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SOCIAL DIVERSITY IN SEED YAM PRODUCING COMMUNITIES OF BWARI AREA COUNCIL, FCT ABUJA NIGERIA: A GENDER SITUATION ANALYSES

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ABSTRACT
This study area was Bwari Area council of FCT Abuja Nigeria, to investigate gender and social diversity issues among seed yam producing communities in the area. A multistage sampling procedure, with the use of purposive and random sampling techniques was employed to select 270 seed yam farmers belonging to three gender groups. Focus group discussions (FGD) and interviews of group leaders as key informants, using different check lists were carried out to elicit information relating to gender roles in seed yam production, decision taking, access and control over resources, yam varietal preferences and constraints to seed yam production in the study area and descriptive statistics used to analyse the responses. The result shows that all the genders groups were involved in seed yam production. However, their levels of involvement and roles differ; influenced by social and religious inclinations. Men, women and youths perform roles that are categorized into dominant, minor, complimentary and some cases, no roles. Men dominate critical roles in farm site selection, access and control of money, women do much of the labour such as hand weeding and fertilizer application, youths were more inclined to performing activities that require physical strength. Gender issues in seed yam production therefore, are important for enhanced productivity and livelihoods of the farmers in the face of social diversity existing within and among communities.

Keywords: Gender, Social diversity, Seed yam, and Communities

Introduction

Yam is one of the root crops produced in Nigeria. It is the second most important tropical root crop in West Africa after Cassava (Osunde, 2008). He further observed that, West Africa accounts for about 90 - 95% of the world's production with Nigeria producing about 70% of that quantity. Nigeria is the largest producer of yams in the world (FAO, 2013), contributing two-thirds of the global yam production each year (NBS, 2012). About 32% of the country's population depend on yams for food and income security (Mignouna *et al*., 2013.), with an average yield of 10-20t/ha using improved variety (NRCRI, 2014).Its cultivation is highly profitable despite its high costs of production and price fluctuations in the markets (IITA, 2013; Izekor and Olumese, 2010).Yam is the first most valuable food and agricultural commodity in Nigeria for the year 2012(FAO, 2014); it is also integral to the socio-cultural life in this sub region, especially in the eastern part of Nigeria, where yam is a major factor in determination of one's socio-cultural status in his community. Aside that, yam is used for marriage ceremonies as a requirement or part of the bride prize.

Yams are consumed in different forms across the country, depending on taste and in some cases, the variety available in the locations. The different forms that yam is consumed include: boiled, roasted, fried, pounded and porridge. Among the food crops belonging to the roots and tubers category, yam is one of the easiest to process into food. As a major staple food in most parts of the southern and middle belt of Nigeria where incomes are low, the consumption of all the yams produced within a season and seed availability is possible. The consumption of seed yams has contributed to the scarcity of seed yams even in the core producing communities and most of the farmers are unable to buy seed yams during the planting seasons. To remain in the business of yam production, the farmers save own seed for the next season's planting.

Many farmers retain and use about 25% of the yam harvested as planting material for next crop (Bassey,

2017). This in essence limits the farmers' ability to expand production, especially in the areas where land is not a problem. However, seeds are the foundation of agriculture and the most important input (Onunka *et al.*, 2016) in the production process of most crops, especially root and tuber crops. Yam is considered a man's crop in most communities because men claim ownership of the crop, probably because their socio-cultural status is assessed with yam, but women and youths play ample roles in the production, processing and marketing of yams. Men may not recognize some of these roles, but there is the need to bring up these roles in gender studies like this one.

Guzura (2017) defined gender as social relations between men and women. This means the socially constructed relationship between men, women, boys and girls. Thus, gender is the difference that sex makes within a society, guiding how we are to think of ourselves, how we interact with others, the social opportunities, occupations, family roles and prestige allowed to males and females. Earlier, Haralambos and Holborn (2004) postulated that gender refers to human traits linked by culture to each sex. Jhpiego (2020) described Gender as the economic, social, political, and cultural attributes and opportunities associated with being women and men. The social definitions of what it means to be a woman or a man vary among cultures and change over time. Gender is a socio-cultural expression of particular characteristics and roles that are associated with certain groups of people with reference to their sex and sexuality.

