

FEDERAL REPUBLIC OF NIGERIA FEDERAL MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT NATIONAL AGRICULTURAL SEEDS COUNCIL

NATIONAL AGRICULTURAL SEED POLICY FOR NIGERIA 2022

DECEMBER 2022

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FOREWORD

It is my pleasure to present to you the Revised National Agricultural Seed Policy, 2022. It is expected that following the last review in 2015, there were changes in the operations of the seed industry that necessitated the current review exercise, five years later. In the light of this, the National Agricultural Seeds Council (NASC) in line with the new functions assigned to it by the enactment of the National Agricultural Seed Act, No 21 of 2019 and the Plant Variety Protection Act No. 5 of 2021 has found it necessary to update the seed policy and come up with a new policy framework to implement various provisions of the recent Seed Laws.

The New Seed Policy has removed the ambiguous areas in the old Policy, strengthen the identified weaknesses and introduce innovations that optimized the operations of NASC in its regulatory, promotional and protection roles. Some of the new innovations include, liberalization of Foundation Seed (FS) production and marketing by accredited private enterprise, affixation of Seed Codex as a quality authentication tool, participation of accredited third party seed inspectors in quality assurance, establishment of satellite and private seed testing laboratories, establishment of the National Strategic Seed Bank for reserve and buffer stock, participation of women

and youth groups in business along the Seed Value Chain among other innovations introduced.

The present seed policy document represents the concerted efforts of the NASC stakeholders who have made valuable inputs and contributions, towards ensuring that farmers have unrestricted access to best genetics to enhance their productivity. Let me take this opportunity to thank all of them, especially the Feed the Future, Nigeria Agribusiness Investment Activity (NAIA) of USAID for their untiring efforts to promote agribusiness in Nigeria by ensuring that enabling environment is put in place through the instrumentation of favorable policies, which include the National Agricultural Seed Policy, 2022. The effort of the Activity in sourcing for the consulting firm - the Farm and Infrastructure Foundation (FIF) that conducted a review study and drafted the new policy document in close collaboration with NASC is highly appreciated. I am recognizing the immense contributions of stakeholders at both the public and private sectors in enriching the contents of this New Policy document as our investment is to build a better future for Nigeria's agriculture, as SEED is a critical input in enhancing farmer's productivity and boosting the Country's GDP through Agriculture.

Finally, I enjoin the Nigeria's farming population to continue to embrace the new innovations and technologies rolled out by NASC in fostering better utilization of improved quality seeds in Nigeria. Let me thank you all for assisting NASC in its quest to make the Council a Centre of Excellence and a seed hub in West Africa.

Dr Mohammad Mahmood Abubakar

Honourable Minister,

Federal Ministry of Agriculture and Rural Development.

PREFACE

The Seed Industry in Nigeria has undergone different stages of development since the country's independence in 1960. The industry has evolved through the attainment of some critical institutional structure for agricultural development. The Federal Ministry of Agriculture and Natural Resources (FMANR), established in 1966, had seed industry development as part of its mandate from onset.

However, the institutionalization of the seed policy process emerged with the establishment of the National Seed Service (NSS) in 1975 in the Federal Department of Agriculture (FDA) of the then Federal Ministry of Agriculture and Natural Resources (FMANR), which superintended over the articulation of policy and legal instruments to manage the seed industry over time, including the implementation of programmes and projects to move the industry forward. Following the enactment of the Nigeria Seed Law, the National Agricultural Seeds Council (NASC) was established in December 2007 to take over the functions of the erstwhile NSS and expand the scope of administration of the entire industry. Consequent upon the constitution and inauguration of the Governing Board of the NASC in 2009, the first articulation of seed policy was carried out in 2010, which was implemented for five years before its review in 2015 in the twilight of the

then Agricultural Transformation Agenda (ATA) of the Federal Government.

Subsequently, the 'Green Alternative – Agricultural Promotion Policy' (APP), was implemented from 2016 to 2020, soon to be followed by implementation of the new National Agricultural Technology and Innovation Policy (NATIP), from 2022 to 2027. Therefore, the seed industry assumes a great importance as the source of enterprise initiatives and investments for generating dramatic increases in the productivity and quality of crops. In particular, the successful effort of Government towards the attainment of national food security and other goals of agricultural development depends on the performance of the seed industry that sets the limit of yield response of other farm inputs. Such policy efforts for seed industry operate in the same policy space that governs the performance of the entire agricultural economy, thereby subjecting seed industry to the changes of government actions or inactions in the agricultural sector.

The present review examines the changes in the policy environment highlighted above, with a view to rearticulating the National Agricultural Seed Policy for Nigeria. The information required for this purpose came from a rapid field appraisal of the situation, following a series of virtual assessment meetings convened with stakeholder groups and

actors; which includes public and private institutions, farmers and commodity associations, youth and women groups.

Also, a number of focus group discussions and in-depth interviews were conducted in the field, which probed into the knowledge, attitude and practice of stakeholders and actors, thereby generating real time information required to review the present situation. Concurrently, the subsisting seed policy environment was examined in terms of its inherent strengths, weaknesses, opportunities and threats (SWOT). Herein, the new policy highlights the review process, and outlines the objectives and structure of the policy in terms of instrumentation tools which include Regulatory, promotional and protection frameworks in the administration of the policy, implementation strategies, monitoring and evaluation, and effective period.

I would like to thank the President, Members of the Federal Executive Council (FEC), the Federal Ministry of Agriculture and Rural Development (FMARD) headed by the Honorable Minister of Agriculture and Rural Development, the NASC Governing Board and Management for their roles in ensuring the success of the review process. I am also, recognizing the immense contributions of stakeholders at both the public and private sectors for their immense contributions in enriching the contents of the new policy document. The Farmers for

which the policy intends to benefit by making improved quality seeds available, affordable and accessible.

