

Refocusing on Gender Roles in Agriculture and their Impact on Household Food Security: An in-depth Analysis of Chosen Wards within Kisarawe District, Tanzania

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ABSTRACT

The research conducted in selected wards of Kisarawe, Tanzania, aimed to examine the interplay between gender dynamics, agricultural endeavors, and household food security. The study objectives encompassed identifying gender-based roles in ensuring food security, evaluating the contribution of agricultural activities to food security, and elucidating the intricate relationship between gender, agricultural practices, and household food security. Employing a descriptive correlational design, data was gathered from a randomly chosen sample of 308 respondents. Data collection involved the use of researcher-designed questionnaires, interviews, and observations. The analysis encompassed descriptive statistics, which included frequency counts and means, as well as Pearson linear correlation coefficients. The research findings underscored a significant relationship between gender roles, agricultural activities, and household food security. Consequently, it was deduced that the primary factors contributing to food insecurity in Kisarawe, Tanzania, encompassed unequal ownership of productive assets, the burden of women's domestic responsibilities, limited decision-making opportunities for women, an absence of labor division, suboptimal technology utilization, limited access to capital, a lack of crop diversification, and inadequate information about modern farming methods. Based on these findings and conclusions, the study suggests several recommendations. These include advocating for equitable resource ownership, promoting gender-balanced decision-making processes, fostering an equitable division of labor, providing access to ample information, encouraging crop diversification, and advancing technological capabilities in the pursuit of enhanced food security in Kisarawe, Tanzania.

Keywords: Gender, Agricultural Activities, Household and Food Security

INTRODUCTION

In today's world, the most important business is growing enough food and ensuring that it reaches everyone. To feed the growing population, there is need to increase global food production by 70% before 2020. Meeting world food needs in the year 2020 will depend even more than it does now, on the capabilities and resources of women. The United States alone cannot meet the global need to

reduce hunger and promote food security since women make up the majority of agricultural work force in many areas of the world, [1]. This is not surprising given that about 52% of the population live under the poverty line. Women are responsible for generating food security for their families in many developing countries, particularly sub-Saharan Africa. Women are processors,

purchasers and the ones who prepare food and play a significant role in national agricultural production of both food and cash crops [2]. In many African countries women engage in various activities apart from agricultural production as compared to men's provision of water, fuel, and child care [3]. These activities which include land preparation, planting, transplanting, weeding and harvesting impose heavy burden to them and not only reduce the time available to work in their fields for agriculture but also reduces the significance of gender within agricultural organization. The basic question of access to land, to the labour of other members of the household and other necessary resources for agricultural production remains unanswered, [4]. The premises of production unit controlled by male head leads to extension of workers (largely male) frequently to ignore women even in areas where women not only do much field labour but also may be managing farms completely due to male migration, [1].

Despite agricultural policies and strategies in both Nigeria and South Africa, food insecurity remains a fundamental challenge in the countries [5, 3]. In Nigeria for instance, although agriculture remains a key component of the national economy, contributing about 41% of GDP and employing about 70% of the active population, it receives less than 10% of the annual budgetary allocations. As a result, the agricultural sector has significantly underperformed given its vast potential. Consequently, Nigerian agriculture has failed to supply sufficient food in quantity and quality to feed the constantly growing population [5]. Therefore, the level of food insecurity in Nigeria has continued to increase steadily since the 1980s. Food insecurity rose from about 18% in 1986 to about 41% in 2004 [6], with an estimated population of 150 million, this implies that over

61 million Nigerians are food insecure, that is they are either hungry, under nourished, or starving.

Agriculture is the backbone of Tanzania's economy and it will continue for a long time to play a predominant role in supporting employment, food production and exports [7]. It is estimated that 84% of the Tanzanian population work in the agricultural sector producing about 60% of Gross domestic product (GDP) and mechanized export. Agricultural production is still the primary source of livelihood for about 85% of Tanzanian population to whom it ensures economic sustenance in terms of food security, income generation and employment. According to national accounts, food crops dominate the agricultural sector totaling 55% of the agricultural GDP, where by 30% is accounted for food crops, the traditional export crops account for 8% livestock farming and hunting accounts for 6% while forestry accounts for 1%. Since 1973 to date, it is said that, Tanzania has become a net importer of food [8]. Inadequate rainfall coupled with poor production technologies, high growth rate gender imbalance in agricultural and natural disasters have also contributed to the determination of Tanzania's capacity to ensure food security.