Social diversity refers to differences between categories of people in their access to and control over livelihood assets, relative wealth, livelihood security, social status, and sense of belonging to different social groups, cultural norms and beliefs (FAO, 2011). Diversity describes differences in age, gender, language, values, attitudes, cultural perspectives, beliefs, nationality, ethnic background, sexual orientation, abilities, impairments, skills, knowledge, level of education, life experience, within a group of people. While the age and gender dimensions are present in everyone, other characteristics vary from person to person and context to context (GICHD, 2014). Stine, (2017), indicated that social differentiation is common to most facets of human social life.

Social factors are important with regard to the different way in which people carry out their daily activities. Easterly and Levine (1997) had demonstrated that the ethnic diversity in sub-Sahara African countries led to a variety of growth-retarding policies, which in turn resulted in a low growth rate in the area. Annett (2000) presented a model that links social diversity and fiscal policy, based on the endogenous growth model. Those studies imply that social diversity influences production activities.

Rural communities and households are not homogeneous; social relationships, livelihood opportunities and patterns are influenced by gender and other forms of social diversity (the socially recognized differences derived from the meanings and identities ascribed to male, female, age, ethnicity, poverty, religion, culture etc. in different societies). The involvement of males and females in seed yam production activities and in different parts of the yam value chain is shaped by socially defined norms of behaviour, social roles and responsibilities. Important aspects of these relate to the division of labour among household reproductive tasks, income generating, food producing and processing activities. Others are access to assets, particularly land, for seed yam production; decision-making on seed yam production, processing, marketing, control of income and investment. This study therefore investigates gender and social diversity issues in seed yam production in the study area.

Methodology

The study location was Bwari Area Council of FCT, Abuja Nigeria. Federal Capital Territory is located within Latitudes 700 20" North of Equator and Longitudes 600 45" and 700 39". Federal Capital Territory has total land area of about 8,000sqkm with a total population of 776,298 at the 2006 census (NPC, 2006). The area is predominantly a grassy savannah region, thus has potentials to produce both root crops and tubers such as yam and cassava (Idisi *et al.*, 2019). The study employed a multistage sampling procedure to select the respondents. Bwari Area Council was purposively selected for the study due to yam production activities in the area. In the first stage, six (6) communities were randomly selected from the communities that make up the area council which include: Yaupe, Sunape, Guto, Kuzhako, Tokulo and Panunuke. In each of the selected communities, three (3) yam groups were randomly selected among the various yam groups existing in the communities in the second stage. These groups include men, women and youth farming groups. Lastly, 15 members of each group were randomly selected including their key officers giving a total of 270 seed yam farmers used for detailed study. FGDs and interviews of key informants and group members were conducted using a check lists that contained relevant questions for the different groups to elicit information relating to gender roles in seed yam production, decision taking, access and control of production resources, yam varietal preferences and constraints to seed yam production in the study area. Descriptive statistics was used analyse the responses and the results were presented in tables and charts.

Results and Discussion

Men, Women and youths in the communities participate actively in seed yam production. In most

traditional farming communities', parents allow their children go through a kind of apprenticeship programme by engaging them in farming activities as a way of teaching them how to farm. In many rural areas, agricultural knowledge and farming expertise are passed on from parents to children. However, a survey carried out in the Pacific indicates that youth feel that such advice should be provided in a more coordinated and effective way, rather than on an informal basis (PAFPNet, 2010). This result negates the perception that men dominate seed yam production and marketing in most yam producing communities of Nigeria. Youths do most of the physical activities thereby lending support to the assertion by Joelle *et al* (2009) that yams are clearly neither a woman's crop nor a man's crop and perceived gender ownership of yam crops varies widely by region and ethnic group. The roles played by the different gender groups in Bwari Area council are as shown in Table 1.

