) and field officer and non-state actor. The focused groups consisted of members from sampled community groups in Isiolo County.

The research intended to have 50:50 gender distributions but only managed to sample 55% male and 45% female. Only 57% had education level above secondary school while the 43% were from primary education level and below. The age gap was between 25 years and 60 years.

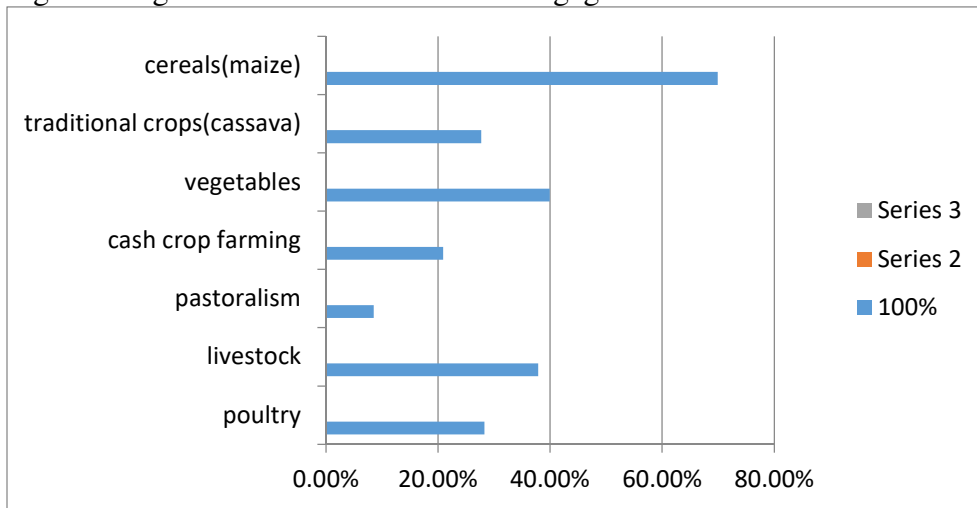
RESULTS

Right to food and food Security

The findings shows that majority of Kenyans are highly dependent on cereals for staples food, particularly maize. Most respondents (69.9%) grow cereals, some in large scale but most in small scale. 37.9% of the respondents practice livestock keeping mainly for provision of milk and meat.

Overall, more than 50% of respondents recorded reductions in agricultural production and 83% had experienced at least an incidence of crop failure and death of their animals due to heavy drought. Although traditional crops are highly tolerant to diseases and varying climatic changes, only 27.7% of the respondents grow them.

Figure 1: Agricultural activities farmers engage in



To assess the dietary habit of the sample areas, respondents were asked about foodstuffs that they would or not have. Most respondents expressed their preference for *ugali*. Graph 2 indicates the type of food commonly used by the residents of Isiolo.

