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# **GENDER PRODUCTIVITY DIFFERENTIALS IN SOUTH GUNIEA SAVANNAH REGION OF NIGERIA: A CASE STUDY OF DROUGHT TOLERANT MAZE VARIETY ON-FARM TRIALS**

**BY**

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## INTRODUCTION

## RESULT AND DISCUSSION

Empirical evidences have shown that the use of Drought Tolerant (DT) maize varieties stabilize maize yields in drought prone ecologies and also increase land area cultivated to maize. The drought tolerant maize varieties are especially targeted towards the poor and resource limited farming household in the more marginal rain-fed agricultural areas. This resource limited farmers include rural women. Rural women are responsible for up to 60 to 80 percent of food production in developing countries, yet they are often underestimated and overlooked in technological innovation, policies and strategies. Despite women's role as key players in the agricultural sector, men have continued to dominate farm decision making, which could be counter-productive, due to conflicts that arises when women are not involved in the decision process. Men and women within households do not have the same preferences nor pool their resources. This has important implications for productivity. This necessitate gender inclusion in agricultural research. The rationale for considering gender in agricultural research relates to agricultural productivity, food security, nutrition, poverty reduction and empowerment. In all of these cases, women play a critical, but often under-recognized role and face greater constraints than men. Recognizing this sets the stage for identifying ways that the agricultural research system can redress these problems and contribute to productivity and equity.

The study revealed that there is low involvement of women farmers on On-farm trials and demonstration. This may be due to cultural effect and low access to farming inputs. The study revealed that both men and women farmers ranked the ST maize varieties as the best at all locations. Results indicate that lower productivity is persistent from female-owned on-farm trial plots. And Farm size, income for inputs acquisition and gender are drivers of productivity differences.

## OBJECTIVES

The general objective of the study is to investigate gender differences in maize productivity using panel data collected from on-farm trials from 2012 to 2015 in South Guinea Savannah region of Nigeria. The specific objectives are to: (i) elicit varietal preference by men and women; (ii) compute and compare maize farm productivity by men and women; (iii) evaluate the determinants of the gender productivity differences.

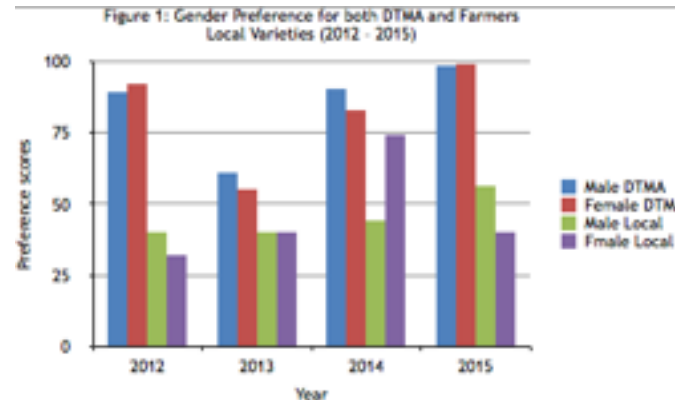


Table 2: Determinants of productivity of male and female farmers

Variables	B	std Error	Sig
Constant	2351.644***	672.60	0.001
Gender	-492.777***	164.838	0.003
Age	-20.471	14.300	0.155
Income from other sources	-0.026***	0.005	0.000
Farm size	260.180***	36.872	0.000
Access to improved seed	35.240	180.990	0.846
labour availability	21.885	18.630	0.242
year of schooling	-19.363	14.672	0.189
years of society membership	52.038	31.642	0.102

Table 1: Result of Propensity Score Matching of male and female productivity

Variables	Treatment Effect	Coefficient	Std error	Z-Value
Male	ATT	447.214***	53.559	8.35
	ATE	387.463***	83.446	4.64
Female	ATT	297.583***	59.876	4.67
	ATE	326.378***	107.656	3.03

## Policy Implication

The study recommends that programmes and policies that will encourage women farmer involvement in the development and testing of agricultural innovations and increase their income should be implemented across the country in order to ensure food security and enhanced agricultural productivity.

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