The Table shows that women dominate important activities such as hand weeding, fertilizer application, mulching, gathering of harvested yams, selling of yams in rural markets, placing seed yams on heap for planting, carrying seed and harvested yams to farm and barn, and at the same time perform domestic chores (cooking, childcare etc). Further investigations revealed that men devote about 32% of their farming time to perform those roles that they dominate in seed yam production whereas the youth use most of their own time (30%) to perform complementary roles in seed yam production. The production and marketing activities where men have strong and dominant roles include: farm site selection, provision of seed yams for planting, sorting of harvested yams, selling of yams at farm gate and keeping money from sale of yams. They also spend 35% of their participation in playing complementary roles. This implies that such activities could be carried out also by other gender groups (Table 1).

Men contribute about 26% of their involvement to play minor roles and responsibilities in some specific activities such as herbicide application, heap making, carrying yam to farm, hand weeding, harvesting, selling yam at rural markets. However, men play virtually no roles in gathering of debris, carrying seed yam to market, gathering harvested yams and mulching. Either they rather give instructions on what should be done by women or the youths because they feel these activities are not important. They use only 7% of the production time to achieve this. These are the areas where men feel that they have no physical roles to play and are not responsible for the performance of such activities. Such activities influence productivity and household incomes from yams. They include; mulching both for planted yams and harvested seed yams that are stored in the farms for next planting, gathering harvested yams and selling yams in rural markets. Such activities are left for the women and youths to perform.

Women devote more of their time (33%) playing minor roles in seed yam production. Some of these minor roles are herbicide application (they fetch water), planting, staking (supply stakes to men), sorting (gather harvested yams), trailing and land clearing. Women do not participate in keeping money from sale of yams. The youths dominate in activities that require physical strength in seed yam production in the area. Such activities as heap making, harvesting and herbicide application involve the use of physical strength. In addition, they play minor roles in some other activities as shown in Table 1. Generally, most of the time, the youths to play complementary roles. These complementary roles are performed by all the gender groups but at varying levels of commitments.

The results in Fig.1 show that men in Bwari Area Council of FCT Abuja Nigeria are more prominent in performing complementary roles in seed yam production and marketing. Women perform more of minor roles, whereas the youths are clearly shown to also perform more complementary roles like the men. This implies that the men and the youths complement each other in the roles they perform in seed yam production, with the exception of keeping money realized from sale of seed yams.

Decision taking, Access and Control of resources for seed yam production

Men dominate in household decision taking and also have access and control of all the seed yam production resources in the study area. However, their level of dominance varies according to indicators. In some cases, men exercise absolute control over, and total access to resources like land. This implies that both the women and youths depend on men in order to gain access to the use of land in Bwari Area Council. In the use of household income, men exert absolute control, but allow some level of access to women and the youths. While men have 60% access to household income, women are allowed 30%, and then the youth has only 10% (Table 2). On seed yams, men have free access and control over seed yams. This confirms men's dominant role on provision of seed yams for use in the farms. Other gender groups have restricted access as may be directed by men. On the use of labour, be it family labour, hired labour or communal/exchange labour, men also exert some sort of dominance. They use family labour at will and at the same time have 80% access to available labour in the community. This implies that to hire labour in the community, men are given preference over women and youths. The women can be considered in terms of use of communal labour if their children happen to be part of the labour force, and the youth also if they are members of the group.

Constraints to seed yam production

Constraints to yam production in the area vary according to gender (Table 3). However, the constraints show that pest and diseases, high cost of labour, poor soil fertility, low capital base, were indicated by the men, while the women are constrained by poor access to production inputs, limited freedom, farm locations that are far for them to walk on foot, no means of transportation women and family chores. The youth indicated weak control of resources, drudgery, and bad roads.

