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DEVELOPMENTAL STRATEGY FOR AGRICULTURE IN NIGERIA

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ABSTRACT:

There seems to be no controversy about Nigeria being an agricultural country with food sufficiency up till the late 1970s. However, in recent times the country is finding it very difficult to provide sufficient food for the teeming population which has resulted in the majority of the country's citizens slipping into poverty. The ability of the country to provide sufficiently for the citizens was a result of a lack of reliable and effective developmental and transformational strategies in the agricultural sector of the country which is a major employer of labour in the rural community. To this end, this chapter mainly focuses on factors inhibiting the development of agricultural companies in Nigeria and how to overcome the developmental barriers in the agricultural sector in Nigeria.

The findings from the review show that the bane of the agricultural sector in Nigeria is due to the lack of an agricultural regulatory framework and policy transmission mechanism and over-dependence on oil revenue amongst other things (Adams, 2016). It is therefore imperative for the country to embark on the development of a reliable agricultural framework and model that will aid food sufficiency in the country.

KEYWORDS:

1. Development
2. Strategy
3. Agriculture
4. Agricultural companies
5. Framework
6. Nigeria

Introduction

In the early 21st century, several predictions were made that the subsistence farming system in most of the developing nations will soon disappear (Hazell, Poulton, Wiggins, & Dorward, 2010) and transcend to modern agricultural companies through the implementation of appropriate developmental strategies for agriculture. Despite these forecasts, the practice of subsistence system of farming persists in some of the African countries including Nigeria which is the country with the highest population in Africa. The lack of adoption of modern technology by the agricultural sector of most of these African countries has led to food insufficiency, poverty, hunger, and stagnation of economic growth.

Consequently, most of the African nations, are riddled with abject poverty; food insecurity; environmental degradation; malnutrition, and poor economic growth (Adams, 2016) due to a lack of appropriate agricultural transformational strategies (Hazell et al., 2010; Akindola, 2017). In consonance with the popular opinion, the Nobel Laureate, Lewis in 1954 said there is a positive correlation between industrial development and agricultural transformation and an economy with stagnated agriculture will not show traits of industrial development (Barrett, Reardon, Swinnen, & Zilberman, 2019).

Against these backdrops, the African Development Bank (ADB) in May 2016 approved a developmental strategy for Agricultural transformation in Africa between 2016 and 2025 tagged "Feed Africa". The goal of the strategy is to eliminate abject poverty in Africa by the year 2025; end hunger and malnutrition in all Africa nations by 2025; make African countries major agricultural produce exporters where it has comparative advantages. The development and approval of this strategy have further confirmed the need for economic growth and development through the agrarian revolution in most African countries including Nigeria that is traditionally an agricultural country (Iwuchukwu & Igbokwe, 2012).

This review, therefore, reveals the agricultural problem in most developing nations and how agricultural policies can be used to influence the development of agricultural companies in Nigeria through the development of a framework, model and identification of the right policy transmission mechanisms. The conclusion of the review will by extension be useful to other developing nations around the world.

Background of the study

The Nigerian economy just as most of the other African countries has not recorded significant progress as a result of neglect of the agricultural sector which underpinned the economic growth and development of the nation shortly after independence (Afolabi, 2015; Adeola & Adetunbi, 2015). The neglect was due to the discovery of oil in commercial quantity (Adams, 2016) and followed by the oil boom in the 70s which led to the manifestation of Dutch Disease (Ibietan, 2011). Sequel to that, the country has been unable to match its economic prosperity with the rapid population growth thereby resulting in food insufficiency, a high rate of rural-urban migration, and consequently massive food importation 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 the application of transformational strategies in their agricultural sector (Divanbeigi & Saliola, 2016).

Nigeria as a country needs to establish economic policies that will promote the development of agricultural companies in form of 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. 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 depend largely on the development of Nigeria's agricultural sector and not on crude oil which 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 & 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 and Naser (2004) also argues that return on capital employed, assets growth, and earnings of agricultural companies can serve as a benchmark for the impact of economic policy on the company growth and development.

Therefore, Nigeria being an agrarian country (Afolabi, 2015) needs to develop its agricultural infrastructure through agricultural transformation mechanisms (Divanbeigi & Saliola, 2016; Barrett et al., 2019) such as the 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 have remained trapped in hunger, poverty, and economic stagnation (Hazell et al., 2010). Against the background, this study will assess the impact of economic policies on the development of agricultural companies in Nigeria with a focus on the Western Region of the country.

The Geography of Nigeria

Nigeria is a federation, politically divided into six regions and comprises 36 states with FCT Abuja. The country is characterised by various cultural and ethnic groups, dominated by the three largest groups, the Yorubas, Igbos, and Hausas. Other smaller groups include Fulani, Ijaw, Kanuri, Ibibio, Tiv, and Edo. The country has three main ecological zones: Savannah, tropical forests, and coastal wetlands. These environmental zones greatly influence the culture of the people dwelling in these zones. The savannah in the north makes cereal farming and herding occupations for the Hausa and the Fulani. The wet tropical forests in the south make farming of fruits, crops and vegetables the principal occupation of the Yorubas, Igbos, and others in this zone. The ethnic groups living along the coast, such as the Ijaw and the Kalabari, make fishing their principal occupation.

As mentioned above Nigeria was traditionally an agricultural-based economy (Afolabi, 2015), providing employment and food for its citizen and exporting agricultural produce, like cocoa, palm oil, rubber, and groundnut to countries around the world. Agriculture has been the vital component of the Nigerian economy, based on its contribution to the GDP, employment and foreign exchange earnings. However, the discovery of oil in 1959 (Adams, 2016) and the oil boom of the early 70s have made the agricultural sector to become, relatively small (Hazell et al., 2010) in terms of foreign exchange earnings and contribution to the GDP of the country.

Nonetheless, the oil boom has prompted the continuous dependence on oil by the nation (Adams, 2016), as the primary source of financing its economy, while other oil-producing nations, like the United Kingdom, United Arab Emirates, Indonesia and Brazil are making more headway in the diversification of their economy into other sectors (Hazell et al., 2010), such as tourism, finance and manufacturing. The inability of the former military and successive civilian government to diversify the Nigerian economy from being over-dependent on oil, which price in recent times has become very volatile is a critical economic issue. The lack of diversification has made the Nigerian economy lag behind countries like Malaysia, Brazil, Indian and Pakistan that used to be on the same level of economic development as Nigeria in the early '60s. This challenge has made Nigeria, now ranked below most of these countries in terms of industrialisation (Egbochuku 2001; Ogbeibu, Senadjk & Gaskin 2018), as some of them are now emerging markets and newly industrialised nations. Figure 7.2 shows the volatility of the oil price and its impact on Nigeria's oil revenue and GDP.

Regulatory framework for national economic policy

Economic development requires advancement in the provision of primary healthcare, access to education and affordable living standard for the citizen of the country on a sustainable basis. Some of these basic amenities are either lacking or not adequate in developing nations, including Nigeria, which is "regarded as the giant of Africa" (Bray, 2018). Most developing countries find it difficult to implement sustainable economic programmes and policies due to a lack of appropriate regulatory framework (Hazell et al., 2010) which should serve as a guide for both policy makers and beneficiaries of the policy.

A sustainable economic system requires a regulatory framework for the supervision and coordination of the commercial activities of a country (Afolabi, 2015; Barrett & Mutambatsere, 2005). For sustainable economic development, the government may initiate a regulatory framework for the control of financial services, policy transmission mechanism, climate change and insurance practice for agricultural development, just as the United Kingdom developed a national planning policy framework, for sustainable development in economic, social and environmental issues.

The review of the regulatory framework for sustainable development carried out by Luken (2006) on 18 developing nations, through data collected from their national reports/surveys, shows that the legal, economic and institutional framework for effective corporate management only exist as a document in the form of company laws, sectoral guidelines and policy documents in developing nations. The availability of Security and Exchange Commission (SEC) rule, code of corporate governance, CAMA (2004) and NSE guidelines which are not complied with, by the operators in the Nigerian economic sectors, further confirmed the findings of Luken (2006). Examples of non-compliance in Nigeria are the case of public listed companies' failure to hold an annual general meeting and file an annual return as required by Company and Allied Matters Act (CAMA) and SEC rules. This was contrary to the view of Cervantes-Godoy and Dewbre (2010), which state that developing countries through their system of governance and economic management were able to reduce poverty substantially. The case of Malaysia whose economy has been growing at an annual rate of 6% over 30 years and was able to reduce poverty from 52.4% to 3.8% over the period (Zin, 2014) further confirm the view of Cervantes-Godoy and Dewbre (2010).

