Knowledge, attitudes, and practices of farmers on production and consumption of the biofortified NUA 45 sugar beans in Makoni District, Zimbabwe

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Abstract

This study examines the knowledge, attitudes, and practices of farmers regarding the production and consumption of the biofortified NUA 54 sugar beans in Makoni district, Zimbabwe. Staple food crops typically have low micronutrient levels, leading to potential deficiencies among individuals whose diets lack diversity. Biofortification is a scientific strategy that enhances the micronutrient content of staple crops through selective breeding. A notable example is the development of iron-biofortified beans, which address nutritional deficiencies and improve dietary iron intake. This study aimed to evaluate farmers' knowledge, attitudes, and practices in the Makoni district of Zimbabwe concerning the production and consumption of biofortified NUA 45 sugar beans. A total of 299 respondents were interviewed through household surveys, and four focus group discussions were conducted to gather comprehensive data on these aspects. The findings demonstrate that farmers in the Makoni district possess a high level of knowledge regarding biofortified crops. Moreover, there is significant acceptance, extensive production, and notable consumption of NUA 45 sugar beans among these farmers. The growing recognition and popularity of biofortified crops, such as NUA 45 sugar beans, potentially contribute to enhanced nutrition and food security in the region. Understanding what farmers know, how they feel, and what they do about NUA 45 sugar beans can help fill in gaps in our knowledge, encourage the use of biofortified beans as a way to combat malnutrition, and assist Extension Services in creating training and support programs that are specific to the needs of farmers.