ASSESSMENT OF AGRICULTURAL RISK MANAGEMENT PRACTICES AMONG RURAL FARMERS IN OSUN STATE, NIGERIA

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This research project written by ADEDIJI, Adebowale Ganiyu has been read, approved and adjudged to meet part of the requirements for the award of Ph.D Degree in Agricultural Extension and Rural Sociology of Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

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DEDICATION

This thesis is dedicated to God and Humanity.

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ABSTRACT

The study specifically identified types and sources of agricultural risks to which farmers are exposed; determined their knowledge and perception of agricultural risks; analyzed current risk management practices adopted and determined the degree of vulnerability of the farmers to agricultural risks with a view to providing information for Agricultural Extension workers to enable them to disseminate appropriate information on agricultural risk .

The study was conducted in Osun State of Nigeria using the three Agricultural Development Programme (ADP) agricultural zones namely Ife/Ijesa, Osogbo and Iwo. Multi-stage sampling technique was used to select 150 rural farmers from Ife/Ijesa zone, 120 from Osogbo zone and 90 from Iwo zone, making a total of 360 respondents sampled for the study. However, only 351 questionnaire and interview schedule administered were properly completed and returned. Data collected were described with mean, standard deviation, frequency counts and percentages while inferential statistics like Chi-square, Pearson Product Moment Correlation (PPMC) and Analysis of Variance (ANOVA), Tobit Regression and Factor Analysis were used to make deductions.

The results revealed that surplus produce (glut) (84.6%), low demand for produce (82.3%), high cost of inputs (81.8%), sudden fall in price of goods (78.9%), pest/disease outbreak (77.5%), poor seeds/animal foundation stocks (76.4%), insufficient funding (76.1%), unfavourable weather condition (drought/heavy rainfall) (75.5%) and floods (73.5%) were the common types of risks identified by the farmers. About 78.5 percent had high knowledge of production risks, 89.6 percent of marketing risks, 58.8 percent of the respondents had high knowledge of financial risks. Slightly above average (53.7%) of the respondents had high knowledge of human/personal risks while 93.1 percent had low level of knowledge in legal risks. The results further show that most of the respondents moderately perceived all the identified

farm risks in the study area. The findings revealed that slightly above average (55.3%) of the farmers had a very low level of awareness of agricultural insurance scheme and low degree of vulnerability to all the identified farm risks. The findings revealed that marital status (χ^2 = 869.82), major occupation (χ^2 = 119.31), gender (χ^2 = 119.70), religion (χ^2 = 327.70) and types of farming (χ^2 = 224.73) had significant association with farmers' risks management practices at both 5% and 1% significant levels. Also, age (r = 0.358), farm size (r = 0.271) and years of formal education (r= 0.107) were the correlates of agricultural risk management practices among farmers. It was revealed that there was no significant difference in the risk mangament practices associated with farming across the three agricultural zones of the study area.

In conclusion, rural farmers were quite aware of most of the risks associated with farming, their level of risk knowledge was also high and their risk perception was moderate. These enable the farmers to adopt some perceived effective agricultural risk management practices.

CHAPTER ONE

INTRODUCTION

1.3 Background to the Study

Agriculture remains a sizeable part of most developing countries' economies as it employs about two thirds of the labour force and accounts for 37 per cent of Gross National Product (GNP) and one half of exports in Africa (Department for International Development (DFID), 2012). It remains a significant source of wealth and an important influence on poverty reduction and overall economic performance. The theme for the year 2000 World Food Day, "A millennium free from hunger", underscored the importance attached to problems of hunger by the world body-Food and Agriculture Organization (FAO) of the United Nations Organization (UNO). Projections by experts on the world food situation and population in the last two decades, point to food shortages and widespread famine, especially in the poor countries. Bender and Smith (1999) observed that in spite of the extra ordinary growth in agricultural production in the last few decades, which resulted in increased per capita food supply despite the unprecedented population growth; there are warning signs that we may be reaching the limits of agricultural expansion. Bender and Smith (1999) further remarked that widespread problems of water and wind erosion, desertification, salinization, unpredictable rainfall pattern and increased pests and diseases attacks suggest that the amount of land available and suitable for agricultural production may be fast shrinking to a point that the current production level and pattern may not be sustainable.

In the sub-Saharan Africa where Nigeria features prominently, the population projection is put at 1.12 billion by the year 2020 and 1.79 billion by the year 2050 United Nations Organization (UNO), 1996). Currently, about 43 per cent of the population in sub-Saharan

Africa is malnourished and reports from different countries showed that an average of 65 per cent of the people lives below poverty line. In Nigeria, about 60 percent of the population lives below the poverty line. The presentation above on the trend of food production and poverty situation shows that something urgent needs to be done to rectify the anomalies.

The World Bank (2000) proposed a framework for tackling poverty, which involves coordinated efforts in three areas namely:

(i) Increasing economic opportunity by opening up more job opportunities through diversification, processing, and value addition to products.

(ii) Increasing voice and empowerment by creating more level plain grounds for training and capacity building to enable more people to participate in decision making about what affect them.

(iii) Tackling vulnerability in this context means preventing and managing economy-wide shocks, and providing mechanisms to reduce the sources of vulnerability that poor people face. This enables more effective participation in growth process, which is likely to remain agricultural -based for the majority of the rural poor in Nigeria.

Agriculture remains the most important poverty – reduction sector of the Nigerian economy. In the 1960s it provided employment for about 80 percent of the adult working population and earned about 60 percent of the Gross Domestic Product (GDP) (Olayide, 1976). However, recently agricultural output accounted for only 42 percent of the GDP in 2012 as shown in Table1. (Central Bank of Nigeria (CBN), 2013 and Nationa Bureau of Statistics (NBS), 2013)

Agriculture is believed by many to hold great economic potentials for the nation but the right approach and the correct road map to this destination has remained difficult to fully conceptualize in policy terms.

Successive governments have made concerted efforts to address this ugly trend through some intervention programmes. According to Jibowo (2004), some of the agricultural programmes launched and executed by government included; National Accelerated Food Production Programme in 1973; River Basin Development Authority in 1975; Operation Feed the Nation launched in 1976; Green Revolution in 1980; Agricultural Development Programme conceived in 1972 but launched in 1975; National Special Programme for Food Security launched in 2003; and the National Fadama Development Project 1992; 2004; 2009 and 2014. Limited success were achieved from the programmes.

As a primary production sector, agriculture itself has to be modernized in order to achieve the much–needed increase in the productivity of the sector. This modernization has brought with it, some man-made risks in addition to the naturally available risks that are associated with agricultural activities in Nigeria.

For an individual farmer, according to Pennsylvania State Cooperative Extension Service (2005) risk management involves finding the preferred combination of activities with uncertain outcomes and varying levels of expected return. One might say that risk management involves choosing among alternatives for reducing the effects of risk on a farm, and in so doing affect the farm's welfare position. Some risk management strategies (such as diversification) reduce risk within the farm's operation, others (such as production contracting) transfer risk outside the farm, and still others (such as maintaining liquid assets) build the farm's capacity to bear risk.

Risk management typically requires the evaluation of tradeoffs between changes in risk, expected returns, entrepreneurial freedom and other variables.