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**SOCIO-ECONOMIC FACTORS AFFECTING FOOD SECURITY
AMONG THE ELDERLY. A CRITICAL LITERATURE REVIEW**

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SOCIO-ECONOMIC FACTORS AFFECTING FOOD SECURITY AMONG THE ELDERLY. A CRITICAL LITERATURE REVIEW

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ABSTRACT

Purpose: Mobile technologies provide an affordable and easily accessible technology that lecturers can use effectively to assist students with their studies. The general objective of the study was to evaluate socio-economic factors affecting food security among the elderly.

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: From the study findings, it is concluded that the households of the elderly persons are faced with abject poverty due to the household structures they live in, which lack food storage facilities hindering food utilization. The elderly persons are faced with health challenges that hinder them from accessing adequate and appropriate foods. They also are not able to use the available types of food due to the ailments they suffer. Elderly persons are faced by various levels of food insecurity due to the deteriorating strength and vulnerability that comes handy with aging. Farming practices by elderly persons depict that they mainly use manual labour limiting their food production. The elderly persons food utilization that entails enlightenment on food production based on food storage, feeding habits and farming methods have lowered food production thus food insecurity.

Recommendations: The study recommended that there should be established programmes that provide homes for the aged to cater for the elderly persons who live alone, sickly and too aged to undertake their daily domestic duties. In addition feeding programmers in households with elderly persons should be formulated and implemented. Relatives should be encouraged to follow up on the wellbeing of their aging parents and organize to employ care givers to keep up domestic duties that may be making it difficult for the elderly to access food. The ministry of special programmes should consider provision of relief food to households with the elderly persons who suffer severe food insecurity. They should also collaborate with the ministry of education in ensuring children who are under the care of aged people have a school feeding programme to provide at least a meal for them at school.

Keywords: *evaluate, socio-economic factors, food security, elderly.*

1.0 INTRODUCTION

1.1 Background of the Study

Globally, approximately 800 million people live in conditions of food and educational deprivations. Food production comprises such factors as land use and tenure, soil management, crop breeding and selection, crop management and harvesting (Sen, 1999). Food distribution involves a series of post-harvest activities including the transportation, storage, marketing of food as well as activities related to household purchasing power, traditions of food use including feeding practices, food exchanges and public food distribution. Activities related to food utilization and consumption include those involved in the preparation, processing and cooking of food at both the home and community levels, as well as household decision-making regarding food, household food distribution practices, cultural and individual food choices and access to health care, sanitation and knowledge (Surur, 2017).

Food and Agriculture Organization (FAO) of the United Nations (2020), estimates that global food production needs to increase by 60% by 2050. Improving productivity and intensifying crop production among small-household farmers could be key to global food security and ending hunger. According to Coates, et al (2007), food security and insecurity are terms used to describe whether people have access to sufficient quality and quantity of food. The risk of food security situation has impacts on the population's access to food and water and overall levels of health and nutrition, particularly among vulnerable people in the society. Poverty, health, food production, political stability, infrastructure, access to markets and natural hazards are some of the determinants of food security.

In the developed countries, the primary causes of food insecurity are poverty, low levels of education, poor health status, and certain disabilities that increase the risk of food insecurity for individuals and households in the United States. In developing countries, the root causes of food insecurity include; poverty, war and civil conflict, corruption, national policies that do not promote equal access to food for all, environmental degradation, barriers to trade, insufficient agricultural development, population growth, low levels of education, social and gender inequality, poor health status, cultural insensitivity, and natural disasters (Reddy, 2016). Globally, certain groups of people are more vulnerable to food insecurity than others. Vulnerability is the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters. Poverty – and its common consequences such as malnutrition, homelessness, poor housing and destitution – is a major contributor to vulnerability. Vulnerable groups include: victims of conflict (for instance refugees and internally displaced people); migrant workers; marginal populations (such as unemployed people, homeless people, and orphans); dependent populations (e.g., elderly people, children under five, and disabled and ill people); women of reproductive age; ethnic minorities; and low literacy households (French, 2016).