Luken (2006), however, identifies the problems of sustainable development in developing nations, as lack of coordination and coherence among policies and programmes, lack of adequate data or database, lack of punitive measures against defaulters, lack of application of modern technologies in sectoral development, absence of involvement of all stakeholders in policy formulation and abuse of policies by the institution and government agencies. The study, however, concluded that there is a need for effective partnerships between the public and corporate sectors for the development of appropriate policies (Ahmad and Omar, 2016), improved control mechanisms and technological progress, which will create a positive impact on business and economic development. This was corroborated by a study carried out by Ibietan (2011) which states that the causes of Nigerian government policy reversals and failure in the agricultural policy-making process from 1960 to 2011 were as a result of non-conformity with the theoretical framework of the policy model adopted.

The case of the Green Revolution (GR) programme initiated in 1980, was evidence of non-conformity with the conceptual framework, in which the Asian countries were able to increase agricultural output through smallholders-based GR. While the African countries such as Nigeria could not make significant progress with the programme (Birner & Resnick, 2010) due to lack of proper monitoring, evaluation and accountability of the considerable fund invested on the GR project (Iwuchukwu & Igbokwe, 2012; Ezekwezili, 2012). This programme was later jettisoned in 1986 without any meaningful achievement and replaced with the Structural Adjustment Programme (SAP). Ibietan's (2011) review of various literature on the policy-making process, also shows that inconsistency and lack of collaboration among the policy stakeholders has been the principal barrier of developmental programmes in Nigeria. He, therefore, concluded that the model which aids continuity of policy implementation is appropriate for the Nigerian government as policy inconsistency and failure, which is the bane of agricultural policy in Nigeria would be prevented.

Micah and Ruth (2014) through administered questionnaires, found that corruption, fraud and white-collar crime persists in Nigeria despite the enactments of the EFCC Act of 2002, ICPC Act and Evidence Act of 2011. It was further discovered that the Acts failed to curb the high rate of corruption and financial crime, as a result of weaknesses in the regulatory framework, judicial system and supremacy and conflict among the law enforcement agencies. The supremacy and conflicts were due to duplication of responsibilities between the agencies responsible for the administration of the Acts such as the conflict between the Independent Corrupt Practices Commission (ICPC) and Economic Financial Crime Commission (EFCC) on investigation and prosecution of a corrupt public official. These have prevented the Acts from combating corruption effectively in Nigeria.

The use of plea bargaining, where corrupt politicians, negotiate an agreement on the amount embezzled (Akpan & Eyo, 2018; Ijewereme, 2015) to avoid prosecution is evidence of weakness in the regulatory framework of the country. The study was able to determine the causes of failure in the fight against corruption in the country but failed to identify the structural defects in the development of the regulatory framework by the Nigerian government, such as duplications of responsibilities of the law enforcement agencies in the country. The establishment of a regulatory framework with the proper structure will effectively eliminate the weaknesses arising from political interest and duplication of responsibilities among the law enforcement agencies.

Therefore, the Nigerian government needs to define crime investigation procedures with the agency's clear line of responsibility in its regulatory framework just as it is done, in developed nations. For example, the United States of America legal system goes beyond "Black letter law" (technical legal rules to be applied in a specific issue which is most often well established and no longer subject to reasonable dispute) to prevent conflict in judgment (Micah & Ruth, 2014) with the help of a regulatory framework.

Bergh (2000) states that the framework should be restricted to the area of economic distortion, such as the area of significant negative externalities, climate change, political distortion, and where there is a comparative advantage. He, therefore, recommends an integrated step-by-step approach for decision-making by the European regulators. This approach can also be adopted by a developing country, like Nigeria, for the development of its regulatory framework, which has been inconsistent since 1960 to date (Ibietan, 2011). The step-by-step approach will integrate all the anti-corruption agencies and eliminates the area of responsibilities overlap.

Kulawczuk and Poszewiecki (2011) discover that national economic policy usually influences the tax system, government grants, financial support and incentives available for business development and the method used in disseminating information (transmission mechanism) about national economic policies to all stakeholders. This study concluded that, financial incentives are influenced by the nature of competitions within the economy (Williams, 1985) and that an improved economic framework will support the new entrant to the economic sector and in turn, aid business development.

Finally, Harrison, Paul and Burnard (2016) propose that the government of developing economies such as Nigeria has not given adequate attention to entrepreneurial leadership which can aid the development of the sector of the economy with great potential through the establishment of an entrepreneurial leadership framework. The establishment of a leadership framework can be used to influence the development of agricultural companies in the Western part of Nigeria. Therefore, a nation, like Nigeria, needs the political will of the leaders to develop an appropriate institutional framework for the country's agricultural companies. To overcome the challenges of a weak institutional or regulatory framework, the Nigerian government can also adopt external policies developed by international agencies, such as the climate change policy developed by United Nation Framework Convention on Climate Change (UNFCCC), accounting policies developed by International Accounting Standard Board (IASB) etc.

A framework for global policy adoption

Estrada, Papyrakis, Tol, and Gay Garcia (2013) found out during their study that, there is a need to integrate climate policy with the national economic policy. They believed that the development of the regulatory framework in respect of climate change would promote government policies within the country. The absence of a framework for climate policy will increase the risk of vulnerability from the change in climate conditions, which may lead to drought and consequently, food insufficiency in a developing country like Nigeria (Adetuyi et al., 2021). However, Nigeria being a member of many international institutions can adapt existing policies developed by the international bodies of which they are a member rather than developing a similar policy locally.

The adoption of the external or global policies developed by global agencies, such as the United Nations, World Trade Organisation (WTO) and Food and Agriculture Organisation (FAO) by Nigerian policy makers will help to integrate the Nigerian economy in the area of agricultural development with other countries around the world, regulate the trade relationship between Nigeria and other countries (UNFCCC 2007) and eliminate the application of the rule of thumb in the development of policy and regulatory framework. The adoption of global policies is in line with the view of Muhammad, Muhammad, Muhammad, and Iqra (2011), that adoption of global policies or standards such as the climate policy and international accounting standard will boost local economic activities, eliminate ethnic, cultural and political distraction in governance, attract FDI, and increase cross border transactions.

However, the study was able to give direction on how national economic policy, such as climate policy can be used to prevent future financial crises and food shortages through the integration of climate change in the planning and budgeting strategies of the country. Likewise, Afroz and Akhtar (2017) in their paper believes the global policy adoption strategies can serve as a basis for policymakers to produce a policy that will be in line with the need of agricultural companies such as knowledge about climate change and other information that can lead to the development of agricultural companies. However, it is worthy to note that climate change may render an operating framework obsolete and frustrate the economic activities of individuals, government and firms in the country (Bauer & Yamey, 1965), just as it did, to the agricultural sector in the Northern part of Nigeria, during the severe Sahel Savannah drought of 1972 to 1974 and outbreak of the disease in 1975 (Agbola, 2014) and the global pandemic of 2020 as a result of COVID 19.

A paper produced by UNFCCC (2007) emphasizes the importance of a framework in the development of climate policy and how developing countries can integrate adaptation programmes into their regulatory framework. Nigeria, a developing nation is yet to effect the recommendations of the UNFCCC of 2007 on climate change in its national policy. The lack of a framework for climate policy poses a future danger to some economic sectors, such as agriculture, the health of the citizen, water resources and terrestrial ecosystem. The convention was able to give direction on how national economic policies through the adaptation of an appropriate framework can be used to prevent the impact of climate change on the economy. Nigeria, an agricultural-based country, will be protected from unexpected calamities of deforestation, agricultural land degradation, and hunger, through the development of agricultural policy which includes strategies for management of climate change impact.

