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INFLUENCE OF SOCIO ECONOMIC FACTORS ON STAPLE FOOD PRODUCTION. A CRITICAL LITERATURE REVIEW

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ABSTRACT

Purpose: Agricultural management practices are key for higher production and are influenced by training as well as financial resources which enable farmers to adopt better practices as well as new farming methods. The general objective of the study was to the study was to establish influence of socio economic factors on staple food production..

Methodology: The paper used a desk study review methodology where relevant empirical literature was reviewed to identify main themes and to extract knowledge gaps.

Findings*:* The study found out that most of the farmers were marginalized on gender, age and education and still suffers inequalities in the development ladder. Gender inequality is still in existence and plays a major role in placing the women in informal sectors, in limited wages employment activities it is an outstanding factor that plays a major role in food insecurity at house hold level. Land is a major resource for food production and majority of the small scale farmers' occupied land that was self-owned which was less than 1 acre and was not adequate for food production for sustainable food security

Recommendations: The study recommends that that the extension services should be improved through retraining of existing extension workers , increasing the number of the extension service providers at farm levels .The government should also increase the facilitation of extension service so as to enable service delivery through training, demonstration , farm visit as well as group trainings amongst other training avenues so as to ensure the farmers are equipped with the right knowledge and technology for staple food production..

Keywords: *influence, socio economic factors, staple food, production*

1.0 INTRODUCTION

1.1 Background of the Study

Food security remains an elusive goal in many parts of the world despite the global commitment to provide adequate, affordable and nutritious food (FAO,2009).The developed nations try to alleviate the problem food insecurity by providing food security interventions, including food aid in the form of direct food relief, food stamps, or indirectly through subsidized food production. Similar approaches are employed in developing countries but with less success due to insufficient resource base and shorter duration of intervention. The United Nations defines food security as a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2011). This basic need remains unfulfilled in many countries especially in Asia and Sub-Saharan Africa.

According to Deshmukh-Taskar, Nicklas & Berenson (2007), marital status as a sociodemographic factor influences household food security status in that married individuals/households have a higher likelihood of consuming diverse diets comprising of snacks and main meals. On the contrary, unmarried individuals/households are less likely to consume diverse diets and are more likely to consume more servings of alcoholic beverages. Religion also has an influence on dietary diversity, whereby various researches have pointed to the fact that Christians consume more diverse diets than other religions such as Muslims (Deshmukh-Taskar, Nicklas & Berenson, 2007). An empirical study carried out in Louisiana showed that education has a positive implication of household food security status. The study found out that people with more that twelve years of education had a high intake of dairy products, fruits juices, cereals/bread, and vegetables (Deshmukh-Taskar, Nicklas & Berenson, 2007). This concurs with a study by Thornton, Pearce, & Ball (2014), which showed that household food security is strongly related to higher education. Furthermore, Thornton, Pearce, & Ball (2014) notes that 10 male-headed households have a greater food security status than female-headed households. The sentiments expressed by Deshmukh-Taskar, Nicklas & Berenson (2007) and Thornton, Pearce, & Ball (2014) on the effect of marital status, educational levels, and household head on food security is true. However, the studies did not consider how the socio-demographic factors affect food security during specific seasons such as during periods of reduced food production. The current research bridged this gap by focusing on the manner in which socio-demographic factors affect food security status during seasons when populations experience food shortage occasioned by crop diseases (maize necrosis disease

Savy et al. (2005) assert that dietary diversity is closely aligned with socio-economic status. Individuals drawn from disadvantaged socio-economic backgrounds rarely purchase grocery foods, which are often more nutritious in that they are low in salt, fat, and sugar, and are high in fiber. Findings from a study done by Mokono (2015) indicate that there were cases where food secure households had poor dietary practices occasioned by lack of nutritional knowledge and poor attitudes. Individuals doing manual jobs (blue-collar) purchase vegetables and fruits less regularly than those employed in office jobs (white collar). Sanusi et al. (2006) notes that household income capability, as a proxy indicator of socio-economic status is highly associated with adequate food

access and food security. Individuals with a low household income are more predisposed to food insecurity than households with high household income who have a higher purchasing power.