According to Morgan (2020) older people are particularly sensitive to disruptions in food availability and access. They have been categorized as vulnerable persons, a consequence of food insecurity amongst the majority of them. Eradication of extreme poverty and hunger is first among the eight Millennium Development Goals (MDGs) set by the United Nations member states and at least 23 international organizations for achievements by 2015. The Food and Agriculture

Organization, categorizes food as a basic human right (FAO, 2016). Food security means access to sufficient, safe and nutritious preferred food at all times to meet the requirements of an active and healthy life. This basic need remains unfulfilled in many countries especially in Asia and Sub-Saharan Africa (Food and Agriculture Organization, 2014). For food security to exist at the national, regional, and local levels, food must be available, accessible, and properly utilized. Availability of food means that enough safe and nutritious food is either domestically produced or imported from the market. However, food availability does not ensure food accessibility. Government policies must also contribute to equal distribution of food within nations, regions, and communities. In addition, for food to be accessible, individuals and families must be able to afford the food prices on the market. Food must be properly utilized which depends on proper food storage to guard against spoilage, appropriate handling to avoid disease transmission, and proper preparation to ensure nutritiously balanced meals (FAO, 2012).

The World Food Summit (WFS) 2016, defined food security as a situation when all people, at all times have physical, social and economic access to sufficient, safe food to meet their dietary needs and food preferences for an active and healthy life. The dimensions of food security include availability, access and utilization of food. Therefore households become food insecure when there is uncertainty about food availability and access; insufficiency in the amount and kind of food necessary for meeting their dietary requirements. Famine is the most extreme state of food insecurity. In its least serious degree, food insecurity indicates only the risk of hunger, not necessarily its presence. According to FAO (2013), food security exists when all people, at all times, have access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food insecurity has been described as —a condition in which people lack basic food intake to provide them with the energy and nutrients for fully productive lives (Perez, 2017).

A critical examination of these definitions, especially in the context of smallholder farming and the elderly, suggests that there are many factors embedded in what food security or insecurity entails. Most of the smallholding farms are characterized by low income generation, small size land utilization, lack of proper inputs and lack of resources, all of which limit productivity and further increased level of poverty. Low level of managerial and technical skills and inadequate training are identified as the major determinants of low level of productivity and household food insecurity. People living in poverty often cannot produce or buy enough food to satisfy their needs and so are more susceptible to diseases. Sick people are less able to work or produce food. The United Nations (UN) Standing Committee on Nutrition concluded that, nutrition is an essential foundation for poverty alleviation and also for meeting Millennium Development Goals (MDGs) related to improved education, gender equality, child mortality, maternal health and diseases (POST, 2006). Food and Agriculture Organization (FAO) estimates indicate that the number of undernourished people increased from 848 million to 923 million from 2003/05 to 2007, largely owing to the food price crisis (FAO, 2018).

To understand the magnitude of food insecurity, hunger, and malnutrition, one must consider both the continued rapid growth in world population and the number of individuals below the poverty line. Food production in most African communities was much associated with the older people of the society. They owned the land, farm tools and also controlled the farming systems and

determined what food would be produced in particular seasons. This ceases to be the case when the main producers start growing old and the situation brings in in-adequate supply of food to their families. Good health is a pre-requisite for socio-economic development in a country. Poor health means withdrawal of people from productive activities thus rendering them dependent and becoming very vulnerable. The elderly have been categorized as vulnerable persons, a consequence of food insecurity amongst the majority of them. Traditional systems of care and support for the elderly people that depended upon the extended family system have broken down or if in existence can no longer cope or be sustained (FAO, 2008). Consequently, food production, distribution, and consumption are perhaps the most important economic activities in Africa as elsewhere in the world. Food production is so important in Africa that nearly seventy percent of the population of most African countries are directly engaged in producing and distributing food (Exploring Africa, 2011). Regional strategies for example the Alliance for Green Revolution in Africa (A.G.R.A.) and the Comprehensive African Agricultural Development Program (C.A.A.D.P.) have also complemented efforts in ensuring that food security will be achieved by all communities by 2015.

