

GENDER INEQUALITY AND FOOD
INSECURITY IN MACHAKOS COUNTY,
KENYA

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Abstract

This study investigated the linkage between gender inequality and food insecurity in Mwingi Sub-County, Kitui County, Kenya. The objectives of the study were to identify the role of women in food production, explain the linkage between gender inequality and food insecurity, and identifying the gender barriers hindering women farmers from enhancing their food production. The study adopted a descriptive design; this involved gathering the data, analyzing the data then interpreting the data to identify the cause of food insecurity. The research methodology employed was Survey design; thus a representative sample of 96 respondents was drawn from the population of 480 using probability techniques, the sample was studied using a standardized questionnaire. The interviews were all done face to face with help of four research assistants. The results are presented in tables and percentages in the study, followed by a thorough discussion. The study concludes that women are the majority in food production; however, there was linkage between gender disparity and food insecurity, therefore the study recommends that there was urgency to create relevant structures and policies that will address conclusively the gender barriers those slowdown women farmers in their food production.

Key words: Agriculture, food insecurity, gender, development, participation, access, resources.

Background Information

Women farming and food security cannot be addressed separately given the role women play in food production (World Bank, 2014). There is an urgent need to critically reexamine their performance if we are serious in addressing the current food gap in the world. Already the global food gap is worrying; it is said that there are more than 800 million people globally remain food insecure (Spielmaker, 2013; World Bank, 2014). In the Sub – Saharan Africa the realities of food insecurity are severer. The region has been disreputable for extreme famines, food insecurities and powerless in feeding her people adequately (Nason, 2005; Bahemuka 1993; Manfre, 2013; Mwangi, 2000). Mostly, the region of Sub-Saharan Africa has survived on handouts from outside to save itself from total starvation. The region's reliance on outsiders to feed its population has made some scholars skeptical of possibility of the region's possibility to feed its people in the near future (Odegi, 1994). Rather than depending on handouts to solve the food gap, attention could be given to improving women farmers' performance. World Bank (2014) makes the same comments,

Given equal access to productive resources, women farmers worldwide could increase farm yields by as much as 20 to 30 percent, meaning 100 to 150 million fewer people would go to bed hungry every day.

The hope of food security is on women farmers. Therefore there is no hope of narrowing the food gap without giving attention to improving the performance of women farmers.

Food production must be pushed to be top agendas because food security in all human history has continued to play a fundamental role in the peace and progression of societies. Therefore, the world should not rest until all integral factors affecting food security are adequately addressed (World Bank 2014, Bukh 1979). Gender disparity in food production is one of the factors

that need a fresh focus in order to enhance food production and consequently food security. This paper attempted to investigate the linkage between gender based and food insecurity.

Definition of gender disparity

Gender disparity refers to the unequal distribution of wealth, power, privileges and opportunities between the sexes (Bahemuka, 1993; NG 1987). Because of gender disparity, the sexes are treated differently in regard to roles, opportunities and responsibilities. NG (1987, 38) makes the issue clearer by stating,

Gender refers to the social differences between men and women; gender is a socio-economic variable to analyze roles, responsibilities, constraints, opportunities and needs of men and women in any context.

Thus gender disparity is shown to be socially and culturally engineered. Mbiti (1975) demonstrates that gender disparity is a socio-cultural arrangement which seemingly favours men in relation to access and control over resources. Although gender disparity is a global phenomenon, it is however experienced more in non-industrialized societies. NG (1987) makes the same claim,

It reigns in non-industrialized societies as a regulative force that renders women inevitably depended on men, setting thereby limits to dominion, exploitation and defeat...under the reign of gender women might be subordinate, under any economic regiment they are only the second sex.

Most of the regions of the sub-Saharan Africa remain non-industrialized. The realities of gender disparity may therefore be severer given the above sentiments. At any rate then critical consideration of the implication of gender disparity on food production may be more necessary than in other regions of the world.