Dr Philip Olusegun Ojo

Director General, NASC

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ACRONYMS/ABBREVIATIONS

ABP Anchor Borrowers Programme

ACFTA Africa Continent Free Trade Agreement

ADP Agricultural Development Project

AFAN All Farmers association of Nigeria

APP Agricultural Promotion Policy

ATA Agricultural Transformation Agenda

CBO Community Development Organization

CVRC Crop Varieties Registration and Release Committee

DUS Distinct, Uniform, Stable

ECOWAS Economic Commission of West African State

FACAN Federation of Agricultural Commodity Associations

in Nigeria

FAO Food and Agriculture Organization

FCT Federal Capital Territory

FDA Federal Department of Agriculture

FMANR Federal Ministry of Agriculture and Natural

Resources

FMARD Federal Ministry of Agriculture and Rural

Development

GMO Genetically Modified Organism

IAR&T Institute of Agricultural Research and Training

IITA International Institute of Tropical Agriculture

IPR Intellectual Property Right
LGA Local Government Area

NAGRAB National Centre for Genetic Resources and

Biotechnology

NABDA National Agricultural Biotechnology

Development Center

NAQS National Agricultural Quarantine Service.

NARI National Agricultural Research Institute

NASC National Agricultural Seeds Council

NATIP National Agricultural Technology and

Innovation Policy

NCRI National Cereal Research Institute, Badeggi

NCRP Nationally-Coordinated Research Projects

NCVL National Crop Varieties and Livestock Breed

Registration and Release Committee

NGO Non-Governmental Organization

NRCRI National Root Crops Research Institute, Umudike

P & PC Planning and Policy Coordination Department of

FMARD Federal Ministry of Agriculture and Rural

Development

PFI Presidential Fertilizer Initiative

PVP Plant Variety Protection

PVS Participatory Varietal Selection

SEEDAN Seed Development Association of Nigeria

SOP Standard Operating Procedures

SWOT Strengths, weaknesses, opportunities and threats

UA University of Agriculture VCU Value, Cultivation and Use

WACPSV West African Catalogue of Plant Species and

Varieties

NATIONAL AGRICULTURAL SEED POLICY FOR NIGERIA 2022

The National Agricultural Seeds Council (NASC), a specialised agency under the Federal Ministry of Agriculture and Rural Development established by National Agricultural Seeds Council Act No 21, 2019 as amended is saddled with the responsibility of developing, coordinating and regulating the Nigeria Seed Subsector.

Some of its specific mandates include: SS

- (i) Facilitating the timely and appropriate access of farmers to quality seeds;
- (ii) Facilitating local and international seed trade through the application of regionally and or internationally agreed principles and rules;
- (iii) Creating an enabling environment for private sector investment in the seed industry;
- (iv) Facilitating a broader selection of seeds available to farmers; and promoting partnership between the public and private sectors.
- (v) Designing an improved management systems and procedures relating to the administration of seed activity.
- (vi) Advise the federal Government on the organization, management and financing of seed programmes.

- (vii) Advise the national research system on the changing pattern of seed demand and farmer's needs.
- (viii) Monitor and evaluate the establishments of the national seed system and recommended improvement.
- (ix) Encourage the establishment of seed companies in Nigeria for the purpose of carrying out research, production, processing and marketing of seeds.

NASC's Vision, Mission and Core Values

NASC is anchored on "Centre of Excellence for Seed Industry (CoESI) in West Africa" in partnership and collaboration with stakeholders nationally and internationally to ensure that farmers have adequate access to improved quality seeds.

The NASC is thus envisions "to be recognised as Africa's leading seed regulator that fosters the emergence of a globally competitive seed sector with high quality planting materials that is available, accessible and affordable for all farmers". To achieve this, its mission is "to enable a credible, dynamic, competitive and relevant industry which provides healthy and high-quality planting materials for Nigerian farmers and export".

It approaches this through core values of synergy of partners; team members' excellence accountable to ensure accurate and timely service delivery; building industry ethical conduct through honest and transparent approach; and dynamism of leveraging on cutting-edge technology and innovative solutions

The NASC is the principal institution for the implementation of the National Seed Policy; National Harmonised Seed Rules and Regulations; NASC Strategic Plan (2020-2024); National Seed Roadmap (NSRM); Plant Variety Protection Act, 2021 that "grant plant breeders-farmers, scientist and designated breeder's intellectual property right over their materials-varieties".

The NASC strategy expected outcomes includes more timely and cost-efficient certification processes; increased availability of quality seed; and a 40% increase in farmer adoption; reduced counterfeiting; the recognition of the NASC as a point of reference for the seed industry; enhanced capacity of key industry stakeholders and NASC staff; and diversification of revenue streams and reduction in operational costs by the NASC.

The NASC believes this is the way to meet its inspirational targets of achieving the key sustainable goal of ending incidence of hunger by 2030, significantly increasing the resilience of climate change in agriculture, reducing the incidence of poverty in smallholder farming households, ending childhood and maternal malnutrition.