According to New Partnership for Africa's Development (NEPAD) (2013), CAADP aims to eliminate hunger and reduce poverty through agriculture by bringing together key players - at the continental, regional and national levels - to improve co-ordination, share knowledge, successes and failures, to encourage one another, and to promote joint and separate efforts. NEPAD (2013) states that the CAADP has been prepared to promote interventions that best respond to the widely recognized crisis situation of African agriculture. It has been cast to deliberately focus on investment into the following three mutually reinforcing "pillars" that can make the earliest difference to Africa's dire situation: extending the area under sustainable land management and reliable water control systems; improving rural infrastructure and trade-related capacities for improved market access; and increasing food supply and reducing hunger. The CAADP also pays attention to emergencies and disasters that require food and agricultural responses or safety nets; if ignored, the dislocation caused by these can undermine or reverse development achievements. In addition, it presents one long-term "pillar" on agricultural research, technological dissemination and adoption. Kenya's Vision 2030 lays emphasis to food security through the Economic Pillar which strives to revamp the state of the Agricultural, Wholesale and Retail Trade sectors. The government of Kenya which is the key policy formulator has recognized the right to food in the context of national food security. This includes not only sufficient intake of calories, but also the right to nutritious diets that guarantee health, growth and development at all stages of life and for all citizens (GOK, 2010).

In particular the Kenyan government has been and is still the principal player in policy formulation of the older persons. It has envisaged that the state will continue to play such significant role and also provide resources for the effective management and implementation of quality services to the improved livelihood for the older persons (Olumi, 2018). The constitution of Kenya (article, 57) (a) the state shall take measures to ensure the rights of the older persons to fully participate in the affairs of the society; (c) to receive reasonable care and assistance from their family and the state. The national policy for the elderly covers among other issues the laws and rights of older persons, poverty and sustainable development, health and active life, family culture, gender, food security and nutrition (GOK, 2010). Older Persons Cash Transfer (OPCT) Programme Payment System, is

set to benefit 105,000 elderly persons through a bi-monthly cash pay for basic upkeep. The programme first began in 2007 under the Rapid Response Initiative (RRI) as a programme funded by the Government of Kenya to provide a bi-monthly stipend to elderly, disabled as well as orphaned persons to cater for Kenya's most poor and vulnerable communities which Postal Corporation of Kenya is the designated payment agent (Samwel, 2014).

1.2 Statement of the Problem

Millions of people worldwide suffer from hunger and under-nutrition, a major factor contributing to food insecurity which is an international problem. This condition exists when people lack sustainable physical or economic access to enough, safe, nutritious, and socially acceptable food for a healthy and productive life.

For food security to exist at the national, regional, and local levels, food must be available, accessible, and properly utilized. Food insecurity may be chronic, seasonal, or temporary, and it may occur at the household, regional, or national level (FAO, 2018). According to the Household Food Insecurity Access Scale (HFIAS) report (2017), food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Household Food Security Scale (HFSS) (2011) supports differentiation of four categories of food security: food secure, food insecure without hunger, food insecure with moderate hunger and food insecure with severe hunger. This scale includes items about food conditions understanding and addressing household food insecurity issues related to vulnerable people.