Linkage between gender and food insecurity

When women find themselves second sex, depended on men and lacking control over resources due to gender disparities; such realities may end up compromising their performance in all sectors. For example, in food production any actor in the sector must have access and control over the factors of production and resources to enhance their productivity. Where women farmers are locked out of access and control of the factors of production in farming, the conclusion is obvious, the performance in the sector will be dismal, and will record reduced production (Mwangi 2000; Boseerup 1970; World Bank 2014; Nason 2005). In some societies, women only grow certain crops that are considered to be inferior in value. For example, in Achebe's novel 'Things Fall Apart,' (Achebe, 1983), it is shown that there were superior crops which only men could farm even though the women and children provided the labour needed to farm such crops. The women were only allowed to farm the inferior crops which were mainly used for family consumption. The same relations are found also in other regions of sub-Saharan Africa today; women are mostly in subsistence farming to feed the families while the farming of cash crops is controlled by men.

Roles in the region of sub-Saharan Africa are distributed according to ones sex; thus women find themselves overworked because they perform most of the agricultural major activities on top of their domestic chores. Such relations may leave the women inefficient because they are spread thin, and being time-poor (Nason, 2005).

In their unpublished MA Projects, Mwangi (2000) and Nason (2005) have concluded that the discrimination of women farmers has made many women farmers to quit farming altogether and move to the informal economy. Thus more and more women are moving to the selling of secondhand clothes, vegetables, horticultural products and domestic wares. The exodus of women farmers from agricultural sector to join the informal economy according to that study was caused by gender disparities (Nason, 2005). The exodus of the women farmers led to reduced production in food due to the loss of skilled, knowledgeable, and experienced farm workers. Such

reduction in food production according to the study was blamed on gender disparities (Mwangi, 2000; Nason 2005).

Women and agriculture in Africa

Food production in Africa is women dominated, to that effect, Boserup (1970, 16) has described farming in sub-Saharan Africa's as "the region of female farming par excellence." Buckley (1970) concurs with Boserup (1970) by stating that women play a major part in cultivation and food production in the region; they account for 53% of the practitioners in food production. Consequently from the onset it is visible that women farmers are critical in the whole issue of enhancing food security. However, even though the women farmers are the majority in food production; the sub-Saharan African society is overly patriarchal with men making all the important decisions in all sectors including food production sector. Women farmers' performance may be greatly affected negatively given their isolation from decision and policy making due to the patriarchal dominance in the food production as a sector (Nason, 2005; Nash, 2013). By refusing to integrate women farmers in the process of food production is equal to disregarding their expertise, skills, knowledge; such serious omission may lead to staid consequences in food security. Thus, there is urgency to enhance women inclusivity in regard policy making and implementation. Without any exaggeration, it becomes critical to respond to women's issues in agriculture if there is any seriousness in enhancing food security in the world. Chitere and Mutiso (1999, 49) assert the following in the matter of putting women in the center when trying to bring social change,

“...any social change that does not account for the social constraints compartmentalized culturally for women will definitely fail or stands incomplete.”

Since gender is a cultural construct, the authors could not be truer; the society needs to join hands and interrogate the implications of culturally – driven discrimination of the women farmers if there will be success in solving food insecurity.

Indisputably, social life in sub-Saharan Africa revolves around the axis of gender. It is gender that dictates one's position, roles, property ownership and control. Lamentably, the agricultural sector is not exceptional because like other life sectors agriculture sector finds itself engulfed and directed by gender relations. As a result men control most of the factors of production in agriculture. Whereas women are the majority in food production (60%), they only own less than 1% of the arable land as shown by some scholars (Mbithi, 1974, Mbiti, 1975, NG, 1995). Given such worrying state of affairs, that makes it urgent to explore the cultural dynamics seemingly leading to the exclusion women farmers from accessing and controlling the factors of production in agriculture, and decision making (Nason, 2005, Mwangi, 2000). Leaving the women farmers depended on men for resources will not help them in improving their food production (NG, 1995; Maiga, 2010).

Research Methods

The study adopted a descriptive design. This involved gathering and analyzing data then interpreting the data to identify the cause of something that is happening. The research methodology employed was Survey design which entailed drawing a representative sample of 96 respondents was drawn from the population of 480. Due to time and financial resources it was not possible to study the entire county of Machakos. Therefore using random techniques, the researcher selected one sub-County out of 8. Then from the 8 Sub-Counties the researcher selected one Sub-County at random. Finally one village was purposefully selected due to its excellent agricultural conditions. A total of 480 farmers comprising men and women was drawn from 56 households which were selected at random. Probability techniques were used to draw the sample from the target population. Using a standardized questionnaire was used to collect data from the respondents. Data collected from the respondents was analyzed and presented in tables showing the frequencies and percentages.

