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A Study of Agricultural Companies Development in Nigeria: A Systematic Literature Review

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Abstract: - There is no doubt that Nigeria is an agricultural country with food sufficiency up till the late 1970s, but this seems to be a thing in the past as a result of neglect of the agricultural sector by the Nigerian government due to the discovery of crude oil and subsequent oil boom in the late70s (Adams, 2016). This paper seeks to identify factors inhibiting the development of agricultural companies in Nigeria and how to overcome such barriers through conducting a Systematic Literature Review (SLR) on related papers. The SLR in this paper is based on the three-stage approach recommended by Tranfield et al. (2003) and Harrison et al. (2016). The findings from the review show that the bane of the agricultural sector in Nigeria was due to the lack of an agricultural regulatory framework and policy transmission mechanism and over-dependence on oil revenue amongst other things. It is therefore imperative for the country to embark on the development of a reliable agricultural framework and model which will aid food sufficiency in the country.

Key-Words: - Agriculture, Companies, Development, Nigeria, Systematic literature review, Framework.

1 Introduction

In the early 1960s, shortly after independence, Nigeria was at the same level as countries such as Indonesia, Malaysia, and Singapore in terms of economic growth and development. While most of these countries have diversified their economy through structural transformation (Barrett et al., 2017) and has become an emerging economy, Nigeria has failed to diversify and improve its economy, thereby resulting to increase in the level of poverty and unemployment in the country (Adams, 2016).

The Nigeria economy can be regarded as a developing economy rather than an emerging economy like India, China, and Malaysia because its industrial base is underdeveloped. The World Bank (2018) classified the developing nations as those countries with less than $4,035 per capita income. Therefore, in line with the World Bank definition, Nigeria can be regarded as a developing nation because her per capita income of $1960 is less than

$4,035. Also, based on the World Bank report of 2018, Nigeria human development index (HDI) is at 0.534 in the form of living standard, education and average life expectancy of 56 years which is low when compared with other emerging economies such as Malaysia with a HDI of 0.804 and life expectancy of 77 years.

The Nigerian economic progress has been impaired due to the neglect of the agricultural sector which underpinned the economic growth and development of the nation in the early sixties (Afolabi, 2015) by the Nigerian government as a result of the discovery of oil in commercial quantity (Adams, 2016). Consequently, the country has been unable to match its economic growth with the rapid population growth thereby resulting in a country that used to be an exporter of agricultural products now importing food and other agricultural produce from other countries around the world. However, in many developing nations such as Malaysia, Thailand, and Indonesia, agriculture has played a vital role by addressing challenges like poverty, food insecurity and as a significant source of foreign exchange earnings (Adeola, 2015) through transformational policy in their agricultural sector (Divanbeigi and Saliola, 2016).

Therefore, Nigeria being an agricultural country (Afolabi, 2015) needs to establish economic policies that will promote the agricultural companies' development. The development of sustainable policy will lead to an increase in agricultural produce and application of modern technologies in the agricultural sector which will, in turn, lead to an increase in national productivity (Mau, 2014). The economic retreat by the Federal government of Nigeria on economic policy proposal, further confirms the need for a transformational agricultural policy as the President of Nigeria Muhammed Buhari (2016) stated that "it is obvious to Nigerians that food production and self-sufficiency of the country requires urgent action as for so long the government policies on agriculture have been half-hearted and suffered inconsistencies''. It is therefore imperative that the growth and development of Nigeria's economy depends largely on the development of Nigeria's agricultural sector and not on crude oil whose price fluctuates from time to time globally. Nonetheless, emphasis should be upon the type of economic policies and mechanisms used by government agencies in the quest for growth and development of the agricultural sector rather than the broad-brush approach used in the past (Storey 1994; Talbot and

Reeves 1997). However, Memon and Tahir (2012) believe that the performance of a business in terms of increase in output, increase in sale revenue, higher return on capital employed, growth of assets and increase in earnings per share of companies are the traits of growth and development in any sector of the economy. Mokhtar (2004) also agrees that an upward movement in these factors (return on capital employed, assets, and earnings) will indicate a positive impact of economic policy on the company growth and development, while the opposite indicates negative impact (Mokhtar, 2004).

However, an agricultural country such as Nigeria (Afolabi, 2015) can develop its agricultural sector through transformation mechanisms (Divanbeigi and Saliola, 2016; Barrett et al., 2017) such as transition from a semi-subsistence agricultural system to a mechanised agricultural system and development of an appropriate entrepreneurial regulatory framework that will lead to the development (Adams, 2015; Afolabi, 2015; Harrison et al., 2016; Hazell et al., 2010) of the agricultural companies in the country. Moreover, most developing countries such as Congo DR and Nigeria that have failed to transform their agricultural sector has remained trapped in hunger, poverty, and economic stagnation (Hazell et al., 2010). This study will therefore assess the impact of economic policies on the development of agricultural companies in Nigeria.

2.0   The Methodology for SLR

The literature review stages are crucial to academic investigation and serve as a blueprint for the research. The main purpose of conducting a literature review is to develop the blueprint that will assess the previous study within the area of research (Harrison et al., 2016). To ensure the development of a reliable blueprint, the systematic literature review was adopted for this study.