However, Sanusi et al. (2006) does not consider the fact that lack of nutritional knowledge amongst members drawn from high-income households may jeopardize food utilization component of food security occasioned by purchase of less nutritious foods. Savy et al. (2005), Mokono (2015), and Sanusi et al. (2006) provide crucial insights on the manner in which socio-economic factors are related to dietary diversity. Nonetheless, these studies did not consider how occupations aligned with food production such as farming affect dietary diversity. The study filled in this gap as it focused on how both food-production based occupations, especially farming, and non-food production based occupations such as business, salaried employment, and casual labour affect dietary diversity.

Food insecurity in a household may be caused by a combination of factors amongst which gender issues may play a larger role. The Ministry of Agriculture strategic plan 2000-2009, recognizes the fact that women play a key role in implementation of agriculture about70% of agricultural related activities are carried out by women. A study carried out for Agricultural Sectors Investment Programme 2004 established that women were the core of the small hold agricultural in Kenya. They manage at least two fifth of the small holding and produce about 75% of the labour used in the small holding. They are largely responsible for attaining food security at the household level as they are responsible for a large part of cultivation as well as for marketing (World Bank, 2005).

1.2 Statement of the Problem

Food security remains an elusive goal in many parts of the world despite the concerted efforts of governments, non-governmental and international agencies over the past years. An estimated 925 million people around the world were undernourished in the year 2010 (FAO, 2011). All nations signatory to the Millennium Declaration of the year 2000, have a goal of reducing hunger and extreme poverty by halve by the year 2015 in fulfillment of the MDG goal number one. Vision 2030 has identified agriculture as one of the key sectors to deliver the 10 % per annum economic growth rate envisaged under the economic pillar. To achieve this there has been focus on programmes that increase productivity of crops, livestock and tree cover, introduction of policies for better use of high and medium potential land, improving market access and adding value to farm produce. But despite this there has been sever food insecurity even in high potential areas due to climate change, urban development, and population growth, limited diversification in agriculture, unproductive land, agriculture disease and pests (Ministry of Agriculture, 2010). Meeting food security has been a major challenge because of the inability of agricultural production to keep up with food demands. Crop yield growth has slowed because climate change, urban development, population growth, limited diversification in agriculture, unproductive land, agriculture disease and pests Despite the crop failure the farmers in the area continue to grow the same crops staple foods though there are other alternative crops which are drought tolerant. Most farmers in the area rely on farming as their main source of income. The average land size in the study area is 1 acre which is not economical for food production; this is due to the ever increasing population which lead to land fragmentation. Further, there exists limited data relating to influence of socio economic factors on staple food production prompting the need for this study

1.3 Objectives of the Study

The general objective of the study was to establish influence of socio economic factors on staple food production.

1.4 Justification and Significance of the Study

The study findings and recommendation will help the implementers and stake holders in the Ministry of Agriculture to implement programme which will revitalize food production initiatives to enable them achieve food security. The study will also help identify the strengths and weakness in the staple food production and this information will be used to develop corrective actions by the programme implementers and the stakeholders in the production of staple foods. The study also hopes to provide base for further research on suitable varieties and technologies which can be adopted to improve the current staple food production. The study further hope to provide important lessons from the ground, to replicate or enable development practitioners to pay attentions while designing and implementing of both development and food security programmes. The study is also aimed at documenting social and economic factors that influence production of staple foods for planners and implementers so that key assumptions can be redefined to ensure achievement of food security country wide.

2.0 LITERATURE REVIEW

2.1 Theoretical review

Two theories were found to be relevant in influence of socio economic factors on staple food production. The theories that were found to best inform the research constructs are theory of supply and demand Alfred, 1890) and Food Systems theory (Ericksen, 2008).

