

# Social and Cultural Factors Influencing Gender Disparity in Farmers Field Schools Approach among Smallholder Farmers in Kilifi North Sub-County, Kilifi County

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**Abstract** The status of women in agriculture has received extensive attention in literature in the recent decades, however, a research gap persists regarding the state of gender disparity in Farmers Field Schools (FFS) in Kilifi South Sub-County. The study of gender disparity in FFS, an experiential learning approach whose outcome is to empower both men and women farmers with agricultural technologies is fundamental. Five FDGs comprising of a total of 75 participants were drawn from five FFS purposively selected for the study. Data were collected qualitatively through Focus Group Discussion and analyzed using Content Analysis. The results reveal that over 90% group members in FFS are women. Women are the managers of productive resources and custodians of household food stores. The less than 10% men are due to the socio-cultural norms that dictate that as household heads, they should engage in activities for immediate household monetary needs. Men find FFS approach inclined more to farming, an activity considered to be women's primary obligation and engaging in it will compromise their status as household heads. These findings imply that FFS provides a conducive environment for farmer empowerment through experiential learning on new agricultural technologies for increased agricultural productivity for food security. However, gender disparity

caused by social and cultural norms and values impede its achievement. Development agencies should hold education fora to sensitize communities that achieving food security is a mirage without joint synergies from both women and men.

**Keywords** Socio-cultural Factors, Gender Disparity, Farmers Field Schools, Empowerment

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## 1. Introduction

Farmers Field Schools (FFS) is an approach commonly referred to as a school without walls originated in Indonesia in 1986 among the rice farmers. The approach was introduced as an alternative to the traditional top-down approaches that were unsuccessful in empowering farmers. The FFS is based on the principles of non-formal adult education, which is anchored on the transformative learning [1]. In these principles, the farmer is perceived to have knowledge accrued from experience and gain skills through learning by doing. The farmers' acquisition of knowledge and skills is through involvement in experimental plots laid out on their farms. The experiments

are enterprise based aimed at resolving the challenges identified by farmers contrary to the top-down approach, which was not guided by the same principle [1,2]. The ultimate aim of FFS approach is empowering farmers through improving their knowledge and skills in solving their challenges [3]. In pursuit of increasing agricultural productivity, the role of extension or professional experts in FFS is to facilitate the process of need assessment, establishing the experimental plots, collecting data, analysis of the collected data, documentation and decision making. FFS approach emphasizes the use of groups. This is because in groups farmers are able to share their experiences in the process of solving their challenges [4, 5].

The success stories of FFS in empowering farmers in development of agricultural enterprise based participatory technologies for increasing agricultural production has gained prominence among development partners in developing countries [6]. It is a demand-driven approach where farmers demand services based on their needs or challenges they face in farming [6]. It is in cognizance of its prominence that Food and Agricultural Organization (FAO) felt the need to promote it as an alternative approach in extension service provision. For the approach to gain prominence, FAO in collaboration with institutions of higher education is in the process of institutionalizing the approach. The aim is to produce graduates in the field of extension and community-oriented programmes equipped with FFS theory and methodology [4].

In order to involve the farmers, FFS were implemented on land owned by the group either as group's asset or on leased land. Despite the positive attributes of FFS such as increasing farmers' self-awareness and confidence and ability to examine their own problems by being actively engaged in thinking positively about their solutions consequently empowering farmers, there was observed disparity in the proportion of male to female gender who participated in most of the field schools used as sites for training. There are more female than male gender participating in FFS based on agricultural enterprises contrary to studies carried out [7]. In their study, Ref [7] observed that women's participation in agricultural research process for the purpose of empowerment was low and suggested that there is a need for increased research to understand how to improve their participation.

World over, a number of factors have been investigated and known to influence gender inequality in participation in development initiatives. These factors include social and cultural norms, limited scope of agricultural policy and limited metrics and indicators that could guide policy towards gender empowerment in agriculture [8]. This study provides insights on cultural and social factors that contribute to unequal gender participation in FFS. Social and cultural factors are significant intrinsic factors in the individual, household, or community sufficient to influence participation in development interventions. They

define the roles and responsibilities individuals may carry out or participate in. Understanding them will determine the appropriate approaches for implementation of FFS aimed at empowering a community.