These struggles over gender, class and national relations often occur simultaneously, as men sell off family land to large-scale farmers for example, or to hunting companies and tourist hotels, without involving their wives and children in decision-making or sharing the proceeds. From Tanzania Gender Networking Programmes (TGNP's) perspective, one cannot separate the interests of women from those of their communities in the face of the greater enemy in their view: the outside investor and often the corrupt government go-between [9]. The land question became even more central because land deprivation goes hand-in-hand with food insecurity.

According to participatory action research conducted by Kihacha in Shinyanga Rural, Ngorongoro and Njombe districts during 1998-2002, land is a gender as well as a national and class question. More than half the village households researched lacked food security throughout the year [10]. In all three districts, women and men farmers and livestock-keepers agreed that food security depends on access to and control over land and achieving participatory democracy at home and at community and national levels. They collectively designed and organized a campaign, 'The Right to Food, Land and Democracy' and won support from activist NGOs, including TGNP and many Fem Act members. TGNP led a major campaign, 'Return Resources to the People' during the 2000s which linked HIV/AIDS, gender and resources. Women's economic empowerment was understood as essential to reducing their vulnerability to HIV infection, which arises partly from lower immunity due to poor nutrition, and diseases like Sexual Transmitted Diseases (STDs), malaria, anemia, and water-borne parasite infections all of which are enhanced by insufficient income for food security and health services. Moreover, many women in both rural and urban areas are forced to engage in risky sexual practices because of their economic dependence on male partners or involvement in commercial sex work. Independent access to productive property such as land, as well as housing and cash incomes, are essential aspects of

METHODOLOGY

Research Design

This study employed descriptive correlational research design. It was descriptive because the researcher intended to systematically describe the characteristics of the population in line with independent variables; gender and agricultural activities and

Research Population

In this study, the target population comprised of households from

economic empowerment. Hence, the 'Return Resources to the People' campaign embraced women's efforts to access and control land and other natural resources such as water, minerals, forests, and wildlife.

There is considerable evidence in Tanzania that women predominate in the agricultural sector, and that women do most of the farm work. Sector policies

and programs need to recognize and act on gender differentiated structural roles in agricultural explicitly. Women lack access to and control over productive resources (land, credit, and other business support services) seriously undermining their economic empowerment. Currently, in most of the developing nations within the African continent including Tanzania, rural women are really marginalized to concentrate on small hand hoe farming, fire wood collection, water fetching and cooking throughout the days, with limited access to land, limited income, lack of division of labour and lack of decision making on the type of crop for plantation. Hence such a situation limits the ability of women to produce enough food for their families. Unfortunately, little is known as to why women are disadvantaged. This study therefore attempted to investigate some of the factors that cause persistent inequalities between Men and women in performing agricultural activities in order to maintain food security in the selected wards in Kisarawe District Tanzania.

the dependent variable household food security. Correlation analysis was employed to statistically (numerically) show the extent to which household food security can be determined by gender and the type of agricultural activities.

selected wards of Kisarawe District, agricultural coordinators, the district

agricultural officer. The District has a total population of 101,598, where males are 50,631 and females 50,967 respectively with an average number of household of 4,787 (Report from the District Headquarter 2012). The district is however divided into 15 wards with their total number of households respectively;Cholesamvula,

Kibuta,Kiluvya,Kisarawe,Kirui,Mafizi,Maneromango,Marui,Marumbo,Masaki,Masanga,Msimbu,Mzenga,Vihingo and Vikumbulu. Three out of the fifteen wards were purposively selected because they are known for agriculture and hence they form the target population. The three wards are; Kisarawe, Masaki and Msimbu.

Sample size

In this study the researcher obtained data from a sample of a population in which case the study become a sample survey. Regarding sample size

calculation from 1263 households using Slovene’s formula a samples of 304 households was obtained.