CHAPTER ONE

INTRODUCTION

The crop subsector predominates in the structure of Nigeria's agricultural economy, invariably, the whole economy significantly depend on the sector for incremental growth and sustained development. This implies that systematic articulation of a national policy on seed, a critical green revolution farm input, is vital to increasing the contribution of agriculture to Gross Domestic Product (GDP). Thus, the regular review and re-articulation of the subsisting seed policy would go a long way to: (a) properly align and realign the different components of the seed industry with the mandate of National Agricultural Seeds Council (NASC) specifically and the Federal Ministry of Agriculture and Rural Development (FMARD) generally, including alignment with existing legal and regulatory frameworks and other measures for the attainment of food security, b) reasonably comply with global standards and best practices such as environmental neutrality, intellectual property right and other protocols germane to a virile seed industry; and (c) constantly address current issues in the industry at national and global level, in terms of product and process technologies benefitting the seed market, and also in terms of socially desirable objectives particularly gender inclusiveness, equity and human rights, as well as women and youth empowerment.

The formal articulation of public policy of Nigeria's seed industry commenced in 2010, with a recommendation to undertake reviews in a cycle of five years. Thus, the conduct of the first review of the seed policy that produced the "National Seed Policy 2015"; which is followed by this review exercise to produce the new policy, namely: "National Agricultural Seed Policy for Nigeria 2022", in line with the recommended practice. Typically, policy review is an exercise in looking back at the implementation period, in order to determine: a) if policy gaps exist that need to be filled; b) if a legislative change has happened or is required; and c) if other issues have emerged in the national or global seed industry to be addressed over time. Therefore, the present review exercise, being the second in the series, reflects the need to fill such gaps, incorporate such changes or address such emerging issues since the penultimate 2015 seed policy came into force. In this regard, the enactment of two Acts of parliament are important cases in point, namely the National Agricultural Seeds Council Act No 21 of 2019 and the Plant Variety Protection (PVP) Act No 5 of 2021.

1.1 Overview of the Nigeria's Seed Industry

The Seed Industry in Nigeria has undergone different stages of development since the country's independence in 1960. The industry has evolved through the attainment of some critical

institutional structure for agricultural development. The Federal Ministry of Agriculture and Natural Resources (FMANR), established in 1966, had seed industry development as part of its mandate from onset. However, the institutionalization of the seed policy process emerged with the establishment of the National Seed Service (NSS) in 1975 in the Federal Department of Agriculture (FDA) of the then Federal Ministry of Agriculture and Natural Resources (FMANR), which superintended over the articulation of policy and legal instruments to manage the seed industry over time, including the implementation of programmes and projects to move the industry forward. Following the enactment of the Nigeria Seed Law, the National Agricultural Seeds Council (NASC) was established in December 2007 to take over the functions of the erstwhile NSS and expand the scope of administration of the entire industry. Consequent upon the constitution and inauguration of the Governing Board of the NASC in 2009, the first articulation of seed policy was carried out in 2010, which was implemented for five years before its review in 2015 in the twilight of the then Agricultural Transformation Agenda (ATA) of the Federal Government. Subsequently, the 'Green Alternative – Agricultural Promotion Policy' (APP), was implemented from 2016 to 2020, soon to be followed by implementation of the new National Agricultural Technology and Innovation Policy (NATIP), from 2021 to 2025.

Therefore, the seed industry assumes a great importance as

the source of enterprise initiatives and investments for generating dramatic increases in the productivity and quality of crops. In particular, the successful effort of Government towards the attainment of national food security and other goals of agricultural development depends on the performance of the seed industry that sets the limit of yield response of other farm inputs. Such policy efforts for seed industry operate in the same policy space that governs the performance of the entire agricultural economy, thereby subjecting seed industry to the nuances of government actions or inactions in the whole sector.

1.2 Policy Review Process

The present review exercise examines the changes in the policy environment highlighted above. The information required for this purpose came from a rapid field appraisal of the situation, following a series of virtual assessment meetings convened with stakeholder groups namely among others:

- i. Public institutions Universities, Research Institutes, the NASC, the NAGRAB etc.;
- ii. Seed Companies namely Value Seeds Limited, Premier Seeds Company Limited, Da-All Green Limited, etc.
- iii. Farmers/Youth Groups and other Stakeholders such as Nigerian Young Farmers Network, Young Farmers Association of Nigeria, etc.

- iv. Associations and Bodies Nigeria Seed Policy Group; Federation of Agriculture.
- v. Commodity Associations of Nigeria (FACAN); All Farmers Association of Nigeria; Seed Association of Nigeria; Civil Society Organization

Also, several focal group discussions and in-depth interviews were conducted in the field, which probed into the knowledge, attitude and practice of stakeholders and actors, thereby generating real time information required to review the present situation. Concurrently, the subsisting seed policy environment was examined in terms of its inherent strengths, weaknesses, opportunities and threats (SWOT).

1.3 Objectives of National Seed Policy

The seed industry is governed by certain principles and economic imperatives, which is derived from the aforementioned principles and imperatives of the agricultural policy as a whole; that is the seed industry is i) a business enterprise by its very nature; ii) key to long-term economic growth and security; iii) instrumental to the right to food of Nigeria; iii) characterised by its own distinct value chain features; iv) critical to prioritizing crops; v) subject to market orientation; vi) important for implementing climate change and environmental sustainability measures; vii) relevant to enhancing participation and inclusiveness; and viii) an

important factor for achieving policy integrity; nutrition sensitive agriculture, and agriculture's linkages with other sectors.

Thus, the following objectives of the seed policy are pertinent, to:

- (i) Ensure the implementation of a state-of-the art system that supports and fast-tracks varietal development, and release of new crop varieties as well as the rapid multiplication of released varieties.
- (ii) Ensure Breeders and Farmers Rights are protected.
- (iii) Improve the quality of seeds sold to farmers for enhanced productivity.
- (iv) Promote commercially sustainable seed system and position public sector agencies in the promotion of commercially sustainable seed system.
- (v) Facilitate the commercial role of the private sector in the seed value chain.
- (vi) Promote technology and policy best practices as obtains in the global seed industry.
- (vii) Promote climate-smart and nutritional enhancement.
- (viii) Strengthen inter agency collaboration and

maintenance of genetic biodiversity of the crop ecologies.