The systematic literature review is an evidence-based, inclusive, and explanatory (Harrison et al., 2016; Sawyerr and Harrison, 2019) form of scientific and transparent stages of a review that will further enhance the output of this study. Ahmad and Omar (2014) are of the opinion that a systematic literature review will eliminate the rule of thumb through the provision of an audit trail of the review. Therefore, reviewing literature systematically entails identification of data

requirement, selection of literature, research papers classification and description, paper content analysis, and referencing, and reporting of findings (Tranfield et al., 2003). For the effective development of the review, the systematic review methodology prescribed by Tranfield et al. (2003) and Harrison et al. (2016) was adopted. The review stages include review planning, review exercise, and reporting the outcomes were followed.

2.1   Stage 1: Review planning

At the commencement of the literature review an extensive discussion was undertaken with the expert panel to determine the breadth and criteria for the search. The initial discussion aided the criteria for inclusion and exclusion of literature. However, in line with the research title, the review questions were strictly adhered to determine what to include and what to exclude in the process of the systematic literature review. The exclusion and inclusion criteria aided the identification of relevant evidence. The review questions were based on the following.

REVIEW SEARCH STRINGS AND KEYWORDS

Search String	keyword
Search string 1.1	*Economic policies*
Search string 1.2	*Developing economy*
Search string 1.3	*Economic policies impact*
Search string 1.4	*Nigeria economic policies*
Search string 2.1	*Agricultural policy*
Search string 2.2	*Agricultural policies in a developing economy*
Search string 2.3	*Agricultural policies in Nigeria*
Search string 2.4	*Impact of agricultural policies on corporate development*
Search string 3.1	*Agricultural policies in Western Nigeria*
Search string 3.2	*Impact of agricultural policies on agricultural companies*

- economic policies in developing economies
- impact of economic policies on corporate sector development
- agricultural policies development in Nigeria
- agricultural companies' development in developing economies

The review questions

(1) Are the national economic policies used to aid the development of the agricultural sector in developing nations?

(2) What are the impacts of agricultural policies on agricultural companies' development in developing nations?

(3) What are the impacts of the regulatory framework on agricultural policy implementation in Nigeria?

(4) Has policy transmission mechanisms been used to influence agricultural policy implementation in Nigeria?

Inclusion and exclusion criteria:

Inclusion criteria

- The paper must be written in English
- The title of the paper must be related to economic policies in developing economy
- The study must have been published between 1960 and 2020 (both year inclusive)
- The study should focus on the review guidelines

Exclusion criteria

- Papers with the main focus on a developed economy
- Working papers
- Conference proceedings

2.2   Stage 2: Conducting the review

For this study, the literature search commenced by adopting the review strategy as discussed with the expert panel and using the keyword identified in the process of initial narrative review. The search string and keywords are shown in Table 1 below.

Table 1. Search strings

The above search strings were used in addition to Boolean such as agricultural policy and economic development in developing nations, impact agricultural policy on companies or corporate development in Nigeria etc. to search for literature in the nine databases listed in Table 2 below. The databases were considered because they are rich and suitable for social and management research.

Table 2 . Sources of literature

SEARCHED DATABASES OF LITERATURE REVIEWED
Sage Journal, Google Scholar (Academic search engine) Emerald, Taylor & Francis, Springer link, JSTOR, Science Direct, Elsevier and Wiley online

Analysis and quality assessment

The selection of the literature from the database was based on the title of the study as indicated under the search code in Table 1 above. The exclusion and inclusion criteria were also taken into consideration during the search. Nonetheless, 78 papers were initially sourced from the databases and later streamlined to 47 papers after the abstract screening in line with the title of the study. These papers were critically reviewed and analysed to determine the risk of bias of individual papers and the level of evidence reported. During the process of review and analysis, additional themes were generated from the papers analysed and further searches were conducted based on the theme generated and related journals included in the references. Upon scooping of the references of the initial papers sourced additional 31 papers were identified out of which 17 were identified as suitable and relevant to this study. Overall, 64 papers were reviewed and analysed. To ensure the quality of assessment all the papers that meet the inclusion criteria were reviewed at least twice to ensure criticality and compliance with the prescribed review processes. The reference details of the papers were also extracted and cross-checked to avoid transposition errors and it was discovered that there were no errors and duplication of papers. However, there seems to be no mention of structure or methodology adopted in some of the papers

reviewed including those from the same database which makes it difficult to analyse the underlying methodology adopted by the authors.

2.3 Stage 3: Reporting and Dissemination

This stage involves synthesising the studies through the descriptive analysis of the methodology, conclusion, and findings from the literature reviewed. The analysis is used to provide answers to the review questions. Furthermore, the findings from the literature review are used to justified further investigation and development of a questionnaire for primary data gathering. Other forms of quantitative analysis such as the pie chart and bar chart are also used to analyse the facts extracted from the review. The quantitative analysis will entail information like geographical distributions of papers reviewed, frequency of the papers and analysis of the methodologies adopted by the authors.

2.3.1 Findings and conclusions of the papers reviewed

Table 3. Summary of findings from the literature reviewed.