Regulatory framework for the transformation of the agricultural sector

In recent times, the agricultural sector, through transformation has been regarded as a sector that will alleviate poverty, ensure food sufficiency and security and trigger growth and development (Byerlee, De Janvry, & Sadoulet, 2009) in developing nations. It is also widely accepted that a good policy framework will significantly influence the level of business development (Storey, 1994; Satar, 2016) and by extension the agricultural companies development in developing nations like Nigeria. Most developing nations are agricultural countries with a low level of real income and low GDP per capita when compared with developed countries such as, the United Kingdom, Australia and the United States of America that are industrialised. Nigerian GDP of $397 billion in 2018, is the highest in Africa, but low when compared to the United Kingdom with $2.9 trillion, Australia with $1.4 trillion and the United States of America with $20.5 trillion in the same year (WEI, 2019). However, the lack of an appropriate regulatory framework has resulted in the development of various agricultural policies without significant progress (Iwuchukwu & Igbokwe, 2012) on the transformation of the agricultural sector in Nigeria.

Adeola and Adetunbi (2015) in their investigation discovered that South-Western Nigeria can transform the agricultural companies through collaboration between the government agencies and the agricultural companies in the region. The study, however, did not specify the form of collaboration that will promote the transformation of the sector in the region. Unlike Adeola and Adetunbi (2015), Morrison and Schneider (1987) in their research carried out at OECD's Development Centre, on factors responsible for the poor performance of the agricultural sector in under-developed nations, selected Burkina Faso, Mali, Nepal, Kenya, Tanzania and Sri Lanka. They discovered that government interventions in under-developed countries had become a barrier to the development of agricultural companies, as government agencies usually use fiscal policy, such as direct tax, to regulate prices of crops as a way of controlling the economy.

However, Jayne (2019) stresses that developing nations need to transform their agricultural sector, which is the heartbeat of their economy, by allowing the private sector to be the engine of the agricultural transformation, while the government concentrates on the development of the regulatory framework, just as, it is the practice in the developed nations. Morrison and Schneider (1987) also discovered that the government agencies of the nations selected, have monopoly power to purchase the export crops from the farmers at a price, fixed by the government, export it and retain between 20% and 50% of exports value for the government. This is not the practice in developed countries such as the United States of America and Canada, where prices are determined by market forces or forces of demand and supply. They noticed that imposition of excessive income tax, export tax and levies on agricultural companies as a form of redistribution of resources for the development of the non-agricultural sector, is another major factor inhibiting the growth of agricultural companies in developing nations.

The Nigerian government, in an attempt to promote the transformation of the agricultural sector in Nigeria, decided to grant specific tax incentives to agricultural companies (CITA, 2004). The tax incentives are in the form of carrying losses forward against future profit, unrestricted use of capital allowance on capital expenditure and non-imposition of the minimum tax, which is payable by other sectors. These incentives have led to the creation of fictitious agricultural companies trading in other sectors fraudulently claiming the benefit and thereby not leading to significant development in the agricultural sector as a result of this corrupt practice.

Bauer and Yamey (1965) express their view on the policy measures affecting agricultural development in under-developed nations. The authors identified policy measures that can influence agriculture such as, necessary revision of contract terms, agricultural extension, and conservation of natural resources, appropriate regulatory framework and promotion of cooperative enterprise, compulsory cooperation and price and income stabilisation. They argue that the rapid population growth in developing nations is exerting massive pressure on little capital available for the small farm holders within the country and thereby giving rise to low agricultural output and consumption per head. In Nigeria, for example, the population is growing at an average rate of 2.7% per year, while the contribution of agriculture to GDP has fallen from 32% in 2007 to 21% in 2018 (NBS, 2019).

To overcome these challenges, Bauer and Yamey (1965) suggested the inclusion of the following in agrarian policy by the government; agricultural extensions, such as disease control, bud-grafting, veterinary support and conservation practices and mechanisation of farming as techniques of increasing output. This is contrary to the findings of Iwuchukwu and Igbokwe (2012), who discovered that corruption, misappropriation, lack of interaction between policy makers and stakeholders and role conflict between different programmes and projects are the major barriers facing the Nigeria agricultural sector and by extension other developing nations (Utomi, 2019).

Bauer and Yamey (1965) advised that developing nations can conserve resources through the use of regulatory provisions or direct control, such as the imposition of a high tax rate and preventing the use of public funds by private entities. These measures will discourage the registration of fictitious agricultural companies in Nigeria and by extension, reduce corrupt practices in the agricultural sector of the economy. However, the imposition of a high or excessive tax rate on the agricultural company may lead to an increase in the price of essential food items, cost-push inflation and discourage investors from investing in the agricultural sector.

Divanbeigi and Saliola (2016) investigate how the regulatory framework can be used to transform the traditional agricultural sector using cross-sectional data. They discovered that good regulatory practices and government policies play a crucial part in the transformation of businesses through the elimination of hostile competition and the reduction of fraudulent practices among stakeholders in the sector. The findings show that agricultural output increase in countries where there is strict compliance with good regulatory practices, as demonstrated by Asian countries during the green revolution (Hazell et al., 2010).

Consequently, a country like Nigeria that failed to implement a useful regulatory framework in its agricultural transformation has remained trapped in economic stagnation, high rate of corruption, poverty (Diao et al., 2007) and hunger. Therefore, setting the Nigerian economy on the path of recovery requires an aggressive reform in the agricultural sector, which seems to be the only way out of the national conundrum

(Adams, 2016). In line with the view of Divanbeigi and Saliola (2016), the interest of economic development, and the transformation of the agrarian sector through the appropriate regulatory framework should be the priority of all developing countries such as Nigeria. Therefore, as a way forward, the Nigerian government can learn from the transformation agenda of the Malaysian government that was used to transform the agricultural sector into a modern sector.

Furthermore, the Nigerian government can develop its agricultural company through the development of appropriate policy and framework rather than using the broad brush policy (Storey 1994; Talbot & Reeves 1997) approach which has not helped the sector in the past. The lack of conceptual framework and the absence of the right measuring tools (Harrison et al., 2016) in the implementation of agricultural policy has been the bane of agricultural companies' development in Nigeria. Therefore, the conceptual framework in figure 7.1 below is suggested for agricultural companies' development in Nigeria.

FIG 7.1 HERE

The conceptual framework in figure 7.1 illustrates how the relevant research variables relate to each other and to the overall aim of the study which is agricultural companies' development in South-Western Nigeria.

The framework shows that individual entrepreneurs are motivated by factors such as higher return on capital employed, entrepreneurial skills, opportunities for capita creation through access to grants, low-interest loans, etc. The growth of the individual start-up can be influenced by appropriate policy development and implementation in the area such as free access to education and training at a local or regional research centre (Barro, 1995). However, the establishment of a local research centre will stimulate the start-up as a result of the availability of local support in the area of low-interest capital/loan and venture capital. Access to training and education on-farm management will also aid the development and growth of the individual entrepreneur and influence their transition (Satar, 2016) to agricultural companies.

Furthermore, the conceptual framework reveals how individuals that migrate to agricultural companies will further develop through effective policy implementation (Danej, 2011). The implementation of policy that promotes access to the international market, resource pooling, and support on the acquisition of modern technologies will aid the development of agricultural companies (John et al., 2012).

The establishment of regional programmes and schemes such as public-private partnerships, the establishment of agricultural companies network by stakeholders and setting up management strategies for development by the individual agricultural companies will influence the growth of agricultural companies in the region and hence lead to national economic growth (Ishola et al., 2016). To maximise the benefits derivable from the above conceptual framework there is a need for both policy makers and agricultural stakeholders to develop business ethics, legal framework and appropriate policy transmission mechanisms. The development of the framework and transmission mechanisms will prevent unhealthy competition and offer effective growth of the agricultural companies within the region. In addition, offering tax benefits and incentives in form of agricultural subsidies and the development of infrastructural facilities will aid the development of agricultural companies and by extension the economic growth of the nation.

Lessons from Malaysia agricultural policies transmission mechanism

In assessing the role of agricultural policy in the development of agrarian companies, it is important to evaluate the transmission mechanism used in communicating the agricultural policies to the stakeholders in the sector. Effective communication of agricultural policy and transformation agenda through the right channel of communication will aid the implementation of established agricultural policy, agricultural sector development and the international transmission of economic policies (Omekwu, 2003), as it did in Malaysia. Malaysia is an emerging economy and planned to be a developed nation by the year 2020 (Dardak, 2015) just as intended by the Nigerian government. Though Malaysia was unable to actualise the plan of becoming a developed nation in the year 2020, unlike Nigeria, the country has recorded significant economic development through its transformation agenda. Nigeria, a developing country like Malaysia, can learn from the agricultural policies transformation mechanism of Malaysian policy makers and avoid most of the negative externalities associated with the transformation strategies.