Figure 2: The commonly used food item within six consecutive months

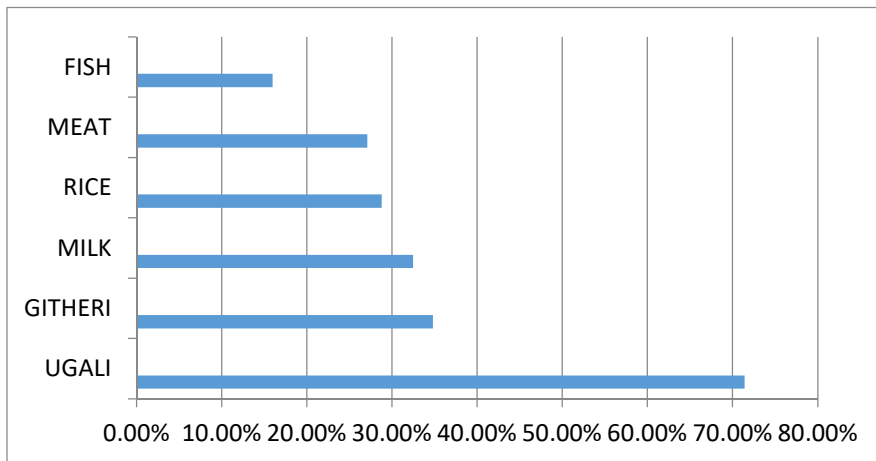
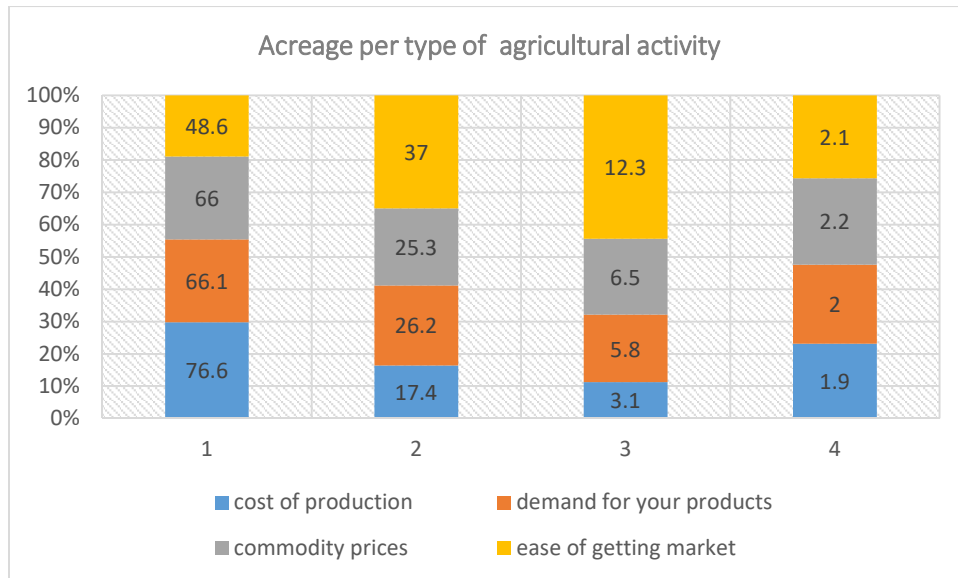


Figure 3: Acreage per type of Agricultural Activity



The acreage under different categories of crops is shown in graph 3 above. Further analysis of responses from open-ended questions on the types of crops grown and the land sizes occupied shows that most farmers carry out their agricultural activities on pieces of sizes less than or equal to an acre. 26.9% of the respondents cultivate cereals in small pieces of land of sizes less or equal to an acre. 20.6% of the respondents engage in cereals on pieces of land between one and five acres. 15.6% of the respondents cultivated traditional crops on pieces of land that were less than an acre in size. 22.6% of the respondents grow vegetables on pieces of land less than an acre. 7.1% of the respondents engaged in cash crops on pieces of land measuring less than or equal to an acre and 5% on pieces of land that is over an acre but less than five acres.

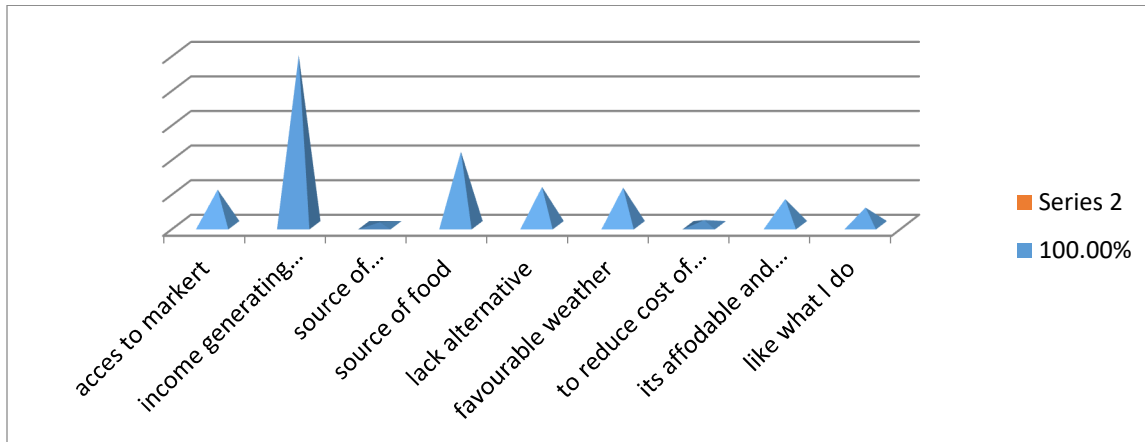
When asked about the reasons that made them engage in the same activities for over two years, 49.2% of the respondents said they were dependent on farming for income generation to meet their needs. 21.3% depended on it for their food sustenance. 39.2% of the respondents consider farming a major source of income as their harvest improved (see graph 25). This could indicate the effects of individual motivation have effects on the production. As shown in the qualitative responses.