1.4 Scope and Strategy

The National Agricultural seed policy applies to all activities that deal with and actors involved in any matter relating to planting materials, comprising biological seeds and vegetatively propagating materials. Thus, by 'seed,' we mean 'agricultural seeds,' including all conceivable planting materials. Accordingly, the present review exercise covers such seeds and planting materials in different aspects to which the following terms of reference apply:

- Attain food security and creation of standards and protocols;
- ii. Identify the legal and regulatory bottlenecks militating against the seed industry;
- iii. Assess and apply/adapt global standards in seed best practices in terms of environmental compliance, intellectual property ownership, among others;
- iv. Create a more conducive business environment to attract private sector finance and investment;
- v. Promote farm viability and competitiveness of priority sub-sectors;
- vi. Promote resource efficiency and shift towards a lowcarbon and climate-resilient economy in agriculture;

- vii. Address emerging cross-cutting issues;
- viii. Identify factors hindering effective participation and integration of women and youth in the seed industry;
- ix. Identify appropriate strategies for training, youth empowerment, and generating employment;
- x. Examine and make decisions concerning the issues around GMO technology for seed improvements.
- xi. Strengthen inter-agency collaboration in the maintenance of genetic biodiversity of the crop ecologies.

1.5 Instrumentation of Seed Policy

The current focus of the government on the seed industry consists of three policy directions or functions: regulation, promotion, and protection of the activities of stakeholders in the industry. The primary mandate of the National Agricultural Seeds Council (NASC) is regulatory, then incorporating the promotional and protective aspects as well. In each direction, several policy instruments will be deployed, as listed below:

- **1.5.1 Regulatory policy instruments** the collection of policy actions to regulate the activities of actors in the seed industry include:
 - i) Crop and Seed Improvement
 - ii) Variety Development and Adaptation Trials
 - iii) Variety Registration and Release

- iv) Early Generation Seed Production and Supply
- v) Seed Production, Multiplication and Reserve
- vi) Seed Quality Assurance
- vii) Accreditation of Service providers along the seed value chain.
- viii) Seed Import and Export
- ix) Harmonisation of rules and regulation governing seed industry
- x) Genetically Modified Seeds
- xi) Management of Seed Industry Data and Statistics
- xii) Any other seed-related matters

1.5.2 Promotional policy instruments - the collection of policy actions to promote best practices in the seed industry:

- (i) Agribusiness, Innovation and Competitiveness in the Seed Enterprise
- (ii) Climate Compliance in the Seed Sector
- (iii) Women and Youth Participation in the Seed Industry
- (iv) Seed Distribution and Marketing
- (v) Seed Extension and Promotion
- (vi) Training and Capacity Building
- (vii) Seed Policy Advisory, Advocacy and Sensitisation

- (viii) Any other seed-related matters
- **1.5.3 Protection policy instruments** that is, the collection of policy actions to protect the proprietary rights of principal actors in the seed industry:
 - i) Breeders' Rights
 - ii) Farmers' Rights

1.5.4 Administration of the National Agricultural Seed Policy:

The administration of the policy falls under the purview of the National Agricultural Seeds Council (NASC). The agency will leverage and partner with relevant agencies and key actors, particularly the Crop Varieties Registration and Release Committee (CVRC), in accordance with the Crop Varieties and Livestock Breed Registration and Release Committee Act 2016 and other statutory bodies along the seed value chain to ensure effective administration and implementation of this policy.

1.6 National Agricultural Seeds Council:

Under the supervision of the Federal Minister of Agriculture and Rural Development, the National Agricultural Seeds Council (NASC) is the principal institution for the implementation of the national seed policy. The seed policy is functionally in line with the mandate of the Federal

Government for agricultural development as stipulated in the constitution, and integrally a part of the overall agricultural policy of government. The Second Schedule of the constitution situates the role of the Federal Government in terms of "agricultural research, promotion and financing" of agricultural projects in the country. Accordingly, the NASC shall concentrate its main efforts on the regulation of seed industry activities subject to the mandate of the Federal Government for the promotion of best practices and protection of rights of actors in the entire seed industry. Thus, the functions of NASC cover the entire administration of the National Agricultural seed policy for the country. This involves the regulation of the subsector, promotion of best practices, and protection of actors and stakeholders in the seed industry; particularly the regulation of the market towards competitiveness and quality control aimed at protecting the farm population against sharp practices and ensuring bio-safety of the environment. Towards this end, the membership of the Council shall comprise suitably knowledgeable individuals and groups in the subject matter, to be drawn from public and private sectors as stipulated in the seed act. NASC may wish to constitute an expanded National Seed Technical Committee, for the continuous monitoring and implementation of the policy which may include state and non-state actors such as NGOs and CBOs engaged in the seed industry.

CHAPTER TWO

POLICY DIRECTION FOR THE REGULATION OF THE SEED INDUSTRY IN NIGERIA

For all intents and purposes, NASC is primarily a regulatory agency of the Federal Government, whose function in this regard spans all conceivable policy instruments applicable to the seed industry, as highlighted in sequence hereunder.