Hassan, Shaffril, Samah, Ali, and Ramli (2010), discovered that the Malaysian government through mass media, such as television, radio, newspapers and the internet were able to disseminate vital agricultural information to the farmers. The dissemination of agricultural information through the right channel of communication led to the creation of educated and informed farmers with updated information in Malaysia.

However, the case of Nigeria agricultural sector is directly opposite of the situation in Malaysia, as farmers are disenfranchised from the implementation of agricultural policies due to a lack of information flow between the Nigerian government and stakeholders in the agricultural sector (Iwuchukwu & Igbokwe, 2012; Ayayi et al., 2007; Ibietan 2011). Unlike Malaysia farmers who are knowledgeable and educated as a result of information received from Malaysian policy makers through suitable transmission mechanism, the Nigerian farmer has remained uninformed due to lack of knowledge on how to transform from the use of peasant or traditional techniques to mechanised farming with high productivity (Cervantes-Godoy & Dewbre, 2010).

Hassan et al. (2010) further emphasised, that the use of mass media has eliminated the challenge of literacy among farmers and makes data more accessible for agricultural research. In Nigeria, the problem of literacy among farmers and the non-availability of data for agricultural research (Akinkunmi, 2017) are major problems hindering the progress of the agricultural sector. Cervantes-Godoy and Dewbre (2010) also believed that the use of appropriate transmission mechanisms for communicating agricultural policies would improve agricultural performance and income in a rural area, influence agricultural contribution towards the growth of other sectors and stimulate the transition of agriculture towards sustainable development. Hassan et al. (2010) concluded that more funding or sponsorship on agricultural information would further improve the agricultural sector of a nation.

To overcome the problem of agricultural policy transmission between the policymakers and agricultural stakeholders such as agricultural companies, the Nigerian policymakers and agricultural agencies can adopt the conceptual framework developed by Osakwe in 2010 for the National Agriculture Information Management

System (NAIMS) in Nigeria. The adoption of the framework will aid the transmission, reliability, quality and value of agricultural information (Osakwe, 2010) transmitted among stakeholders in the agricultural sector. The efficient flow of information in the agricultural companies' network will however improve decision making by the management of agricultural companies which will, in turn, lead to the growth and development of the companies (Afolabi, 2015).

The case of palm oil production in Malaysia versus Nigeria

The Malaysian oil palm sector has grown to become a very significant agricultural base (Nuyartono et al., 2016), making the country one of the leading producers and exporters globally. Kajisa, Maredia, and Boughton (1997) examined the transformation of the palm oil plantation in Malaysia vis-a-vis the stagnation of the industry in the Nigerian agricultural sector. In their study, they discovered that Malaysia agricultural transformation is aided by the application of modern technology in research and development and oil palm processing, creation of a conducive business environment and the adoption of an effective transmission mechanism in the sector.

The Nigeria government, on the other hand, has not been able to make significant progress on its transformation strategies as a result of its inability to create an enabling environment and technology frontier for the small farm holders and private sector (Iwuchukwu & Igbokwe, 2012; Kolawole, 1974) operating in the oil palm industry. The lack of improvement in technology application by Nigerian small farm holders in the oil palm industry has resulted in the stagnation of Nigeria's oil palm production that used to be a major producer. They discovered that the transformation strategies adopted by the Malaysian government pushed the oil palm production in Malaysia from less than 10% of global palm oil production in 1965 to more than 43% as of 2005 and fell to 32% in 2018. While Nigeria that used to produce more than 40% of global production up till 1960 before independence, has fallen to 2% in 2005 and further fell to 1% of global oil palm production in 2018 (World Economic Indicator, 2018) as shown in Figure 7.2 below.

Iwuchukwu and Igbokwe (2012) concluded that Malaysia was able to increase its oil palm production through the transformation of its environment, transmission mechanism and taking advantage of technological innovations in oil extractions, while Nigeria remains stagnant as a result of its smallholder's farmers extracting oil through the traditional technique. The oil palm is also used to perpetuate corrupt acts by companies that obtain a license to clear land for oil palm plantation, but use the area for other purposes (Fitzherbert, Struebig, Morel, Danielsen, Bruhl, Donald & Phalan, 2008) such as logging, thereby causing stagnation in the oil palm industry in Nigeria. However, the increase in oil palm production through transformation is not without cost, as it has led to deforestation because of the replacement of oil palm plantation with larger forest areas in oil palm producing nations. It has also reduced the value of biodiversity in Malaysia.

FIG 7.2 HERE

Fitzherbert et al. (2008) in their review, on the impact of oil palm plantation expansion on biodiversity, discovered that the oil palm plantation growth in the south-east of Asia has led to a rapid increase in deforestation around the continent, especially in Malaysia, Thailand and Indonesia (Nuyartono et al., 2016). The three countries are global leaders in palm oil production and also leading in the area of deforestation globally (Gurden, 2017). However, the oil palm production in Nigeria has fallen by 100% between 2005 and 2018 and the smallholder's farmers who are geographically spread in Nigeria keep extending the oil palm plantation into the tropical forest area without a significant increase in the oil palm production in the country. This is due to a lack of proper plantation management and use of modern mills processing method (Kajisa et al., 1997). Fitzherbert et al. (2008) further discovered that the boom in the oil palm industry (Manning & Roesad, 2007) has reduced the value of biodiversity, as oil palm continues to replace the tropical forest area and brings about some negative externalities such as land disputes, pollution, greenhouse gas emissions and habitat fragmentation (Nuryartono, Pasaribu & Panggabean, 2016).

Nonetheless, they concluded that the rapid loss of biodiversity value could only be reduced if the transformation of the oil palm industry is administered to avoid deforestation. For Nigeria to successfully transform its oil palm industry, it will need to emulate the development path of Malaysia (Kajisa et al., 1997) and avoid negative externalities such as deforestation and loss of biodiversity (Adeola & Adetunbi, 2015; Millennium Ecosystem, 2005) associated with Malaysian oil palm transformation.

Agricultural development and agricultural externalities in Nigeria

From the previous literature reviewed, it was discovered that the agricultural sector has become a very complex sector of the economy as a result of factors such as externalities and the activities of the marketing board, with multiple effects on market, social, cultural, environmental and agricultural development of the most developing nation (Pretty et al., 2001; Barua et al., 2010) like in Nigeria. However, the activities of the peasant farmers in most of these developing nations such as Nigeria and Malaysia are leading to deforestation and causing a reduction in the biodiversity of the nation (Adeola, 2015).

Likewise, the grazing of cattle on farmland by nomadic herdsmen has led to the destruction of farm produce in southern Nigeria and thereby causing scarcity of basic food items in the region. The effect of these agricultural activities by the small farmers and nomadic herdsmen are the problems of social cost (Coase, 1960; Ruffin & Anderson, 1996; Chikhuri, 2013) which are referred to as externalities that cause market failure (Yusuf, Rufai & Komolafe, 2013) and infringement on property right.

Externalities are social products in form of non-monetary benefit (good) or cost (bad) associated with private activities of a firm (Ruffin & Anderson, 1996) in an environment that may cause a social problem, market failure, infringement on property rights or benefit for other participants in the environment (Coase, 1960). The externalities which arise from the activities of the peasant farmers may impact the welfare of an environment directly or indirectly, it may be positive or negative. While the activities of the cattle-raiser may lead to an increase in the prices of agricultural produce, infringement on the property right of the farmers (Coarse, 1960) and discourage investment in cash crop production.

Novikova (2014) on the evaluation of agrarian externalities through the review of economic scientific literature and logic analysis of traits of agricultural externalities, discovered that intensive and extensive agricultural activities have an effect on the environment in form of positive and negative externalities. This was corroborated by policy analysis carried out by Moss and Schmitz (2013) who identified positive externalities as benefits which include non-marketable products and services, such as the creation of recreational centres like Ikogosi recreational centre in South-Western Nigeria. However, Moss and Schmitz (2013) state that negative externalities are costs which includes pollution, soil and water degradation, forest fire and other uncompensated damages inflicted on the property right as a result of agricultural companies' activities. The control and management of these externalities depend on how it arises and whether the effect is public or private.

