

Tropentag, September 18-21, 2016, Vienna, Austria

"Solidarity in a competing world — fair use of resources"

Impact of Presidential Cassava Initiative on Cassava Productivity: Implication for Food Security and Economic Development

Emmanuel Donkor¹, Stephen Onakuse¹, Joe Bogue¹, Ignacio De Los Rios²

Abstract

Governments in sub-Saharan Africa have devised a number of agricultural interventions to stimulate economic development. One of such interventions is the presidential cassava initiative (PCI) in Nigeria, implemented during the period 2002–2010. The intervention aimed at promoting cassava production, alleviating rural poverty and promoting national food security. Although there are claims about the positive outcomes of this intervention, there is limited empirical evidence to prove the extent to which the intervention has impacted on cassava production and food security. Therefore, this study examined the impact of the intervention on productivity of cassava and its implications on food security and economic development using a system of multivariate linear regression models. Smith and Blundell approach was used to address endogeneity problems in the food security and food production models. The study employed a time series data from 1961–2013. The time series data consisted of cassava production, land area under cassava production, fertiliser, agricultural machinery, food production index and food adequacy index. Food adequacy index was used as a proxy for food security. The empirical findings from the study showed that the implementation of presidential cassava initiative increased cassava productivity by 17.6%. Moreover, fertiliser application and agricultural mechanisation were found to promote production of cassava. Food production in general appeared to have gone higher during the period of PCI. The food production in turn increased the national food security level. The main conclusion drawn from the study is that government interventions that seek to promote agricultural development are critical to enhancing national food production, food security and economic development as a whole.

Keywords: Economic development, food security, multivariate regression, presidential cassava initiative, productivity

Contact Address: Emmanuel Donkor, University College Cork, Dept. of Food Business and Development, Cork, Ireland, e-mail: edonkor.knust@gmail.com

¹ University College Cork, Dept. of Food Business and Development, Ireland

² Technical University of Madrid, Higher Technical School of Agronomic Engineers, Spain