AUTHOR/YEARS	METHODOLOGY	FINDINGS	CONCLUSION
Hazell et al. (2010)	Review of literature on the role of agriculture.	Lack of appropriate regulatory framework in developing nations.	Development of policy package by policy-makers.
Afolabi (2015)	Narrative-Textual-Case study (NTCS) and interview.	Lack of regulatory framework for sustainable economic development.	Adoption of Schumpeter ideology of introduction of a new

			method.
Luken (2006)	Review of national report and use of the survey.	The economic framework exists but not functional.	Need for effective partnership between government and corporate sector.
Cervantes Godoy and Dewbre (2010)	Review of the literature.	Reduction of poverty through effective governance by developing nations.	Data from most developing are not reliable.
Ibietan (2011)	Review of literature on policy establishment and implementation.	Non-conformity with the theoretical framework of the policy-model adopted.	Adoption of a model that aid continuity of policy implementation by the Nigerian government
Micah and Ruth (2014)	Questionnaires	Persistence high level of corruption, fraud and white-collar crime in Nigeria.	Weaknesses in the regulatory framework and judicial system is a major barrier in fights against corruption
Bergh (2000)	Review of policy document	Restriction of the framework to area	Use of a step-by-step approach

s	of economic distortion e.g negative externalities.	in the development of the regulatory framework.
Iwuchukwu and Igbokwe (2012)	Time series approach	Nigeria needs the political will of leaders to overcome the challenges of a weak regulatory framework	Adoption of external policies developed by international agencies can help to minimise the risk associated with a weak regulatory framework
Birner and Resnick (2010)	Review of political-economic literature	Discovered that most global agricultural and economic policies such as the green revolution are having a positive impact on Asian agricultural companies, unlike Africa counterpart that is struggling with the	Need for the African countries to develop a framework that will guide the agricultural companies towards the achievement of an agricultural goal.

		goal.		et al. (2011)	literature	ion has resulted in the production of foreign product and acceptance by consumers globally	government should adopt a global policy to increase cross-border trade.
Akpan and Eyo (2018)	Descriptive analysis and ANOVA	The cash crop output was volatile over various policy programmes significantly.	There is a need for policymakers to formulate a tailor-made policy for the cash crops rather than using a broad-brush approach				
Akinkunmi (2017)	Time series regression and Autoregressive Distributed Lag (ARDL)	The level of economic performance is influenced by the political will of the leaders in the country	The need for the provision of an economic growth model and necessary infrastructural facilities by the political leader.	Byelee et al. (2009)	Review of literature	Government of developing nation has neglected the Agricultural sector which has the potentials to eliminate poverty and promote food security	Need to eliminate policy bias and strengthen corporate governance in agricultural companies.
Estrada et al. (2013)	Review of policies	The established climatic policies are weak and inconsistent and have resulted in underestimation the effect of future climatic change disaster	Need to improve the national policy on climatic change through adaptation strategies.	Satar (2016)	Analysis of the existing model	Absence of policy framework in most developing nations.	The need for the establishment of an appropriate regulatory or policy framework for effective policy implementation.
Mohammed	Review of	Globalisat	The	Storey (1994)	Observation	Lack of clear policy statements and objectives	Emphases should be placed on specific policies for the

		is the bane of corporate development in most nations including developed countries.	sector with rapid growth potentials
Owombo et al. (2012)	Multi-stage sampling and regression model	There is a positive correlation between access to the machine with extension services and agricultural development in Ondo State in Nigeria	The need for the development of the right policy that will lead to easy access to agricultural technology and modern equipment at an affordable cost.
Adeola and Adetunbi (2015)	Pearson Product Moment Correlation (PPMC)	The agricultural companies in south western Nigeria are willing to adopt sustainable agriculture that will increase their income.	Government agencies should improve their collaborative effort with stakeholders in the agricultural sector through the dissemination of appropriate information on sustainable agricultur

			e.
Daneji (2011)	Review of policies and programmes documents from 1960 to 2011.	The series of policies and programmes set up by the Nigerian government has not had a positive impact on agricultural development due to the lack of inclusion of all stakeholders in the agricultural sector.	The policymakers and other stakeholders should collectively design a framework that is based on the social and economic realities of the country.
Diao et al. (2007)	Least square regression technique	The level of poverty in a developing nation depends on the level of growth in the agricultural sector and the share of agriculture in total employment in the country.	Agriculture should be used as an engine of development in a developing nation through the development of an appropriate agricultural policy and regulatory framework
Omekwu (2003)	Review of agricultural literature published	Developing nations are faced with the problem	Development of an agricultural

	by international agricultural agencies like FAO, ATA, BA, and ISI	of data acquisition and retrieval with challenges of processing and disseminating of information to stakeholders	information framework which will integrate all agencies and agriculturist involved in the use of agricultural data and information
Morrison and Schneider (1987)	Comparative analysis of six developing nations economic policies	The government excessive intervention in the marketing of agricultural produces in developing nations act as a significant barrier to agricultural development in developing nations	The appropriate regulatory framework should be developed to promote and encourage the marketing of agricultural products without government intervention.
Jayne (2019)	Review of documents	Inadequate sustainable agricultural practice in Africa	The government of developing nation should make agriculture the engine of

			the economy
Zin (2014)	Review of economic policies	Economic development in developing nations can be achieved through the promotion of trade-friendly agricultural policies, infrastructural development and promotion of free trade.	Need for development of an appropriate regulatory framework that will promote structural transformation from an agricultural-based economy to an industrial economy.
UNFCCC (2007)	Convention paper	The lack of adoption of global policy poses a threat to the economic development of developing nations.	Need for the adoption of the global policy by developing nations to prevent future climatic change problem
Dardak (2015)	Review of agricultural policies	The agricultural policy transformation has led to the growth of the agricultural sector and influence economic developm	The need for a sustainable agricultural transformation programme in most developing nations.