Formula

$$n = N / (1 + N (e)^2)$$

Where

n = Sample Size

e = Level of precision (5%)

N = Population

From each household, the head of the family was considered. On top of these households, agricultural coordinators and Kisarawe district

agricultural officer were also considered as part of the study. Thus the total numbers of respondents were 308.

TABLE 1: The sample composition

Category of Respondent	population	sample
Households	1,263	304
Agricultural Coordinators	3	3
District agricultural Officer	1	1
Total	1,267	308

Source: primary data, 2012

Sampling procedure

Simple random sampling was used to select households from the three purposively selected wards. This was used to give all households in the target population equal chance of being selected. The researcher had to go to each of the three wards and selection of a household was on first encounter interview basis. When the researcher would come across a household with gardens, she would go ahead and administer the

questionnaire. This was done continuously until the required number of households from that ward was attained. Purposive sampling technique was used to select agricultural coordinators and the district agricultural officer in Kisarawe District because they were thought to have the information on gender roles, agricultural activities and household food security.

Research Instrument

Interviews were used to collect data from; ward agricultural coordinators and district agricultural officer who were interviewed personally with help of interview guide. This enabled the

researcher to get additional data through further discussion. The interview schedule was designed inline with the objectives of the study. Researcher devised questionnaires

were used to collect data from farmers. Questionnaires were chosen to collect specific data that made it easy to analyze. While designing a questionnaire, anonymity of respondents was upheld in order to elicit more satisfactory data. This claim is corroborated by the assertion of [11] when he stated that

Validity and Reliability of the Instrument

Content validity of the instrument was ensured through use of valid concepts or words which were meant to analyze the relationship between genders, agricultural activities and household food security as cited in the literature. The researcher also made use of the University supervisor and other senior/experienced lecturers in the Department of Development Studies and school of post graduate studies and research (SPGSR) to evaluate the

Data Gathering Procedure

The data gathering procedure began after the approval of the proposal by a panel coordinated by the school of Post Graduate Studies and Research (SPGSR) of KIU Dar es salaam College. With a successful approval of the proposal, the researcher had to secure an official introductory letter from the office of the Director SPGSR to various authorities to enhance accessibility of data. The researcher then was

Data analysis

Descriptive and inferential statistics were used to analyze data. Minor gaps in the questionnaires were dealt with in focused group discussions which involved resolving hand writing issues, dealing with unfilled gaps among others. Data was entered into SPSS and frequencies, means, Pearson Linear Correlation were generated and variances were calculated using Likert-scale. When using likert-scale, scoring must be consistent. Thus, if it is decided that on appositive statement a high score of 5 is Strongly Agree, then a score of 1 should be for Strongly

Ethical Considerations

In ensuring ethical research undertaking, the researcher adhered to the following. A university letter of

questionnaires are preferable since they avoid the embarrassment of direct questioning and so enhance the validity of responses. It was intended that, questionnaires would be easy to understand and complete. The questionnaire items were developed basing on the objectives of the study.

relevance, wording and clarity of questions or items in the instrument. These individuals were asked to give their judgment on whether or not the items in the instrument are valid for evaluation of gender roles in agricultural activities and household food security in selected wards in Kisarawe Tanzania. The reliability of the instrument was ensured by using acronbatch alpha test of atleast 0.7. [11].

prepared with questionnaires and interview guide for data collection. The respondents were requested to sign the informed consent, answer all the questions with honesty and objectively as possible. Most of the questionnaires were collected immediately after filling and where respondents could not respond instantly in a time space of 1-3 weeks was considered.

Disagree or Negative statements must be scored with a 1 for Strongly Agree and a 5 for Strongly Disagree. Such reversals are important to take note of. On the likert-scale constructed for this particular study, responses were graded for each statement, and were expressed in the following five categories, SA; A; U; D and SD. (SA) for Strongly Agree, (A) for Agree, (U) for Undecided. (D) for Disagree and (SD) for Strongly Disagree. The statements were either positive or negative. To score, the scale, the responses were credited 5; 4; 3; 2 and 1 respectively.

introduction was presented to enhance access to the public offices and documents for building trust with

respondents. Informed consent of the respondents was sought and confidentiality of data acquired was assured through well administered

data collection and handling procedure. Acknowledgements of the authors whose ideas and insights were part of this study [12].

