Moor Journal of Agricultural Research 23: 1 – 10, 2022

MOOR JOURNAL OF AGRICULTURAL RESEARCH

Assessment of Risks Influencing Agribusiness in Imo State

Ujunwa, E.I., Adesida, F.A., Lawal, J.O., Taiwo, O., Oha, F.K., Olebara, U.F. and Bakare, A.A.

Cocoa Research Institute of Nigeria (CRIN), Idi-Ayunre, Ibadan, Nigeria.

Corresponding author: ujunwaikechukwu@gmail.com, Phone Number: +234 7066732099

Keywords

Agribusiness operators
Farmers,
Financial Risks
Production Risks
Risk Management

Abstract

This study was conducted in Imo State, Nigeria, to examine the risks affecting agribusiness activities in the study area. *A descriptive* research design that was cross-sectional in nature was adopted. A quantitative method of data collection via a semi-structured questionnaire was utilized. The respondents are mainly agribusiness operators in the urban and rural areas of Imo State. A multi-stage sampling technique was used to select 180 respondents, and the data was analyzed using simple descriptive statistics such as frequency distribution, percentage, mean, and bar chart. The result shows that *the* majority (76.1%) of the respondents strongly agree that production risks affect their agribusiness. Similarly, *the* majority (77.5%) of the respondents opined that (financial risk affects their agribusiness. The majority (60%) of the respondents strongly agree that natural disasters like fire outbreaks are one of the risks affecting their business. Agribusiness operators in Imo used diseases and pest control, improved variety, proper and timely medication and vaccination, credit markets, informal borrowing and selling of assets, and improved storage facilities as risk management whenever they faced risk in their agribusiness. The study, therefore, recommends that the government should provide credit and loan facilities to agribusiness owners, provide power supply, and provide and subsidize fertilizers, pesticides, herbicides, and veterinary drugs to agribusiness owners.

Introduction

Globally, agribusiness operators deal with a significant magnitude of uncertainty all day long. This is because agribusiness is risky. Agribusiness operators live with risk and make daily decisions that affect their agribusiness operations. Agribusiness entrepreneurs also face risks and uncertainties which can lead to unexpected decline in efficient operations of enterprise.

According to Osuagwu *et al* (2017), farming is risky. Farmers live with risk and make decisions every day that affect their farming operations. Many of the factors that affect the decisions that farmers make cannot be predicted with 100 percent accuracy: Weather conditions change; prices at the time of harvest could drop; hired labor may not be available at peak times; machinery and equipment could break down when most needed; draught animals might die; and government policy can change overnight (Khan, 2013). All of these changes are examples of the risks that farmers face in managing their farm as a business. All of these risks affect their farm profitability. While farmers have always faced risk, farming has over the years, as a result of market liberalization and globalization, become increasingly risky.

Smallholder farmers have become especially vulnerable. A casual approach to farming, even if it is for household food consumption, is no longer viable. Farmers need to acquire more professional skills, not only in basic production but also in farm business management.

Agribusiness is a term applied to businesses whose operations involve production and sale of agricultural products for profit. Agribusiness comprises of crop production; which involves production and selling of crops like cassava, maize, yam, cocoyam, plantain, millet, cocoa, coffee, kola nut, fruits and vegetables. Livestock production which involves the rearing and selling of different farm animals like cattle, goat, sheep, pig for their meat and other products like milk, hides and skin. etc.

Osuagwu *et al* (2017), described agribusiness

as the sum total of all the operations involved in the manufacture and distribution of farm supplies, production operations on the farm and the strong processing-distribution of commodities and items. Furthermore, Tersoo (2013), views agribusiness as dividing the structural components of the production process into substructures which are capable of being administered as a whole. Three substructures of this sector are the input; farm productions and the marketing section for processed products.

Njavro (2009), opined that agribusiness operation risks can be grouped into Social Risk, Market Risk, Political Risk, Financial Risk, Production Risk and Foreign Exchange Risk. Risk sources to agribusiness enterprises can be grouped into social, market, political, financial, production and foreign exchange risk (Parker, 2013).

Social risk is suggestive that the risks or hazards have their origin from man. The risk could be due to fire outbreak, burglary or theft, kidnapping of investors/workers for ransom, embezzlement, strike, civil commotion and changes in social structure e.g., divorce and dissolution of partnership which can lead to unexpected decline in efficient operation of enterprise.