2.1 Crop and Seed Improvement

The seed industry in Nigeria is concerned with meeting the seed and planting material needs of the country's main crops, as determined by the Federal Ministry of Agriculture and Rural Development (FMARD). However, the Seed Act emphasizes cereals, legumes, oilseeds, grass, fibre, roots and tubers, trees, or any other crop seeds or seedlings commonly recognized in Nigeria as agricultural seed, lawn seed, vegetable seed and seedlings, conventional or genetically modified seeds, horticultural seeds and seedlings, ornamental seeds, seed mixtures, and all planting materials designated by the Minister. There is also a pressing need to develop national capacity for the production and supply of vegetable and minor crop seeds, such as onions, tomatoes, peppers, and carrots. In due course, priority will also be given to fiber, forage, and tree crops and other crops that may emerge in the future for both food security and industrial raw materials.

NASC shall guide the seed industry to support the Government's crop diversification efforts, including diversification to income-earning export crops, by addressing the needs of both true seeds and vegetative planting materials of crops such as taro, cocoyam, yams, and fruit trees. The Federal Department of Agriculture (FDA) shall update the list of priority crops to keep it in line with the nation's requirements.

For variety evaluation, release, and withdrawal, a national Crop Variety Registration and Release Committee (NCVRRC) exists, made up of relevant technical members of NASC and other relevant experts outside NASC, as well as co-opted researchers who may be relevant to specific crops or varieties being considered at any particular point in time. The Variety Release Committee shall provide NASC with all relevant information on the released varieties to avoid conflicts in the administration of the plant variety protection law. This may include data on DUS and VCU traits.

To ensure easy access to plant genetic resources needed for the development of crop varieties, there should be smooth coordination among the custodians and users of germplasm and facilitate the smooth operation of an efficient varietal release and maintenance system.

2.2 Variety Development and Adaptation

NASC will establish a strong working relationship with national and international gene banks to facilitate public and private plant Breeders access to plant genetic resources for the development of new varieties. Both public and private researchers will be encouraged to undertake varietal development and maintenance. However, research institutes, in conjunction with universities and colleges of agriculture, will undertake genetic improvement, varietal maintenance and breeder seed production of their mandate crops. The Participatory Varietal Selection (PVS) process will be adopted to fast-track the release process, especially of self-fertilised crops, to create awareness about new varieties and appropriate improved crop production technology. High priority will be given to the development and promotion of superior, high-yielding disease-resistant, nutritionally enhanced and climate-smart crop varieties by NARIs, international research institutes and private seed companies. Also, all stakeholders, including agro-allied industries, will be encouraged to promote the adoption and use of hybrid varieties. The government will give more emphasis to the development and promotion of hybrid crop varieties as opposed to open-pollinated varieties. Varietal evaluation will be widely conducted under the Nationally-Coordinated Research Projects (NCRPs) involving multi-location on-station

trial data collected for two cropping seasons which may include dry and wet seasons and multi-location on-farm trial for two cropping seasons. This will help to fast-track the release process.

2.3 Variety Registration and Release

All varieties, whether domestic or imported, that are used for seed multiplication purposes, shall be appropriately registered and released. The NASC will keep the National Variety List, which will contain information about registered varieties that qualify for commercialisation, and will publish this list periodically, as specified by the Seed Act. NASC will revise and issue a list of registered and licensed crop varieties, including detailed descriptors and other relevant information necessary for general use in the seed industry. These varieties shall qualify for certification and be traded in Nigeria. Additionally, only the varieties that are registered and released in the National Seed Catalogue or the West African Catalogue of Plant Species and Varieties will qualify for commercialisation programmes in Nigeria. NASC shall partner with relevant research institutes for the development, registration, and release of high-yielding varieties of tree crops with short gestation periods to increase productivity and ensure that these varieties are listed in the varietal catalogue for commercialisation and trade.

2.4 Seed Production, Multiplication and Reserve

2.4.1 Generation System of Seed Multiplication
Nigeria will adopt a three-tier system for seed
multiplication, including Breeder seed, Foundation
seed, and certified seed under the seed certification
scheme. The National Agricultural Seeds Council will
oversee and coordinate the production and marketing
of all seed classes (breeder, foundation, and certified) to
maintain a limited generation plan.

2.4.2 Early Generation Seed Production and Supply Production of breeder seed of publicly bred varieties for national requirement shall be the responsibility of the relevant National Agricultural Research Institutes (NARIs) that has the national mandate for any given crop.

Breeder seed, which is the starting point for all seed multiplication shall be expected to meet all seed standards as may from time to time be prescribed by the NASC. The institution that originated a variety shall have the primary and leading responsibility for the genetic purity maintenance, and multiplication of breeder seed. No agency shall be allowed to produce more than one class of seed under a trade name. Private

Seed companies wishing to produce both foundation and certified seeds must do so under separate trade names.

Production of foundation seed shall be decentralised, with the functions of NASC focused on supervision, monitoring, coordination and certification for quality assurance including licensing private seed companies to handle the production of foundation seed.

Existing seed growers who wish to produce foundation seed shall be encouraged to establish their own private Seed Enterprises which shall be duly considered for registration and accredited by the Council for that purpose provided it has the capacity.

As may from time to time be decided by the FMARD, particularly concerning food security crops, the production of foundation seeds of improved crop varieties and their subsequent multiplication as commercial seeds will be adequately funded through the contract growers and other private commercial seed producers within the national seed rules and regulations. However, where it is considered not profitable to do so, government will intervene in a specific and transparent manner in the interest of the

public to make such foundation seeds available.

