

A CASE STUDY

re ISSN-0976-5670 | Visit us | www.researchjournal.co.in

Analysis of adoption and risk perception in innovation system in Kwara state Nigeria : A case study of improved rice

O.E. AYINDE*, M. MUCHIE, K.B. OLATINWO¹, A.H. ADENUGA¹ AND A.E. OYEWOLE¹ Institute for Economic Research on Innovation (IERI), Tshwane University of Technology, PRETORIA, SOUTH AFRICA (Email: opeayinde@yahoo.com)

Abstract: The critical issues associated with the Nigerian agriculture is that of low productivity and also what the farmer's perceive as risk involved in adopting innovative and improved technology. Although rice is a leading staple food crop in Nigeria, domestic rice production has not increased sufficiently to meet the increased demand. This study, therefore, focused on determining the risk perception of farmer's on improved rice and consequently the adoption of new technology, a case study of improved rice. Farmers were classified into risk classes using the multi-item scale approach and probit model was used to determine the relationship between socioeconomic characteristics and adoption status. A relatively large group of farmers exhibit a risk taking attitude with only few exhibiting risk indifference attitude. The study revealed high rate of adoption of improved rice. Farming experience, amount of credit available, co-operative membership and risk co-efficients have significant effects on the adoption status of the new rice variety. Inadequate capital, disease and pest, climate change and inadequate input were perceived as a risk situation affecting improved rice production. Consequently the study recommends among others that risk situation and behaviour of farmers should be considered in innovative technology to achieve sustainable development via agricultural development.

Key Words: Innovation, Multi-item scale, Probit, Rice, Risk, Uncertainty, Perception

View Point Article: Ayinde, O.E, Muchie, M, Olatinwo, K.B, Adenuga, A.H. and Oyewole, A.E. (2014). Analysis of adoption and risk perception in innovation system in Kwara state Nigeria: A case study of improved rice. *Internat. J. agric. Sci.*, 10 (2): 816-822.

Article History: Received: 17.10.2012; Accepted: 23.05.2014

^{*} Author for correspondence