Improving households' food security is an effective way to bring together communities to address food systems issues embedded in food production, processing, and distribution; food access and utilization by individuals, communities and populations; and food recycling, composting and disposal. Traditional systems of care and support for the elderly people that depended upon the extended family system have broken down or if in existence can no longer cope or be sustained. Majority of the Youth and middle aged persons have left for job search in towns and the elderly persons have been left in the rural areas to shoulder most of the responsibilities. This situation has consequently reduced economic activities; particularly those farm related tasks that are geared towards food production. They have also not been able to access the available food from the market due to reduced levels of income. The above dimensions reveal inequalities in food patterns in rural households which drive this study to investigate what causes food insecurity among the aged in Imenti central. Although an overwhelming amount of research has addressed food security issues, much attention has been paid to evaluation of food security interventions and their nutritional benefits along with factors influencing their sustainability. Most of the researches done on projects implementation have focused on general organizational factors that influence their implementation. The researcher of this study therefore focused on the socio-economic factors that influence food security for the aged, an issue which has not been adequately addressed previously.

1.3 Objectives of the Study

The general objective of the study was to evaluate socio-economic factors affecting food security among the elderly. A critical literature review

1.4 Justification and Significance of the Study

Despite the efforts put by the government to ensure well-being of the older persons, it is still found that this population stratum is neglected and continues to be given low priorities in receiving economic, social assistance and to some extent cultural respect from the society. The findings and recommendations of this study would therefore help the government to formulate and implement policies that can revitalize community-based projects and private sectors participation towards the welfare of the older persons in regard to food security initiatives. The study endeavors to provide empirical findings of the elderly and their status of food security and give recommendations in the subject area. The research study was also hoped to provide a base for further research aimed at documenting socio-economic factors that influence food security

LITERATURE REVIEW

2.1 Theoretical review

Two theories were found to be relevant in evaluating socio-economic factors affecting food security among the elderly. The theories that were found to best inform the research constructs are Disengagement theory, (1961) and Activity Theory (Maddox, 1963).

2.1.1 Disengagement Theory

Disengagement theory was originally developed by Cumming and Henry (1961), two scientists interested in studying aging and the way interactions with other people change as people grow older. According to their theory, as people age, they tend to withdraw from society and this can be mutual, with society being less likely to engage with and include older people. They argued that this was a consequence of people learning their limitations with age and making way for new generation of people to fill their roles. Under this theory, as people age they tend to grow more fragile and their circles shrink as they start to pull away and be less actively involved. Critics point out that often this disengagement is forced rather than voluntary; someone who needs to move to a nursing home for example, experiences a curtailment of her social circle as her friends may not be able to visit, and may start to die, leaving her with fewer connections. The theory argues that certain processes of ageing are universal, inevitable and developmental.

The theory postulated that as people grow older there is mutual withdrawal between the social context and the ageing person, seen in the decreased interaction or activity outside the primary family group (Marshall 1986). In their book "Growing Old," Cumming and Henry suggested that some older adults purposely withdraw from society in preparation of death. Disengagement occurs as older adults retire from work and decrease their social participation. Society fosters this disengagement by providing fewer opportunities for older adults to participate in the workforce and in social situations. Cumming and Henry suggested that this mutual disengagement of the individual from society and society from the individual is the optimal form of aging. Cumming and Henry outlined nine postulates of Disengagement theory. The first postulate states that "although individuals differ, the expectation of death is universal and decrement of ability is probable. Therefore a mutual severing of ties will take place between a person and others in his society." A second postulate is that the disengagement process reduces the number of normative expectations placed on older adults and essentially frees them from social responsibilities. Disengagement is a universal event, experienced across gender and cultures. Cumming and Henry argued that their theory adequately explained why older adults demonstrated a reduction in work,

a decrease in social interactions, a lack of interest in new activities, and an increased amount of introspection. This theory was grounded in the University of Chicago's Kansas City Study of Adult Life and conclusions were drawn from observations of older adults' social participation, ego energy, and self-awareness. This theory was deemed applicable to this study due to the disengagement of the elderly persons from the societal activities and also reduced individual work, the elderly withdraws from most productive economic activities. Indeed some of them retire from the workplace because they sense their mortality and do not wish to spend their last days in work. On the other hand getting relieved from the societal roles make them eventually suffer loneliness because it reduces their social interactions, and their desire is to disengage and prepare for death.