2.4.3 Certified Seed Production.

It will be the responsibility of the private sector to establish enterprises for the production of certified seed. Production of certified seed from foundation seed. shall be carried out by duly registered and licensed seed companies. Any government/public institutions interested in producing seeds for commercial purposes must establish and register a seed company which must be accredited with NASC. Certified seed production can also be carried out by licensed and accredited Farmers Groups (FGs)/Cooperatives under the community seed production scheme. NASC shall, from time to time, organize capacity-building programs for producers of all classes of seed as the need arises. It will be a requirement that all seeds marketed and distributed in Nigeria are processed/conditioned. NASC shall, in partnership with seed industry players, develop a system to provide seed conditioning services to smallscale and community seed producers for a fee.

2.4.4 Vegetatively Propagated Seed Production

The development and promotion of tissue culture laboratories using modern technologies for multiplying horticultural crops and other seedlings shall be encouraged for commercialization. The quality standards for multiplying these seeds or planting materials must comply with the standards set by NASC. NASC shall also conduct regular inspections of these laboratories and nurseries used for seedling production of tree and other horticultural crops.

Producers and marketers of seeds/seedlings of vegetatively propagated materials for sale to farmers shall be required to register with NASC for operational licenses

2.4.5 Organic Seed Production

Due to the growing trend of organic agriculture and the importance of seed in the production chain, NASC shall regulate the production of organic seed in Nigeria and ensure that standards and procedures for production are maintained by any entrepreneur engaging in organic seed production as stipulated in the International Organic Standards (OneCert International 2018)."

2.4.6 Genetically Modified Seeds:

Research into the development and use of biotechnology in the seed industry will be encouraged provided it does not infringe on existing legal channels of introducing new varieties into the country. Research into seeds that have terminator genes will be encouraged for the purpose of genotype development ONLY.

Importation of Genetically Modified (GM) seeds would be subject to approval or Permit by the National Biosafety Management Agency whose main mandate is the regulation of genetically modified and gene edited seeds in collaboration with NASC. Commercial GM seeds with terminator genes should at no time be allowed into the country. However, quality standards for safety and certification shall be as prescribed by the relevant laws.

2.4.7 Strategic Seed Reserve

The D-8 countries, of which Nigeria is a member, recommend a national seed bank to serve as a strategic seed reserve to mitigate the effects of natural/human disasters in the country. Furthermore, the government through NASC shall establish a buffer stock for seed to meet seasonal changes in demand or to replace crops lost during times of natural disasters, as well as to preserve seeds during times of abundance. Private sector agencies shall also be required and encouraged to maintain a reserve stock.

NASC, in conjunction with industry players, shall organize annual seed planning workshops to effectively plan annual seed targets for immediate use and reserve.

2.5 Seed Quality Assurance

2.5.1 Quality Standards for Seed

Seed quality is fundamental to crop performance and yield. Therefore, quality of seeds will determine all activities in the seed value chain aimed at ensuring that only the highest quality seeds that meet prescribed minimum standards are introduced into the Nigerian seed system, regardless of their origin. NASC will ensure that only seed lots meeting prescribed minimum seed certification standards are offered for sale to farmers. To guarantee this, joint monitoring and field inspection of breeder, foundation and certified seed plots will be carried out in accordance with prescribed procedures and standards. The use of digital technologies will also be encouraged for field inspection and traceability such as seed trackers and seedcodex.

2.5.2 External Seed Quality Control

Certification, which is an independent third-party guarantee, shall be mandatory for all seeds to be marketed in Nigeria irrespective of the class. NASC will establish a seed certification system that provides farmers with assurance that the seed in circulation is genetically pure and meets the minimum requirements for seed certification.

NASC shall ensure that all seed producers comply with technical requirements for maintaining quality standards for certification.

The NASC shall carry out inspections and certification of all seed production fields across the country, regardless of the producer and class of seed.

NASC shall collaborate with other relevant law enforcement agencies to enforce quality standards in the seed industry.

Certification may be carried out on behalf of NASC by accredited and registered seed specialists who have the necessary qualifications and experience in seed quality assurance processes. The cost of their services shall be borne by the recipient.

2.5.3 Internal Seed Quality Control

Accreditation of new seed companies/enterprises and renewal of accreditation for existing seed enterprise producing and marketing seeds in Nigeria shall depend on the presence of an internal seed quality control mechanism approved by NASC.

Private seed companies shall be encouraged to establish seed testing laboratories for the purposes of internal seed quality control. Such laboratories must be accredited by NASC. NASC shall also conduct recertification of accredited seed enterprises every two years to ensure compliance with operational rules and regulations.

2.5.4 Plant Protection and Quarantine

Seeds at both trial and commercial levels shall not carry pathogens or pests that will threaten the bio-security of the nation. The seed shall pass the phytosanitary conditions in line with the National Quarantine regulations.

2.5.5 Seed Testing

There shall be regular sampling and testing of seed lots to enforce the seed law in accordance with the National seed rules and regulations of Nigeria and the Harmonised Seed Rules and Regulations of ECOWAS as domesticated and gazetted by Nigeria.

There shall be established standard seed testing laboratories comprising the Central Seed Testing Laboratory and the Zonal Seed Testing laboratories to be equipped and strengthened with adequate quality control equipment, manpower, and facilities.

Satellite seed testing laboratories shall be established in all the states of the federation and FCT to bring seed testing facilities closer to producers and farmers.

Independent seed testing laboratories shall be accredited by NASC to provide services to interested clients.

2.6 Accreditation of Service Providers along the Seed Value Chain

Accreditation of service providers along the seed value chain may involve organizations authorized by NASC to carry out specific activities on behalf of NASC. They shall be accredited to ensure that the entity is technically capable of carrying out the intended operations. The entity shall be trained, subjected to technical evaluation, including an audit before being licensed by NASC. NASC and the certification organization may also license and audit seed inspectors, seed analysts, and seed samplers.

