Post-harvest Handling Practices and Technologies Harnessed by Smallholder Fruit Crop Farmers in Vhembe District, Limpopo Province, South Africa

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Abstract: Post-harvest losses pose a serious challenge to smallholder fruit crop farmers, especially in the rural communities of South Africa, affecting their economic livelihoods and food security. This study investigated the post-harvest handling practices and technologies harnessed by smallholder fruit crop farmers in the Vhembe district of Limpopo province, South Africa. Data were collected on a random sample of 224 smallholder fruit crop farmers selected from the four municipalities of the district using a multistage sampling technique. Analytical tools employed include descriptive statistics and the tobit regression model. A descriptive analysis of farmers' socioeconomic characteristics showed that a sizeable number of these farmers are still in their active working age (mean = 52 years) with more males (63.8%) than their female (36.2%) counterparts. Respondents' distribution by educational status revealed that only a few of these had no formal education (2.2%), with the majority having secondary education (48.7%). Results of data analysis further revealed that the prominent post-harvest technologies and handling practices harnessed by these farmers include using appropriate harvesting techniques (20.5%), selling at a reduced price (19.6%), transportation consideration (18.3%), cleaning and disinfecting (17.9%), sorting and grading (16.5%), manual cleaning (15.6%) and packaging technique (11.6%) among others. The result of the Tobit regression analysis conducted to examine the determinants of post-harvest technologies and handling practices harnessed showed that age, educational status of respondents, awareness of technology/handling practices, farm size, access to credit, extension contact, and membership of association were the significant factors. The study suggests enhanced awareness creation, access to credit facility and improved access to market as important factors to consider by relevant stakeholders to assist smallholder fruit crop farmers in

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