2.1.1 Theory of supply and demand

Theory of supply and demand was proposed by Alfred (1890) Theory of supply and demand is considered one of the fundamental principles governing an economy. It is described as the state where as supply increases the price will tend to drop or vice versa, and as demand increases the price will tend to increase or vice versa. Basically this is a principle that most people intuitively grasp regarding the relationship of goods and services against the demand for those goods and services. In Agriculture food production is controlled by the demand of a particular food item. When the demand is low the prices of that commodity is reduced whereas the price will increase with reduced supply. Demand for food production due to increased population lead to demand in agricultural inputs which makes expensive for most farmers to afford thus leading to low production which further leads to food insecurity. Due to low production the demand for maize and beans exceed the supply leading to high prices. Sustainable agriculture theory involves the practice of farming using principles of ecology. Sustainable agriculture focuses on the ability of providing food on the long-term. As such, besides artificial fertilizers and pesticidesit also does not allow the use of agricultural machines running on non-renewable resources. Besides this, it

focuses on finding the most energy-efficient and cost-effective method of using agricultural machines and non-renewable natural resources. For this reason it also implements natural biological cycles and controls where possible. Sustainability affects overall production, which must increase to meet the increasing food and fiber requirements as the world's human population expands to a projected 9.3 billion people by 2050 (Altieri,1995).This theory adds to our study as people with high socio economic factors will have a high purchasing power, enhancing their food availability.

2.1.2. Food Systems theory

Food Systems theory by Ericksen (2008) which states that: "A food system is as a set of dynamic interactions between and within the bio geophysical and human environments and include a number of activities leading to a number of associated outcomes." Food systems comprise a set of activities and outcomes ranging from production through to consumption, which involve both human and environmental dimensions. Food systems are often described as comprising four sets of activities: those involved in food production, processing and packaging, distribution and retail, and consumption. All these activities encompass social, economic, political, and environmental processes and dimensions. A food,...system can be more broadly conceived as including the determinants (or drivers) and outcomes of these activities. The determinants comprise the interactions between and within biophysical and human environments that determine how food system activities are performed. These activities lead to a number of outcomes, some of which contribute to food security and others that relate to the environment and other societal concerns. These outcomes are also affected directly by the determinants. Food security is the principal policy objective of a food system (Ericksen, 2008). Food security outcomes are described in terms of three components and their subcomponents: food availability (production, distribution, and exchange); food access (affordability, allocation, and preference); and food utilization (nutritional and social values and food safety). Although the food system activities have a large influence on food security outcomes, these outcomes are also determined directly by socio-political and environmental drivers. These outcomes vary by historical, political,. And social context. By specifically linking activities to outcomes, the food system approach helps understand both linear and non-linear links between activities as part of the outcome analysis (Ericksen and Ingram, 2005). Food systems mayor may not result in food security for the unit of analysis of concern; in this case the household.

2.2 Empirical Review

Namasake,(2020) conducted a study on examine the socio economic factors affecting effective implementation of subsidized secondary education in West Pokot; to examine the socio cultural factors affecting the effective implement of subsidized secondary education in West Pokot; and to determine the adequacy and availability of physical resources to sustain the subsidized secondary school education in West Pokot. The study utilized an exploratory survey design. The study targeted 123 respondents comprising of 10 principals, 108 teachers, and 5 Curriculum Support Officers (CSOs). The sample size was comprised of 6 principals, 54 teachers, and 2 CSOs. The study instruments utilized for information collection from principals, CSOs and teachers were