2.7 Seed Import and Export

All applications for imports and exports shall be made to NASC for all purposes, such applications will be handled according to the Seed Act and in accordance with the phyto-sanitary requirements of the National Agricultural Quarantine Service (NAQS), the Nigerian biosafety guidelines, and the harmonised ECOWAS regulatory framework before approval is given.

The encouragement of germplasm introduction for breeding and varietal development purposes is vital. Importation of early generation seeds (breeder or foundation seeds) of varieties not bred in Nigeria for local seed multiplication and production shall be encouraged for a specified period, also seeds for introduction, demonstrations and research shall be approved for importation on request. The amount to be authorised for such a purpose will be decided by NASC. These shall include the importation of seed varieties not listed in the West African Catalogue of Plant Species and Varieties (WACPSV).

Seed export, particularly to African countries and other regions, will be encouraged to promote international seed trade and allow the private sector to establish a prosperous, competitive, and responsible export business. Seed trade will be promoted based on the trade guidelines in the ECOWAS subregion to minimise trade barriers and conform with all trade

agreements under AfCFTA, AFSTA, OECD, UPOV, ISF and other global organisations.

2.8 Harmonising Seeds Rules and Regulations Governing the Seed Industry

The existing legal frameworks for implementing the National Seed Policy are the National Agricultural Seeds Council Act No. 21 of 2019, which may be reviewed and amended by the National Assembly as the need arises, the ECOWAS Harmonised Seed Rules and Regulations, as gazetted by Nigeria for domestication, and the PVP Act No. 5 of 2021. Penalties for infringing or contravening any provisions of these rules and regulations shall be as prescribed in the relevant laws.

The internal working mechanism of NASC as a regulatory agency shall be in line with guidelines stipulated in the strategic plans, the National Seed Roadmap for Nigeria (2020), Standard Operating Procedures (SOPs), and other regulations guiding the operations of NASC activities.

2.9 Seed Industry Data and Statistics

NASC shall set up and maintain a system to gather and distribute accurate, timely, comprehensive and up-to-date data on seed usage, projected demands and seed availability, to

aid management and decision-making by seed providers and users. A Management Information System (MIS) shall be established for the seed industry, in order to encourage and promote the use of technology among stakeholders.

CHAPTER THREE

POLICY DIRECTION FOR THE PROMOTION OF THE SEED INDUSTRY

As a matter of policy, a number of promotional benefits shall accrue to the private sector in the seed industry. In light of this, the resources of federal government shall be committed to the seed industry based on NASC approval, which will license the appropriate organizations or companies to produce and market improved seeds. The council shall also encourage existing seed growers to register as seed enterprises.

The promotional function of NASC derives from the constitutional mandate of Federal Government for "research, promotion and financing" of agricultural projects. Thus, with regard to the seed industry, the policy direction of NASC comprises the set of individual or multiple policy instruments for meeting the stated policy objectives. These are highlighted as follows.

3.1 Agribusiness, Innovation and Competitiveness in the Seed Industry.

Nigeria's seed industry is worth over N4billion annually with Nigeria supplying over 40% of the seeds requirement of other West African countries. The resources of Federal Government

shall be committed to the seed industry through the NASC which will license the appropriate organizations or companies to produce and market improved seeds. The Council shall also encourage existing seed growers to register as seed enterprises.

Subject to consideration by the FMARD, and in recognition of its pivotal role as a critical food production input, subsidies may be selectively granted on seeds to reduce the cost of agricultural production and if necessary, on prices of agricultural products to enhance farmers income.

It shall be the policy of government to develop the private seed industry for foundation and certified seed production, processing and marketing through public- private partnership (PPP) for seed producers, seed processors, seed distributors and dealers. Private Plant Breeders shall also be encouraged to develop new crop varieties.

Participation of the private sector in policy administration shall be ensured through a strong representation of members on the Governing Board of the National Agricultural Seeds Council.

The access of private sector to breeder and foundation seed of publicly bred varieties for seed enterprises that do not have an independent research capability shall be promoted.

The right of accredited seed enterprises to produce and market seeds (hybrids and vegetable seeds) shall be granted to include the freedom to import breeding materials, subject to plant quarantine regulations, seed quality and biosafety guidelines for a specified period.

Other policy incentives to members of the private seed sector shall be provided, in form of: Grant of pioneer status; Concessionary interest rates on loan; Exemption from import duty on equipment; Exemption from sale taxes; Tax holiday; Liberalization of letter of credit consistent with foreign exchange regulations, etc as may be determined by government policy guiding trade and investment.

3.2 Climate Compliance in the Seed Sector

Improved seed is at the heart of achieving climate change compliance of food systems. Government shall make deliberate effort to promote the use of climate smart, disease and pest resistant crop varieties.

3.3 Women and Youth Participation in the Seed Industry

Women and youths shall be supported to access knowledge, skills, technologies and business development services, in order to strengthen their participation in the seed value chain.

Gender equality will be promoted by increasing opportunities for both girls and boys in the industry. Effort will be concentrated on the creation of an enabling environment for female entrepreneurs; support for youth entrepreneurship; and the promotion of clusters and partnerships to facilitate access to information, technology and markets for both demographics.

It is recognised that access to seeds is powerfully influenced by gender relations, so Nigeria's seed distribution system will strive to bring quality seeds within the reach of women and youth, given their vulnerability in the farming system. This will be realised by recognizing their preferences, interests and barriers to seed access.

3.4 Seed Distribution and Marketing

Government shall encourage and support the establishment and operation of a private sector-led seed supply system, which makes improved seed available within their zone of mobility to all farmers in all crop production areas.

