













# Content

SEED POLICY BRIEF SEED FACT SHEETS

### **EXECUTIVE SUMMARY**

Seed is one of the most crucial elements in the livelihoods of agricultural communities. The potential benefits from the use of good quality seed by farmers can be enormous, and the availability to farmers of quality seed of a wide-range of varieties and crops can increase productivity, reduce risks from pest, drought and disease pressure, and increase incomes. Production increases through the use of adapted varieties in a given area could create employment opportunities related to processing, marketing, and other activities generated through quality seed production.

The repeal of the National Agricultural Seeds Act Cap. N5 LFN 2004 and enactment of the National Agricultural Seeds Council Act will create a vibrant thriving seed sector and promote a competitive seed sector which is pivotal to ensuring timely availability of appropriate, high quality seeds at affordable prices to smallholder farmers in Nigeria.

The passage of the bill by Parliament and assent by the President provides a unique opportunity and momentum for the Federal Government of Nigeria to rapidly put the regulatory framework of the seeds subsector into action through the matching of the diversity of seed systems whilst promoting entrepreneurship and professionalism in seed value chains, and thereby enhancing the performance of seed sector administration and the agricultural sector of Nigeria as a whole. The National Agricultural Seeds Council (NASC) will be the principal institution responsible for the administration and implementation of National Seed Policy for Federal Government of Nigeria including the regulation of the market towards competitiveness and quality control to protect the farm population and the environment. As principal

coordinator, it will play the lead support role, maintain public-service infrastructural and service support required to maintain efficient seed supply, enhance farmer demand for improved seeds, and create a favourable enabling environment for investment in the seed subsector. It will also be tasked with the facilitation of the production and distribution of sufficient quantities of high-quality seed of improved varieties of all relevant crops to farmers in order to ensure production of the required food, feed and fibre (National Seed Policy 2015).

This bill when signed into law, will also support the building of a thriving seed system in Nigeria which will not only include an effective distribution network, promotion of the adoption of improved crop varieties by smallholder farmers, seed quality certification and assurance, increase household income, national food security and the sector aligned to the ECOWAS seed regulation framework and responding to the Malabo Commitments and CAADP result framework.

This policy brief posits that a strong regulatory policy framework and legislation should be put in place to facilitate the access to agricultural inputs (seeds) which will serve as catalyst or is pivot to transform agriculture in Nigeria. It will also contribute directly to one of five key executive priorities, as indicated in the National Economic Recovery Growth Plan (ERGP) of the Federal Government of Nigeria; which include input supply; seeds, water, land, fertilizer and agro-chemicals. These were identified as one of the strategies for achieving food self-sufficiency; but of all the yield-enhancing inputs in crop production, seeds give the most dramatic and most cost-effective return on investment. Improved seeds have provided 50% of the productivity gains in agriculture.



### INTRODUCTION

Food security is heavily dependent on the seed security of the farming community and Seed sector development is essential to foster agricultural growth. All these obvious benefits are attainable through a well-developed seed sector (AU 2015).

Although Agriculture is the economic and social mainstay of over 500 million smallholder farmers worldwide, on the African sub-continent, the sector is currently at a crossroads because of the persistent food shortages which are compounded by threats from climate variability (Diallo 2018). Sub-Saharan Africa is dominated by rain-fed agriculture, while 75% of its surface area is dry land or desert. This makes the region highly vulnerable to droughts and floods, threatening its agricultural sector and food security. Many African countries experience severe water scarcity, which is likely to increase in the coming years. Therefore boosting the agriculture sector's productivity, profitability and sustainability is essential for fighting hunger and poverty, tackling malnutrition, and ensuring food security (FAO 2010)

In order to address this, the Federal Government of Nigeria's (FGN) Agriculture Promotion Policy (APP) 2016-2020, which seeks to operationalize the Comprehensive Africa Agriculture Development Program (CAADP) principles, was crafted with a thrust to boost productivity, intensify the role of

private sector investments, and build the capacity of the Federal Ministry of Agriculture, and Rural Development (FMARD) to formulate and administer policy as well as position agriculture as a business. The ultimate goal of Nigeria's agricultural policy is the attainment of self-sustaining growth in all the subsectors as well as the realisation of the structural transformation necessary for the overall socio-economic development of the rural areas in the country (FMARD 2015).

Through the Federal Ministry of Agriculture & Rural Development (FMARD), the Federal Government of Nigeria (FGN) envisions improving its food security by facilitating equitable access, availability and affordability of quality foods to all Nigerians. This vision has become more important due to the rise in global food prices. Achieving this vision requires deliberate and sustained efforts to improve agricultural productivity growth through strategic investments in the input system: seeds, fertilizer, and irrigation. While boosting production of good quality seeds is one of the necessary steps towards improving agricultural productivity growth, the uptake of improved seeds by farmers is another very important activity. This is being slowed down by both supply and demand constraints within the sector (IFPRI 2009).

