# Chapter 10 Agricultural Marketing Dynamics in the Face of Climate Change: Insights of Rural-Based Cash-Crop Emerging Farmers

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## ABSTRACT

Climate change is instrumental for agricultural performance, with its production and marketing being the leading cores. Although numerous climate change adaptive strategies have been identified, there is a need to explore how climate change impacts agricultural marketing. The focus of the study was to investigate the agricultural marketing dynamics brought by the impact of climate change among ruralbased emerging farmers. The study was conducted in the Vhembe district of the Limpopo province. A simple random sampling technique was used to select the participants, while a structured questionnaire was used to collect data. Discriminant analysis was used to draw a distinct difference between farmers who had observed the impact of climate change on their marketing dynamics from those who didn't. The study results show that unstable selling prices have been a negative impact of climate change on the market. The study recommended that collaborative efforts be directed toward assisting farmers in enhancing their marketing practices.

## Inroduction

Agriculture relies on climate, with its performance significantly influenced by climatic conditions. A study conducted by Hristov et al. (2021), revealed that climate change has substantial negative impacts on agricultural performance, including yields and sales volumes. Also, agricultural development has been significantly influenced by the performance of agricultural marketing. It has also been noted that

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the marketing function should be an integral part of accelerating agricultural growth. A study by Tshikororo et al. (2021) ascertained climate change as a global phenomenon that has been of great concern as it continuously contributes to food insecurity and increased malnutrition, particularly in developing countries.

Agriculture is highly affected by climate change; hence unfavourable climatic changes bring undesired shocks to the sector. It has been noted that climate change will continuously impact agricultural production negatively (Kogo et al., 2018). It has also been noted that agricultural supply chain systems are disrupted by climate change, with farm production, marketability, processing, retailing, and human consumption being among other vital areas that suffer the most (Godde et al., 2021). Agricultural markets have been hampered by the impacts of climate change, with most farmers severely affected at the farm level. Consequently, farmer productivity has been significantly challenged, leading to poor market performance (Zabel et al., 2019).

A study conducted by Zhang et al. (2020) discovered that fluctuations in agricultural commodity prices have negatively obstructed society in its bid for food security in recent years. Despite climate change negatively impacting agriculture, population growth has mounted severe pressure on the agricultural sector. Whereas there is a need to ensure food and nutritional security for humankind, these have been negatively impacted by climate change over time (Malhi et al., 2021). The future of rural livelihoods hangs in the balance through agricultural uncertainties brought by the impacts of climate change (Yalew et al., 2018). Forecasting agricultural commodity prices is essential for market performance and the sustainability of both farmers and agribusiness firms (Manogna and Mishra, 2021). Farming has become a considerable risk, mainly due to the impacts of climate change, which contributes to higher interest rates by financial institutions. Ultimately, farmers are mostly limited to effectively adapting to climate change for remaining competitive in the market (Nyoro, 2019). The author further outlines the frequent change in market information with farmers failing to access such information timely being disadvantaged. The marketability of agricultural products harvested under severe climatic changes has proven costly; with fewer resources leading to farmers losing their marketing share (Rasul et al., 2021).

In a study conducted by Seppelt et al. (2014), it was revealed through projections of climate change that agricultural productivity growth is unlikely to continue; on the other hand, it has been noted that prices of agricultural produce have been dropping gradually, mainly due to products quality concerns (Kastner et al., 2012). In comparison, a study by Tilman et al. (2011) has emphasized the common trend of climate change is a threat to food security, especially for the poor. It has been noted that the change in drought and flood occurrence threaten food security (Gomez-Zavaglia et al., 2020). Emerging farmers were the focal point of the present study in that they are the epitome of the rural economy and vital players in food security, yet the most affected group of farmers by climate change. Therefore, this chapter precisely unpacked agricultural marketing dynamics resulting from the impacts of climate change.

## CONTEXT OF THE PROBLEM

As noted above climate change has severely impacted the agricultural chain through its critical determinants, such as unfavourable weather patterns, which influence numerous agricultural operations. Marketing of agricultural produce has been left in a dire situation because of climate change, with diminishing world prices of agricultural commodities and increasing prices of agricultural inputs being other negative impacts of climate change felt in agricultural markets around the globe (Nyoro, 2019). 20 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/agricultural-marketing-dynamics-in-the-face-ofclimate-change/320569

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