Market risk is associated with the difficulties in transferring products from farm to markets as a result of poor infrastructural facilities and damage during the cost of transportation, fluctuation in prices and so on. Political risk is due to changes in government machineries and policies. Financial risk is caused due to the use of debt in financing agribusiness investment.

Foreign exchange risk is borne out of the firm's dependence on foreign currency. Production risk occurs because agribusiness enterprise is affected by many uncontrollable events that are often related to weather, drought, physical hazards to the factory site and techno-logical failure of the firm. This risk affects the efficient conversion of input to output (Sekumade and Ogunro, 2013).

Adeyonu *et al*, 2021, agreed that agribusiness entrepreneurs also face risks and uncertainties which can lead to unexpected decline in efficient operation of enterprise. They include; small land holding/capital, change in commodity prices, decline in crop yields or livestock production, cash flow constraints and changes in government laws and regulations. Born out of this uncertainty is the possibility of economic loss. African agriculture is predominantly rain-fed and hence fundamentally dependent on vagaries of weather, input supply, yield, pest, diseases, weeds, seasonal change in rainfall (Obasi,et al, 2013).

Identifying sources of uncertainties helps farmers and other stakeholders along the agricultural value chains to harness the most important risk management strategies such as disease control, storage, crop insurance, contract production, credit market, informal borrowing, use of improved seeds/ breeds, savings, off-farm employment and use of new technologies for mitigating risk and aids in circumventing extreme outcome such as bankruptcy. Hence knowledge on how agribusiness entrepreneurs make decision as well as their attitude and strategies towards risk is important in any agribusiness.

Nigeria being prone to a lot of environmental inconsistencies requires high degree of risk aversion strategy to break the circle of poverty which engulfed over 70% of its population and also to achieve increased food production to meet 3.18% population growth (Ojo, 2003; Alimi and Ayanwale, 2005). Risk which investment economists describe as the variation from expected outcomes due to imperfect knowledge of investor in decision making is inherent in every form of enterprise but is more intensive in input- output relation among agribusiness productions (Kuyrah *et al*., 2006).

. This risk affects the efficient conversion of input to output (Aneke, 2007). Thus, empirical studies have produced varieties of sources of risk. According to Alimi and Ayanwale(2005), in a study conducted on risk in onion production in Kebbi State, Nigeria, reported that the most important sources of risk are technical, drought, market and financial.

Osuagwu, *et al* (2017) opined that a situation of imperfect knowledge is more common in agribusiness enterprises. Hence, investors in

agribusiness enterprises face the danger that what they expect ex-ante may not be realized ex-post (Tersoo, 2013). For instance, each time an investor borrows money for investment in agribusiness enterprise, there is the possibility that return on investment is less than cost of borrowed fund. Also, in this era of global climate change, an investor cannot predict with certainty the degree of fluctuation in prices of input and output.

In Imo State, land holdings especially for agricultural production are small (generally less than 1 hectare) and often fragmented, comprising different types of land which are managed in different ways. Farm operations are being carried out manually by men, who generally are responsible for land clearing and yam cultivation, while women are responsible for most other farm operations. Livestock entrepreneurs due to inability to provide startup capital for large scale production, engage in small scale production. These problems put profit from the food crops and livestock entrepreneur at risk.

Zhang *et al.*, 2007 opined that the presence of any of these unpredictable risk factors can significantly lower profit level and lead to losses. Agribusiness operators also face financial risks due to the cost and unavailability of capital to finance debt and agribusiness expansion. Poor availability of capital results from a lack of stable financial institutions, as well as weak links to capital markets and global financial system.

It is against this background that this study was undertaken with the aims of answering three (3) research objectives which are to ascertain the socio-economic characteristics of agribusiness operators in the study area; to examine the risks affecting agribusiness operators in Imo State and proffer solutions for solving the identified risks

Materials and Methods

This study was carried out in Imo State, Nigeria. Imo State is one of the 36 States of Nigeria and is located in the South Eastern Zone of Nigeria with Owerri as its capital and the largest city. The state lies within latitudes 4°45'N and 7°15'N, and longitude 6°50'E and 7°25'E, with an area of around 5,100 sq km. The state is blessed with two climatic seasons like other areas in the country. These are dry and wet seasons. The wet season covers between April to October every year while dry season is witnessed between November to March of each year. The area is characterized by mean daily minimum and maximum temperature of 11^{o}C and 26.7 ^{o}C respectively. Farmers in the state grow cassava, yam, plantain, banana, cocoyam, maize, fluted pumpkin, oil palm, coconut, and mango. There are cashew plantations established by the government and private entrepreneurs in the state with increased processing of cashew nuts and exporting activities.

