Economic impacts of climate change: A micro-level evidence from Nigerian rice agriculture

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Abstract

This study employed the Ricardian approach to test the relative importance of climate normals (average long-term temperature and precipitation) in explaining the value of farm land used for rice production under irrigation and dry land conditions. A survey was done by interviewing 1200 rice farmers from 20 rice producing states in Nigeria. The states cover all the six geopolitical zones in the country. The results indicate that increase in temperature will reduce land rent per hectare for dry land rice farms while it increases the land rent for irrigated rice farms. Increase in precipitation on the other hand will cause a rise in land rent for both dry land and irrigated rice farms. The results clearly demonstrate irrigation as a significant techniques used by the farmers to adapt to the climate change.

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