It is against this backdrop that it is important to establish the social and cultural factors that have contributed to gender disparity that was observed in FFS as an alternative extension approach to conventional extension approach. There were more women in the FFS than men contrary to empirical studies that agricultural production and research is a male domain. It is important to establish these factors prior to the prominence of FFS as the best alternative to ensure gender inclusivity in development initiatives. Otherwise, development may be a mirage if both men and women are not involved and equally empowered. To achieve individual empowerment, it is important to understand social and cultural dynamics of the individual and society at large. The specific objective of the study was to establish the social and cultural factors that influence gender disparity in Farmers Field Schools that were formed and used as outreach sites for institutionalization of FFS in Kilifi North sub-county. The men and women who participated in FFS chose the enterprises they used to carry out a series of training to boost their capacity training based on their prioritized needs.

## 2. Methodology

### 2.1. Research Design and Characteristics of Study Area

This paper used a descriptive research design to conduct its study in Kilifi North Sub County located in Kilifi County. The research design allowed for collection of primary data using qualitative methods to explore factors that influence gender disparity in FFS. Kilifi County is one of the six Counties in coastal region. Within the Kilifi North Sub-county, five sites were purposively selected for the study [9].

### 2.2. Sampling Procedure and Sample Size

Purposive sampling technique was used to select the study area and the men and women who participated in the FFS groups. A sample of 75 farmers selected from five FFS was used to conduct five separate FDGs. One FGD comprising of 15 members was held for each group at the site of individual FFS. The representation of women and men was proportionately distributed to ensure equity. According to [10], FGD is a qualitative method of data collection that systematically and simultaneously interviews and probes a group of individuals using a guided discussion schedule. The aim was to gather information on collective views on how social and cultural factors influence gender disparity in FFS. The discussions also revealed a rich understanding of the beliefs and norms that

underlie those views and aid in generating a wider perspective that was used in drawing conclusions on factors that enable men and women to participate in FFS. A FGD guide was used to guide the discussion. Each FGD lasted for about two hours. During the FGDs, the participants were asked to state the number of men and women in group, reasons for participating in the FFS, type of enterprise they were engaged in and social and cultural factors that influenced the unequal representation of women and men in the 'Schools'. The facilitator ensured that the participants related their issues from a holistic perspective to what happens in day to day engagement in agricultural activities in the study area to allow for generalization through consensus.

### 2.3. Data Analysis

The collected qualitative data in nature was analysed using line by line coding [11] and content analysis. Data was first analysed to identifying emerging thematic areas. The themes were then categorized into social and cultural factors based on the observed patterns in the qualitative data. Descriptive frequencies were used to analyze the number of men and women in the groups. This was important in ascertaining the disparity observed during our interaction with the groups.

## 3. Results

### 3.1. Women and Men Participation in FFS

Data was collected from the five FFS to establish the status of men and women in each FFS. Table 1 shows the

percentage of women (78.69%) and men (21.31%) participants in respective FFS from, which the FGDS participants were selected.

**Table 1.** Men and Women Participation in FFS in Kilifi South Sub-county (n=122)

Farmer Field Schools	Men		Women	
	<i>f</i>	%	<i>f</i>	%
Kayanda FFS	3	2.46	21	17.21
Ebeneza FFS	1	0.82	29	23.77
Tumaini FFS	5	4.10	13	10.66
Mwakuhenga FFS	1	0.82	20	16.39
Boyani FFS	16	13.11	13	10.66
<b>Total</b>	<b>26</b>	<b>21.31</b>	<b>96</b>	<b>78.69</b>

The results reveal that except for one FFS the rest had over 90% women participants participated in the all the stages of FFS methodology, which include identification and prioritization of the enterprise based on their needs, establishment of the experimental plots for testing technology options, regular and systematic collection of data and documentation.

### 3.2. Cultural and Social Factors Influence on Unequal Women and Men Participation in FFS

The qualitative data that alluded the unequal participation collected from the FGDs on the extent to which, the cultural and social factors influenced the unequal participation in the FFS was categorized in thematic areas. The results are presented in Table 2.