Qualitative responses:

Respondents made the following comments;

- It is the sole economic activity to supplement income*
- It pays my bills*
- It has raised my tuition fee thus I progress in academics*
- When we sell milk we get money for domestic use*
- Because it is my source of food*
- For food security and sustenance*

Figure 4: If the responds engaged in the above activities (Figure 3) for over 2years, what has made them engage in the same activities



In addition to the above findings; the qualitative shed more light on why one could engage on the same activity in consecutive years. Their responses include the following;

Habit of our village

Lack of alternative crop since there is no water

Lack of alternative means of livelihood

Lack of enough funds to try optional methods of farming

I found my parents doing it, no other good crop to plant.

When asked to indicate the statement which could explain their level of production; 47% of respondents produced less than the yields of the previous year, while 20% produced the same yields as previous year. Only 33% of the responds in Isiolo produced more than the previous years. The livestock farmers noted that their livestock produce reduced every year.

Figure 5: Measuring the level of production

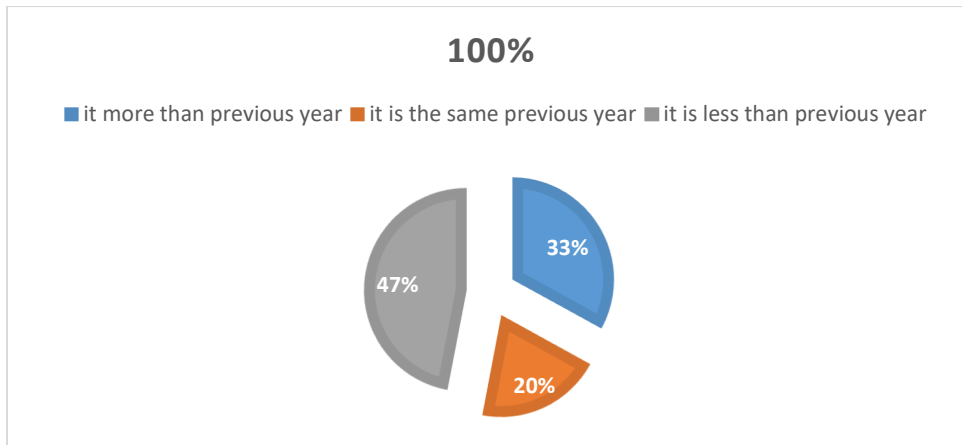
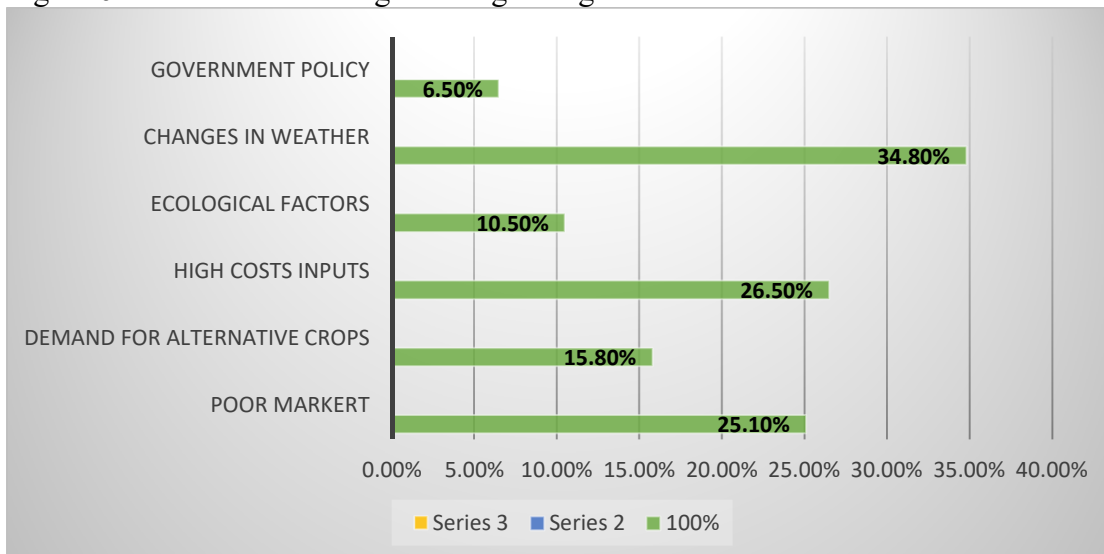