survey questionnaires. The validity and reliability of the questionnaires was checked using Pearson coefficient of correlation, which was 0.84. The Data was analyzed using descriptive statistics in the form of frequencies and percentages and presented using frequency distribution tables. The study concluded that certain socio economic and socio-cultural factors notably influenced implementation of subsidized day secondary education negatively. The study findings indicated that the major socio economic factors that negatively affected implementation of subsidized secondary education included pastoralism, nomadic way of life and illiteracy. The study also revealed that the specific socio economic and socio-cultural factors that hampered the utilization of subsidized day secondary education were an itinerant way of life, joblessness, single or polygamous guardians, early relationships and marriages, female genital mutilation (FGM), sexual orientation inclination of male instead of a female child and child labor through household tasks. The study also found that most schools lacked physical offices, for example, study halls, classrooms, latrines, libraries, research centers, seats and work areas and tables, and the accessible offices were of low quality. The study recommends extension of physical offices, the presentation of rotating assets for destitute students, and enlightenment of the public on the merits of educating and training their youngsters and stopping negative socio-cultural practices, which adversely influence education such as FGM, early relationships and marriages and the nomadic way of life.

Tanui,(2018) conducted a study to assess the household food security and nutritional status of HIV sero-positive clients attending Comprehensive Care Clinic at Longisa County Hospital, Bomet County. The study used a cross-sectional analytical design on a comprehensive sample of 210 adult HIV sero-positive clients. A structured questionnaire was used to collect data on sociodemographic and socio-economic factors, anthropometric measurements, dietary intake, and food security status. Analysis was done using descriptive statistics, which included means, percentages, standard error of the mean, and frequencies. Pearson-moment correlation was used to establish strength of associations between continuous variables and Chi-square for relationship between categorical variables. Independent-Samples t-test was used to ascertain the existence of significant differences in the study variables across the male and female gender categories. One-Way ANOVA was used to determine the existence of significant difference in the means of categorical variables and non-categorical variables. A p-value of < 0.05 was used as the criterion for statistical significance. Data drawn from 24-hour dietary recall was analysed using Nutri-survey. SECA calculator model 491 was used for accurate determination of the Body Mass Index (BMI). Majority of the respondents: (61.6%) were females. Adequacy in meeting energy requirements was 47.4% for males and 50% for females. Males and females met the dietary needs for selected nutrients: vitamin A, B1, B2, C. Iron intake was significantly low among female respondents whereby 89.3% did not meet the RDI and zinc intake among male respondents was low as only 28.9% met the RDI. Consumption frequency of meats, eggs, and fish was irregular. Household food insecurity prevalence was 17.7% as evidenced by a Household Dietary Diversity Score (HDDS) of ≤ 4. About 23.7% of the respondent's households had severe household hunger. Mean Household Hunger Scale score was 1.56 ± 0.061 indicating that most of the respondent's households experienced moderate household hunger. The prevalence of underweight was 22.8%. There was a significant relationship between nutritional status measured by BMI and household food security status measured by HDDS at $p=0.001$. Household food security status measured by HHS and nutritional status as assessed by

MUAC had a positive association at p=0.001. Dietary intake and nutrition status did not exhibit any relationship. The study recommends the need to scale up care and treatment modalities at Comprehensive Care Clinics (CCC's) by considering and including household food security and nutritional status aspects as part of nutritional care and support modalities for HIV sero-positive clients. This provides an ample means of optimizing ART, enhancing rehabilitation, and adherence to care and treatment.