Descriptive research design which was cross-sectional in nature was adopted. Quantitative method of data collection via semi-structured questionnaire was utilized. The respondents are mainly agribusiness operators in the urban and rural areas of Imo State. Multistage sampling technique was used to select 180 respondents. The first stage involved the selection of the three senatorial districts, Imo North (Okigwe), Imo East (Owerri) and Imo West (Orlu) senatorial zones. The second stage was the purposive selection of two local government areas from each of the senatorial zones. The third stage was the purposive selection of thirty (30) participants from each local government, making 60 participants from each senatorial zone. The selected participants were purposively selected based on the inclusion criteria set by the researcher which includes that the respondents must be 18years and above, must own agribusiness, must have been residing and doing agribusiness in Imo state at least 12 months preceding this study. Primary data was collected using quantitative method of data collection via semi-structured questionnaire. Secondary data was collected via review of relevant and current journal articles, textbooks, and conference proceedings. Data was analyzed using simple descriptive statistics such as frequency distribution, percentage, mean and bar chart.

Results and Discussion

This section focused on data analysis and data presentation of results that was generated from the field. Data are presented in frequency distribution tables, pie and bar charts. Table 1 above presents the, demographic characteristics of the

respondents, the result shows that, the respondents were equally distributed across the 3 senatorial zones in Imo state. The distribution of the respondents according to the LGAs shows that

Table 1: Socio-demographic characteristics distribution of the respondents

Variables	Frequency	Percentage	
Senatorial zones			
Imo North (Okigwe)	60	33.3%	
Imo West (Orlu)	60	33.3%	
Imo East (Owerri)	60	33.3%	
Selected LGAs			
Obowo	30	16.6%	
Ehime Mbano	30	16.6%	
Ideato North	30	16.6%	
Oguta	30	16.6%	
Ikeduru	30	16.6%	
Owerri Urban	30	16.6%	
Gender			
Male	98	54.4%	
Female	82	45.5%	
Age			Mean age= 47.6
18-28years	13	7.2%	
29-39years	21	11.6%	
40-50years	91	50.5%	
60years and above	55	30.5%	
Education			
Primary education	23	12.8%	
Secondary Education	72	40%	
Tertiary education	85	47.2%	
Income level per month			
Less than #50,000	26	14.4%	
#50,000- #100,000	50	27.7%	
Above #100,000	104	57.7%	
Place of residence			
Rural area	107	59.4%	
Urban area	73	40.6%	
Type of agribusiness			
Agricultural production	83	46.1%	
Processing and value addition	49	27.2%	
Marketing and sales	37	20.5%	
Input sector	11	6.1%	
Total	**180**	**100%**	

Source: Field Survey, 2020

16.6% of the respondents are selected from each of the six LGAs. This shows that the respondents were evenly distributed amongst the selected LGAs.

The distribution of the respondents according to their age categories shows that 7.2% of the respondents are within the age bracket of 18-28years, 11.6% of the respondents are within the age bracket of 29-39years, 50.5% of the respondents are within the age bracket of 40-50years, while 30.5% of the respondents are 60years and above. This shows that majority (50.5%) of the respondents are within the age bracket of 40-50years, while the mean age was (47.6%).

The distribution of the respondents according to their educational status shows that 12.8% of the respondents had primary education, 40% of the respondents had secondary education, while 47.2% of the respondents had tertiary education, this show that higher percentage of the respondents had tertiary education as their highest level of educational qualifications. The distribution of the respondents according to their income level shows 14.4% of the respondents earns less than ₦50,000 per month, 27.7% of the respondents earns between ₦50,000 to ₦100,000 per month, while 57.7% of the respondents earns above ₦100,000 per month. This is an indication that majority (57.7%) of the respondents earns above ₦100,000 per month.

