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Impact of the Fourth Industrial Revolution on Food Security in South Africa

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Abstract : This paper investigates the relationship between the Fourth Industrial Revolution and food security in South Africa. The Ordinary Least Square was adopted from 2012 Q1 to 2021 Q4. The study used artificial intelligence investment and the food production index as the measure for the fourth industrial revolution and food security, respectively. Findings reveal a significant and positive coefficient of 0.2887, signifying a robust statistical relationship between AI adoption and the food production index. As a policy recommendation, this paper recommends the introduction of incentives for farmers and agricultural enterprises to adopt AI technologies -and the expansion of digital connectivity and access to technology in rural areas.

Keywords: Fourth Industrial Revolution, food security, artificial intelligence investment, food production index, ordinary least

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