Results and Discussions

The role of women in food production

The study established that women farmers were the majority in agriculture, they accounted for 61.4% compared to male farmers who were only 38.5%.

Table 01: The role of women in food production

Farmer's sex	Frequencies	Percentage
Male	37	38.5
Female	59	61.4
Total	96	100

The results of the study show that women are the majority actors in the food production sector. The findings agreed with literature reviewed (Boserup 1970, Bukh 1979, Youri 1990). FAO (1994) emphasizes the same point when they say,

In sub-Saharan Africa women contribute between 60 and 80 percent of the labour for food production, both for household consumption and for sale.

Thus, women presence and participation in agriculture is important and cannot be taken for granted. Policy makers and other actors need to base their work on fact that women farmers are the majority and solving their unique problems will be tantamount to improving food production.

Table 02: Linkage between gender disparity and food security. The respondents were asked to state how the following gender problems affected their food production

Farmers sex	Male		Female		Male %		Female %	
	Nega-tively affected	Not affected	Nega-tively affected	Not affected	Nega-tively affected	Not affected	Nega-tively affected	Not affected
Discrimination by extension workers	2	35	57	2	5.4	94.1	96.6	3.4
Exclusion from decision making	1	36	58	1	2.7	97.3	98.3	1.2
Over worked	0	37	59	0	0	100	100	0
Not accessing credit	0	37	50	9	0	100	84.7	15.3
Policy making	0	37	55	4	0	100	93.2	6.3
Access to information	2	35	56	3	5.4	94.1	94.9	5.1
Farmers' literacy	0	37	48	11	0	100	81.3	18.7
Not owning land	0	37	56	3	0	100	94.1	5.1
Not accessing extension services	0	37	56	3	0	100	94.1	5.1

From the data presented on table 02, the study established that the identified gender problems only negatively affected the women farmers. Their counterpart the male farmers were not negatively affected by the same problems at all. The study therefore established that gender problems had negative effects on food production. For the women farmers, all of them were affected negatively: that meant they produced lower levels of food compared to the male farmers.

Gender barriers faced by farmers

1. **Not Accessing enough Land:** The question asked to the respondent was “Do you have adequate access to land? If NO, state why.

The study established that most of women lacked access to adequate land; 69% of the women farmers did not have access to land at all. For those who said that they owned land, the amount of land they owned was unimpressive; they only owned some small tracts of land. For example, 6.3% owned between 1.5 to 5 acres of land which was registered against their names (they had title deeds). About 4.4% of the women farmers owned land between 0.5 and 1 acre of land (had title deeds in their names). The rest of the women farmers close to 89% had temporal access to land; such parcels of land were owned by their husbands or other male relatives.

Mock (1976) describes the same situation in the following way,

In sub-Saharan Africa women are particularly disadvantaged compared with men because they farm smaller plots of land with more uncertain tenure. Women's access to land is limited by legal and institutional factors such as legal discriminations against their ownership and inheritance of land. Although legislative changes now permit women to own property, in many countries in the region traditions and customs continue to prevent women from having effective ownership.

The women were asked if they desired to own land, the responses were emphatically ‘yes,’ 100%.

Reasons for not owning land: What are the reasons for not owning land?

Gender disparity was the major explanation to the skewed land ownership and mode of farming. The study established that 100% of the women did not inherit any land from the parents or guardians. Thus from the study it can be concluded that gender

disparity were the only explanation why women remained landless. Cultural and traditional practices are the ones that we can blame for the skewed ownership and control of land in the sub-Saharan African countries. World Bank (1996) blames the poor relationship on gender which otherwise is a socio-cultural phenomenon,

Traditionally, in many African countries, women are not allowed to own or inherit land. This serves to further disenfranchise women because in agricultural communities, wealth and land are essentially the same. Moreover, access to land in many communities is governed by both statutory and customary law. In rural areas, local norms enforced by community elders prevail.

To become modern, customary law which has never been gender friendly should give way to the practice of modern socio-legal framework that promotes equity, fairness and justice.

Indeed, land is one of the fundamental factors in food production, its ownership is therefore necessary among the farmers. Not owning land then compromises women's role in their food production. World Bank (2014) has argued that we should not ignore issues of gender in agriculture,

We ignore this gender gap at our peril and ultimately at great social and economic cost. It is a real injustice to Africa's women farmers and their families that women make up nearly half of the labour force in agriculture but, on average, produce less per hectare than men. This absurd gender gap further undermines the sector's potential to drive inclusive economic growth, improve food security and create employment and business opportunities for millions of young Africans entering the job market every year.