On the other hand, men find it difficult to meet family needs due to insufficient incomes from yams, the women are encumbered with family chores, and so active participation in seed yam production in most cases is difficult for them. The youths are not usually given attention or regarded to be important when their fathers are still alive. Men are not constrained by decision-making process, access and control of productive resources, culture and tradition of the people, and religious issues. This might be because in some community setting, men have the lee way. The situation with other gender groups appears to be different on the issues of decision taking, religion, culture and tradition of the people. For the women, they have little or no access and control of productive resources, restricted participation due to religion; women without children are not allowed access and control of husband's assets. The youth also have both religion and cultural constraint that influence them negatively in yam production.

Yam varieties grown and Preference

In Bwari, several yam varieties are grown (Table 4). The most popular among them include: *Gwari, Yangode, Akuchi, Maccakusa, Ame, Water yam, Didiyo, Mala, Taribe, Namuche, Shakata, Suba, Lafia, Daniche, Lagos* and*Pepa*. Some of these varieties are called different names in other surrounding area councils. However, these yam varieties have specific characteristic that influence their choice across gender. Preferences to yam varieties by men, women and youth reflect the specific interests of the gender groups in the area. For men, preferred varieties are those that are mostly high yielding and in high demand that will enhance high incomes. The women rather prefer yam varieties that are sweet to taste and easy to pound, indicating that their interest is in family consumption while men are interested in selling their yams to generate enough money for family needs. Youths are more inclined to yam varieties that are early maturing, strong, white in colour and high yielding. They need quick money and are interested in their personal needs.

Crop preferences

The farmers in the study area cultivate different types of crops. These crops are planted all year round in different seasons. Choice of crops planted depends on the particular interest of the farmer. Apart from the peculiarities associated with different crops, gender differences also exist in the choice of crops for planting. Table 5 shows the different crops planted by the farmers and their preferences by gender. The crops are ranked according to the preferences of the different gender groups with the most preferred crop ranked one and least, ten. The crop with the lowest mean is the most preferred in the community by all. The results show that men prefer yam to other crops in all the communities. Women prefer Guinea corn in most of the communities followed by Beniseed. For the youth, yam and maize are the most preferred crops in the area. Generally, yam is the most preferred crop among the gender groups, followed by maize and guinea corn.

Conclusion

Gender issues in seed yam production are important towards improving the productivity and livelihood of the farmers in the face of social diversity existing within and among communities. This need to be fully understood by all actors along the yam value chain in order to ensure that all the gender groups are given equal opportunities to express their potentials. Some of these gender issues have both direct and indirect relationships with culture, traditional and religious believes that tend to affect productivity. However, in the affected communities of Bwari Area council of the FCT, Nigeria, all the gender groups participated actively in seed yam production, but differences exist in the individual roles they play in the production and marketing process, decision taking, access and control of productive resources, household income, and varietal preferences etc. Therefore, gender considerations are important in determining the needs of the farmers. In developing interventions for seed yam production in the rural communities, gender base peculiarities need to be considered which would lead to increase outputs and incomes for farmers.

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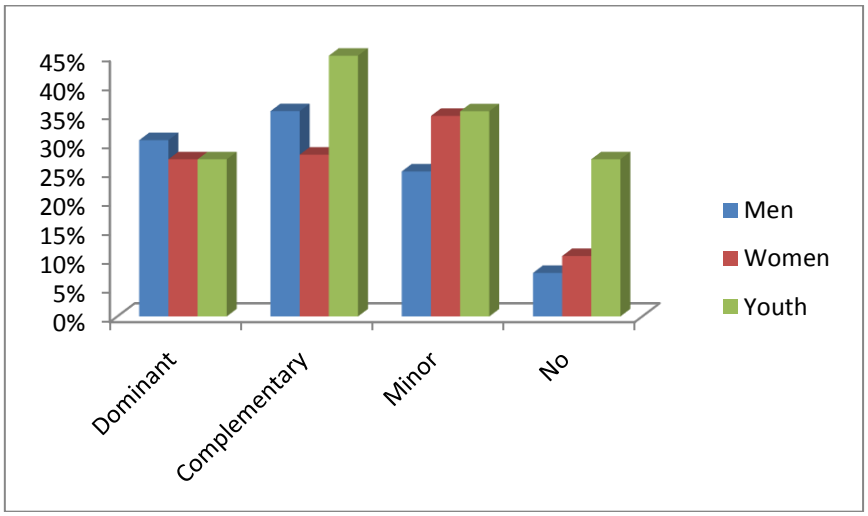