Limitations of the study

The following limitations were encountered for various reasons when carrying out this study: Inadequate cooperation from some of respondents where some of

respondents were not reached and others did not return the questionnaires. The researcher was not able to control the sincerity of the respondents.

RESULTS

Demographic Characteristics

In this section the distribution of respondent by gender, age, level of education marital status, type of family and ward are given.

Table 2: Gender of Respondents

Type of gender	Frequency	percentage (%)
Male	98	32.2
Female	206	67.8
Total	304	100

Source: Primary Data, 2012

Table 2 indicates that females dominated the sample by contributing two thirds (over 67%) of the respondents, suggesting their large numbers in the selected wards in Kisarawe District.

Table 3: Age of Respondents

Age category	Frequency	Percentage
15-20	11	3.6
21-25	28	9.2
26-30	78	25.7
31-35	70	23.0
36-40	60	19.7
41 and above	56	18.4
Total	304	100

Source: Primary Data, 2012

According to Table 3, out of the 304 respondents involved in the study 11(3.6%) were between 15-20 years,28(9.2%) were between 21 and 25,The findings show that the sample was dominated by those between 26 and 30 who constituted 78(25.7%).This implies that most respondents (ie 68.4%) were in their middle adult hood

stage. The findings Further show that the population of the youth especially in rural areas is very low which might be because of rural urban migration which involves the youth who are mostly searching for employment and most of these youth are involved in casual labour.

Respondents by level of education

Table 4: respondents by the highest level of education attained

Level of education	Frequency	Percentage
Primary	125	41.1
O'level	93	30.6
A' level	38	12.5
Diploma	30	9.9
B'degree	18	5.9
Total	304	100

Source: Field data, 2012

According to table 4 Forty three percent of respondents were having secondary education, 41% had primary level of education and only 5.9% had Degree education. Due to absence of schools, children in the poorest families find it difficult to meet basic academic standards. And with many children among these families having

low education most families have become poor and poorer to the extent that they cannot be able to afford taking children to school after attending their secondary education. Also this reveals the typical characteristics of lacking basic social services in rural areas.

Respondents by Marital Status

Table 5: shows the distribution of respondents by marital status

Marital Status	Frequency	Percentage
Single	70	23.0
Married	189	62.2
Widow	41	13.5
Total	300	100

Source: Field data, 2012

With regard to marital status the study findings in table 5 show that majority were married 62.2% possibly due to low education. The findings on level of education table 4 indicated majority of the respondents stop schooling at secondary level and

therefore there is a high level of early marriages followed by single who were 23.3% and the widowed were only 13.7%.This suggest that most Tanzanians marry in early 20s and 30s an showed that they are likely to have many children.

Respondents by the size of the household

Table 6 shows the distribution of the respondents by size of the households

Number of children	Frequency	Percentage
1-3	114	37.5
4-7	130	42.8
8-11	40	13.2
12 and above	6	2.0
Total	304	100

Source: Primary data, 2012

According to table 6 household with 4-7 members were 130(42.8%) followed by those with 1-3 members and were 114(37.5%) and the least were those with 12 and

above with 2.0%. This implies that there is high level on early marriages as already explained above due to low education as indicated in table 4 where most of the respondents have stopped at secondary level followed by primary education. Another implication here is that as shown in table 3 there is still existence of extended families especially in rural areas who encourage many children and large families. Hence this is already observed to be one of the causes of food insecurity where children below 15 years are many and their participation in agriculture is low. Therefore, this gives heavy work load to their parents.

