Determinants of choice of Farming Techniques among rural women in Eastern Uganda

Context to the study
- Improving the quality of life of people requires paying particular attention to the poorest (rural women).
- The farming techniques that rural women employ should establish some level of stability in their way of life to warrant access and ownership of land and other farm inputs.
- The study seeks to establish the farming techniques that rural women employ.

Summary of Findings
- Farmers with more years of experience and older in age are more likely to use traditional farming techniques than those with fewer years of experience.
- The annual income, land owned and annual income from other jobs of farmers who made use of modern techniques was found to be significantly higher than that of farmers who did not make use of these techniques.
- The age, experience, male-headed households, land owned, and taking on farming as the primary job was significantly correlated to the farmer using traditional farming techniques.

Introduction
Farming techniques which refer to the practices followed in farming such as diversification of crops, changing cropping calendars, chemical pest control, the use of organic manure, fertilizers, fallowing, high yielding seeds, irrigation, intercropping, crop rotation, agroforestry, and polyculture are essential for profitable agriculture (Adetoye, Okojie, & Akerele, 2017; Farid, Tanny & Sarma, 2015; Mwangi & Kariuki, 2015).

Studies have majorly focused on farming and sustainable livelihoods more generally. There is limited attention to why rural women continue living poorly, and yet there are farming techniques to boost farming production and improve livelihoods. This presents critical implications in development planning, which is often ignored. There is a false assumption that 'introduction of new farming techniques results in improved farm production, which automatically translates to improved wellbeing'; this is not the case because rural women's ability to utilize different modern and traditional techniques is a key determinants. This study aims to;

- Examine, using multivariate Probit regression the factors that determine the choice of farming techniques utilised by rural women in Eastern Uganda.

Summary of Research
Primary data was collected from rural women engaged in agriculture in February 2020 in the districts of Kapchorwa and Budaka. All rural women in the selected sub counties were eligible to take part in the study.

Research Findings
As for farming techniques, more women made use of traditional farming techniques compared to modern ones (Figure 1).

The mean age of the farmer who employed traditional techniques was 45.6 years which is 12 years higher than those who did not use this technique. The results further reveal that the mean farming experience for the farmers who use and on-users of traditional techniques was 26.5 and 9 years. The income from other jobs was also found to have a significant effect on the use of traditional farming techniques. As for the modern techniques, annual income from farming, income from other jobs, and land ownership were found to be significantly correlated with the use of modern farming techniques at 10% while the income from other jobs was also found to be significantly correlated to modern techniques, with the mean annual income from other jobs for non-users being higher than that of the users.
The age of the farmer was found to be negatively and significantly correlated with modern farming techniques. An increase in the farmer's age by 1 year reduces the probability of the farmer making use of traditional techniques by 7.2%. The farmers' experience in farming had a positive and significant (1%) effect on the use of traditional techniques. The results reveal that a 1-year increase in the farmers' experience increased the probability of the farmer using traditional farming techniques by 15.8%. Male-headed households have a significant effect (5% and 1%) for traditional and modern farming techniques. However, this correlation is negative in nature. Further still, having farming as the primary source of employment was significant and negative (5%) for traditional techniques but positive (1%) for modern techniques. The land owned (acres) was found to be significantly (1%) and positively correlated with the use of modern techniques by the farmers. A unit increase in the acreage owned was found to increase the probability of the farmer using modern techniques by 3.9%.

Policy Recommendations

1. The government policy could aim at upgrading the skills of extension agents to increase efficiency in the dissemination of innovations hence, boost the adoption rate. Extension officers must also be well motivated to regularly visit and monitor the progress of female households.
2. Based on the findings the study recommends coordinated effort by the policymakers to promote productive soil and water conservation measures through the adoption of minimum field operations and other conservation practices, to improve soil fertility and water holding capacity among these rural women.
3. There is need to involve both males and females to participate in women empowerment programmes so as not to place the concerted efforts of women empowerment programs down the drain.

References