#### OVERVIEW OF THE SEED SYSTEM IN NIGERIA

The seed subsector of Nigeria's agricultural economy has undergone different stages of development since the 1960. From the National Seeds Service (NSS) which was established in 1975 to the enactment of the Nigeria Seed Law and resultant National Agricultural Seeds Council (NASC); which not only took over the functions of the National Seed Service but also expanded the scope of administration of the entire subsector with the consequent National Seed Policy of 2010. The National Seed Policy has since undergone review under technical guidance of FAO and through a two-stage methodology; review of the subsisting seed policy and consultative workshops with various stakeholders including farmers, seed producers, policy makers, policy service providers, among others (FAO 2016, NSP 2015). The objectives of the National Seed Policy include the following: (a) support and fast track varietal development, (b) registration and release of new crop varieties as well as the (c) rapid multiplication of released varieties, (d) improve the quality of seeds sold to farmers for higher yields and better income, (e) encourage

private sector participation in seed operations through appropriate policies and promotional activities/incentives, etc. (FAO 2016, National Seed Policy 2015). The policy lists and highlights all activities and stipulated roles of actors in the seeds-subsector while it further defines the role of government in the management of the production and distribution of improved varieties of high quality of all relevant crops to farmers in order to ensure production of the required food, feed and seeds as needed by farmers in the country.

Overtime, the farmers' self-reliance to provide own seed and other planting materials is continuously being undermined by both natural (like; climate change) and manmade effects (e.g. fake/poor quality seed on the market). Smallholder farmers have been most affected by seed insecurity yet they produce more than 75% of total food production for consumption and marketing in Nigeria (Adeleke, 2010).

It is also universally accepted that the use of improved quality crop seed cultivars by farmers has been recognized as the most important effort in boosting agricultural production and ensuring food security (Oyekale et al.2014). Secondly, farming activities depend on a continuous supply of good quality seeds and planting materials (Oyekale 2014, Oyekale and Adebisi, 2005). But unfortunately, the Nigerian seed industry has not fully developed the capacity to perform this role very well due to the absence of the Seeds Act which would provide the legal framework for guiding the development of the seed sector (e.g. the coordination and management of the different sub-activities which are include the National Crop Variety Registration and Release Committee (NCVRRC) with functions that are listed under the National Crop Varieties and Livestock Breeds (Registration) Act of 2016).

The current national seed uptake is also less than 10%, while the regulatory and enforcement capacity in the industry has been weak (Oyekale et al 2014). The Nigerian agricultural seed sector has evolved over the last 30 years in terms of seed science and commercial seed production capabilities. However, the sector is still under-performing in terms of meeting the agricultural seed needs of the country (Oyekale et al 2014).

Unlike most other African countries, the seed industry in Nigeria consists of four systems; and are generally categorised: (a) farmer-saved, (b) public-private composed of the National Agriculture Research Institutes (NARIs) with private seed company involvement in certified seed production, (c) public led systems, and (d) private-led systems dominated by local seed companies and some international seed companies. The farmer-saved seed systems represent the majority of seed volume. While smallholder farmers in Nigeria are aware of improved varieties, the rate of adoption is low across most agro-ecological zones, as the majority of smallholder farmers recycle seeds of improved varieties. However, some fraction of farmers buys improved seeds while others depend upon free seeds acquired from subsidy programs and donor/ NGO-funded input intervention programs. Adoption of improved varieties is higher for some crops than others, with smallholder farmers tending to adopt improved varieties of grains more than improved varieties of root and tuber crops, because root and tuber planting material is easily recyclable (USAID 2016). Based on this analysis, a larger percentage of the smallholder farmers' seed requirements are met through the informal sector.

To date, over 80 percent of the crops in Nigeria are still planted with farmers' varieties and farm-saved

seeds. In the past, the public sector, universities, governmental organizations and international research organizations, were the major sources of new varieties and quality seeds of food crops for the smallholder farming sector, especially selfpollinating crops. However, in recent years many countries, donors and international organizations have encouraged privatization of the seed sector. This, combined with cut-backs in international agricultural research organizations, has led to reduced investment in public-sector plant breeding and seed production. This has very seriously constrained progress towards food security in many developing countries including Nigeria (FAO 2010). This argument is further buttressed by (Oyekale et al., 2014) who posits that the most important prerequisite for good crop production is the availability of good quality seeds of high-yielding varieties; and that the quality of seeds alone is known to account for an increase in productivity of at least 10-15%.