2.1.2 Activity theory

This theory is supported mainly by those who disagree with the disengagement. It was developed by Havighurst and Maddox (1963). The theory postulates that successful ageing is highly dependent on maintaining a high level of activity (Lipman and Smith 1968). Therefore the more the activity the aged are engaged in, the more satisfied they are likely to be in life. But when those desiring to remain active incur loss of activity, they tend to become lonely and experience feelings of isolation. Maddox says that successful ageing depends on the contribution the elderly people continue to make in both their social and economic realms. The theory suggests that the greater the loss of activity the slower the life satisfaction. In addition, other social psychologists who disagree with the disengagement theory support that healthy aging corresponds with continued psychological engagement and social participation throughout older age. Older adults should actively compensate for the age related changes in their biological, psychological, and social experiences, and individuals must continue to engage in and modify the activities that they pursued in their middle age. These gerontologists thus conclude that disengagement is not compatible with optimal aging. In old age, Erikson argued that individuals must pass through a stage which is characterized by a psychological conflict between ego integrity and despair. In this stage, older adults reflect upon their life and then assess their self-worth. A positive appraisal of their life course experience results in ego integrity while a negative self-appraisal results in despair. Older individuals with ego integrity go on to acquire wisdom, acknowledge the universal conditions of humanity, and accept their mortality. Those who fall into despair suffer with what Kierkegaard referred to as the sickness unto death. Despairing individuals may become withdrawn and ambivalent or hostile and destructive in their old age. Activity theory explains why some older adults remain employed and actively participate in work and social events and also provides insight into why some other older adults may appear to be at peace with growing old while others appear fearful. To support the activity theory, both Parker (1982) and Busee (1969) believe that various activities that the elderly people engage can revitalize them and maintain their socioeconomic well-being. These economic activities may increase the levels of ego integrity for the elderly, consequently enabling them to engage and participate in the communal activities thus rendering them to be more active than living lonely and idle. In ascertaining the practicability of either of the above theories, this study therefore was able to give some empirical evidence of the reality amongst the elderly in terms of food security situations in their lifeline

2.2 Empirical Review

Nyaki,(2020) conducted a study, aimed at addressing the influence of women empowerment projects on the enhancement of food security in Mbeere Sub-Counties, Embu County. The study was anchored on the following objectives: level of women education influence on the enhancement of food security in Mbeere Sub-Counties, Embu County, and the credit availability influence on the enhancement of food security in Mbeere Sub-Counties, Embu County, and the building capacity of women influence on the enhancement of food security in Mbeere Sub-Counties. The theories that were adopted include the Theory of Change and the Critical Social Theory. A descriptive survey research design was adopted across a target population of 8,000 women comprising of women in the socio-economic empowerment program and women in administration in eight wards in Mbeere Sub-Counties, Embu County. A sample of 400 women was sampled to take part in the study. Questionnaires and interview guides were used as crucial data collection tools in the study. Both quantitative and qualitative data analysis approaches were used to analyse the collected data as per the research questions. Coding data and data analysis was done using Version 21 of the Statistical Package for the Social Sciences (SPSS). Quantitative data was summarized and results were presented in percentages and frequencies. Analysis of Qualitative data entailed categorizing them into themes and discussion of responses as per each item of study objectives. The study found the level of women education, credit availability, and building capacity has a significant influence on the enhancement of food security in Mbeere Sub-County, Mbeere County. The study concluded that the level of women's education, credit availability, and building capacity of women influence the enhancement of food security.