		ent in Malaysia.	
Divanbeigi and Saliola (2016)	Cross-sectional data and questionnaire	Strict adherence to regulatory framework led to lower transaction cost and increase in productivity.	Need for the development of appropriate regulations and frameworks to support agricultural performance and transformation.
Adams (2016)	Descriptive statistics and correlation analysis	Nigeria has become a mono economy that largely depend on oil revenue as a result of continuous neglect of agriculture	Nigeria needs to diversify its economy through the development of the agricultural sector.
Hassan et al. (2010)	Literature and document analysis	Adoption of the right information transmission mechanism by agricultural agencies will lead to informed and	The government agencies and the major stakeholders in the agricultural sector should invest more funds in the agricultur

		knowledgeable agricultural companies in a country.	al transmission mechanism.
Kajisel el al. (1997)	Case study analysis	Malaysia a developing country like Nigeria was able to transform the palm oil sector through appropriate and effective agricultural research unlike Nigeria with unproductive agricultural research centre with docile administrative staff	Need to create a link between the agricultural research institute activities and agricultural companies
Nuyartoro et al. (2016)	Survey	Provision of all farm input to agricultural companies will lead to growth and development of agricultural companie	Need to develop a framework that will facilitate the development of agricultural companies.

		s as it did in Malaysia	
Fitzherber et al. (2008)	Literature review	The increase in an oil palm plantation in South Asia is leading to the extinction of biodiversity in the region.	Need to adopt a strategy that will increase palm oil plantation with little impact on the environment.
Garden (2017)	Economic review	The increase in global demand for palm oil has led to widespread deforestation in most developing nations such as Malaysia, Indonesia and Nigeria who are the major producer of palm oil.	Need for government to develop a policy which will prevent the continuous damage caused by palm oil industries on the biodiversity.
Millennium Ecosystem (2005)	Assessment of scientific literature, database and models.	Changes in the ecosystem have affective the physical healthy living in the environm	Development of framework and policies which will promote a healthy environment.

		ent.	
Pretty et al. (2001)	Literature review	Taxes, subsidy and institutional mechanisms are the effective instruments that can be used to discourage negative externalities and promote positive externalities.	Need to develop a regulatory, legal and economic framework for effective implementation of the behavioural policy.
Harrison et al. (2016)	Systematic Review of Literature (SLR)	Discovered effective communication, innovation, creativity and appetite for risk are the traits of the corporate leader	Investigation of the attribute of corporate leaders in developing economies.
Coarse (1960)	Review of economic policies	Most social costs are cost by the factory in the environment or firm external to the victims of the social cost.	Need for the payment of adequate damages in the form of compensation to the victims and payment of Pigouvian tax.

Chikhuri (2013)	Review of Global models of agricultural trade database	Food insecurity is influenced by the extent of trade liberalization.	Free trade should be used to promote development and food security.	**Novikova (2014)**	Economic scientific literature and logic analysis	Agricultural activities usually create both negative and positive	Need for the development of policy strategies for the effective control of externalities.
Ruffin and Anderson (1996)	Analysis of theory	Pigovian tax theory can only correct the market problem but cannot solve all the problems associated with externalities.	The need to develop a detailed institutional framework that will solve the problem which emanates from externalities and market failure	**Bauer and Yamey (1965)**	Review	Under-developed nations lack appropriate agrarian policy for price and income stabilisation.	The development of an inclusion policy that will aid mechanisation, price stabilisation and disease control.
Talbot and Reeves (1997)	Postal Questionnaire.	The use of broad-brush policy does not directly aid the development of all businesses.	Need for development of tailor-made policy for the development of companies.	**Moss and Schmitz (2013)**	Policy Analysis	There is an opportunity cost associated with every positive externality	Need to develop a strategy that will minimise the negative externalities associated with the public project.
Yusuf et al., (2013)	Literature review and data analysis from government agencies	The positive externalities outweigh the negative externalities in Nigeria.	Need to develop appropriate data collection strategies that will lead to efficient forest management in Nigeria.	**Williamson (1970)**	Theoretical analysis	The compensation paid to victims of externalities or demoralisation cost is usually not timely and commens	Public or private entities should pay adequate compensation to the victims of negative externalities caused by the