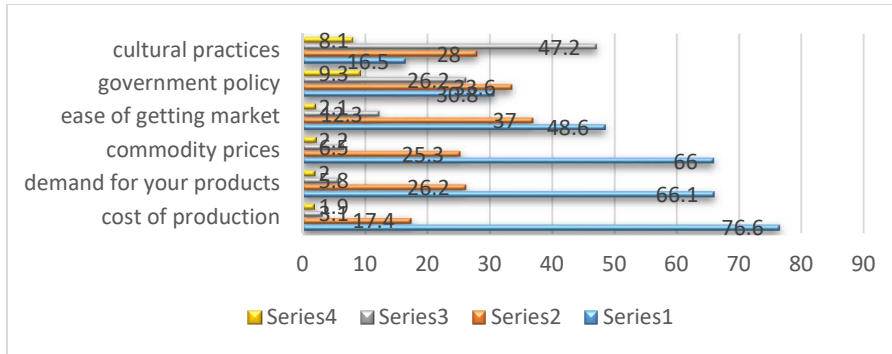
Figure 6: Factors contributing to change of agricultural activities:



The changes from one agricultural activity to another were occasioned by poor markets, demands for alternative crops, high costs of inputs, and changes in weather and ecology as well as government policy. Climate change accounted for the most changes in agricultural activities among the respondents as the graph below shows. 34.8% of the respondents said that varying and unpredictable changes in weather patterns was the main cause for changing from one agricultural activity to another. 26.5% of the respondents cited high cost of inputs while 25.1% said the changes at the markets as reasons for them shifting from one activity to another. These reflect concern of respondents and the need to address the question of the cost of inputs and provision of stable