Githagui ,(2015) conducted a study to investigate the relationship between participation in the programme and household food and non-food expenditures. Survey data collected within three locations in Lodwar Town, in Kenya's Turkana County, was used. Ordinary Least Squares (OLS) approach to linear regression was used to estimate Engel curves. Contrary to expectation, the study found strong evidence that participation in HSNP was not associated with higher household food and non-food expenditure. Despite the additional income available to participant households, they were found to spend less on food than nonparticipant households. Besides purchase of food, a portion of the funds transferred through the HSNP was used in purchasing non-food items such as blankets and clothes, services like health and education, and assets like livestock and housing, thus reducing poverty. Part of the funds were also invested or saved. It is expected that empirical information generated through this study will inform decisions on rolling out of similar safety nets elsewhere not just in Kenya, but in Africa

Samwel ,(2014) conducted a study to investigate the socio-economic factors affecting food security in households of elderly persons in Imenti Central Sub County, Kenya. The objectives were to assess demographic characteristics of households with elderly persons, health status of elderly persons, influence of aging and farming practices of elderly persons in relation to households 'food security. The study was based on the disengagement theory of aging, the activity theory of aging and the theory of food economy and entitlements. The study adopted a descriptive survey design. The target population of the study comprised of 80 households in each of the four divisions within Imenti Central Sub County. The sample size comprised of 320 households with elderly persons purposively sampled, key informants to address matters facing the aged and Focus Group Discussion (FGDs) with groups of elderly persons. Questionnaire tools were used to collect the data from elderly persons, while interview guides collected data from key informants and the

FGDs. A total of 304 elderly persons' questionnaires were returned and a questionnaire return rate of 95% was achieved. The major findings of the study revealed that majority of the elderly persons were living in pathetic conditions since they have been left alone in shanty structures in the rural as their children have moved to the urban in search of employment. Their health status contributes to low food security due to the fact that they either have health conditions that hinder them from eating the available food for instance when on diet or they do not like eating the kind of food that is available in the households. Aging interfere more with sustaining the level of food security in households with elderly persons because as age crops in they get less active and they cultivate only small portions of their land either leaving the rest uncultivated or leasing it out. Elderly persons maintain traditional farming practices and fail to embrace the evolving agricultural technology, thus their lands gets less productive causing food insecurity. Moreover, the study revealed that most households with elderly persons were faced by food insecurity with severe hunger as only 19.4 percent of the households were food secure. In the light of the research findings, the researcher recommended that; although social norms and traditional mind-sets are difficult to change over short time, the collaboration efforts involving the government, the community and the families should be encouraged on caregiving in regard to the challenges that come with aging. Thus the researcher suggested for further research on the impact of Cash Transfer Programme for elderly persons on the levels of food security in their households.

Sabila ,(2014) conducted a study to examine the influence of political factors on household food security, to establish the influence of economic factors on household food security, to determine the influence of innovation on household food security, to identify the influence of social cultural factors on household food security. This study was conducted using the survey research design. Data was collected from 151 households using Yamane Taro's (1967) formula selected rural households through the use of structured questionnaires. The survey employed a systematic random sampling technique to select the sample. The sub county was divided into twelve locations to ensure the sample was representative of the population. The study applied both primary and secondary data sources. Primary data was collected using a combination of questionnaires and interview schedules which was tested for reliability and validity by carrying out a pilot study. The secondary data was obtained from published thesis, academic journals, textbooks, government publications and internet. The data collected was processed through tabulation and tallying, thereafter it was coded and analyzed by use of measures of central tendencies, dispersion, percentages as well as content analysis. The data was presented using tables and frequency distributions. The summary of the findings have also been outlined and discussed based on the variables under study. Conclusions have been made based on the information obtained. Finally study recommendations have also been made and suggestions for further research recommended as such will add great value to this project research