The distribution of the respondents according to their place of residency shows that 59.4 % of the respondents reside in rural areas, while 40.6 % of the respondents reside in urban centers. This indicates that majority of the respondents who participated in the study resides in rural areas. The distribution of the respondents according to their type of agribusiness shows that 46.1% of the respondents are engaged in agricultural production such as cashew and kola nut plantations as well as growing some arable crops and animal husbandry. Also, 27.2% of the respondents are into processing and value addition of agricultural products, 20.5% of the respondents are engaged in marketing and sales of agricultural products while 6.1% of the respondents are in the input sector of the agribusiness.

Figure 1 above shows respondents' opinion on how true it is that financial risk affects their agribusiness. The result shows that 77.5% of the respondents agreed that it is very true that financial risk affects their agribusiness, 15% of the respondents said it is true that financial risk affects their agribusiness, 4% of the respondents said it is false that financial risk affects their agribusiness while 3.5% of the respondents agreed strongly that it is false that financial risk affects their agribusiness. This shows that majority (77.5%) of the respondents opined that financial risk affects their agribusiness. The above findings is in tandem with the assumptions of Adeyonu et al (2021) who asserted that financial risk (loan and its cost) is the major risk affecting farmers in Nigeria.

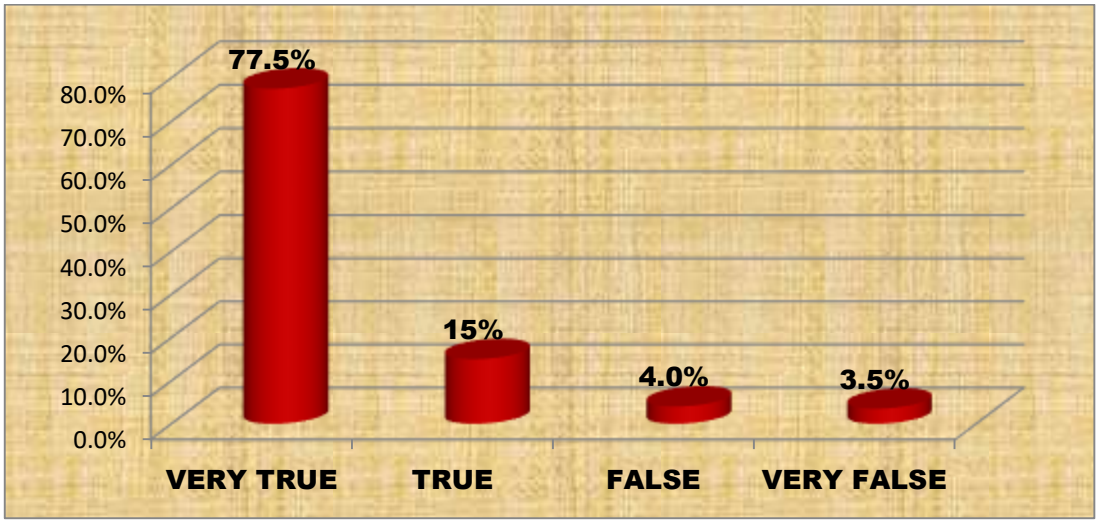
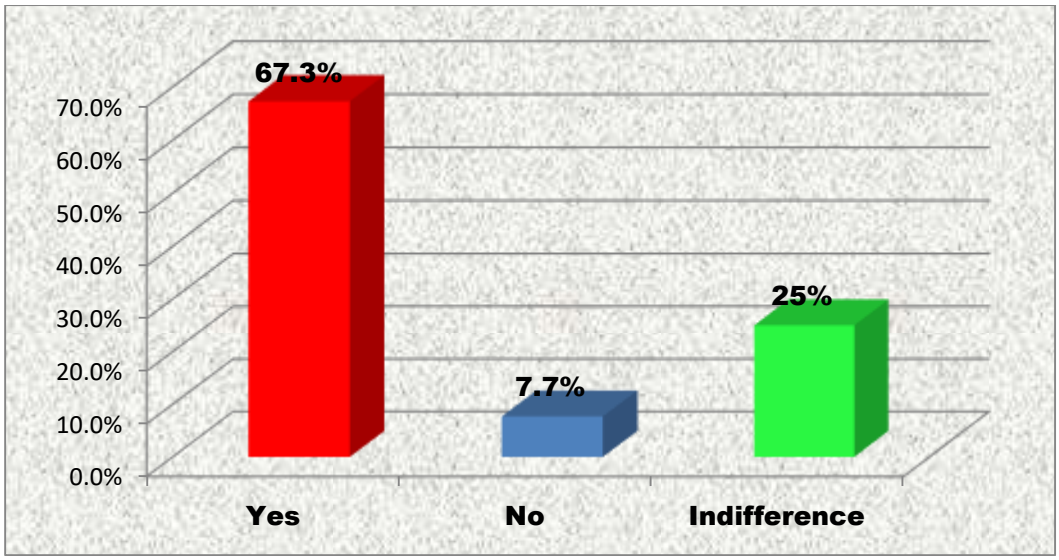