Coase (1960) state that government intervention may or may not be necessary for the control and management of either good or bad externalities. The impact of externalities caused by activities of a firm or sector may lead to the failure of another firm or sector in the environment in terms of market failure, deforestation, health hazard, property rights infringement and loss of profits. A similar case in Nigeria is where government grants tax relief to agricultural companies for making a loss but has not been able to find a solution to the infringement on the property right of the agricultural companies in the Southern part of the country by cattle raisers from the Northern part.

Unlike Coase, Pigovian theory assert that the impact of externalities such as market failure and loss of profit should be corrected through tax payment. The tax payment will serve as compensation for damages suffered by other firms in the environment. While the subsidy will serve as compensation for good externalities generated (Ruffin & Anderson, 1996; Meramveliotakis & Milonakis, 2018).

Nonetheless, in Nigeria, a significant portion of externalities such as deforestation and pollution are from the agricultural sector which provides social and economic benefits in form of food safety and employment to the citizenry (Yusuf et al., 2013).

Furthermore, Williamson (1970) in his study on the theory of externalities and compensation analysis, through the use of the case of television signal transmission of World Trade Centre construction, concluded that compensation for damages which can be regarded as demoralisation cost should be paid to the victims of the externalities for loss suffered as a result of the impact of the externalities. In line with

Williamson (1970), Ruffin and Anderson (1996), based on the review of Coase theorem and Pigovian principle on property rights, concluded that there should be payment of damages to the victims of the externalities and also reasonable tax to the government for competition. This is not the case in Nigeria, as most of the firms whose activities lead to negative externalities neither pay demoralisation costs to the victims or tax to the government for the effect of their activities, like in the case of peasant farmers activities which are leading to deforestation and reduction in biodiversity.

Also, the study carried out by Yusuf et al. (2013) on the evaluation of externalities using data from literature and multinational organisations revealed agricultural externalities exist as a form of indirect forest goods and services that arise out of the agricultural activity. These indirect forest goods and services influence the stakeholders in the environment where the agricultural activity is taking place (Moss & Schmitz, 2013). Examples of such influences are the cases of deforestation in Nigeria by the peasant farmers and in Southeast Asia as a result of oil palm plantation expansion in Malaysia and Indonesia (Fitzherbert et al., 2008) without payment of demoralization cost (Williamson, 1970). The effect of negative externalities in Nigeria is currently at a low level as the Total Economic Value (TEV) of positive externalities outweighed the TEV of the negative externalities by (positive value -N269bn; $747m and negative value- N4.2billion; $11.6m) 63 times (Yusuf et al., 2013), while the cost of externalities in other countries are; UK $3.8bn, US$34.7bn and Germany $2bn (Pretty et al., 2001). The total economic value is the market cost of the externalities, including the transaction cost in the form of dispute cost and damages (Ruffin & Anderson, 1996). The low level of cost or negative externalities in Nigeria may be a result of the lack of extensive and intensive agricultural activity in Nigeria (Adams, 2016). or non-payment of transaction cost for the impact of negative externalities (McChesney, 2004).

However, McChesney (2004) in his review discovers that the view of Demsetz theory was contrary to the Coarse theorem, Demsetz theory believes, certain externalities does not involve transaction cost but can negatively affect the activities of others, as in the case of cattle-raisers in Nigeria where damages or compensation are not paid to the farmers who incurred loss as a result of the activities of cattle-raiser. Also, the case of the pandemic as a result of the global outbreak of COVID-19 led to a global economic standstill including the activities of the agricultural sector in Nigeria due to the spread of the virus to Nigeria in the early part of the year 2020 is another form of negative externalities which may not be expressly recorded by the Nigeria government.

Consequently, based on Demsetz theory the total effect of negative externalities may not have been fully captured in Nigeria and this has resulted in a low cost of negative externalities. Novikove (2014) further classified the positive and negative agricultural externalities on the basis of cultural, environmental, social and others (Table 7 below). He, however, concluded that policy makers should make analysis and valuation of externalities as part of agricultural policy development strategies.

TABLE 7 HERE

Pretty et al. (2001) in their paper on externalities of modern agriculture, concluded that the inclusion of externalities management and valuation in the regulatory and legal framework and agricultural policies will lead to a reduction in negative externalities in Nigeria. Yusuf et al. (2013) also stated that the major limitation of research in Nigeria is the paucity of data on the agricultural sector which further justified the low cost of total transaction cost of negative externalities in Nigeria. They further recommend that a developing nation like Nigeria should include externalities management strategies and valuation in agricultural policy.

In line with Yusuf et al. (2013), Ruffin and Anderson (1996) in the review of Coase theorem, they discovered that theory and policy alone cannot eliminate the challenges of market failure brought about by externalities except with detailed analysis of the structure of the agricultural sector which seems not in existence in Nigeria. In addition to the detailed analysis of the agricultural structure in Nigeria, an efficient policy framework for deciding compensation or demoralisation cost (Williamson, 1970) for both positive and negative externalities need to be developed by policymakers in Nigeria.

Summary of the review findings and conclusions

The overview of key Nigerian economy variables revealed that Nigeria economic performance mostly depends on oil revenue and the price of oil in the international market. Other factors influencing the performance of Nigeria economy are foreign exchange, inflation rate, corruption, national policies and strategies, population growth and employment. The Nigeria economy has not been able to record significant economic growth due to over-dependence on revenue from the export of crude oil and neglect of agriculture, which is a major employer of labour in the country. The economic challenges facing Nigeria, are the high rate of unemployment, high level of poverty, weak agricultural policies, high import rate of consumer goods, high inflation rate and high rate of population growth.

In conclusion, since after independence, Nigeria has been unable to achieve significant economic growth and development, despite abundant human and natural resources available at the country's disposal. As suggested by most literature, Nigeria needs to diversify its economy to agriculture, which used to be its primary source of revenue and employer of labour in the pre-independence era and late 1960s. The diversification will promote food sufficiency and the economic growth of the country. Furthermore, to enjoy the full dividend of agricultural transformation, the Nigerian government need to fully create an environment with perfect market competition. A free-market system or private agricultural marketing channels where prices of the agricultural product are determined by the forces of demand and supply and not the government agencies.

Also, in an attempt to transform and develop the agricultural sector the country needs to effectively manage the negative agricultural externalities and improve on current positive agricultural externalities. The negative agricultural externalities such as infringement on property rights, extinction of biodiversity and damages to the environment where the agricultural companies operate need to be prevented during transformation to avoid the situation of most Asian countries that has transformed their agricultural sector.

However, based on the findings from the papers reviewed a conceptual policy framework for agricultural companies' development (Figure 7.1) has been designed as a guide for effective implementation of developmental strategy for agriculture in Nigeria.

References:

Adams, O. A. (2016*) Diversification of Nigeria economy through agricultural production*. Journal of Economic and Finance. Vol.7, (6) pp104-107.

Adeola, R. G. and Adetunbi, S. I. (2015*) Farmers' perception of sustainable agriculture in South-West Nigeria: Implication for rural economy*. International Journal of Applied Agricultural and Apicultural Research. Vol.11, (2) pp86-92.

Adetuyi, M. A, Borode, D. A and Adebowale, A. (2021) Climate change: Policy support for National Adaptation Plans in Sub-Saharan Africa. Researchgate Vol.1 pp1-13, 13p.

Afolabi, A. (2015*) The effect of entrepreneurship on economy growth and development in Nigeria*. International Journal of Development and Economic Sustainability. Vol.3, (2) pp49-65.

Afroz, A and Akhtar, R (2017*) Determinants of Malaysian farmers' choice of adaptation strategies for adapting to climate change in Kedah Malaysia*. Asian Journal of Agricultural Research. Vol.11, (4) pp120 -127.

Agbola, A. I. (2014*) Agricultural finance: A practical guide for lenders and entrepreneurs*. Lagos: The CIBN Press.

Ahmad, S. and Omar, R. (2016) *Basic corporate governance models: a systematic review*. International Journal of Law and Management. Vol.58, (1) pp73-107.

Ajayi, A. T, Samuel, A. I and Abiodun, R. (2017*) Produce buying and marketing board in Nigeria: Interrogating the fiscal role of Western Nigerian marketing board 1942 - 1962*. European Journal of Management and Marketing Studies. Vol.2 (3) pp61-85.