Respondents by type of family

Table 7 shows the distribution of respondents by the type of family

Type of family	Frequency	Percentage
Extended	70	23.0
Nuclear	192	64.6
Single	35	11.5
Total	304	100

Source: Primary data, 2012

According to table 7 majority of respondents were under nuclear family with 64.6% and extended family with 23.0% and the least were single with 11.5%. This implies that most of the people much involved in agricultural activities are the married ones and this is because there is a high rate of early marriages most especially among the rural areas. Because as indicated in table 4.2 most

of the respondents were between the ages 26-30 where all these were married which clearly shows the high level of early marriages amongst Tanzanians and this also reflects the rate of increased population most especially among the youth as indicated in table 6 where most of the families were found having between 4 and 7 children.

Respondents by Ward

Table 7 gives the distribution of respondents by the ward of residence

Respondents by Ward		
Ward	Frequency	Percentage
Kisarawe	74	24.3
Masaki	116	38.2
Msimbu	111	36.9
Total	301	100

Source: Field data, 2012

According to table 7 the majority of respondents lived in Masaki and Msimbu with 75.1%, and the least with 24.3% from Kisarawe Ward. Most of the respondents are found to be living in Masaki and Msimbu because of fertile soils for their agricultural activities most especially for cassava and maize where most were found to be having the food for consumption and the surplus for sale compared to Kisarawe where the area is more of urban and most people are involved in

business activities than agriculture and most of the food they feed on is transported from Masaki and Msimbu which are near by wards that they are more involved in agricultural activities. In the interview that I conducted with the agricultural officer from Kisarawe she said that there is a high level of food insecurity in the community due to lack of division of labour between men and women since most of men are much involved in business.

Table 8: Gender roles on food security

Table 8 presents the findings on the first objective which was to identify the role of gender on food security

Statements	Mean	Ranking	Interpretation
Both men and women are involved in crop production for home consumption.	4.14	1	Agree
Women and men contribute to production of food crops for selling.	4.12	2	Agree
There is equal ownership of land between men and women .	3.99	3	Agree
Women do much roles in weeding Crops and transplanting than men.	3.96	4	Agree
Both male and female headed families can afford two meals per day.	3.76	5	Agree
There is gender equality in food production .	3.76	6	Agree
Both men and women ensure that part of harvested food Is stored for future consumption.	3.76	7	Agree
Men and women lobby and advocate in increased food production.	3.73	8	Agree
Both men and women participate in environmental conservation.	3.71	9	Agree
Both men and women take decisions on agricultural production.	3.70	10	Agree
Both men and women make decisions on income generated from agricultural activities.	2.92	11	Undecided
Total	3.78		

Source: Primary data, 2012

The mean scores in table 8 indicates that respondents rated high (i.e. agreed) most items on gender roles with both men and women getting involved in crop production for home consumption rating the highest (Mean=4.14), followed by both men and women participating in production of food crops for sale (mean=4.12).Both men and women making Decision on income generated from agricultural activities was rated as the lowest on gender roles with a

mean of 2.92.This clearly shows that the respondents rated gender roles on food security whose index was computed (i.e. Total) which turned out to be 4.1 indicating that farmers in Kisarawe rated the role of gender as high. This implies that Both Men and Women play a role in ensuring food security in Kisarawe by participating in a number of activities leading to food production for example they both do land preparation, planting, weeding, transplanting and

harvesting. These findings support [7] that 84 % of the populations in Tanzania work in the agricultural sector producing about 60% of both domestic gross product (GDP) and mechanized export. Agricultural

production is still the primary source of livelihood for about 85% of the Tanzanian population to whom it ensures economic sustenance in terms of food security, income generation and employment [7].

Role of agricultural activities on food security

Table 9 presents the findings on the second objective which was to identify the role of agricultural activities and food security.

ITEM	Mean	Ranking	Interpretation
In most cases weeding is done by women.	4.14	1	Agree
On average women involve in many activities like cooking, childcare washing and time not enough for agric activities.	4.12	2	Agree
On average women are more involved in land preparation compared to men.	4.12	3	Agree
Men attend agricultural meetings compared to women.	4.10	4	Agree
Planting of crops is mainly an activity for women.	3.99	5	Agree
Land cultivation is normally done by men in this community.	3.96	6	Agree
Men are mainly involved in Transplanting .	3.87	7	Agree
The major source of income for women is from agriculture .	3.76	8	Agree
Men are mainly involved in Harvesting.	3.73	9	Agree
Men are farm owners/managers farm partners.	3.70	10	Agree
The society norms do not allow women to Participate in other activities like fishing.	3.67	11	Agree
Women are in charge of crop production .	3.26	12	Neutral
Processing preserving and marketing of agricultural produces is mainly done by women	3.19	13	Neutral
Total	3.82		