Fig. 1: Respondents opinion on how true it is that financial risk affects their agribusiness
Source: Field Survey, 2020

Figure 2 below presents respondents' opinion on whether natural disasters such as flooding, fire outbreaks and so on are some of the risk factors affecting their agribusiness. The result shows that 67.3% of the respondents agreed that natural disaster like flooding and fire outbreaks occasioned by climate change are some of the risks affecting their agribusiness, 7.7% of the respondents disagreed that natural disasters limit their agribusiness while 25% of the respondents were indifferent to the assertion that natural disasters are some of the risks affecting their agribusiness. This shows that majority (67.3%) of the respondents agreed that natural disasters are some of the risks affecting their agribusiness. This result is in agreement with the report of (IPCC, 2007) that there has been an increase in outbreak of wild fire and flooding due to climate change.

Table 3 above presents opinions on the risk management techniques agribusiness operators have adopted to reduce the level of risks in their agribusiness. (Respondents were asked to pick the technique they mostly adopted). The result shows that 53.9% of the respondents opined that they used diseases/pest control as a management technique against risks facing their agribusiness, 23.9% of the respondents stated that they use improved variety as a management technique adopted against risks facing their agrobusiness,

Fig. 2: Respondents opinion on whether Natural disasters are some of the risks affecting their agribusiness



Source: Field Survey, 2020

Table 2: Risk management techniques adopted by Agribusiness owners in Imo state, Nigeria

Responses	Frequency	Percentage
Diseases/pest control	97	53.9%
Use of improved variety	43	23.9%
Proper & timely medication/vaccination	14	7.7%
Credit market/informal borrowing/selling of assets	17	9.4%
Improved storage facilities	9	5%
Total	**180**	**100%**

Source: Field Survey, 2020

agribusiness, 7.7% of the respondents said they adopted proper and timely medication/vaccination as a management technique against risks facing their agribusiness, 9.4% of the respondents said they adopted credit markets, informal borrowing and selling of assets as a management technique when they face financial risks in their agribusiness while 5% of the respondents said that they adopted improved storage facilities as a risk management whenever they face risk in their agribusiness. The above finding is in tandem with the assertions of Afolabi (2008) that agribusiness owner tries new crops and cultivars, better animals, and alternative technologies to increase productivity, diversify production, reduce risk – and to increase profits (Afolabi, 2008).

Challenges Encountered in Mitigating Agribusiness Risks

A lot of challenges are being faced by agribusiness operators in Imo State in their efforts to mitigate various risks that limit their agribusiness. These are briefly discussed below.

1) Inconsistent government policy: Imo State government agricultural policies have been unstable over the years. Agricultural inputs such as agrochemicals which are supposed to be supplied at subsidized prices are grossly lacking. Faced with the challenge of input supply, many agribusiness operators have found it difficult to mitigate the myriad of risks they encounter in their operations.
2) High Cost of Transportation/ Bad Road: One of the challenges faced by agribusiness operators in Imo State which has in no small measure limited their ability to mitigate the risks being encountered in their agribusiness is high cost of transportation/bad road. The cost of transporting agricultural produce from rural areas where they are produced to the urban centers where they are sold and consumed is highly exorbitant. This inevitably translates to increase in prices of these produce. Most of the roads leading to these rural areas are in a state of disrepair which compounds the problems.
3) Inadequate Record Keeping/ Adoption of Research Findings: According to the submission of the agribusiness operators in the study area, inadequate record keeping such as climate record, production record and so on, has been a serious barrier for them to alleviate the risks facing their agribusiness. They sometimes make decisions based on imperfect knowledge which instead of reducing the risks, compound their problems.