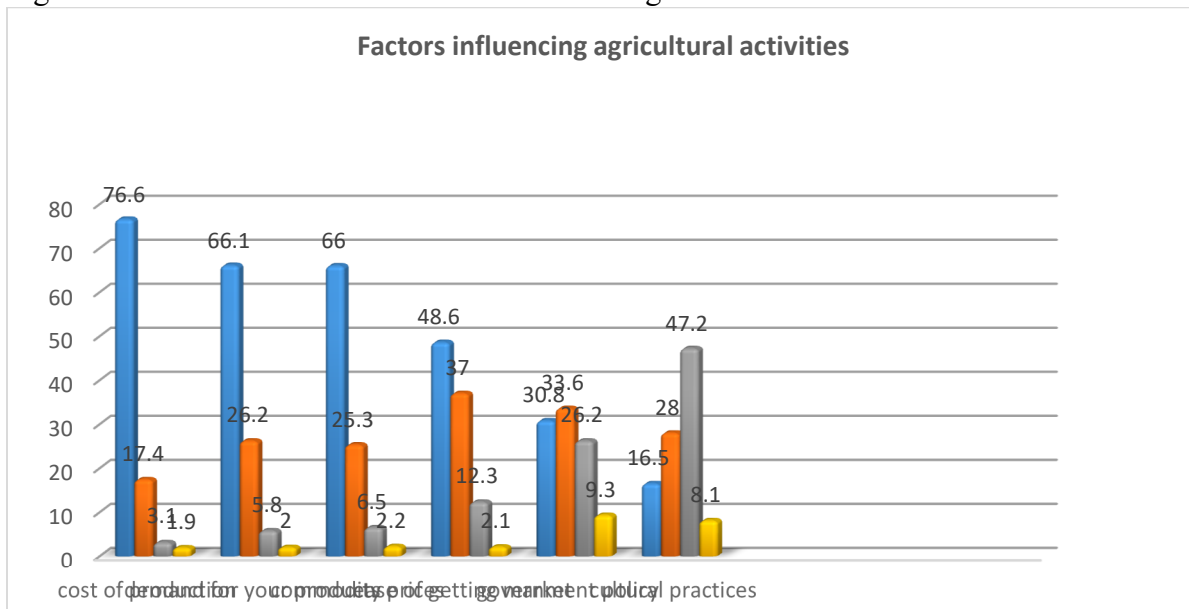
markets for agricultural products.

Figure 7: Factors that influence farmers' decisions regarding their agricultural activities check:



Farmers are influenced by many factors when determining the agricultural activities to engage in. The cost of production has the highest influence at 76.6%. 66.1% respondents consider demand for commodities, and 66% consider prices of the produce as graph 7 above shows. 48.6% and 46.5% respondents consider the ease and cost of going to the market as having great influence in their decisions regarding agricultural activities respectively.

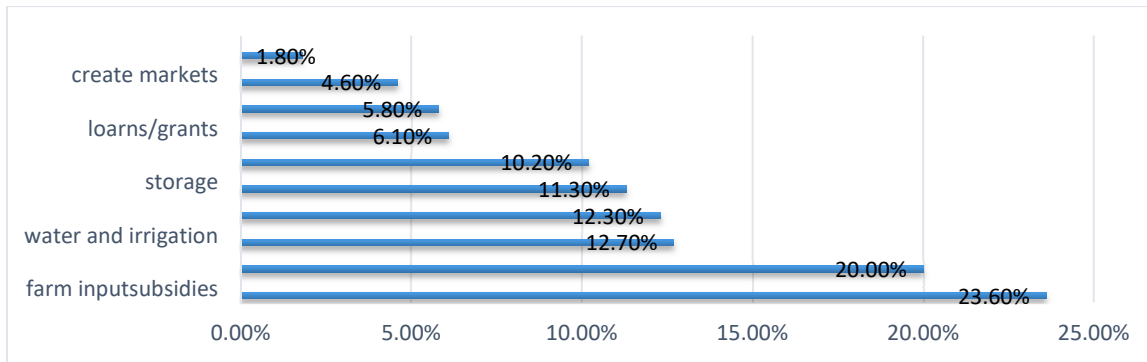
Figure 8: The rate at which the factors influence agricultural activities:



Although farmers feel that with more funds they can do better only 29.4% feel that access to loans has strong influence on their farming activities. This may explain the low willingness of farmers to take loans for agricultural activities. 12.3% of the respondents cited international policies having

strong influence in decisions regarding their agricultural activities. Other factors that influence agricultural activities are shown in graph 8 above. 81.2% of respondents cited rainfall patterns while 76.7% of them cited soil fertility as having which had strongly influence on their agricultural activities. 46.3% of the respondents cited soil erosion and 45.9% cited deforestation as having great influence on their agricultural activities.