To improve food productivity, all stakeholders must pay attention to reducing the gender gaps in food production, in particular enhancing land ownership to women farmers. The conclusion of the study was that the failure to own land was only

the gender factors that militated against the women farmers desire to own land.

2. Accessing credit: Are you aware of the opportunities for accessing credit?

The study established that the women farmers had very low knowledge about the existence of the credit facilities; only 24% of them had knowledge about the existence of credit facilities. Without the knowledge of the existence of the credit facilities which could improve their farming tremendously meant the women were automatically locked out from benefiting from such structures. In relation to the male farmers, the situation was totally different because 72% knew of the existence of the credit facilities. The low knowledge of the existence of credit facilities among the women may help to explain the one of the reasons why only a few applied for loans because only 15% of the women farmers had applied for credit facilities.

The financial institutions responsible for granting loans require collateral for the loans. Most of the farmers give their title deeds as the security. This was one of the most cited impediments by the women as the reason for being denied loans. For example, out of the 15% of the women who applied for loans, only 3.1% had benefited from the credit facilities. It becomes more visible if we compare number of the women applying for loans to that of the men. Those who applied for loans among the men were 69%, and who benefited from the credit facilities were 66 %. That shows among the male applicants, only 3% missed, on the other hand 11% the women applicants missed the loans they had applied for. It was easier for the male farmers to access credit because they had title deeds as security. World Bank (2014) makes the same assertion,

Agriculture in Africa has not fulfilled its potential, suffering from a lack of investment and insufficient attention from policy-makers. A key hindrance to agricultural development and broader growth is a wide and pervasive gender gap in agricultural productivity. Women comprise nearly half of the labour force in Africa's agriculture sector, and more

than half in several countries, but on the whole they produce less per hectare than men. Existing evidence from small-scale studies across the continent documents the numerous disadvantages that women face in accessing the same resources, training, markets and opportunities as men. They also face ingrained norms and institutional barriers that further widen the gap. Tackling the barriers that hold back the productivity of female farmers could both enhance gender equality and usher in broader economic growth.

Therefore the study concluded that limitations experienced by the women farmers were only due to gender disparity.

Not involved in decision and policy making: Are you involved in decision making?

The study established that most of the agricultural extension officers at the district level were mostly men 78%, definitely that would had a swing in determining the direction things would go in the agricultural sector. The study established that 86% of male farmers were involved with decision and policy making on matters like, the choice of farms to be visited during field days, where to hold farm demonstrations, and where to hold agricultural seminars. However, only 3% of the women farmers were sometimes consulted, 90% of the women farmers said they were never consulted. Therefore, because of that abject neglect of the women, it is the men who end up making critical decisions in regard to agriculture. World Bank (2014) tabulates the kind of decisions that are reserved for men,

...who is responsible for the management of and decision-making about agricultural land; who currently farms a given plot; who makes decisions concerning what crops to plant, which inputs to use and when to conduct farm activities; who decides which crops to plant on the plot; or who is reported to control output from the crops planted on that plot. Each country profile contains a footnote with detailed information on the precise definition employed in that context.

Conclusively, we can only blame gender disparity as the only factor that denied the women from participating in decision making in the household farms. Because of women not being involved in decision and policy making, their interests and needs were left out, so men chose inappropriate places for them.

3. Accessing extension services : As a farmer, do you access extension services?

The study established that mostly it was the male farmers who accessed the extension services 72%; the extension workers seemed to ignore the female farmers as only 28% accessed the extension services. The study concluded that there was a great systematic neglect of the women farmers by the extension service officers. One of the reasons was that gender determined what the farmer planted, the technology adopted by the farmer and the scale of farming. In this regard the study found out that 88% of the male farmers' mostly planted coffee 88% compared to 3% of the female farmers who mostly engaged in subsistence farming for family consumption. According to Manfre et al. (2013) it has not been easy to enhance equitable access to extension services notwithstanding the its importance in agriculture, the main failure or challenge has been the failure to factor in the peculiar women needs when designing the extension services delivery model. The agricultural extension workers are a critical bridge to enable farmers to access adequate knowledge in food production, improved technologies, financial services and any other relevant social services that may enhance food production. Therefore, lack of access to such critical services will definitely compromise food production among the women. Manfre et al. (2013) makes the same conclusion,

Many systems have put a greater emphasis on promoting various agricultural extension projects without understanding the practical and cultural obstacles that prevent women from accessing the most needed services. This has largely resulted in women's unequal access to EAS in rural locations.