Source: Primary Data 2012

According to table 9 it provides the distribution of the understanding of respondents of on agricultural activities in ensuring food security where it has been observed in this study that, women are the major participants in farm and housework

activities as compared to men. The mean score in table 4.9 indicates that respondents rated high (ie agreed) most items on agricultural activities with women getting involved in weeding rating the highest 4.14 followed by 4.12 where women still

gets much involved in many activities like cooking, childcare and time not enough for agricultural activities. Thus the findings are in line with [3] who reports that the daily life of agriculture, women starts well before sun rise the first core being to fetch water, then washing the pots and pans from the night's meal and setting about the tasks of preparing breakfast and perhaps the mid day meal as well, next they wash and feed the children and get them ready for school. The results from farm and non-farm activities in the study area show women to be the main participants in both activities, while men seem to be only owners of the produces. This mode of division of labour increases the workloads on women and affect both their energy and time which

leads to less food production and so food insecurity to most of households. Again the finding are in conformity with [13] who reports that, rural women make a tremendous contribution to food and agricultural production. They also play a crucial role in determining and guaranteeing food security and well being for the entire household. Results from agricultural activities further show the extent of imbalances between men and women in both activities where by women participate fully in both agriculture and house work activities as compared to men .Hence due to such an imbalance there has been persistent food insecurity in the selected wards in Kisarawe district Tanzania.

Level of food security

Table 10 presents the findings on the level of food security

Items	Mean	Ranking	interpretation
A variety of food crops are grown in this community .	4.15	1	Agree
There are different seasons for crop planting in this area.	3.88	2	Agree
There is adequate information for both men and women on modern methods.	3.31	3	Undecided
Modern methods of farming are used like the use of tractors.	3.22	4	Undecided
Local production is supported by imported food.	3.15	5	Undecided
All family members participate in food production .	2.93	6	Undecided
Household resources such as land are owned equally between men & women.	2.61	7	Undecided
There is participatory democracy at home and at the community level.	2.57	8	Undecided
The government is much involved in program monitoring and evaluation.	2.51	9	Undecided
The households have enough food for consumption and for sale.	2.48	10	Disagree
The society is much concerned with environmental conservation	2.42	11	Disagree
The households can store food For three months and above.	2.35	12	Disagree
In this community people normally have three meals per day.	2.33	13	Disagree
Total	2.92		

Source: Primary data, 2012

Table 10 it provides a distribution of respondents' perception on the state

of food security in the three selected wards in Kisarawe district Tanzania.

The general findings shows that two items were rated high on the level of food security with a variety of food crops being grown in the community rating the highest as (mean=4.15), followed by having different seasons for crop planting in the area (mean=3.88). However the respondents were undecided information on most of the items with the lowest in that category having the mean of 2.51 rating on government getting involved in monitoring and evaluation. To some extent the respondents could not go hand in hand with the items rated the

highest being on households having enough food for consumption and for sale (mean=2.48) where this seemed to be more of a myth to the respondents and on the community since most people did not have enough food and in the community can not afford two meals per day (mean=2.33). Hence this research is in line with most of the researches that have been conducted in Tanzania showing the level of food security like [14] which reports that most of the food crops are being supplemented by exports.

The relationship between gender roles, agricultural activities and household food security

In this study there were two hypotheses which have stated that, there is a significant relationship between gender roles, agricultural,

activities and household food security. Findings on the testing of this hypothesis are presented in table 11

Table: 11: Relationship between Gender roles, Agricultural Activities and household food security.

