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GENDER CONSTRAINTS IN SMALL-HOLDER COCOYAM PRODUCTION IN ENUGU NORTH AGRICULTURAL ZONE OF ENUGU STATE NIGERIA

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Abstract

The study presents the results of analysis of data collected on 120 cocoyam farmers (60 females and 60 males) across the two Agricultural blocks in Enugu North Agricultural Zone using the multi-stage randomized sampling technique. Descriptive statistical tool (percentages) was used in analyzing farmer's production problems. The survey reviewed that most of the farmers (males and females) encountered problems of root rot disease as a result of storage and lack of storage facilities. Both farmers encountered the problem of limited land, labour unavailability lack of credit facilities, distance from farm to market, pest and diseases etc. These constraints constitute serious impediments to cocoyam production and need to be addressed adequately through policy advocacy.

Introduction

Cocoyams (*colocasia* and *xanthosoma* spp) are stem tubers that are widely cultivated in both tropical and sub-tropical regions of the world. Both are important crops in Hawaii, Japan, Ghana and Nigeria (Iwuoha and Kalu, 1995). Cocoyam is mainly cultivated by peasant farmers especially in Nigeria, (Knipscheer and Wilson 1980). There are about nine cultivars of cocoyam identified in Nigeria, (NRCRI, 2002) namely NXs 001, NXs 002, NXs 003, NXs 004, NCe 002, NCe 003, NCe 004, NCe 005 and NCe 006. NXs series belongs to the *colocasia* spp and NCe series to *xanthosoma* spp.

Research efforts by NRCRI established that cocoyams have yield potentials of 30-60tonnes/ha which indicate that there is much room for improvement on the farmers output through research and development of the crop. Also, improvements on the listed farmers' practices have gradually commenced at both NRCRI and International Institute for Tropical Agriculture (IITA) Ibadan, Nigeria. The first step in assessing the usefulness of innovations to cocoyam farmers is to determine the major constraints militating against the effective use of these cultivars. Earlier studies by Dorp and Rulkens (1993), Agwu (2002), Springer et al., (2002) and Kimenju et al., (2005) show that farmers decision to use a particular crop cultivar were influenced by a number of reasons, some of which are market-driven or socio-culturally based.

Ogbimi and Williams (2000) assessed the availability of productive resources to women in agricultural production. They stressed the problem associated with the timely availability of productive assets such as land, credit facilities, improved farm/inputs/farm practices, extension services, transportation, and storage facilities. This study, therefore, sought to determine the constraints in production of cocoyam across gender in Enugu North Agricultural Zone of Enugu State, Nigeria.

Methodology

The study was carried out in Enugu North Agricultural Zone of Enugu State. Enugu North Agricultural Zone is made up of eight (8) blocks which include Nsukka I, Nsukka II, Igbo- Etiti, Igbo-Eze South, Igbo-Eze North, Uzouwani I, Uzouwani II and Udeno. Within the zone, two blocks (Nsukka I and Igbo- Eze South) were purposively selected for the study based on cocoyam cropping intensity. Enugu North Agricultural zone is situated on gentle slope with hills and valleys and located between latitude 7^o 2¹ S and 7^o 36 East and longitude 6^o 45 and 7^o North, (Ezike, 1998). Rainfall distribution is between 1680mm-1700mm. The area has tropical climates marked by two distinct seasons. The dry season occurs between November and April; while the rainy season begins in April and last till October. Temperature ranges between 39^oC. and 44^oC. The vegetation is of derived savannah and people in these areas are predominately farmers; farming constitutes their major economic activity. However, some of the urban areas like Nsukka town have more civil servants and petty traders who also farm on part time basis. There predominate crops include cassava, maize, cocoyam, yam, vegetable and others. Multi-Stage random sampling techniques were adopted for the study. In the first stage, two blocks were selected. Three (3)

circles were randomly selected from each block. One sub-circle was selected from each circle selected, and finally 10 female and 10 male farmers were interviewed. This gave a total of 120 farmers or respondents. Data were collected from the respondents using structured interview schedule which was distributed to small-holder farmers. Descriptive statistics (percentages) was used to analyze farmers' production problems.

Results and Discussion

Table 1 presents the constraints/factors facing the small-holder cocoyam male and female farmers in the zone. The results show that male farmers encountered the following problems: limited land (98:33%), distance from farm to market (83%) non-availability of labour (88%), low price of product (88%), poor infrastructural facilities (88%), poor storage facilities (86%), high cost of information (90%). The female respondents encountered; limited land (90%), from farm to market (90%), non-availability of labour (90%), low price of product (86%), poor infrastructural facilities (90%), poor storage (100%), high cost of setts (planting materials) (93%), low soil fertility(89%),lack of market information(90%). The results indicate that most of the farmers faced these problems. Majority (100%) of the female respondents experienced rot and decay of cocoyam during storage and 98% of the male respondents encountered this problem also. This agrees with findings of Nwauzor, (2001) that rot had earlier been identified as one of the problem which militate against maximum production of cocoyam. Breeding programmes may help to eliminate or minimize some of these problems of rot and disease of cocoyam in storage. Storage problem received (100%) for the male farmers and 86% for the male farmers. Njoku (2008) reported that for any strategy developed for achieving sustainable crop production by small holder farmers in the 21st century must tackle the problem posed by the following inputs; inputs supply, storage facilities, production facilities and access to credits.

Table 1: Distribution of Male and Female Respondents According to Production Problems.

	Female		Male	
	Percentage%	Rank	Percentage%	Rank
Root and decay during storage	100	1	98.33	1
Poor storage facilities	100	1	86.67	8
Lack of credit	93.33	3	90.00	4
Pest and diseases	93.33	3	81.67	14
High cost of planting materials	93.33	3	85.00	9
Limited land	90	6	98.33	1
Distance from farm to market	90	6	83.33	10
High cost of labour	90	6	83.33	10
Poor infrastructural facilities	90	6	83.33	10
Lack of market information	90	6	90.00	4
Poor knowledge of technology cocoyam	86.67	11	75.00	15
Labour unavailability	83.33	12	95.00	3
Low price of product	83.33	12	83.33	10
Low soil fertility	83.33	12	90.00	4
Lack of extension contact	70	13	70.00	17
Poor feeder roads	70	13	90.00	4
Lack of fund to invest	33.33	17	75.00	15

Source: Field Survey, 2008

Conclusion

The study indicated that most of the farmers (males and females) encountered most important problems such as; root rot disease as a result of storage and lack of storage facilities. Others were; limited land, labour unavailability, lack of credit access and pest and diseases. However, cocoyam production is yet to be maximized since several constraints still limit its production. These constraints constitute serious impediments to cocoyam production and need to be addressed adequately through policy advocacy. Government should encourage cocoyam based Research programmes, the National root crops Research Institute Umudike, Universities and agro-based industries to carry out genetic improvement research on land races that are hardy and less susceptible to diseases and pest attack.

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