Kanjeru, (2013) conducted a study to assess indoor mushroom production and food security among households, determine influence of greenhouse horticultural production and food security, assess influence of plot based *Jatropha* production and food security and finally assess influence of organic farming on food security among the households. The study was based on diffusion of innovation theory. The study used a descriptive survey design. The population of the study was 10,423 households. A sample of 212 respondents was considered with 200 households (145 households from Lanet Division and 55 households from Barut Division), 6 group leaders and 6

extension staff. This sample was picked using stratified random sampling and proportionate sampling. Questionnaires were used to collect data. Pilot testing was carried out in 10 households before the commencement of the study and errors in the data collection instruments were corrected. Data analysis was done using Statistical Package for Social Sciences and Ms Excel. Descriptive statistic was computed and data presented using tables. In the first objective, the study showed that 12 respondents practiced indoor mushroom farming and produced 1909.5 Kilogrammes which generated 235,006 Kenya shillings. The consumption of mushroom is 1-200kgs per year which is low despite its high nutritive value. In the second objective, the study has shown that 21 respondents practised green house horticultural farming, produced 76,509 Kilogrammes worth 3,650,007 Kenya shillings. Majority of respondents (11) planted only tomatoes in their green houses. Lack of capital hindered 82 respondents from practicing green house horticultural production. In the third objective, the study has shown that plot based *Jatropha* production was practised by 10 respondents who produced 252.5 Kilogrammes of *Jatropha* seeds worth 7,502.5 Kenya shillings. In the fourth objective, the study showed that organic farming is practiced by 199 respondents and besides improving soil fertility, it generated 74,003 Kenya shillings from sales. Organic farming was ranked as the most important agricultural technology in the area of study. The study also showed that indoor mushroom production, green house horticultural production, plot based *Jatropha* production and organic farming influence food security status in the study area. These agricultural technologies produce food, income and act as a source of employment in the study area. The research findings generated information which will be used by farmers, government agencies and other stakeholders to understand agricultural technologies and their influence towards food security among households

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, Nyaki, (2020) conducted a study, aimed at addressing the influence of women empowerment projects on the enhancement of food security in Mbeere Sub-Counties, Embu County. A descriptive survey research design was adopted across a target population of 8,000 women comprising of women in the socio-economic empowerment program and women in administration in eight wards in Mbeere Sub-Counties, Embu County. The study found the level of women education, credit availability, and building capacity has a significant influence on the enhancement of food security in Mbeere Sub-County, Mbeere County. The study presented a geographical gap as it was done in Mbeere Sub-County while our current study sought to evaluate socio-economic factors affecting food security among the elderly.

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. Githagui ,(2015) conducted a study to investigate the relationship between participation in the programme and household food and non-food expenditures. Ordinary Least Squares (OLS) approach to linear regression was used to estimate Engel curves. Contrary to expectation, the study found strong evidence that participation in HSNP was not associated with higher household food and non-food expenditure. Despite the additional income available to participant households, they were found to spend less on food than nonparticipant households. The study presented a methodological gap

as it was subjected to Ordinary Least Squares (OLS) approach to linear regression 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. Kanjeru, (2013) conducted a study to assess indoor mushroom production and food security among households, determine influence of greenhouse horticultural production and food security, assess influence of plot based *Jatropha* production and food security and finally assess influence of organic farming on food security among the households. The study was based on diffusion of innovation theory. The study used a descriptive survey design. Descriptive statistic was computed and data presented using tables. In the first objective, the study showed that 12 respondents practised indoor mushroom farming and produced 1909.5 Kilgrammes which generated 235,006 Kenya shillings. The result showed that organic farming was ranked as the most important agricultural technology in the area of study. The study presented a conceptual gap as it sought to assess indoor mushroom production and food security among households, determine influence of greenhouse horticultural production and food security, assess influence of plot based *Jatropha* production and food security and finally assess influence of organic farming on food security among the households, while the current study will evaluate socio-economic factors affecting food security among the elderly.

METHODOLOGY

The study adopted a desktop literature review method (desk study). This involved an in-depth review of studies related to socio-economic factors affecting food security among the elderly. 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 socio-economic factors affecting food security among the elderly 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 socio-economic factors affecting food security among the elderly. 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 socio-economic factors affecting food security among the elderly which was split into top key words. After an in-depth search into the top key words (socio-economic factors, food security, elderly), the researcher arrived at 5 articles that were suitable for analysis. The 5 articles were findings from Nyaki, (2020) who conducted a study, aimed at addressing the influence of women empowerment projects on the enhancement of food security in Mbeere Sub-Counties, Embu County. A descriptive survey research design was adopted across a target population of 8,000 women comprising of women in the socio-economic empowerment program and women in administration in eight wards in Mbeere Sub-Counties, Embu County. The study found the level of women education, credit availability, and building capacity has a significant influence on the enhancement of food security in Mbeere Sub-County, Mbeere County.