Variables	R-value	p-value	interpretation	Decision on Ho
Gender roles				
V ^s	0.175	0.003	significant relationship	Rejected
Food security				
Agricultural Activities				
v ^s	0.138	0.018	Significant relationship	Rejected
Food security				

Source: Primary data 2012

According to table 11 it shows that gender roles and the level of food security have a positive significant relationship with $r=0.175$, and $sig=0.003$ leading to the rejection of the null hypothesis to the effect that gender roles significantly relate to the level of food security in Kisarawe at 5% level of significance. The findings are in conformity (agreement) with other studies like [15] observation that, women perform a greater role in agricultural activities in Sub-Saharan Africa and are the main producers as compared to men thus this implies that there is significant relationship on the gender roles especially the work performed by women in agricultural activities as indicated in

table 8 and 9 though men according to table 4.8 and table 4.9 play some role but it has been confirmed with the interviews conducted that women perform a greater role than men therefore this study is in line with [3] who reports that the daily life of agricultural women starts well before sun rise, even [16] reported that Women's active participation in agricultural production in developing countries generally fall into four categories farm owners or managers, farm partners, unpaid family workers, and agricultural wage laborers. The distinctions among these categories are based on the woman's decision-making power, time spent in farming, and agricultural tasks. Contextually,

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the findings implies that when gender play an active role, the level of food security increases and the reverse can be true when the gender roles are low. Table 11 also presents the analysis on the relationship between agricultural activities and food security which turned out to be $r=0.138$, $Sig=0.016$ indicating a positive relationship ($r>0$) which is also significant since the p value is less than 5% level of significance leading to rejection of the second null hypothesis to the effect that Agricultural activities are

DISCUSSION

This study was carried out in order to establish the relationship between genders, agricultural activities on household food security in Kisarawe District Tanzania. The study was conducted in selected wards of Kisarawe including Kisarawe; Masaki and Msimbu. The study employed a correlational descriptive research design. It was descriptive because the researcher intended to systematically describe the characteristics of the population in line with independent variables; gender and agricultural activities and the dependent variable household food security. Correlation analysis was employed to statistically (numerically) show the extent to which household food security can be determined by gender and the type of agricultural activities. For effective data collection, research administered questionnaires and interviews and observation were used. The three methods were used for purposes of complementing each other in collection of both qualitative and quantitative data. The response to the questionnaires was good in that 304 out of 308 questionnaires issued to respondents were completed and returned to the researcher on time. Of those returned only 4 questionnaires had serious errors and were not included in the analysis. As it was highlighted in the previous chapter of this report, the study came up with a number of significant findings and the most important ones have been

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significantly Linearly correlate with the level of food security in the selected wards of Kisarawe at 5% level of significance. The findings are in conformity with national accounts where food crops dominate the agricultural economy, totaling 55% of the agricultural GDP, Where by 30% is accounted for food crops, the traditional export crops account for 8% (livestock) farming and hunting accounts for 6% while forestry accounts for 1% [7].

summarized in the following ways; The respondents' perception on the first objective which was to identify the gender roles in food security in selected wards of Kisarawe District Tanzania was viewed as being one of the major challenges of food security since it has been confirmed that there is gender imbalance in resource ownership like land and on decision making is always in the hands of men which is a great challenge when it comes to what type of crop for plantation and where due to limited land ownership and this has been among the challenges that have caused food insecurity and as supported by the interviews conducted and the questionnaires administered many people living in these wards can not afford three meals per day. The respondent's perception on the second objective which was to assess the contribution of agricultural activities n agricultural activities still women are the major participants in farm activities like in land preparation, planting, weeding and harvesting though some people agreed on some statements that men also play some part especially, in land preparation, land cultivation and attending agricultural meetings and workshops but they had some doubt which was clearly supported by the interviews conducted among the ward coordinators that women play a great role and men normally come in when it is time to make decisions on selling

of the produces which continually brings an imbalance in resource ownership and that has also been among the factors that have caused persistent food insecurity in the country. The respondent's perception which was on the to establish the relationship between Gender, agricultural activities and household food security most people highly rated that there are a variety of food crops that are grown with in the community but with some doubt since the seasons for their crops are some times not favourable with no adequate rainfall that can support them throughout the year. And for the information pertaining modern methods of farming the respondents had little information like on the use of tractors and irrigation methods they had very little information about it. People are not concerned with environmental conservation and the households can not store food for three months and above hence there is persistent food insecurity. Finally, the respondents were much needed to