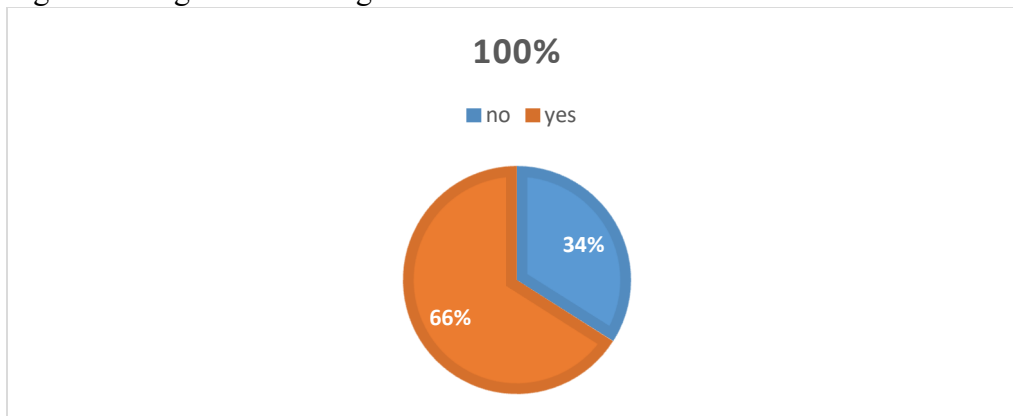
Figure 9: opinions on food security



Respondents' opinions on what should be done to enhance food security recommended that farmers be supported with farm inputs subsidies (23.6%) and 20% said there is need for enhanced capacity building for farmers. Provision of water and irrigation system (12.7%) was of importance while storage (11.3%) could ensure food preservation to be used in time of calamities.

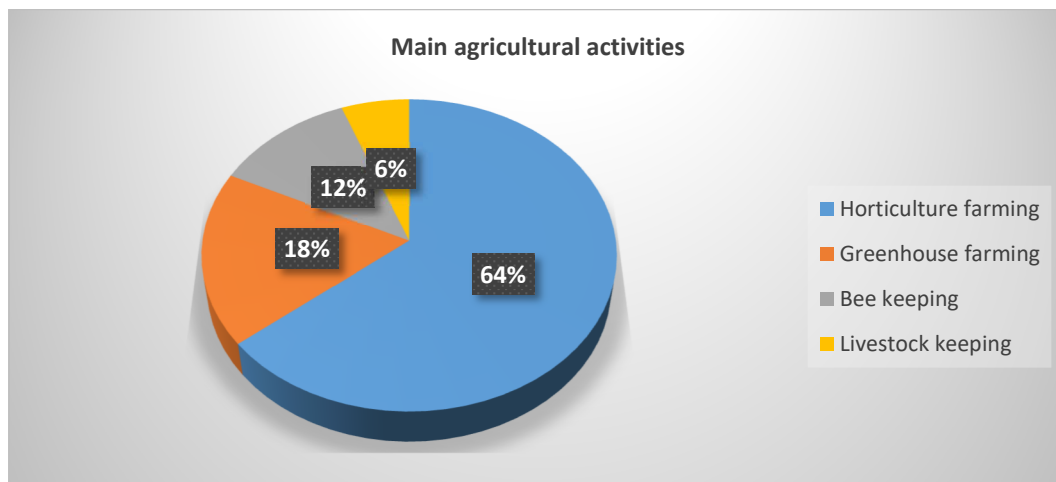
Land and food security

Figure 10: Significant changes on land use in the area



Changes in land use were acknowledged by 66% of the respondents noting that this has happened their area of residence and 34% said they did not notice any changes in the use of land in their areas. The difference of opinions was influenced by the agricultural activities the respondents were engaged in. Through the key informant discussions, it was realized that there has been tremendous changes in land use, with 41.8% of respondents having noted that the land was being used for crop production before the change occurred; 26.5% observed that it had been idle, 15.1% that it had been used for livestock keeping and 11.1% observed that it was a forest.

Figure 11: adoption to new agricultural activities in the area



Question on farmers' adoption of new agricultural activities and methods indicated that 64% of the respondents had observed horticulture farming being practiced in their area, 18% the use of greenhouses, 12% observed the practice of apiculture (bee keeping) and Livestock keeping 6%.