Fig. 1: Gender roles and responsibilities in seed yam production and marketing in the study area

Table 1: Gender disaggregation of roles in seed yam production and marketing in the study area

	Men	**Women**	**Youth**
Dominantroles	-Farm site selection -Land clearing -Provision of seed yams for planting -Sorting of harvested yams -Selling of yams at farm gate -Keeping -money from sale of yams ***Men use 32% of their farming time to perform these roles***	-Hand weeding -Fertilizer application -Mulching -Gathering of harvested yams -Selling of yams in rural markets -Placing seed yams on heap for planting -Carrying seed yams to farm -Carrying harvested yams to barn -Domestic Chores (cooking, childcare etc) ***Women use 30% of their time on this***	-Heap making -Herbicide application -Harvesting ***Youth use 27% of their available time to perform these activities***
Minor roles	-Herbicide application -Heap making -Carrying yam to farm -Hand weeding -Harvesting -Selling yam at rural market ***Men use 26% of their farming time to perform these roles***	-Herbicide application -Planting -Staking -Sorting -Trailing -Land clearing ***Women use 33% of their time on this***	-Farm site selection -Land clearing -Sorting -Selling of yams in rural markets -Placing seed yams on heap -Planting -Hand weeding ***Youth use 23% of their available time to perform these activities***
No roles	-Gathering of debris -Carrying seed yam to market -Gathering harvested yams -Mulching ***Men use 7% of their farming time to perform these roles***	-Keeping money from sale of yams -Selling yams at farm gate ***Women use 10% of their time on these roles***	**-Keeping money from sale of yams** -Provision of seed yams for planting ***Youth use 20% of their available time to perform these activities***
Complimentary roles	Planting, Staking, Trailing, Mulching, fertilizer application, placing seed yam on heaps, Burning of debris **% Time used to play complimentary roles:** **Men; 35%** **Women; 27%** **Youth; 30%**		

Source: Field survey, 2015

Table 2: Decision making, access and control of seed yam production resources

Indicators	Men	Women	Youth
Decision Taking	Men take 80% of the decisions in seed yam production and marketing	Women contribute 13% to decisions concerning seed yam production and marketing	The contributions to taking decision from the youths is minor, as they have only 7% influence on decision taking
Access and control over **land**	**Total access** and control over farm land for seed yam production	**No access** and control over land for seed yam production. Completely subject to the man's permission	**No access** and control over land for seed yam production. Completely subject to the man's permission
Access and control over **Household Income**	Absolute control over Household Income from yams, but 60% Access	No control, but have 30% Access	No control, but have 10% Access
Access and control over **Credit**	Have 60% access and control	Have 25% access and control	Have 15% access and control
Access/control over **fertilizers**	Have complete access but 60% control	Have limited access but 20% control	Have limited access but 20% control
Access and control over **Seed Yam**	Men have free access and control of seed yam	Restricted access (30%) and no control over seed yam	Restricted access (30%) and no control over seed yam
Access and control over use of **Herbicides**	Have both accesses (50%) and control (80%)	Limited access (10%) and No control	Have both accesses (40%) and minimal control (20%)
Use of **family labour**	Always available for use at will. 60% of family labour available is utilized by men	Not Available for use at all the time. 25% of family labour available is utilized by women	Scarcely available for use. 15% of family labour available is utilized by youth
Use of **Hired labour**	Men have 80% access to available labour in the community and control the use of hired labour in the household	Women have 10% access to available labour in the community and no control the use of hired labour in the household	Youths have 10% access to available labour in the community and minimum (20%) control the use of hired labour in the household
Use of **communal or exchange labour**	50% access and control of communal or exchange labour	35% access and control of communal or exchange labour. This is however dependent on the presence of her children, membership of the group and if she is a widow	15% access and control of communal or exchange labour. This is however dependent on the membership of the group