From the findings, It is concluded from this study that unequal ownership of means of production between men and women and the burden of women's domestic work as compared to men and the poor participation of men in non-farm income generating activities and the limited involvement of women in decision-making were some of the contributing factors on household food insecurity revealed from the study. It is also concluded that the major factors causing food insecurity in the study area are; lack of division of labour, bad weather conditions, poor technologies (using hand hoe), lack of capital and a limited crops diversification (cassava and maize mainly grown) these crops require sufficient rainfall (especially maize which was grown by majority of households) when rainfall is not sufficient people are likely to have food insecurity. Furthermore, it is

give their response on the level of food security in the community by focusing at gender roles in food security, the contribution of agricultural activities in food security and then the researcher was required to test the relationship between these two variables and this has been correlated by testing the hypothesis of which in testing this it has clearly given the results that there is a significant relationship between gender roles and food security and the same case with agricultural activities which was found to have a significant relationship with food security and the level of significance being 5%. This shows that on average respondents expressed their confidence in responding to the level of food security in the community though there are some respondents who remained undecided especially on statements pertaining food security but the information given to the researcher has clearly been measured to show the level of food security in the community.

CONCLUSION

concluded that both men and women have little information pertaining modern farming methods the use of tractors, irrigation where most of the farmers still rely on the use of local tools like the use of hoes, axes, panggas among others in clearing the land and planting which at the end of the day limits the level of production and in turn many people in the community are able to only produce for their own consumption which is not even enough since some people can not even afford three meals per day and there is no surplus for sale.

Further still, it has been concluded that there is a significant relationship between gender roles, agricultural activities and food security where by all these have been found out to have contributed towards the problem of food insecurity in that, gender imbalances have acted upon the problem of food insecurity and poor agricultural means of production

which have also acted upon food insecurity.

RECOMMENDATIONS

A number of recommendations have been raised out of this study. They address themselves to be the findings of the study and how the study was conducted. The author also recommends on some research areas

Recommendation 1-Decision making and resource ownership

Since the study concludes that there is unequal ownership of means of production between men and women and the burden of women's domestic work as compared to men and the poor participation of men in non-farm income generating activities and the limited involvement of women in

or topics that she finds relevant and prompting for better actions and results in order to reduce or if possible to eliminate the problem of food insecurity, the following should be addressed: -

decision-making has been one of the major factors causing food insecurity then, there should be equal ownership of means of production should be addressed so as to enable women to own land and even get involved in decision making so as to increase food production.

Recommendation 2-Equal division of labour and adequate information

Pertaining the workload of women in as far as agricultural activities in terms of land preparation, planting transplanting weeding up to harvesting it has been concluded that women participate much in these activities compared to men and still women are seen to do a lot of house work at home when they are already tired from farms they again go home to do cooking, cleaning the house, washing clothes and all sorts of things

which even limits their time for agricultural activities, therefore equal participation in agricultural activities and non-agricultural activities at home should be addressed between men and women for example men also should participate much in small business so as to overcome food shortage when it happens, and reducing the burden of domestic work among women through men's participation in order to increase agricultural production.

Recommendation 3-Crop diversification

Since in this community it has been concluded that most of the crops grown are cassava and maize which sometimes are not enough for home consumption and for sale, it is good to have crop diversification. In which, apart from growing cassava and maize as the main crops, farmers in the

study area should grow other crops especially those which can persist drought like rice and sorghum and this will help households to store food for at least three years and above and further still people can be able to have many produces both consumption and for sale.

Recommendation-4: Technological advancement

Due to the fact that most of the respondents were not even aware of modern farming methods and in the interviews conducted the coordinators were giving the idea that the government is giving tractors atleast at each and every ward plus power tillers but people did not have any information about it, then it means there is need to extend services to

rural farmers and more so lowering the costs of input like fertilizer, pesticides and herbicides and also improving their technology, e.g. instead of using a hand hoe, the farmers, could use drought animals and tractors. This will enable them to cultivate a large area and hence improve food production and thus food security.

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