This policy brief therefore identifies that a strong regulatory policy framework and legislation should be put in place to facilitate the access to agricultural inputs (seeds) which will serve as catalyst or is pivot to transform agriculture in Nigeria. It will also contribute directly to one of five key executive priorities, as indicated in the National Economic Recovery Growth Plan (ERGP) of the Federal Government of Nigeria; which include input supply, consisting of seeds, water, land, fertilizer and agro-chemicals. These were identified as one of the strategies for achieving food self-sufficiency; but of all the yield-enhancing inputs in crop production, seeds give the most dramatic and most cost-effective return on investment. Improved seeds have provided 50% of the productivity gains in agriculture. The other 50% has come from improvement in management, including timeliness, best use of fertilizer, crop protection measures and equipment (Shobowale 1994; Gupta 1994; Joshua 1999; Echekwu1999; Louwaars and Marrewijk 1999; Adamu 2000, P. Kormawa et el2014). Good quality seed greatly contributes to agricultural production and productivity as well as continuity of farming systems. It is therefore of paramount importance that farmers have control and access of well adapted quality seeds in adequate quantities at all times to ensure sustainable agriculture development. (FAO2016). To surmise this policy brief: the passage and assent of the Nigeria Agricultural Seed Council Bill will be a strong regulatory policy framework and legislation for the development of the seed industry in Nigeria, especially those geared towards safeguarding against any potential threats to the interests the various stakeholders in the industry including smallholder farmers.

# CHALLENGES OF THE NIGERIA SEED SECTOR

The Nigerian agricultural seed sector has evolved over the last 30 years in terms of seed science and commercial seed production capabilities. However, the sector is still under-performing in terms of meeting the agricultural seed needs of the country.

Almost all the units and sectors involved in seed development in Nigeria are faced with one problem or the other with resultant poor performance in delivery. Some of these problems are identified as:

Table 2: Challenges of the Nigeria Seed Sector

SEED MANAGEMENT ISSUE	CAUSE/EXPLANATION
Low production of breeder seeds	The output of the research institutes is far below what is required to meet the growing requirement for improved seeds and seed technology Funds are reportedly inadequate, disbursed late, resulting in distortions in the breeding process.
Weak seed certification and quality control arrangements	Laboratories required for seed testing, certification, and quality control are inadequate, and those available are understaffed and as a result there have been cases of unlabelled seeds being sold in markets and stores. There is need to upgrade all existing zonal seed testing laboratories to attain international standards and get accredited by ISTA and OECD. Without seed testing accreditation and following of international standards in seed testing, certification and testing, Nigeria cannot actively engage in the international seed trade. The inability to export seed will reduce production of better Nigerian varieties with export potential.
Weak Seed distribution network	There is poor seed distribution network across the geopolitical zones. There is a yawning gap in the distribution and management of improved seeds produced by the public sector sold to the farmers through farmers' supply companies, agro service centres, ADPs, cooperative societies, etc. Due to this gap in provision, most farmers in such regions buy their areas mostly buy seeds from private seed companies. As a result, these private sector players are taking advantage of this lack/ limited market access. The resultant effect of this is that they have the market power to set prices of inputs/ seeds higher than in competitive markets.
	(if any)/seed entrepreneurs/dealers in the open market. Some of the fallout of such arrangements is exorbitant prices farmers are forced to pay; Secondly, they often run greater risks of buying unviable seeds due to poor storage and handling by the seed traders.
Reduced activity of NASC	The NASC has a pivotal role to play in the development of the nation's seed industry, including the production of foundation seeds, supervision, monitoring and quality control, etc. But their activities have been grounded due to epileptic funding mechanism to perform quality control functions and research support services. A dearth of capacity and capacity strengthening processes has also constrained the development of the seed market.
Lack of resources for training and information dissemination	The resultant effect of this problem has also been the inadequate supply of certified seeds to the farmers; and flooding of adulterated and unlabelled seeds in the market. Improved seed varieties are not readily disseminated to the farmers due to inadequate number of extension agents. There is a yawning gap in the delivery of capacity strengthening in seed testing, quality control and provision of technical assistance to contract growers due to lack of funding.