Akindola, R. (2017*) Military incursion, tribalism and poor governance: The consequenses for development in Nigeria.* . Mediterranean Journal of Social Science. Vol.8, (2) pp151-155.

Akinkunmi, M. A. (2017*) Nigeria's economy growth: Past, present and determinants*. Journal of Economic and Development Studies. Vol.5, (2) pp31-46.

Akpan, J. D. and Eyo, M. F. (2018*) Anti-corruption war under President Muhammadu Buhari in Nigeria: The arsenal, casualties, victories and corruption perception appraisal*. Global Journal of Politics and Law Research. Vol.6, (3) pp32-47.

Arthur Conan Doyle Quotes. BrainyQuote.com, BrainyMedia Inc, 2019. https://www.brainyquote.com/quotes/arthur_conan_doyle_131991.

Barrett, C. B and Mutambatsere, E (2005*) Marketing board*. The New Pelgrave Dictionary of Economy. Vol.2 pp1-13.

Barrett, C., Reardon, T., Swinnen, J., and Zilberman, D. (2019). *Structural transformation and economic development: insights from the agri-food value chain revolution*. Working paper, Dyson School of Applied Economics and Management, Cornell University

Barro, Robert J. (1995). Inflation and economic growth. National Bureau of Economics Research. Vol. 5326 pp1-34.

Barua, S. K., Jussi, L., Jussi, U. and Jari, K. (2014*) On the economics of tropical deforestation: Carbon credit markets and national policies*. Forest Policy and Economics. 47 pp36-45.

Bauer, P. T. and Yamey, B. S. (1965*) Specific policy measures affecting agriculture.* In: Guillebaud, C.W. and Friedman, M. The economics of under-developed countries. Cambridge: Cambridge University Press, pp209-234.

Bergh, V. R. (2000*) Towards an institutional legal framework for regulatory competition in Europe*. Kyklos. Vol.53, pp435-466.

Birner, R. and Resnick, D. (2010*) The political economy of policies for smallholder agriculture*. World Development. Vol. (38) 10 pp1442-1452.

Bradley, A. (2010*)* The abolition of the Milk Marketing Board. pp1-2, 2p.

Bray, F. J. (2018) *US speaks on Nigeria being the giant of Africa*. Daily Post. https://dailypost.ng/2018/04/24/us-speaks-nigeria-giant-africa/

Byerlee, D., De Janvry, A. & Sadoulet, E. (2009). *Agriculture for development: Toward a new paradigm*. Annual Review of Resources Economics. Vol.1 (1), pp.15-31.

Cervantes-Godoy, D. and Dewbre, J. (2010) Economic Importance of Agriculture for Poverty Reduction. OECD Food, Agriculture and Fisheries Working Papers. Vol.23. OECD Publishing

Chikhuri, K. (2013) Impact of alternative agricultural trade liberalization strategies on food security in the Sub-Saharan Africa region. Vol. 40 (3), pp. 188 - 206.

CITA (2004) Companies Income Tax Act, Cap C21, Laws of the Federation of Nigeria (2004) (CITA).

Coase, R. H. (1960) *The problem of social cost*. Journal of Law and Economics. Vol.3 pp1-44, 44p.

Diao, X., Hazell, P., Resnick, D., & Thurlow, J. , (2007) *The role agriculture in development – Implications for Sub-Saharan Africa.* Research report no. 153. International Food Policy Research Institute (IFPRI). Washington, DC.

Daneji, M. I. (2011) *Agricultural Development Intervention Programmes in Nigeria*. Savannah Journal of Agriculture. Vol.6, (1) pp101-107.

Dardek, R. A. (2015) *Transformation of Agricultural Sector in Malaysia through Agricultural Policy*. FFTC Agricultural Policy Articles. Environmental Science. Vol.237 pp2-5.

Divanbeigi, R. and Saliola, F. (2016) *Regulation and transformation of Agricultural*. Food and Agricultural Organisation. pp1-22.

Egbochuku, S. 2001. "Nigeria, Unlocking the future". Business Confidential: *Nigeria's Business Newsletter*. 27(35): p8

Estrada, F., Papyrakis, E.,Tol, R. S. and Gay Garcia, R. S. (2013) *The economics of climate change in Mexico: implications for national/regional.* Climate Policy. 13 (6) pp738-750.

Ezekwezili, O. (2012) *Nigeria loses $400billion to oil thieves*. Vanguard Daily Post.**:** https://www.vanguardngr.com/2012/08/nigeria-loses-400bn-to-oil-thieves-ezekwesili/

Fitzherbert, E. B., Struebig, M. J., Morel, A., Danielsen, F., Bruhl, C. A., Donald, P. F., & Phalan, B. (2008) *How will oil palm expansion affect biodiversity?.* Trend in Ecology and Evolution. Vol.23 (10) pp538-545.

Gurden, B. (2017) *The palm oil crisis in Nigeria and beyond.* Ecologist. p1

Harrison, C., Paul, S., and Burnard, K. (2016) *Entrepreneurial leadership: A systematic literature review*. International Review of Entrepreneurship.. Vol.38, (10) pp1349-1361.

Hassan, M. S., Shaffril, H. A., Samah, B. A., Ali, M. S., and Ramli, N. S. (2010*) Agriculture communication in Malaysia: The current situation*. American Journal of Agriculture and Biological Science. Vol.5, (3) pp389-396.

Hazell, P., Poulton, C., Wiggins, S. and Dorward, A. (2010*) The future of small farms: Trajectories and policy priorities*. World Development. Vol.14,(2) pp235-264.

Ibietan, J. (2011*) Public policymaking process: Agricultural and rural development policies in Nigeria (1960 to date)*. International Journal of Studies in the Humanities. Vol.8, (9) pp95-108.

Ijewereme, O. B. (2015) An anatomy of corruption in the Nigeria public sector: Theoretical perspectives and some empirical classifications. Sage Open. Vol.5 (2) pp1-16.

Isola, L., Oluwafunke, A. I., Victor, A. and Asaleye, A. (2016*) Exchange rate fluctuation and the Nigeria economic growth*. Danubius Journals. Vol. 35 (2) pp738-750.

Iwuchukwu, J. C. and Igbokwe E. M (2012*) Lesson from agriculture policies and programmes in Nigeria*. Journal of Law, Policy and Globalization. Vol.5, pp11-22.

Jayne, T. (2019) *Agriculture transformation in Africa: opportunity and challenges*. Global Development. **http://www.globaldev.blog/blog/agricultural-transformation-africaopportunities-and-challenges**

John, D. E., Akpan, B. S. and Parick, V, I (2012*) Empirical relationship between trends in cash crop output volatility and agricultural policy period in Nigeria.* International Journal of Economic. Vol. 1 (11) pp57-65.

Kajisa, K., Maredia, M. and Boughton, D. (1997) *Transformation versus stagnation in the oil palm industry: A comparison between Malaysia and Nigeria*. Staff Paper. Vol. 97 (5) pp1-19.

Kolawole, M. I. (1974*) The reform of commodity marketing boards in Nigeria: An analysis of new producer price policy*. The Developing Economies. Vol.12 (2) pp155-168.

Kulawczuk and Poszewiecki (2011) Behavioral finance of entrepreneurship. *How framing can influence on the propensity of small businesses to apply financial instruments. Case of Poland.* International Conference on Micro & Macro Economics Research. pp1-66.

Luken, R. A. (2006*) Where is developing country Industry in sustainable development Planning?* Sustainable Development. Vol.14, pp46-61.

Manning,C and Roesad, K. (2007) *The manpower law of 2003 and its implementing regulations: Genesis, key articles and potential impact*. Bulletin of Indonesian Economic Studies. 43 (1) pp59-86.

Mau, V. (2014) *Challenges of Russian economic policy: modernisation or acceleration? (perestroika or uskorenie).* Post-Communist Economies. 26 (4) pp437-458.

McChesney, F. (2004) *What'd I say?: Coase, Demsetz and the unending externalities debate*. Law and Economic Research Paper Series. 04 (01) pp1-32.

Memon, M. A. and Tahir, I. M. ., (2012) *Performance analysis of manufacturing companies in Pakistan*. Business Management Dynamics. Vol.1 (7) pp12-21.

