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Farmers’ and academia’s views”

The effects of agricultural programmes on the adoption of climate-smart agriculture and food security in zimbabwe

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Abstract

Predominantly rainfed farming systems have succumbed to the devastating impacts of climate change in Sub-Saharan Africa and particularly in Zimbabwe. The land and agricultural productivity are below potential in smallholder areas, and these constraints are increasingly impending food security and farm sustainability achievement. Relevant policy programmes have a more significant implication underlying support to farmers in land-use strategies, adaptation to climate variability, enhanced agricultural yields, and food security. To address these challenges, the Zimbabwean government implemented the Zimbabwe Livelihoods and Food Security Program (LFSP) Pfumvudza and the Special Maize for Import Substitution Scheme (SMPIS). Therefore, the study aimed i) to investigate the farmers’ perceived benefits of Agriculture Input Support (AIS) programs, ii) the effect of agricultural programmes on household food security, and iii) to determine the factors that affect the adoption of climate-smart agricultural practices (agroforestry, improved seed varieties, crop rotation, and planting basins). A survey questionnaire of one hundred and nine (109) respondents using face-to-face interviews was conducted in the Goromonzi district of Zimbabwe. Improved seed varieties and planting basins were the most adopted climate-smart agricultural practices, with 96.3 % and 91.7 %, respectively. Further findings indicated that improved household food consumption and increased crop yields were the main perceived benefits of the programs. The food consumption score showed that 53 % of the farmers belonged to the acceptable food security category. A binary logistic regression model revealed that participation in farmer field schools, cooperative membership, extension services, farmer to farmer, radio, years of education, and household size significantly, and positively influenced the adoption of programmes and climate-smart agricultural practices. At the same time, the male-headed households were found to be the primary adopters. It is, therefore, critical to encourage and strengthen the collaboration of local farmers’ authorities and the government, in formulating, empowering, monitoring, and implementing ecological programs. Thus, promoting the adoption of a combination of suitable climate-smart agricultural practices, enhancing agricultural yields, sustainability, and food security.

Keywords: Adoption, Climate-smart agriculture, food security, input support, Pfumvudza, programs, sustainability

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