Group discussions feedback included;

Most of the land in Isiolo is public land, communal land.

Not many people have individual title deeds but this is not a problem for farming or lack of farming

Most of the land lies idle while in various places there is irrigation

Majority of the people in Isiolo have not embraced the importance of crop production

There are large scale (like 5 acres) farming basically for tomatoes, however, because there is no land ownership, they lend the land to the visitors.

The key informant interviews on land access brought out the following;

- ✓ There is a land policy in place however, there is need for land use policy that outlines the amount of land one has to have in order to produce food
- ✓ The constitution gives access to land but women are still unprivileged due to cultural practices
- ✓ The main challenge is the desire to own land as opposed to land access
- ✓ Land is a significant factor in the identity of any individual and usually emotive issue. The government should therefore provide documents to ensure secure land tenure
- ✓ There is an attachment to land as a source of power – huge chunks of idle land
- ✓ There is need for change of attitude towards land as a source of wealth or a possession to a commodity needs to be emphasized.
- ✓ People own huge chunks of land which they leave idle while others do not have land to use for food production.
- ✓ The government ought to tax land to make people use land to increase food productivity.
- ✓ People need to change attitude that I have to grow food in order to have food.
- ✓ Government and other stakeholder support to increase food productivity among the residents
- ✓ Stop the dependence on rain-fed agriculture and adopt alternative thinking
- ✓ Adoption of necessary and tailor made technology
- ✓ Provision of subsidies in terms of farm inputs e.g fertilizers and use of extension officers
- ✓ Need to consolidate farms to increase productivity
- ✓ Need for feeder roads which is now the responsibility of the county government
- ✓ Government can lease land to foreign investors so long as they produce food for the country, share the technology and offer employment to the local people
- ✓ If investors are allowed to access fragile ecosystems it would also lead to environmental damage.
- ✓ Large scale farming is good as there is more productivity that can feed the ones who are not farming.
- ✓ Government and other stakeholders need to collaborate with the local to find safety nets (factories or industries) for livestock keepers and warehouses for storage of products in Isiolo to ensure their security and safe from calamities.
- ✓ The feeder roads should be enhanced to ease the transportation of farm produce to the nearby markets.

CONCLUSION

There are worrying trend in food production in the country due to a combination of factors such as drop in yield per hectare, subdivision of agricultural land and weak support from stakeholders (on issues relating to the cost of production and markets) on food security. Cereals (mainly maize) form a big part of the Isiolo community diet even though most residents would prefer traditional foods in the absence of their favourite staple diet. There is decline in the production of the traditional crops across the county. Food security is also threatened by changes in land use that are characterized by changes within the agricultural sector (from one agricultural activity to another) or movement from agricultural activities to non-agricultural activities. This is due to ecological factors, market forces and policy issues.

Changes in climate have affected every farmer in Isiolo. Many have experienced crop failure decline in productions, and death of livestock due to increase in pests and diseases and erratic weather patterns. Pollution is also a major challenge to many respondents. The major sources of pollutants are industries, poor waste management and deforestation.

While the demand for produce, cost of production, commodity prices, ease of getting to the market and access to credit highly influence on the choice of agricultural activities, fewer farmers are members of co-operative unions that could have provided alternative markets, loans and trainings.

Although Kenya is a signatory of Maputo declaration (2003) that requires the government to allocate 10% of its budget to agriculture, 2013/2014 budget was 4%. As a result the government seems to be struggling to assist small scale farmers. Agricultural extension services meant to support farmers, for instance, are not felt by many of the respondents. In addition, most farmers find it difficult to access the available subsidized inputs such as fertilizers and seeds. Capacity development among the farmers is also lacking. Of big cry is that the community feels that they are left out on decisions on food security in the area and yet they are directly affected by the decision. The grabbing of land by “private investors” and the political class is becoming a threat to the livelihoods of Isiolo. Pastoralist feel they are pushed on the periphery for the change in land use hence leaving them vulnerable and powerless to other threats of food security.

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