There is limited investment in private research programs by seed companies to generate own foundation seed.	Most of the seed companies have limited working capital to invest in the necessary infrastructure for seed processing as well as for the costly research to generate own breeder and foundation seed. Even the resource-rich companies are reluctant to invest in research which takes long to realise results.
Market development	Policies and regulations governing seed imports need to be clarified, as stakeholders are unable to import seed even in the face of acute shortages. The National Seed Council needs to put in place clear guidelines and policies on seed trade consistent with the ECOWAS regional seed agreement. There is need for awareness-raising campaigns and capacity building that will support effective implementation of regionally consistent seed. Given the dearth of locally produced and available certified seed in Nigeria, regional imports can fill the gap. This provision is proposed in the bill for the enactment of the National Agricultural Seeds Council.
Sustainable operation of Private Seed companies in Nigeria	The various policy revisions are shaping the seed industry in the country. Interviews with major stakeholders, including the private seed companies, indicate that the National Seed Company is making efforts to assist and cooperate with private seed companies in the provision of foundation and breeder seed from public bred varieties. However, the private sector still faces very unfair competition with state agencies, particularly the Agricultural Development project (ADPs), as well as a debt load created by government seed procurement programs that delay payments for seeds supplied or in some cases do not honour commitments. The government urgently needs to divest the ADPs or bring them in line to operate as private seed companies
Seed trade and seed imports	Nigeria has virtually no international trade in seed. Except for inbred lines and new varieties for seed development purposes, importation of large quantities of seed is subjected to multi-locational trials by officials of the National Coordinated Research Project (NCRP). The lack of clear-cut import procedures and a cumbersome clearing process with the relevant authorities were identified as the major issues in seed import. Restrictions on imports to supplement domestic supply continue to exacerbate the problems of certified seed shortages in Nigeria. In theory, there is a duty of 5% on all seed imports. The National Seed Council in collaboration with the department of customs and excise is supposed to monitor and regulate the import of seeds of all types into the country. Streamlining seed import procedures and making them clear and easily available to prospective importers is much essential

# THE IMPERATIVES OF A STRONG SEED POLICY FRAMEWORK AND LEGISLATION

Agriculture remains one of the most effective pathways out of poverty. Gross domestic product (GDP) growth that originates in agriculture is approximately four times more effective in reducing poverty than GDP growth that originates in other sectors (World Bank, 2008). The sustainable increase in agricultural productivity needed to achieve food security and inclusive economic growth in Nigeria and the world at large is majorly dependent on a viable and sustainable seed sector.

In this context, the promotion and provision of improved seeds for enhanced food provision, affordability and accessibility in Nigeria is critical for food security and development. Nigeria remains a minor player in the global multi-billion-dollar seed trade. We should take advantage of this opportunity in eliminating the barriers that are severely limiting market size, strengthen the capacities in seed delivery systems, and invest in adequate science and entrepreneurial capacity for commercializing seed innovations and increasing the competitiveness of Nigerian seed product

Policies are important in providing a level playing field for all stakeholders, encourage private-sector investment in the seed sector and ensure institutional support to develop new, improved varieties; provide ide quality assurance; improve market infrastructure; enforce contracts; and establish simplified procedures, that are all important for the growth of the sector.(Francis, J.& Waithaka, M., 2015). Policies should promote the informal system to eventually become formal. They should support an integrated seed delivery system that links seed systems with local, national, regional and international markets. This will provide options to beneficiaries and the pulling force and motivation needed to increase productivity.

This policy brief advocates for an inclusive and efficient public policies and legislation for the seed sector to deliver services in implementing more coherent seed policies; improving the governance of seed sectors; improving performance and responsiveness of the seed research – development scheme; strengthening the capacities of all relevant actors and crowding in funding that is accessible to stakeholders

#Table 8: Key Policy Goals of the National Seeds Bill		
1	Support and fast track varietal development, registration and release of new crop varieties as well as the rapid multiplication of released varieties	
2	Improve the quality of seeds sold to farmers for higher yields and better income.	
3	Re-orientate the operations of public sector agencies along commercial lines.	
4	Encourage private sector participation in seed operations through appropriate policies and promotional activities/incentives	
5	Promote technology and policy best practices in the global seed industry	
6	Maintain genetic biodiversity of the crop ecologies	



## CONCLUSION

It is noteworthy that an effective seed system is germane to increased agricultural production and overall productivity of any nation. Nigeria's Seed Industry has not developed remarkably about two decades or more after the formulation of the National Seed Policy and the enabling Agricultural Seed Decree No. 72 of 1992. The various bodies involved in the implementation of Nigeria's Seed Policy have not performed creditably. Effective implementation of the seed policy by the relevant bodies had been constrained, among others, by inadequate manpower and financial resources, as well as institutional problems. The private seed industry is viable although the profitability level is comparatively low.

In order to ensure Nigeria is consistent with the current dynamics in the global seed trade and create a better conducive atmosphere for private sector participation in the nation's seed industry, this policy briefs advocates for the passage of the Bill for an Act to repeal and Re-Enact the National Agricultural Seeds Act No. 72 of 1992 and for other related matters. This will ultimately enable the National Agricultural Seeds Council to promote and stimulate the development of dependable seed industry, support the registration of released varieties, protect the farmers from the sales of poor-quality seeds, facilitate the production and marketing of high quality seeds in Nigeria, and provide legal backing for official testing, certification, sales, importation, exportation and use of seed. Also, it would promote greater private sector participation in the seed sub-sector in line with the current agricultural seed policy globalization and export trade promotion.

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