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Samwel , (2014) who conducted a study to investigate the socio-economic factors affecting food security in households of elderly persons in Imenti Central Sub County, Kenya. The study adopted a descriptive survey design. The target population of the study comprised of 80 households in each of the four divisions within Imenti Central Sub County. The sample size comprised of 320 households with elderly persons purposively sampled, key informants to address matters facing the aged and Focus Group Discussion (FGDs) with groups of elderly persons. Questionnaire tools were used to collect the data from elderly persons, while interview guides collected data from key informants and the FGDs. The major findings of the study revealed that majority of the elderly persons were living in pathetic conditions since they have been left alone in shanty structures in the rural as their children have moved to the urban in search of employment.

Sabila ,(2014) who conducted a study to examine the influence of political factors on household food security, to establish the influence of economic factors on household food security, to determine the influence of innovation on household food security, to identify the influence of social cultural factors on household food security. This study was conducted using the survey research design. The survey employed a systematic random sampling technique to select the sample. The sub county was divided into twelve locations to ensure the sample was representative of the population.

Kanjeru , (2013) who conducted a study to assess indoor mushroom production and food security among households, determine influence of greenhouse horticultural production and food security, assess influence of plot based Jatropha production and food security and finally assess influence of organic farming on food security among the households. The study was based on diffusion of innovation theory. The study used a descriptive survey design. Descriptive statistic was computed and data presented using tables. In the first objective, the study showed that 12 respondents practised indoor mushroom farming and produced 1909.5 Kilograms which generated 235,006 Kenya shillings. The result showed that organic farming was ranked as the most important agricultural technology in the area of study

SUMMARY, CONCLUSION AND POLICY IMPLICATION FOR FURTHER STUDY

4.1 Summary

The study was based on the disengagement theory of aging, the activity theory of aging which attempted to explain relational, withdrawal, isolation and social ties in terms of perceptions to confront poverty and vulnerability within provision of basic needs. The study adopted a desktop literature review method The study findings revealed that majority of the elderly persons' families 55.3 percent had less than five family members leaving in the homes with most elderly persons indicating that they live alone. These findings implies that food production tend to be lowered by the lack of young and energetic persons who migrate to urban centres in search of jobs leaving elderly persons alone in the rural.

4.2 Conclusion

From the study findings, it is concluded that the households of the elderly persons are faced with abject poverty due to the household structures they live in, which lack food storage facilities hindering food utilization. The elderly persons are faced with health challenges that hinder them from accessing adequate and appropriate foods. They also are not able to use the available types of food due to the ailments they suffer. Elderly persons are faced by various levels of food insecurity due to the deteriorating strength and vulnerability that comes handy with aging. Farming practices by elderly persons depict that they mainly use manual labour limiting their food production. The elderly persons food utilization that entails enlightenment on food production based on food storage, feeding habits and farming methods have lowered food production thus food insecurity.

4.3 Recommendations

The study recommended that there should be established programmes that provide homes for the aged to cater for the elderly persons who live alone, sickly and too aged to undertake their daily domestic duties. In addition feeding programmers in households with elderly persons should be formulated and implemented. Relatives should be encouraged to follow up on the well being of their aging parents and organize to employ care givers to keep up domestic duties that may be making it difficult for the elderly to access food. The ministry of special programmes should consider provision of relief food to households with the elderly persons who suffer severe food insecurity. They should also collaborate with the ministry of education in ensuring children who are under the care of aged people have a school feeding programme to provide at least a meal for them at school.

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