Meramveliotakis, G. and Milonakis, D. (2018) *Coasean theory of property right and law revisited: A critical.* Science & Society. Vol.82 (1) pp38-66.

Micah, L. C. and Ruth. T (2014*) Assessing the relationship between regulatory framework and forensic accounting, the Nigerian experience*. British Journal of Economics, Management and Trade. Vol.4 (12), pp2095-2106.

Millennium Ecosystem Assessment (2005) Summary for decision makers. In Ecosystems and Human Well-being: Synthesis, 1-24. Washington, D.C.: Island Press.

Mokhtar, M. Z. & Naser, K., (2004). Determinants of Corporate Performance of Malaysian Companies, Paper presented at the Fourth Asia Pacific Interdisciplinary, Research in Accounting Conference.

Morrison, C. and Schneider, H (1987*) Economic policy and agricultural performances in Low-Income Countries*. OECD. ProQuest. Vol.145, pp4-6.

Moss, C. B and Schmitz, A (2013*) Positive and negative externalities in agricultural production: The case of Adena springs ranch*. Journal of Agricultural and Applied economics. Vol.45 (3), pp401-409.

Muhammad, A. C., Muhammad, A. F., Muhammad, B. D. and Iqra, A. (2011*) Globalisation and its impact on the world economic development*. International Journal of Business and Social Science. Vol.2 (23), pp291-297.

Novikova, A (2014*) Valuation of agricultural externalities: Analysis of alternative methods*. Research for Rural Development. Vol.2, pp199-206.

Nuryartono, N., Pasaribu, S. H., and Panggabean, P. N (2016*) Total factor productivity analysis of oil palm production in indonesia*. International Journal of Economics and Finance Issues. Vol.6(4), pp1570-1577.

Osakwe, C. O. (2010*) National agricultural information management system in Nigeria: a conceptual framework.* Library Review. Vol.52 (9), pp444-451.

Ogbeibu, S., Senadjk, A. and Gaskin, J. E (2018) *The moderating effect of benevolence on the impact of organisational culture on employee creativity. Journal of Business Research. Vol 90*, pp334-346.

Pattinger, T. I. (2016*) Problem of agriculture- Market failure*. School of economics.

Pretty, J., Brett, C., Gee, D., Hine, R., Manson, C., Morison, J., Rayment, M., Bijl, G., and Dobbs,T. (2001*) Policy challenges and priorities for internalising the externalities of modern agriculture. Journal of environmental planning and management*. Vol.44 (2), pp263-283.

Ruffin, R and Anderson, M. (1996) *Externalities, market and government policy*. Dallas Economic Review. pp24-28.

Satar, M. S (2016) *A policy framework for social entrepreneurship in India*. Journal of Business and Management. Vol. 18 (9) pp30-43.

Storey, D. (1994*) Understanding the small business, London, Routledge.*

Talbot, S and Reeves, A. (1997) *Boosting the Business Birth Rate in Scotland: Evidence from the Lanarkshire Development Agency's Entreprenuership Programme.* Quarterly Economic Commentry. 22 (2) pp26-35.

UNFCCC. (2007) Climate change: Impact, vulnerability and adaptation in developing countries. UNFCCC. Bonn, Germany. 40 pp.

Utomi, J. (2019) Delta State: Oil price is forcing country to agriculture https://www.agronigeria.com.ng/delta-state-oil-price-is-forcing-countries-to-agriculture/

Williams, G. (1985*) Marketing without and with marketing boards: the origins of state marketing boards in Nigeria.* Review of African Political Economy, Vol.12 (34), pp4-15.

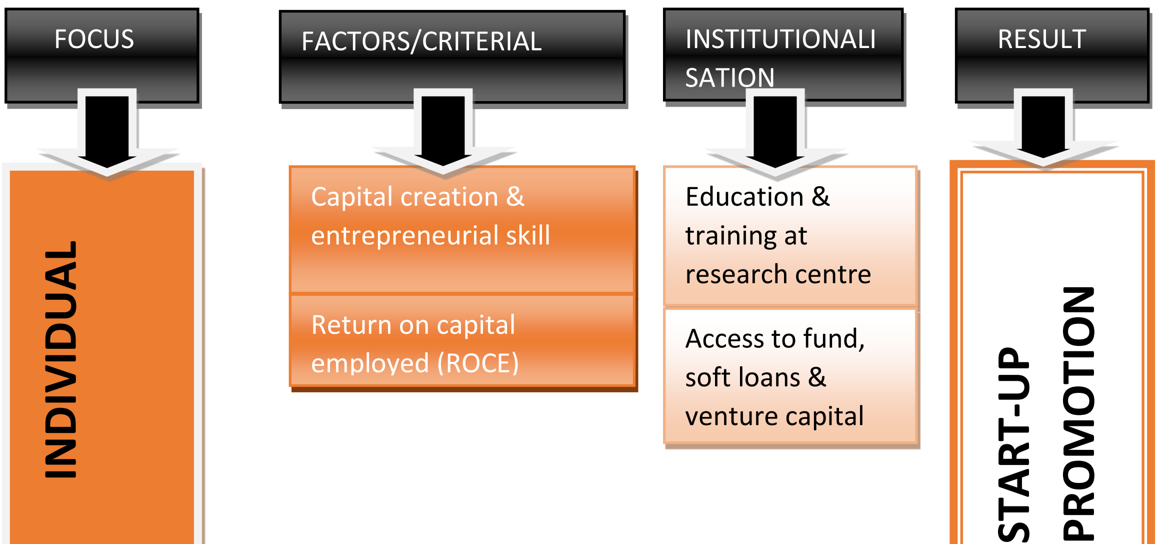
Williamson, .O. E. (1970*) Administrative decision making and pricing: Externality and compensation analysis applied.* National Bureau of Economic Research, pp115-138.

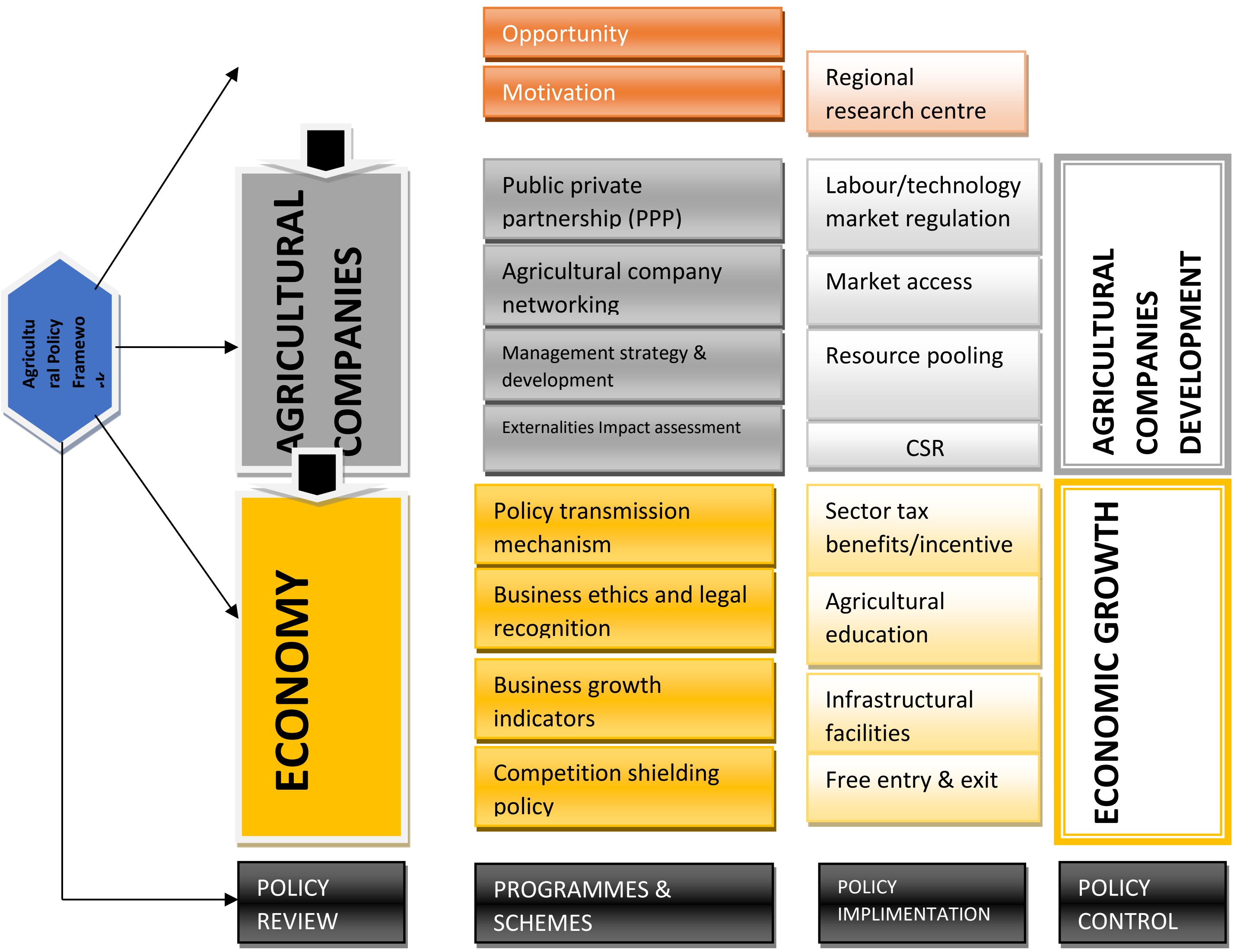
Yusuf, S. A., Rufai, M. A., and Komolafe, J. O. (2013*) An evaluation of externalities linked to Nigerian forests*. International Journal of Research in Agriculture and Food Science. Vol.1 (1), pp1-12.

