



**CRUDE OIL PRICE SHOCKS AND AGRICULTURAL PRODUCTIVITY IN NIGERIA (1987-2020): EVIDENCE FROM NON-LINEAR AUTO REGRESSIVE DISTRIBUTED LAG AND GRANGER CAUSALITY ANALYSIS**

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**ABSTRACT**

The study examined empirically the asymmetric relationship between crude oil price shocks and agricultural productivity in Nigeria (1987-2020) from the perspectives of non-linear auto regressive distributed lag (NARDL) and granger causality analysis. The study used an annual time series data from the World development indicators (WDI) data bank for the period of 1987-2020. The newly introduced non-linear auto-regressive distributed lag (NARDL) approach was applied in the model specification and data analysis for the study. The results of the NARDL in both short and long run revealed that decrease in crude oil prices has a negative and significant ( $P = 0.0011$ ) impact on agricultural productivity in Nigeria and vice versa. The results of the granger causality test revealed a unidirectional causality from crude oil prices to agricultural productivity with evidence from the current decline of global crude oil prices from December 2019 to April 2020 which is in line with the growth hypothesis. The study recommended the urgent need for the Nigerian government to device possible means of diversifying its economy and the reduction of overdependence on the revenue derived from the oil sector to boost productivity in the agricultural sector of the economy. Also, there is urgent need for the world health organization (WHO) to develop a vaccine that will eliminate the COVID-19 virus that poses a tremendous challenge to the world economy.

**Keywords:** Agricultural Productivity, COVID-19, Crude oil Price Shock, ECM, NARDL.