   Also, low adoptions of research findings/Agricultural technologies have reduced the ability of these agribusiness operators to lessen the risks facing their agribusiness. For instance, the cashew plantations in the state are fast becoming old and replacement of the old cashew trees is low.

Solutions to the Risks and Challenges Facing Agribusiness Operators in Imo State, Nigeria.

This section focused on the solutions to the risks and challenges identified above. Respondents were asked to suggest solutions to the identified risks and challenges facing agribusiness in Imo state, Nigeria. Their opinions and responses are presented in charts and tables below.

Table 4 above presents respondents opinion on what the government can do to proffer solutions to the risks and challenges faced by agribusiness operators in Imo state, Nigeria. The result shows that 41.1% of the respondents opined that government should provide credit and loan facilities to agribusiness owners in the state, 26.6% of the respondents said government should provide power supply and other social amenities in both rural and urban areas to ensure that agribusiness strives in the state, 18.9% of the respondents opined that government should provide and subsidize fertilizers, pesticides, herbicides and veterinary drugs to agribusiness owners, while 13.3% of the respondents said government should build good roads and develop adequate transportation system in both rural and urban areas in Imo state, Nigeria.

Table 4: Respondents opinion on what the government can do to proffer solutions to the risks and challenges faced by agribusiness operators in Imo state, Nigeria

Responses	Frequency	Percentage
Government should provide credit and loan facilities to agribusiness owners in Imo state Nigeria	74	41.1%
Government should provide power supply and other social amenities in both rural and urban areas to ensure that agribusiness strives in Imo state Nigeria	48	26.6%
Government should provide and subsidize fertilizers, pesticides, herbicides and veterinary drugs to agribusiness owners	34	18.9%
Government should build good roads and develop adequate transportation system in both rural and urban areas in Imo state, Nigeria.	24	13.3%
Total	180	100%

Source: Field Survey, 2020

Table 5: Respondents Opinions on what Agribusiness owners should do to proffer solutions to the risks and challenges faced by agribusiness operators in Imo state, Nigeria

Responses	Frequency	Percentage
Agribusiness owners should have enough information on the business they are doing	83	46.1%
Agribusiness owners should improve in their bookkeeping skills	39	21.7%
Agribusiness owners should always engage in trainings, capacity buildings, seminars, conferences and workshops to improve their skills and learn new techniques	20	11.1%
Agribusiness owners should endeavor to collaborate with each other to expand their business enterprises.	38	21.1%
Total	180	100%

Source: Field Survey, 2020

Table 5 above presents respondents opinion on what agribusiness owners should do to proffer solutions to the risks and challenges faced by agribusiness operators in Imo state, Nigeria. The result shows that 46.1% of the respondents believed that agribusiness owners should have enough information on the business they are doing, 21.7% of the respondents opined that agribusiness owners should improve in their bookkeeping skills, 11.1% of the respondents agreed that agribusiness owners should always engage in trainings, capacity buildings, seminars, conferences and workshops to improve their skills and learn new techniques, 21.1% of the respondents believed that agribusiness owners should endeavor to go into collaborations to expand their business enterprises. This shows that higher percentage of the respondents opined that agribusiness owners should have enough information on the business they are doing. The

above finding is in tandem with the assumptions Khan (2013) and Osuagwu et al (2017) who opined that in order to succeed, farmers need to generate more profit and become competitive. They must have a good understanding of the farming environment and be skilled at managing risk. By dealing with risk more effectively, better farming opportunities arise (Khan, 2013; Osuagwu et al 2017)

Conclusion and Recommendations

This study makes a significant contribution to the existing literature on agriculture business risk management among rural farm entrepreneurs in Imo state. The study revealed that production risks affect their agribusiness. It is vital to note that production risks include but not limited to risks faced during production process like bad weather due to climate change, diseases, pests, perished crops due to poor storage, crop and animal products destroyed from point of production to point of sale due to bad road. Financial risks which include but not limited to risks associated with inability to obtain loans or repay back as at when due are other risks facing agribusiness owners in Imo state. Similarly, climate extremes causing natural disasters like flooding and fire outbreak are other risks facing agribusiness owners in Imo state. Based on these research findings, the following recommendations are given.