Ndengwa (2016) conducted a with the objectives (a) assess the influence of demographic and socio-economic factors on pumpkin production; (b) analyze uses of pumpkin products and sociocultural practices in pumpkin consumption by smallholder farmers; (c) determine farm households, traders and market characteristics influencing pumpkin marketing; and (d) identify and analyze the major constraints in smallholder pumpkin production and marketing in Eastern and Central Kenya regions. A household survey of 260 pumpkin growing households and a market survey of 172 primary traders were conducted using structured questionnaires. The collected data were analyzed using descriptive statistics, multiple regression and Tobit model analysis with the aid of SPSS and Stata computer software. The research showed that pumpkin productivity by smallholder farmers in Eastern and Central Kenya regions was below the national average of 20 tons per hectare. Age and education level of household head, household size, on-farm income, farm area under pumpkins and engagement in off farm activities were statistically significant and positively influenced smallholder pumpkin production in Eastern and Central Kenya. Pumpkin fruits and leaves were mainly used as food while seeds were mainly used for planting by majority of the households. Household size and distance to market were statistically significant with negative influence on the marketed pumpkin proportion among farm households in Eastern and Central Kenya. Membership in farmers group was significant in Eastern Kenya while market price and gender of household head were significant in Central Kenya. These factors positively influenced the proportion of marketed pumpkin among the farm households. Market price, membership in marketing associations, selling frequency and distance to market were statistically significant and positively influenced market participation by pumpkin traders in Eastern and Central Kenya. The major constraints in pumpkin production were pests, diseases and insufficient rainfall while the main marketing constraints were poor market prices, exploitation by brokers, post-harvest losses, inadequate market information, low consumer awareness and low demand. The proposed policy interventions include farmers' education and strategies to promote pumpkin production, strategies to enhance access to physical markets and market information, organizing farmers into marketing groups, improvement of market infrastructure and organizing pumpkin traders into marketing associations or groups

Otieno,(2012) conducted a study on to investigate how physiological, psychological and socioeconomic factors influence clothing selection and buying practices among Kenyans. The other purpose was to identify factors that underlie satisfaction and dissatisfaction with clothing selection and buying by individuals in Kenya's clothing market. The major objectives of this study were to (1) identify the clothing information sources used by Kenyans, (2) identify the physiological, psychological and socio-economic factors influencing clothing selection and buying practices among Kenyans, (3) determine if there are significant differences between male and

female consumers with respect to physiological, psychological and socio-economic factors as they affect their clothing selection and buying practices, and (4) identify factors that underlie respondents' satisfaction and dissatisfaction with clothing selection and buying. The data used in the study were collected using a questionnaire, which was administered by the researcher to a sample of 150 members of staff at the Kenyatta University starting October, 1989 to January 1990. The data were analysed by the use of frequencies, percentages, mean scores, T-tests and Pearson ProductMoment correlation. Results showed that most sources of clothing information especially the impersonal communication channels such as Television advertisements, newspaper articles and fashion magazines were underutilized or unpopular with consumers for being costly, not readily available or unreliable. Among the used sources, clothing displays and personal communication channels were the most utilized by consumers. The study showed that the physiological factors that most influenced consumers' clothing selection and buying practices were good construction and finishing qualities in clothing, colour and design of fabrics, fitting characteristics of clothing and purpose for which clothing items were bought. The psychological factors that most influenced consumers' clothing selection and buying included item in which one looked beautiful, one's own beliefs and values, cost of the item and acceptable styles by society. The socio-economic factors that had most influence on consumers' clothing selection and buying practices were amount of money available, number of dependants in one's household, one's age and status one held in society. Very few physiological, psychological and socio-economic factors showed significant difference between male and female respondents in their clothing selection buying practices. Fabric construction as a physiological factor showed significant difference between males and females, with a higher influence on the female than the male consumers. There were significant differences between males and females in three psychological factors among which prestige of item's brand name influenced the males more, while, latest style or fashion and own beliefs and values influenced female consumers more. The socio-economic factors that showed significant difference between males and females were religious norms and/or beliefs and status held in society. These had more influence on the female consumers than on the male. Satisfaction with clothing selection and buying showed significant positive relationship with the male, married consumers, older age, low educational level, low household income, high number of dependents, own beliefs and values, and religious norms or beliefs. There was however a negative relationship with purpose for which item was bought, label information, care for garment, fabric construction, prestige of item's brand name, was bought, label information, care for garment, fabric construction, prestige of item's brand name, social activities engaged in and uniqueness of outfit. It was evident that consumers were dissatisfied with various aspects within Kenya's clothing market. These were the clothing information available, quality standards of most clothing items, the consumers' protection service, consumer's knowledge about textile fabrics' quality, availability of imported second-hand clothing, assistance given by sales personnel and hawking of imported clothing.