		urate.	entity
McChesney (2004)	Evaluation of hypothesis and theories	Government intervention weakens the resolution to the problem of social cost and private property rights infringement.	The use of unilateral, technology is the most economical way to fix the problem of social cost.
Tejvan (2016)	Review of policy documents	Government intervention in the form of regulated prices and subsidy has failed to address the issue of price volatility in the agricultural sector.	The government of the developing nation needs to lower the tariffs imposed on agricultural products to improve the income of agricultural products exporter
Barrett and Mutambatsere (2005)	Descriptive analysis	Lack of linkage between agricultural data collection and transformational policy intervention and implementation.	Need to be engaged in micro-based research to identify the process and problem of structural

			transformation and informed policy development.
Agboola (2014)	Policy review	Externalities such as deceases and viruses are part of the limitation to the development of the agricultural sector in most developing nations.	Need to develop a plan that will minimise the effect of the externalities on agricultural development.
Williams (1985)	Regression analysis and Descriptive statistics	The marketing board regime has a lower positive impact on cash crop output compare to the post-marketing board period.	The need to establish the appropriate pricing policies and price stabilization mechanism
Ajayi et al., (2017)	Review of literature	The marketing board era in Nigeria was exploitative during the colonial era and characterised with fraud and	Need for government to establish a mechanism that will promote free trade in the agricultural sector.

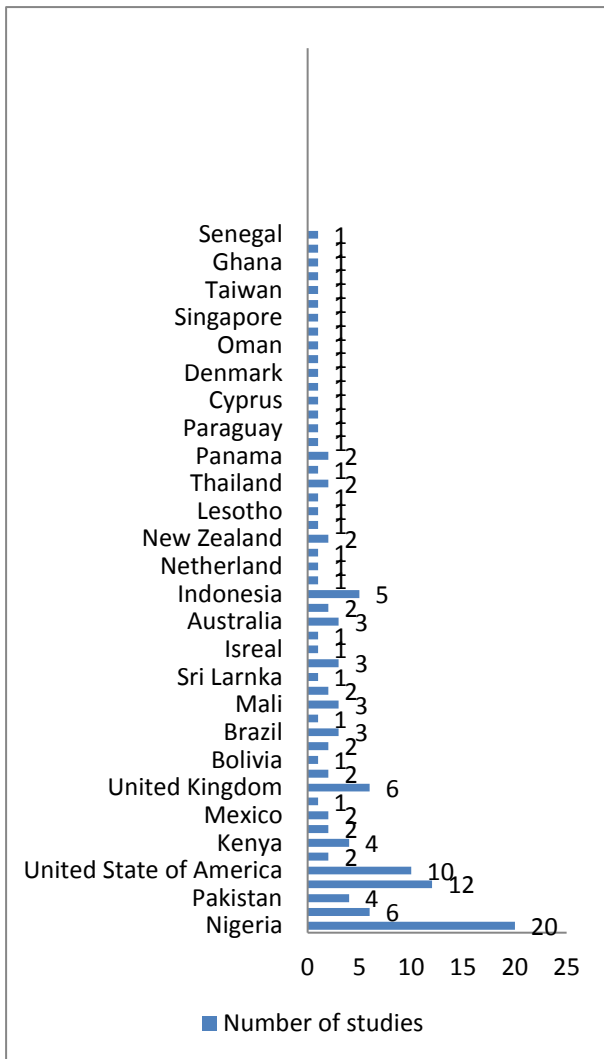| Author	Method	Findings	Recommendation
		misappropriation of the fund by government official's post-colonial	
Kolawole (1974)	Review of government pricing policies.	The pricing policy used by the government to control agricultural produce has resulted to decrease in cash crop production and increase smuggling of agricultural produce from Nigeria to neighbouring countries.	To prevent ambiguity in price stabilisation government should allow the forces of demand and supply to dictates the price.
Evans and Alenoghena (2015)	Vector Autoregressive (VAR) Model	Corruption has significantly hindered the development of agriculture in Nigeria.	To eliminate corruption in both public and private sectors Nigeria will need to develop an unconven
		tional method with strong political dexterity.	
Afroz and Akhtar (2017)	Logistic Regression Model	Adaptation of global policy is influenced by access to information about climatic change by the agricultural companies	Adaptation strategy can be a basis for the development of local policies that address the need of the agricultural companies.

3.0   Descriptive Analysis

Contribution based on geographical distribution

The highest number of papers (20) reviewed for this study originated from Nigeria. Fifty-two (52) countries are represented with second and third highest number of papers originated from Malaysia (12) and United State of America (10) respectively. The other papers reviewed are spread across other developing nations with few developed countries. Thus, high number of papers have been developed on developing economies but few on agricultural development. Nonetheless, figure 1 below shows the distribution by country of the papers reviewed.
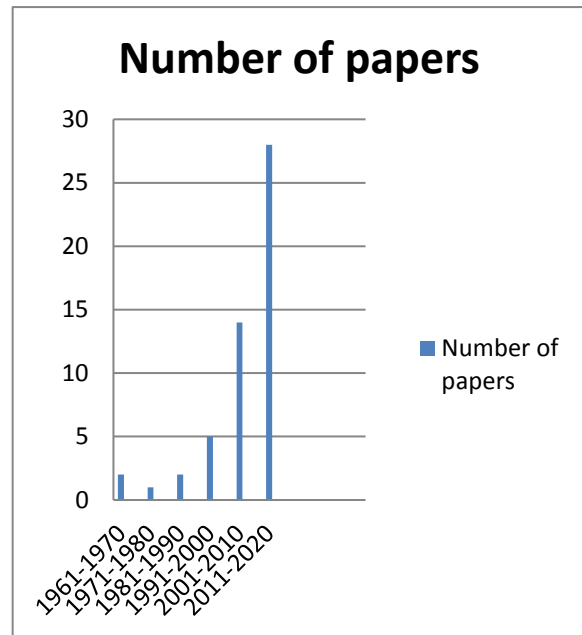
Figure 1: Distribution by countries of the papers reviewed