Government should provide credit and loan facilities as well as subsidize agrochemicals such as fertilizers, pesticides, herbicides and veterinary drugs for agribusiness owners in the state. Government should construct good roads and develop adequate transportation system as well as provide power supply and other social amenities in both rural and urban areas to ensure that agribusiness strive in the state. Agribusiness owners should always engage in trainings, capacity buildings, seminars, conferences and workshops to improve their skills and learn new techniques. Imo State Government in collaboration with the Cocoa Research Institute of Nigeria (CRIN) should expedite action in revamping the various cashew plantations in the state.

References

Adeyonu, G.A, Otunaiya, A.O., Oyawoye, O.E. &Okeniyi F.A. (2021) Risk perceptions and risk management strategies among poultry farmers in south-west Nigeria, Cogent Social Sciences, 7:1, 1891719.

Afolabi, C.J. (2008). Loan repayment and technical assistance among smallholder maize farmers in Nigeria. African Review of Money & Banking, A Supplement of Savings &Development Journal, 1, 64-72

Alimi, T. and Ayanwale, A.B. (2005). "Risk and Risk Management Strategies in onion Production in Kebbi State of Nigeria" J. Soc. Sci. 10(1)

Aneke, J.I. (2007). "Agricultural Insurance" In Reading in Agricultural Economics and Extension, (eds). Akubuilo CJC, Umebali EE, Mgbada JU, Ugwu DS, Egwu WE, Awoke Computer Edge Publishers.Enugu. pp. 221-244.

Esiobu G.C.N (2016) Determinant of Risk-Smart Options among Farming Households in Agricultural Risk Management in Imo State, Nigeria: A Multinomial Logit Model Approach. International Journal of African and Asian Studies www.iiste.org ISSN 2409-6938 An International Peer-reviewed Journal Vol.20, page.

Food and Agriculture Organization (FAO) (2012). "Food insecurity, Risk, Risk Management and vulnerability in Viet Nam: Profiles of four vulnerable groups", ESA Working Paper, No.04-11

IPCC. Climate Change 2007: Synthesis Report. United Nations Environment Programme, 2007:(Pp5, 8, and 10.[1])

Khan, D. (2013). Managing risk in farming.FAO. http:// www.fao.org/3/a-i3229e.pdf

Kuyrah, J.N., Obare, G, Herrero, M, Waishaka, M. (2006). "Agricultural Income Risk and Rural Poverty Dynamics Strategies of smallholder producers in Kenya" Contributed paper, presented at the international Association of Agricultural Economics Conference; Gold Coast, Australia, August,2006 p. 12-16

Njavro, M. (2009). Risk Management in Agribusiness. "Paper presented at Zagreb School of Economics and Management, June 5.

Obasi, P.C., A. Henri-Ukoha, I.S. Ukewuihe, and N.M. Chidiebere-Mark, 2013.Factors Affecting Agricultural productivity among Arable Crop Farmers in Imo State, Nigeria. American Journal of Experimental agriculture, 3(2), 443

Ojo, S.O. (2003). "Productivity and Technical Efficiency of Poultry Egg Production in Nigeria", Int. J. Poult. Sci. 29(6): 459-464

Osuagwu, C.O., Chikaire, J.U., Anaeto, F.C. and Oparaojiaku, J.O. (2017) Analysis of Agricultural business risks management strategies among rural Farmer entrepreneurs in Imo State, Nigeria. Scholarly Journal of Agricultural Science Vol. 7(2), pp. 50-56

Parker, S. (2013). Moving beyond entrepreneurial skills: Key factors driving entrepreneurial learning in multifunctional agriculture. J. Rural Stud. 32: 208-219.

Sekumade, A.B. and Ogunro, V.O. (2013) Risk Assessment and Management for Agribusiness Enterprises Investment in Ondo State, Nigeria. European J. Bus. Manage. 5(1):204-206.

Tersoo, P. (2013) Agribusiness as a Veritable Tool for Rural Development in Nigeria. Mediterranean J. Soc. Sci. 4(8):.17-26

Zhang, X., Rockmore, M. and Chamberlin, J. (2007). A Typology for Vulnerability and Agriculture in Sub- Saharan Africa (Discussion paper 00734).Int. Food Policy Res. Institute