Adero,(2014) conducted a study to establish compliance to food safety since food handling is a significant route through which food is contaminated and as a result food borne illnesses occur. The study focused on the knowledge, attitude and practices of food handlers, compliance to food safety measures at various critical control points and presence of E. coli or Salmonella in food or work surfaces as indicator organisms. To achieve these objectives, the study utilized cross sectional

study design. Data was collected by use of a structured questionnaire and analyzed using Predictive Analytical Software. In addition, food samples and surface swabs were collected and analyzed in the laboratory. The study found out that while food handlers exhibited adequate attitude (mean= 69%) and practices (77.3 (Yo) on food safety and hygiene, their knowledge on food safety and hygiene fell below average (mean= 67). The inadequate knowledge on food safety and hygiene was linked to lack of training of food handlers with 75.9% not having attended any food safety training and only (32.4%) had attended refresher courses in the past five years. Also, implementation of food safety measures at various critical control points were related to the knowledge, attitude and practices of food handlers. E. coli was isolated from 14.4 % of food samples and 13% of swab samples collected from work surfaces. There was no Salmonella in both food and work surfaces. Contamination of food was attributed to inadequate knowledge among food handlers, cross contamination, time and temperature abuse between the periods of cooking, service and handling of left over food. The findings of this study is a clear indication that food cooked for children in preprirnary schools and daycare centers is contaminated with E.coli and it is possible that food is also contaminated with other microorganisms which thrive in the same environment with E.coli. As well, majority of food handlers are not equipped with adequate knowledge to handle food safely in addition to lack of l-JJ\CCP I' systems in most pre-primary schools and daycare centers. The study therefore recommends that food handlers be trained on food safety to boost their knowledge and improve their attitude and practices. It is also recommended that the pre- primary schools and daycare centers implements the H!\CCP system in their operations

2.3 Research gaps

Geographical gap is a knowledge gap that considers, the untapped potential or missing/limited research literature, in the geographical area that has not yet been explored or is under-explored. For instance, Namasake,(2020) conducted a study on examine the socio economic factors affecting effective implementation of subsidized secondary education in West Pokot; to examine the socio cultural factors affecting the effective implement of subsidized secondary education in West Pokot; and to determine the adequacy and availability of physical resources to sustain the subsidized secondary school education in West Pokot. The study utilized an exploratory survey design. The study findings indicated that the major socio economic factors that negatively affected implementation of subsidized secondary education included pastoralism, nomadic way of life and illiteracy. The study presented a geographical gap as it was done in West Pokot while our current study sought to establish influence of socio economic factors on staple food production.

Methodological gap is the gap that is presented as a result in limitations in the methods and techniques used in the research (explains the situation as it is, avoids bias, positivism, etc. Tanui,(2018) conducted a study to assess the household food security and nutritional status of HIV sero-positive clients attending Comprehensive Care Clinic at Longisa County Hospital, Bomet County. The study used a cross-sectional analytical design on a comprehensive sample of 210 adult HIV sero-positive clients.The result revealed that Consumption frequency of meats, eggs, and fish was irregular. Household food insecurity prevalence was 17.7% as evidenced by a Household Dietary Diversity Score (HDDS) of ≤4. About 23.7% of the respondent's households had severe

household hunger. Mean Household Hunger Scale score was 1.56±0.061 indicating that most of the respondent's households experienced moderate household hunger. The study presented a methodological gap as it was subjected to cross-sectional survey design while our current study adopted a desktop literature review method.

Conceptual gap arises because of some difference between the user's mental model of the application and how the application actually works. Otieno,(2012) conducted a study on to investigate how physiological, psychological and socio-economic factors influence clothing selection and buying practices among Kenyans. The other purpose was to identify factors that underlie satisfaction and dissatisfaction with clothing selection and buying by individuals in Kenya's clothing market. The result showed that there were significant differences between males and females in three psychological factors among which prestige of item's brand name influenced the males more, while, latest style or fashion and own beliefs and values influenced female consumers more. The socio-economic factors that showed significant difference between males and females were religious norms and/or beliefs and status held in society. These had more influence on the female consumers than on the male. The study presented a conceptual gap as it investigated how physiological, psychological and socio-economic factors influence clothing selection and buying practices among Kenyans while our current study will focus on establishing influence of socio economic factors on staple food production.