Number of papers

Literature source

The 54 papers reviewed are spread across different journals, but just eight (8) of the journals can be credited with at least two (2) with World development journal having the highest with frequency of 4. This can be seen in table 4

Period of publications

Figure 2 shows that among papers reviewed the papers between 2011 and 2020 have the highest frequency of 28 followed by 2001 to 2010 with a frequency of 14. This signifies that the review is based on a recent trend in corporate development in developing nations.

Figure 2. Frequency of paper by ten years interval.

Table 4. Journals with highest frequency of publications

Journal	Number of Papers
World Development Journal	4
Journal of Business and Management	3
International Journal of Research in Agriculture & Food Science	2
Journal of Economic and Development Studies	2
International Journal of Law and Management	2
International Journal of Economic	2
Staff Paper	2
British Journal of Management	2

Analysis of methodology

Analysis of findings from the literature reviewed showed 55% adopted the qualitative method, 22.5% quantitative method while 22.5% adopted a mixed method. Also, data collection instruments were 39% questionnaires, 24% interviews, 21% case studies and others were 16%. Figure 3 and 4 shows the pictorial diagram of the methodology adopted.
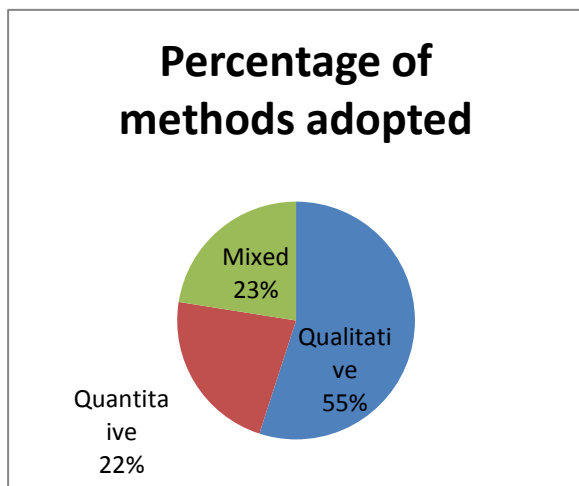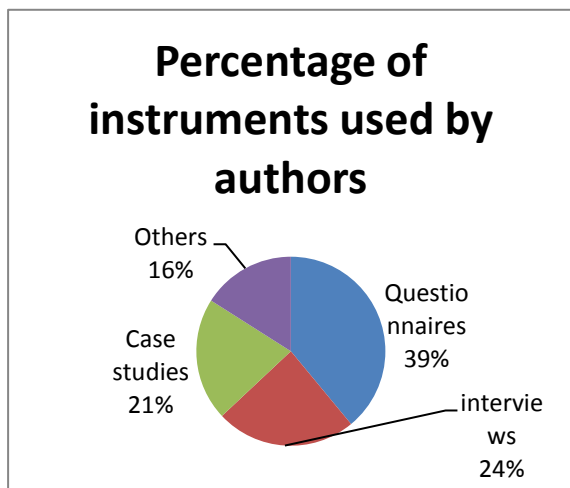
Figure 3. Percentage of the method adopted

Figure 4: Data collection instruments.

4.0   Results

➢ *Are the national economic policies used to aid the development of the agricultural sector in developing nations?*

The review showed that national economic policies in most developing nations do not have a significant impact on the development of the agricultural sector. As indicated in the table 5 below forty-two (42) of the papers reviewed answered question one in part or as a whole. The papers revealed there was no significant development in the agricultural sector as a result of neglect of the agricultural sector by the government (Byelee et al., 2009; Adams, 2016), lack of inclusion of all stakeholders in policy formulation and implementation (Daneji, 2011), lack of adequate and reliable data (Cervantes-Godoy and Dewbre, 2010) and incidence of corruption (Evans and Alenoghena, 2015). However, some of the papers such as Adams (2016) and Daneji (2011) suggested a way out of this conundrum as the development of an appropriate regulatory and legal framework that is based on the economic reality of a developing nation like Nigeria.