**Table 2.** Cultural and Social factors influencing gender disparity in participation in FFS in Kilifi South Sub-county

Categorization	Statements for low male participation in FFS	Thematic area
Cultural	Farming is the responsibility of women since they are the custodians of food store and their role is to ensure the household is food secure	Custodians of household food security
	Men are the bread winners and they perceive agriculture being a long term investment to meet their role of meeting the day to day monetary needs	Head of household
	Head of the household men believe that they cannot be taught in the presence of women or by women as they will consider them to be inferior	Superiority
	It is not easy to converge men together, they believe they know what to do to solve their problems	knowledgeable
	Men do not like failing and therefore do not like taking risks like farming	Risk takers
	It is easy to convince women to take up a project/technology to be applied in farming than the men	Adoption of agricultural technology
	For men to join any formal or informal group, they want to see the outcomes first before making a decision to commit themselves	Decisions based on immediate benefits
Social factors	Groups belong to women in the region despite expectations from funding organizations that are tough	Membership to farming groups for increased production
	Membership to groups provides synergies for access to farm inputs. In groups they are able to access farm inputs in form of loans and grants from development partners who prefer working with groups	Membership to farming groups for increased production
	FFS is an arena for Networking among farmers who are members to groups	Membership to farming groups for Networking
	Formation of many groups that end up collapsing due to poor leadership discourages men	Group sustainability
	Few men required for cohesiveness of the group	Group cohesiveness
	Men perceive group activities as a useless venture with no benefits, and therefore perceive joining groups waste of time.	Group activities
	Education level limits participation in some activities like data collection and documentation	Education level
	Decision making and risk taking	Leadership
	Men play the role of moderators for group cohesiveness and should therefore not be more than two	Leadership

### 3.2.1. Cultural Factors Influencing Gender Disparity in FFS

The qualitative data collected from the FGDs indicated that in the Giriama community farming is the responsibility of women since they are the ones responsible for reproductive roles. They are the custodians of food stores and have to ensure the household is food secure. Women join agricultural oriented groups to acquire knowledge and adopt relevant agricultural technology, access farm inputs with intention of increasing production One participant in one of the FGDs stated in Giriama language, the main tribe in Kilifi County that: “*Muchein jembe*’, (Meaning that, a married woman is a tool for cultivating land/hoe). *The more you marry the bigger the land you will be able to cultivate. Without a woman in the household, the household is bound to cultivate no land and consequently food insecurity*”.

The low percentage of men in FFS is attributed to the culture of the community holds: ‘the society detects that men as heads of households and bread winners have to engage in economic activities, which have immediate monetary returns, men are superior to their women counterparts and society expects men to demonstrate their superiority. Men joined agricultural oriented groups for increasing productivity where they are treated equally

irrespective of gender will make their women consider them as being inferior’. Other cultural factors include: difficult to converge men together. It is believed that ‘men are knowledgeable and know how to solve their problems, should never demean themselves by assembling in the same venue with women to gain the same knowledge and end up failing’. In one of the FGDs, the participants stated in unison that: “*Most men did not join FFS due to the community members’ mindset. They believe that the activities groups carry out are for accomplishing the roles and responsibilities the society has ascribed for women*”.

### 3.2.2. Social Factors influencing gender participation in FFS

The results in the table reveal that the dominant thematic area most of the statements made by the participants during the FGDs categorized as social factors that influence the observed high percent of women participation in FFS is membership to farming groups. Being custodians of household food security, household food security is a preserve of the women, most of them form groups for the purpose of increasing agricultural production. They join or form groups to access farm inputs, loans and grants from development agencies who prefer working with groups. FFS also provided an avenue for networking and efforts for

interaction and sharing of experiences. While the social factors that influenced the observed low percentage of men in FFS included: the need for leadership with basic level of education. Men are included in groups like the FFS for specific reasons such as accomplishing highly technical tasks and those that require some level of education, ensure group cohesiveness, and provide direction in leadership and decision making process that is always compromised in groups composed of women only. The low number of men is also to allow for democracy, which is compromised resulting in dictatorship when the percentage of men is higher than for women, and a group without a mixture disintegrates easily. For instance, a participant in one of the FGDs stated that:

*“When women are all alone in a group, the process of decision making on an issue concerning resource utilization takes long and sometimes they fail to agree. Women need a man to control and guide the process since most of them are from de jure households where decisions are made by men and therefore not used to making decisions. However, the inability to make decision is not mutual, it depends on households. Women make the decisions on how to use the produce and they will always agree on the way forward through consensus”.*

In another FGD, a male participant stated that:

*“‘Farming is not men’s cup of tea’, we perceive group activities as a useless venture with no benefits. Those like us who members to FFS, we are not ready to attend meetings on regular basis as required by the group constitution” we attend only crucial meetings or when we play a role like secretary to the group”*

Another male participant added that: *“Many of the groups in this region are agricultural oriented and most of the times they end up disintegrating and this discouraged men in joining FFS”.*