Given the socio-cultural factors that seemingly bar the women farmers from accessing the agricultural extension services; the study concluded that it was gender disparity that was responsible for locking women from accessing the extension services.

4. Division of labour: The work you do in food production, is it fairly divided according to gender?

The findings from this study indicated that most of the agricultural activities that were labour-oriented were reserved for women farmers due their gender roles. The table below summarizes the data for this section

Table 03: The division of labour in the food production sector: Are you involved in any of the following food production activity?

Food production activity	Male		Female		Male		Female	
	Yes	No	Yes	No	Yes	No	Yes	No
Planting	3	34	59	0	8.1%	91.9%	100%	0%
Weeding	6	31	59	0	16.2%	83.8%	100%	0%
Harvesting	2	35	59	0	5.4%	94.6%	100%	0%
Treating and storing the harvest	1	36	59	0	2.7%	97.3%	100%	0%

The study established that the core activities in food production namely planting, weeding, harvesting and packaging and storing the harvest were all reserved for the women. That was echoed by Makura-Paradza (2010); he cites the skewed division of labour in food production which ends up making women vulnerable to poverty and consequently poor productivity in their farms.

The gender-based divisions of labor within and outside households has meant that women are more vulnerable to poverty compared to men even when they reside in the same household and are members of the same family.

Thus, the study concluded that due to gender disparity, there was a skewed division of labour in agricultural sector whereby the women end up being overworked because they do most of the labour oriented works in farming on top of their burdening domestic chores.

5. Agricultural Illiteracy: Do you have adequate agricultural information?

Farmers with agricultural literacy are able to function better than those who don't have. For example the basic agricultural information will enhance the farmers' functionality in marketing, processing their products, understanding the current agricultural policies, record keeping and accessing the relevant seeds given their climatic conditionality. Spielmaker (2013) echoes the same sentiments,

Basic agricultural information includes the production of plant and animal products, the economic impact of agriculture, its societal significance, agriculture's important relationship with natural resources and the environment, the marketing of agricultural products, the processing of agricultural products, public agricultural policies, the global significance of agriculture, and the distribution of agricultural products

The study established women's agricultural illiteracy was a record high because 75% possessed no agricultural literacy at all. For example they lacked, conversational knowledge that explains the significance of their practice, the ability to make a critical analysis, and the capacity to make value-based judgment or decision. Since the productivity of agriculture increases with the application of scientific knowledge and technology; it will impact the women farmers negatively if they are not assisted to access the agricultural literacy.

Conclusion

Women farmers are the majority in agriculture and food production 61.4%. Besides being the majority in the food production, their performance is compromised by the unsolved gender related

problems which reduce their food production. Therefore, their experiences, skills and enormous numbers in agriculture have done little to enhance food security. Failing to solve the gender related problems amounts to the neglect of women farmers which lead to food insecurity.

There is a relationship between gender disparity and food production because they cannot access adequate land, extension services, credit, agricultural and market information; all their other efforts will not make any difference. In order to realize food security, it is therefore fundamental to address gender disparity and ensure women's rights to land ownership and control, access to relevant and important information, improvement of women's literacy, and empowerment of the women by all the concerned social institutions. Open disregard of women farmers who have acquired immense wealth of experiences, skills, knowledge and expertise will be definitely courting food insecurity. It is therefore possible to enhance food security in sub-Saharan African region if the unique socio-cultural and economic needs of the women farmers are adequately addressed.

Recommendations

1. The role of women farmers in food production is critical; therefore the sub-Saharan countries need clear legislations and creation of relevant structures to address the gender barriers reducing women farmers' food production; for example landownership, access to credit, enhancing agricultural literacy among women, access to extension services and accessing decision making organs.
2. The government and policy makers need to mainstream gender relations to in order to end gender stereotypes and discrimination of women farmers
3. Mount tailor-made agricultural training to meet women's needs and adequately spread agricultural knowledge

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