



# Resilience Metrics in South African Agricultural Supply Chains Amid Climate Variability

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## Abstract

This Data Descriptor focuses on supply chain resilience in South African agricultural sectors under climate variability. Resilience metrics were derived from a comprehensive analysis of historical climate data and agricultural production records across various regions. These metrics include indicators such as yield variability, water stress indices, and market price fluctuations. A key finding is that the resilience of supply chains varies significantly by region, with coastal areas showing higher vulnerability due to increased frequency of extreme weather events. The study highlights the need for tailored adaptation strategies at regional levels to enhance agricultural sector resilience in South Africa. Specific recommendations include developing climate-resilient crop varieties and improving irrigation systems in vulnerable regions. Agricultural supply chains, climate variability, resilience metrics, South Africa

**Keywords:** *African geography, climate variability, supply chain management, risk assessment, vulnerability analysis*

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