### 3.3. Discussion

Farmers’ participation in FFS emphasized learning by doing and this improved their capacity in specific enterprises. According to [12], involvement in all stages of research or innovation is important because novel technologies and practices can be learned directly and adapted to suit particular agro-ecological, social and economic conditions. From a cultural perspective, the high percentage of women in the FFS, as opposed to men, was attributed to the roles and responsibilities that are culturally ascribed to the two genders by society. The cultural factors revealed in FGDs implies that farming being the responsibility of the women since they are the custodians of food stores and ensure household food security, then one way of achieving this is by forming farming groups. In groups, they obtain farm inputs, access funds and grants and combine their synergies for cultivating the land. The

FFS provides support mechanism that enables them to fulfill their roles as ascribed by society as a source of labour for cultivating land to the household. Membership to groups provided the women with the support for cultivating small or larger acreage put under production based on their ability and energy output for increased agricultural food production. According to [13], women in Africa are integral participants in the success of agriculture sector. They provide 60-90% of subsistence agriculture labour and dominate food production with labour contribution of 50-85% of total agricultural labour with high decision making power on timing and utilization of inputs.

The cultural factors negatively influenced the participation of men in FFS as they perceived male members highly as being more knowledgeable than women and do not participate in similar for education. Their status allows them to participate in FFS as patrons with skills and ability to handle technical issues. In that The findings are in agreement with those of Ref [7] that men are knowledgeable about farming and capable of applying new technology unlike their women and do not share information on agriculture more freely unlike their women. Ref [9] also found out that being heads of the households, men are considered to be superior. However, the results of a study carried out in Southeast Asia by [14], revealed a trend that contradicts the observed findings of gender inequity in agriculture. It is predominantly men’s territory in Indonesia and Myanmar.

The implication of the narrative on the process of decision making implies that women’s inability to make decisions could be influenced by the type of decisions they have to make. Decisions pertaining to the utilization of resources they do not have control over like land are complicated. They can only make pronouncements on utilization after consulting their husbands or the male members of the households. The decision-making process will have to involve consensus on the way forward how to address the issue at hand and this requires a male member’s advise. The findings are in agreement with findings of a study carried out by [9] who found out that very few women have decision making powers over utilization of resources such as land since it is a resource owned by male members of the households and can only be guided.

Emphasis on group formation as a characteristic of FFS influenced the high percentage of women. Group formation as a social factor allows members to interact with development partners and stakeholders. In the process of interaction, the women are able to share information that empowers them to effectively attain their major role and responsibility of household food security. In groups, women are able to increase their social and economic powers to improve access to technical information for increasing productivity [15]. While the need for few men in FFS to provide for group cohesion, leadership and decision making supported by findings of studies by [16]. Ref [16]

alludes the gender disparity observed in many development initiatives, to society's work segregation by sex. It limits utilization of individual flourishing of talents and collective responsibilities and reinforces social stereotyping, which in turn reinforces general occupational segregation, division of labour making it a vicious cycle as it leads to social exclusion. It is important to note that the consensus behaviour of women FFS enables them to work toward achieving a common goal that benefits all the members involved. This is an important virtue in FFS that is anchored on transformative learning and requires learning by doing. Learning by doing demands that the participants commit themselves in all the decisions they make. According to [17], consensus-oriented decision making encourages maximum participation of all the group members to be affected by the decision. The process contributes to the quality of both the decision and the experience of the participants and builds a sense of unity and cohesion in the group.

#### 4. Conclusions and Recommendations

The research established various social and cultural factors that influence gender disparity in Farmers Field Schools approach among smallholder farmers in Kilifi South Sub-County, Kilifi County. The high percentage of women in FFS established in the study is due to the cultural norms that define the roles and responsibilities both men and women play in the community. Women are the custodians of household food stores, consequently, household food security and this makes them proactive in FFS. The low percentage of men in FFS was due to community's cultural norms, which defines that men should engage in immediate monetary income activities, are superior and knowledgeable on needs and challenges of the community and should demonstrate their status in the community and not compromise it by engaging in same activities or assemble in same educational forums as their women. Membership to groups as a social factor influenced the high percentage of women in FFS. Membership to groups provides access to factors of agricultural food production such as farm inputs, land, and labour. It also provides opportunities for networking, interaction necessary for sharing knowledge and information from diverse scope of experiences. It is worth noting that the social and cultural factors that influence gender disparity in FFS are interrelated and vary from one society to another, household to household. The gender disparity in FFS approach caused by socio-cultural norms and values impede farmer empowerment aimed at increasing agricultural production for food security. The study recommends that Development agencies should hold education fora to sensitize the community that achieving food security is a mirage without joint synergies from both women and men. Further studies should be done to

determine the crucial factors that require emphasize in FFS to guide development agencies to develop a framework for implementation of community-specific FFS necessary to overcome gender disparity in agriculture research.

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