Zin, R. H (2014) *Malaysian development experience: Lessons for developing countries*. Institutions and Economies Vol.6 (1) pp17-56, 40p.

TABLES AND FIGURES

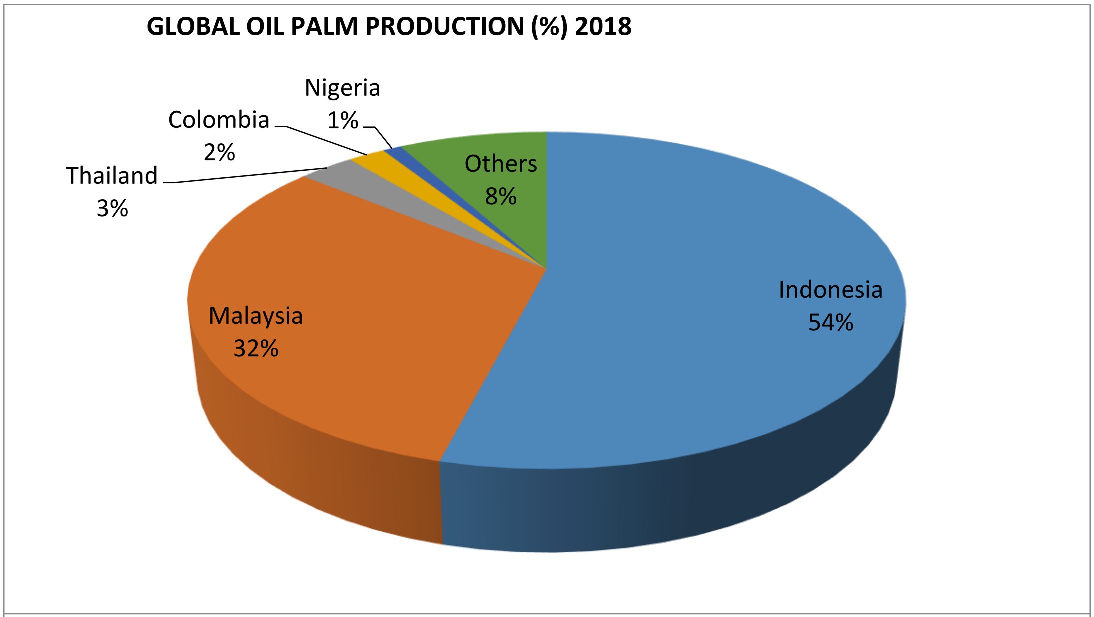
Figure 7.1: Conceptual policy framework for Agricultural companies' development

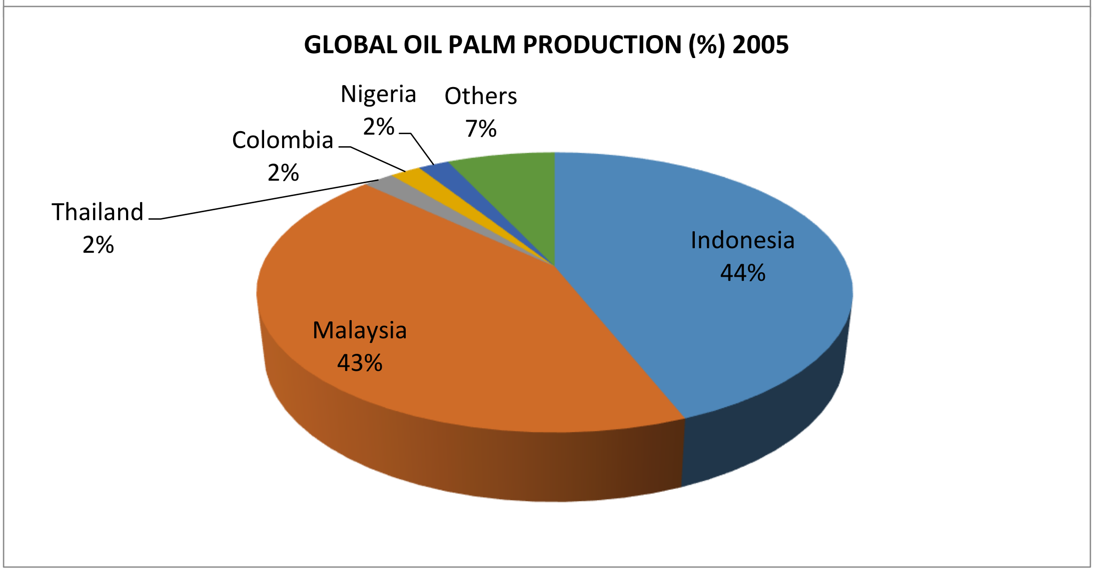




Source: Authors

Figure 7.2. Global oil palm production





Source: Authors

Table 7. Positive and negative externalities

Positive externalities	Negative externalities
Cultural	

The landscape itself (good/goods), Sense of place Enhanced cultural landscape, tourism attraction, heritage, geographical identity, recreational and opportunity for leisure activities e.g Car race.	Impoverished landscape, destroyed heritage and destroyed geographical identity.
Environmental	
Viable ecosystems Biodiversity and its preservation Water quality and availability of water, Improved Soil quality, good air quality, resilience to flooding, Climate Stability, and Resilience to fire.	Damage populations of flora and fauna, Soil erosion, biodiversity loss, water pollution, air pollution, Pandemic Destruction of protected objects of nature, gas emissions, Polluted environment from different chemical nutrients and fertilizes
Social	
Maintenance of rural viability, employment of rural inhabitants, provision of food for citizens and Stable income and other socio-cultural factors.	Destruction of cultural objects and sculpture and other biological specimens, food insecurity and scarcity
Others	
Plants and animals welfare	Human health problems caused by agricultural activities, such as toxic wastes release to the community as a result of the flood.

Source: Authors

GLOSSARY

ADB - African Development Bank

CAMA- Company and Allied Matters Act

CITA- Company Income Tax Act

CPI- Consumers Price Index

CSR- Corporate Social Responsibility

EFCC- Economic Financial Crime Commission

FAO- Food and Agriculture Organisation

FCT- Federal Capital Territory

FDI- Foreign Direct Investment

FPI- Food Production Index

GDP- Gross Domestic Product

GR- Green Revolution

IASB- International Accounting Standard Board

ICPC- Independent Corrupt Practices Commission

ILO- International Labour Organisation

IMF- International Monetary Fund

NAIMS- National Agriculture Information Management System

NBS - National Bureau of Statistics

NSE- Nigeria Stocks Exchange

OECD- Organisation for Economic Co-operation and Development

PPP- Public Private Partnership

ROCE-Return on Capital Employed

SAP- Structural Adjustment Programme

SEC- Security and Exchange Commission

TEV- Total Economic Value

UNFCCC- United Nation Framework Convention on Climate Change

WEI- World Economic Indicator

WTO - World Trade Organisation