Table 5. *Use of national economic policies to aid the development of the agricultural sector*

Lack significant development and neglect of agricultural sector (Adams, 2016; Byelee et al., 2009; Birner and Resnick, 2010; Akpan and Eyo, 2018; Estrada et al., 2013; Adeola and Adetunbi, 2015; Diao et al., 2007; Jayne, 2019; Kajisel el al., 1997; Nuyartoro et al., 2016; Pretty et al., 2001; Chikhuri, 2013; Bauer and Yamey, 1965)
Lack of inclusion of all stakeholders in policy formulation and implementation (Daneji, 2011; Hazell et al., 2010; Afolabi, 2015; Luken, 2006; Ibietan, 2011; Satar, 2016; Owombo et al., 2012; Storey, 1994; Omekwu, 2003; Zin, 2014; Millennium Ecosystem, 2005; Ruffin and Anderson, 1996; Afroz and Akhtar, 2017)
Lack of adequate and reliable data (Cervantes-Godoy and Dewbre, 2010; Bergh, 2000; UNFCCC, 2007; Dardak, 2015; Talbot and Reeves, 1997; Novikova, 2014; Barrett and Mutambatsere, 2005)

> | **Incidence of corruption (Evans and Alenoghena, 2015**; Akinkunmi, 2017; Morrisson and Schneider, 1987; Divanbeigi and Saliola, 2016; Fitzherber et al., 2008; Garden, 2017; Yusuf et al., 2013; Ajayi et al., 2017; Kolawole, 1974) |
> | :--- |

> *What are the impacts of agricultural policies on agricultural companies' development in developing nations?*

Twenty-eight of the papers reviewed were identified to have answered review question two (See table 6). The review findings show that agricultural companies' output, profitability and return on capital employed were volatile over various agricultural policies and programme in most African nations (Akpan and Eyo, 2018) and some of the established agricultural policies are inconsistent and cannot reduce or eradicate poverty in most developing nations (Dao, 2009). Nonetheless, some of the authors such as Hazell et al.(2010) and Storey (1994) recommended the development of a tailor-made policy rather than a broad-brush approach that will influence the development of agricultural companies in the developing nations.

Table 6. *The impacts of agricultural policies on agricultural companies' development*

Volatility of agricultural companies output, profitability and return on capital employed (Afolabi, 2015: Adams, 2016; Byelee et al., 2009; Garden, 2017; Akpan and Eyo, 2018; Omekwu, 2003; Morrisson and Schneider, 1987; Zin, 2014; ; Dardak, 2015 Estrada et al., 2013; Adeola and Adetunbi, 2015; Chikhuri, 2013; Kajisel el al., 1997; Nuyartoro et al., 2016; Pretty et al., 2001; Chikhuri, 2013; Tejvan and Pettinger,2016; Williams, 1985; Bauer and Yamey, 1965; Kolawole, 1974)

Eradication of poverty in developing nations (Cervantes Godoy and Dewbre, 2010; Chikhuri, 2013; Daneji, 2011; Diao et al., 2007; Hazell et al., 2010; Novikova, 2014; Jayne, 2019; Ibietan, 2011; Satar, 2016; Owombo et al., 2012; Millennium Ecosystem, 2005; Agbo Kolawole, 1974 ola, 2014; Ruffin and Anderson, 1996; Afroz and Akhtar, 2017; Kolawole, 1974)
Effect of tailor-made policy on agricultural companies' development (**Bergh, 2000**; Birner and Resnick, 2010; UNFCCC, 2007; Dardak, 2015; Talbot and Reeves, 1997; Novikova, 2014; Barrett and Mutambatsere, 2005)
Broad brush policy versus tailor-made policy (Hazell et al., 2010; Storey, 1994; Akinkunmi, 2017; Divanbeigi and Saliola, 2016; Fitzherber et al., 2008;; Yusuf et al., 2013; Ajayi et al., 2017; Kolawole, 1974)

> *What are the impacts of the regulatory framework on agricultural policy implementation in Nigeria?*
> Twenty-four papers answered review question three (See table 7). The findings revealed that Nigeria agricultural sector just like any other developing nation lacks agricultural regulatory framework (Hazell et al., 2010; Afolabi), The weak regulatory framework in existence is not being complied with due to structural defect (Morrison and Schneider 1987; Luken 2006; Ibietan 2011) and the intervention of government in form of price regulation has further distorted the pricing mechanism in the country (Kolawole, 1974; McChesney 2004 Pettinger, 2016). However, most of the authors such as Storey (1984) recommended the use of a step-by-step approach in the development of an agricultural regulatory framework (Bergh, 2000; Satar, 2016; Nuyatoro et al., 2016) and the adoption of external policy framework developed by international agencies such as FAO and World Bank which can help minimise the incidence of the weak regulatory framework (UNFCCC, 2007).

Table 7. *Impacts of the regulatory framework on agricultural policy implementation in Nigeria*

