Indigenous Farming Strategies Used by Smallholder Farmers to Adapt to Climate Extremes in Limpopo Province, South Africa

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Abstract: From generations to generations, traditional farming systems have supported indigenous populations across the globe. In rural areas where communities primarily depend on farming activity for their livelihood, traditional farming has long been the main source of livelihood. This study seeks to examine the traditional agricultural techniques and agrarian resilient methods to adapt to climate change employed by smallholder farmers in Limpopo Province. The study used participatory appraisal for primary data gathering and was further complemented by qualitative and quantitative techniques. Data for this study were gathered through focus groups, questionnaires, and semi-structured interviews. A sample of 300 Indigenous farmers was chosen for the three survey sites. The results showed that to increase household food security and adapt to climate change, local farmers rely on using indigenous farming techniques. The findings indicated that traditional practices of crop productivity can be increased and climate change stock effects lessened by intercropping, crop rotation, cover crops, traditional organic composting, integrated crop-animal farming, indigenous ploughing, and rainwater harvesting. The significance of these findings lies in their potential to guide the development and execution of suitable resilient initiatives that adapt to shifts in rural landscapes, agriculture, and management. The study illustrates how important indigenous knowledge is to rural communities' agricultural industries. Additionally, it offers proof that indigenous knowledge should be viewed as a cooperative idea that supports resilience tactics and nature-based solutions that have helped rural communities endure.

Keywords: traditional farming strategies, limpopo province, climate change, smallholder farmer, rainwater harvesting

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