Table 3: Constraints to seed Yam production by gender in Bwari Area Council

Items	Men	Women	Youths
General	-Pest & diseases -High Labour cost -Low Capital base -Low soil fertility -Scarcity of fertilizer -Weak access to credit -High cost of herbicides	-Poor access to inputs -Storage facility -Transportation -Limited freedom -Location of farms -Family chores	-Pest and diseases -Bad roads -Lack access to resources -Weak control of resources -Drudgery -Low soil fertility -Scarcity of fertilizer
Roles/responsibilities	-Difficult to meet family needs	-Family chores and active participation is too much	-No much attention if father is still a life -Too much errands
Access and control of resources	None	No access and control of critical yam production resources	Weak access and control of resources
Decision taking	None	Contribute little to final decision (17%)	Contribute little to final decision (7%)
Cultural and traditional	None	Barren women have no access and control of husbands resources	Unmarried youths have little access and no control
Religious	None	Religion forbid women leadership roles causing Limitations to full participation	None
Social	Mostly Poor	Poor	Poor

Table 4: Yam varietal preferences by gender in the study area

Gender Group	Preferred yam varieties	Reasons for preference
Men	Yangode, Mala, Gwagwa, Maccakusa and Suba	High yielding, Storability, Early maturing, Good for pounding and High demand
Women	Shakata, Yangode, Ame, Maccakusa and Suba	Sweet taste, Soft to pound, Low starch, Storability
Youth	Taribe, Yangode, Gwagwa, Maccakusa and Suba	High yielding, Early maturing, Strong, Sweet taste, White and high demand

Table 4: Gender Differentials in Crops preferences

Crops	Guto			Kuzhako			Yaupe			Sunape			Tokulo			Panunuke			
	M	W	Y	M	W	Y	M	W	Y	M	W	Y	M	W	Y	M	W	Y	**Av**
Yam	1	2	2	1	4	1	1	3	1	1	4	1	1	2	1	1	4	2	**1.8**
Guinea corn	2	1	-	4	1	3	3	1	4	4	1	5	3	7	8	5	1	3	**3.3**
Maize	3	-	4	2	3	2	2	5	3	3	5	2	2	6	5	2	3	1	**3.1**
Beans	6	-	8	9	5	7	9	10	8	6	-	7	8	5	-	4	-	6	**7.0**
Rice	5	6	-	-	-	5	-	-	-	-	-	-	-	-	6	-	-	-	**-**
Cassava	4	5	3	3	8	9	6	4	7	8	9	-	4	3	-	9	6	9	**6.0**
Tomato	8	8	1	-	-	8	4	-	5	5	6	4	-	-	-	3	5	5	**5.2**
Sweetpotato	-	-	10	6	7	-	7	8	-	9	--	10	5	-	7	10	8	-	**7.9**
Garden Egg	-	-	9	-	-	-	-	-	6	7	-	9	-	-	-	-	-	-	**-**
Pepper	-	9	7	-	-	10	-	7	-	-	10	-	-	10	-	-	-	-	**-**
Beniseed	-	4	5	7	6	6	-	2	9	-	2	6	-	1	4	-	2	-	**4.5**
Groundnut	9	-	-	5	2	4	5	9	2	2	7	3	6	4	2	8	7	-	**5.0**
Cowpea	-	10	-	8	-	7	-	-	-	-	-	-	-	-	-	-	-	-	**-**
Mellon	10	-	-	-	-	-	-	6	10	-	3	8	-	9	10	-	10	-	**8.3**
Water Mellon	-	-	6	-	10	-	-	-	-	-	-	-	10	-	-	-	-	-	**-**
Plantain	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	7	-	-	**-**
Ginger	-	-	-	-	-	-	10	-	-	10	8	-	7	-	3	6	9	4	**7.1**
Sugar cane	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	-	-	**-**
Okra	-	-	-	10	9	-	-	-	-	-	-	-	-	8	-	-	-	-	**-**
Millet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	**-**