Nigeria agricultural sector lacks agricultural regulatory framework (Hazell et al., 2010; Afolabi, 2015: Byelee et al., 2009; Garden, 2017; Akpan and Eyo, 2018; Omekwu, 2003; Morrisson   and   Schneider,   1987;   Zin, 2014Estrada et al., 2013; Nuyartoro et al., 2016; Pretty et al., 2001; Chikhuri, 2013; Tejvan and Pettinger, 2016; Williams, 1985; Bauer and Yamey, 1965; Kolawole, 1974; Luken, 2006; Satar, 2016; Diao et al., 2007)
Structural defect due to weak regulatory framework   (Luken,   2006;   Ibietan   2011; Morrison and Schneider, 1987; Micah and Ruth, 2014; Storey, 1994; Zin, 2014; ; Chikhuri, 2013; Daneji, 2011; Diao et al., 2007; Hazell et al., 2010; Novikova, 2014;   Ibietan, 2011; Satar, 2016; Owombo et al., 2012; Millennium Ecosystem, 2005; Agbo Kolawole, 1974 ola, 2014; Ruffin and Anderson, 1996; Afroz and Akhtar, 2017; Kolawole, 1974; Millennium Ecosystem, 2005; Pretty et al., 2001; Moss and Schmitz, 2013)
Distortion   of   price   mechanism   due   to intervention of government in form of price regulation (Bergh, 2000; UNFCCC, 2007; Dardak, 2015; Talbot and Reeves, 1997; Novikova, 2014; Barrett and Mutambatsere, 2005; Divanbeigi and Saliola, 2016; Hassan et al., 2010; McChesney, 2004; Tejvan and Pettinger ,2016; Ajayi et al., 2017)
The adoption of external policy framework developed by international agencies (Bergh, 2000; Iwuchukwu and Igbokwe, 2012**;** Birner and Resnick, 2010: Mohammed et al., 2011; Hazell et al., 2010; Akinkunmi, 2017; Divanbeigi and Saliola, 2016; Fitzherber et al., 2008; Yusuf et al., 2013; Ajayi et al., 2017; Kolawole, 1974; UNFCCC, 2007; Millennium Ecosystem, 2005)

➢ *Has policy transmission mechanisms been used to influence agricultural policy implementation in Nigeria?*

Twelve papers provided a solution to review question four (See table 8). The identified papers findings revealed that there is disintegration between agricultural agencies and the agriculturist involved in the use of agricultural data and information (Omekwu, 2003), Lack of appropriate policy transmission mechanism and   effective communication between the policymakers and the agricultural stakeholder (Daneji, 2011; Dardak, 2016) and lack of adequate funding and provision of the appropriate policy transmission mechanism. Furthermore, Dardak (2016) recommends a way out of the ineffective policy transmission mechanism as the development of an effective policy transmission framework   that   will   influence   effective communication between policymakers and the agrarian in Nigeria (Omekwu, 2003; Dardak, 2016).

Table 8. Using policy *transmission mechanisms to influence agricultural policy implementation in Nigeria*

Disintegration   between   agricultural agencies and the agriculturist (Hazell et al., 2010; Adeola and Adetunbi, 2015; Daneji, 2011   ; Garden, 2017; Omekwu, 2003; Ruffin and Anderson, 1996; Bauer and Yamey, 1965; Kolawole, 1974; Satar, 2016;)
Lack of appropriate policy transmission mechanism   and   lack   of   effective communication   between   the policymakers   and   the   agricultural stakeholder (Hazell et al., 2010; Hassan et al., 2010; Storey, 1994; Daneji, 2011; Hazell et al., 2010; Novikova, 2014; Agbo Kolawole, 1974; Ruffin and Anderson, 1996; Afroz and Akhtar, 2017; Harrison et al., 2016; Kolawole, 1974;; Kajisel et al., 1997)
Lack of adequate funding and provision

of the appropriate policy transmission mechanism (UNFCCC, 2007; Dardak, 2015; Talbot and Reeves, 1997; Novikova, 2014; Barrett and Mutambatsere, 2005; Divanbeigi and Saliola, 2016; Hassan et al., 2010; Coarse, 1960; Williamson, 1970; Barrett and Mutambatsere, 2005)

Effective communication between policymakers and the agrarian in Nigeria (Omekwu, 2003; Dardak, 2016Cervantes Godoy and Dewbre, 2010: Hazell et al., 2010; Harrison et al., 2016; Akinkunmi, 2017; Fitzherber et al., 2008;; Yusuf et al., 2013; Ajayi et al., 2017; Kolawole, 1974; UNFCCC, 2007

5.0 Conclusion and recommendation

The literature reviewed provided insightful answers to the review questions and many more. The review however showed that agricultural companies in the most developing nation such as Nigeria have not been able to make significant development given the large potentials of arable land and other renewable resources. From the review, it was discovered that the lack of significant development of agricultural companies in Nigeria was as a result of neglect of the agricultural sector, lack of agricultural development regulatory framework, over-dependence on crude oil revenue, lack of adequate data for agricultural planning, use of broad-brush policy, lack agricultural policy transmission mechanism, the incidence of corruption in the country, poor return on agricultural investment and lack of inclusion of all stakeholders in agricultural planning. It was also discovered that Nigeria can draw a lesson from the Malaysia palm oil development experience. Malaysia is a developing oil nation with poor economic development up till early 70s (Dardak, 2015) just as Nigeria, but Malaysia, through its agricultural development programme, has been able to reduce poverty and increase the standard of living of the citizen which has placed the country among the upper-middle-income country. Therefore, a pragmatic approach to agricultural company development in Nigeria will lead to a decrease in the rate of unemployment, food

sufficiency and an increase in foreign exchange generation.

However, Nigeria being a multi cultural nation with various ethnic groups spread across the regions need to be evaluated on a regional basis. Therefore future research can be carried out on other region to determine the impact of economic policy on agricultural companies development in other region.

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Contribution of individual authors to the creation of a scientific article (ghostwriting policy)

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