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## Factors Affecting the Resilience Capacity of Rice Farmers in Ogun and Niger States, Nigeria

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## Abstract

Rice is important to the Nigerian population as a means of livelihood for the producers and as a major part of urban and rural food consumption and expenditure. In 2017, Nigeria produced approximately 9.86 million tonnes of rice paddy generating more income for Nigerian farmers than any other cash crop in the country. With the global challenge of climate change particularly to agriculture and rural farmers, attention has been drawn towards the resilience of rice farmers in Nigeria being in Sub-Saharan Africa. The region is listed as prone to adverse effects of climate change. This has led to the alarming prevalence of food insecurity. For Ogun and Niger States in Nigeria, using data from the General Household Survey (GHS) of the World Bank, variables required to estimate the resilience pillars and the food security indicators were constructed with a factorial analysis model and fed into the structural equation model for the resilience capacity index (RCI) using the Resilience Index Measuring Analysis (RIMA II) framework. In estimating the factors influencing resilience, results for the first wave (2010) suggest that having electricity, independent household members (individuals between the ages of 15 and 65), spending more on food as well as having a female as a household head significantly influence better resilience of rice farmers in Nigeria. In the second wave (2012), results suggest that having electricity, good housing, scholarships, independent household members, higher monthly food expenditure as well as having a female household head significantly influence resilience of rice farmers in the study area while results from the third wave (2015) suggest that having electricity, owning land, independent household members, as well as higher monthly food expenditure significantly influence resilience of rice farmers in the study area. This study identified areas of interventions for building the resilience of the livelihoods of rural rice farmers in the study area and recommended that programs should focus on enhancing basic services, environmental sustainability; improving the management of natural resources of land and water as well as promoting equitable access to these resources by every member of the community.

Keywords: Climate change, Nigeria, Resilience, Rice

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