3.0 METHODOLOGY

The study adopted a desktop literature review method (desk study). This involved an in-depth review of studies related to influence of socio economic factors on staple food production. Three sorting stages were implemented on the subject under study in order to determine the viability of the subject for research. This is the first stage that comprised the initial identification of all articles that were based on influence of socio economic factors on staple food production from various data bases. The search was done generally by searching the articles in the article title, abstract, keywords. A second search involved fully available publications on the subject on influence of socio economic factors on staple food production. The third step involved the selection of fully accessible publications. Reduction of the literature to only fully accessible publications yielded specificity and allowed the researcher to focus on the articles that related to influence of socio economic factors on staple food production which was split into top key words. After an in-depth search into the top key words (influence, socio economic factors, staple food, production), the researcher arrived at 6 articles that were suitable for analysis. The 5 articles were findings from Namasake,(2020) who conducted a study on examine the socio economic factors affecting effective implementation of subsidized secondary education in West Pokot; to examine the socio cultural factors affecting the effective implement of subsidized secondary education in West Pokot; and to determine the adequacy and availability of physical resources to sustain the subsidized secondary school education in West Pokot. The study utilized an exploratory survey design. The study findings indicated that the major socio economic factors that negatively affected implementation of subsidized secondary education included pastoralism, nomadic way of life and illiteracy.

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4.0 SUMMARY, CONCLUSION AND POLICY IMPLICATION FOR FURTHER STUDY

4.1 Summary

According to findings (58.6%) of the respondents were women while only 41.4% were men. The study agrees with a study carried out by (World Bank, 2005) for Agricultural Sectors Investment Programme which showed that women were the core of the small hold agriculture in Kenya. The study indicates that majority (57.1%) of farmers involved in staple food production were above 41 years and were already retired from their occupation or had not been successful in life. Age distribution therefore had influence of production of staple foods since only 7.1% of the young people in their productive age were involved in staple food production. The study findings concur with conclusions made by Kabue (2011) that young people may be receptive to new ideas and innovations in agriculture but may not perceive farming as an important occupation hence lack of participation.

4.2 Conclusion

From the study findings, it is concluded that most of the farmers were marginalized on gender, age and education and still suffers inequalities in the development ladder. Gender inequality is still in existence and plays a major role in placing the women in informal sectors, in limited wages employment activities it is an outstanding factor that plays a major role in food insecurity at house hold level. Land is a major resource for food production and majority of the small scale farmers' occupied land that was self-owned which was less than 1 acre and was not adequate for food production for sustainable food security

Scarcity of accessible land by small scale farmers was a major hindrance to effective food production and implementation of agricultural management practices like crop rotation, pest and disease control. The study also showed that education is essential to the implementation of the programme though the level of education qualification of the programme implementers does not influence directly implementation of food-based projects. Any small scale farmers of any education level as long as their production capacity is enhanced through training can effectively and efficiently contribute in food production. Agricultural management practices are key for higher production and are influenced by training as well as financial resources which enable farmers to adopt better practices as well as new farming methods

4.3 Recommendations

The study recommends that the extension services should be improved through retraining of existing extension workers , increasing the number of the extension service providers at farm levels .The government should also increase the facilitation of extension service so as to enable service delivery through training, demonstration , farm visit as well as group trainings amongst other training avenues so as to ensure the farmers are equipped with the right knowledge and technology for staple food production. The community should also diversify their food preference to include foods like sweet potatoes, bananas and Irish potatoes as a source on carbohydrates to minimize over reliance on maiz

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