Distribution and marketing of seed of any variety emanating from formal seed sector to farmers for the purpose of sowing will be allowed only if the said variety has been released and registered by the NCVRC.

However, marketing of seeds produced outside Nigeria shall be sold under the brand name of accredited seed enterprise engaged to market such seeds in the country. Any foreign seed enterprise or company that intends to maintain the original brand name and market such seeds must be registered and accredited by NASC and such seed variety must be registered and released by the NCVRC.

Seed codex, an electronic verification and authentication label must be affixed on every seed package from passed seed lots. The seed codex has a unique code that will authenticate and verify the quality of the packaged seeds by texting the code to a dedicated telephone number. NASC shall determine the size and cost of the seed codex from time to time.

Seed should be sold on the basis of cash or on credit as appropriate. No attempt should be made by any organisation to distribute seed free that could undermine commercial sales of seed, except in cases of emergency or promotions and such should be undertaken in consultation with NASC.

Marketing of certified seeds shall be carried out by duly registered and licensed seed companies, Community seed producers and Seed dealers.

Seed enterprises shall be encouraged to pack seeds in different sizes using appropriate materials and labelled as prescribed by

the Seed Act. Seed enterprise is also required to package in units that are affordable to the farmers and ensure availability of seeds at farmer's clusters and proximity.

3.5 Seed Extension and Promotion

Farmer's level of awareness about use of improved seed would be enhanced through seed extension and other promotional activities such as demonstrations, field days, farmer field schools, mass media and other methods.

The quality and volume of seed extension work would be improved through training and re-training of seed extension workers.

Government shall mount aggressive seed promotional campaigns on the use of improved seed at National, State, LGA, and community levels to increase demand for improved seed and thereby increase the seed trade and adoption.

The private sector shall seriously and regularly undertake seed extension and promotional activities to expand their market and consequently broaden the use of improved seeds. Non-government actors or public agencies shall notify NASC of any seed promotional programme they are undertaken.

3.6 The Informal Seed Sector.

The informal seed system, as represented by farmer's saved seeds, seed exchanges in the communities and buying 'potential seed' from local grain market is still the predominant source of seeds to the Nigerian farmers particularly for traditional crops and others not found commercially attractive by the formal sector. The informal seed system therefore presents a huge entry point and opportunity for quality seed production and supply to meet the seed needs of farmers. It can benefit from systematic linkages with formal seed system. Therefore, government shall encourage participatory plant breeding, participatory variety selection, promotion of improved seed storage practices and support to local germplasm conservation at community level. Specifically, Government shall cause to be established at strategic locations ecological gene banks for certain indigenous seed varieties for them not to go into extinction.

3.7 Community Based Seed Production

Community based seed production which is a semi-formal seed production system shall be encouraged as this is expected to bridge the gap for seed crops that are not usually patronized in the formal seed sector. This is particularly in regards to orphan crops that are important in the food security chain but are not widely produced and traded by most established seed enterprise. However, the scope and quantities allowed to be produced and marketed by an accredited community seed producer shall be determined by NASC from time to time, such seeds shall also be limited in distribution within the proximity of the production area except on special cases and on approval of NASC then such seeds can be allowed for distribution outside the specified area of coverage.

3.8 Training and Capacity Building.

The formal training of manpower in the seed industry at any level in the Seed Technology Centres and educational institutions in the country shall be strengthened. Vocational trainings for manpower development may also be handled by interested bodies or groups in collaboration with NASC.

The Council shall ensure adequate and timely training of stakeholders in the seed industry based on emerging innovations, as these will form part of the accreditation and recertification criteria.

In certain circumstances, assistance may be sought by NASC for short local and overseas training for selected candidates in

both public and private agencies in the developed and developing seed systems around the globe.

3.9 Seed Policy Advisory, Advocacy and Sensitization

The benefits of the revised national seed policy will need to be communicated to all sector stakeholders including farmers, government, the private sector, donors as well as the general public. Clear, concise messages can be delivered at media events and seed related meetings or gatherings. Creating awareness of the existence of the policy will help ensure that it is used as reference guide for all seed related activities. Translation into key national languages, and wide distribution of copies are essential.

CHAPTER FOUR

POLICY DIRECTION FOR THE PROTECTION OF THE SEED INDUSTRY

With particular reference to plant breeders and farmers, NASC also has the responsibility to establish and observe mechanisms for the protection of their proprietary rights in the seed industry; this as an international obligation and in conformity with the PVP Act No 5 2021.

4.1 Plant Breeders Rights

The Intellectual Property Rights (IPR) of researchers, inventors and investors in the seed industry will be safeguarded and remunerated through royalties and other returns on their efforts for a maximum of not less than 25 years to enable them recoup the expenses made on research and variety development in accordance with existing relevant IPR legislations as entrenched in the Plant Variety Protection (PVP) Act No 5 2021.

Plant breeder's rights (PBRs) are used to protect variety developers' intellectual property with respect to new varieties of plants, by giving exclusive commercial rights for about 20 – 25 years to market a new variety or its reproductive material. The variety must be Novel, Distinct, Uniform and Stable. This protection prevents anyone from growing or selling the

variety without the owner's permission. Exceptions may be made, however, for breeding and research purposes and use of seed saved by a farmer for replanting. The intellectual Property Rights, and Breeder's Rights shall apply as entrenched in the Plant Variety Protection (PVP) Act No 5 of 2021.

Hybrid crop varieties developed and released by NARIs shall be commercialised only by seed companies with the payment of royalties to the relevant NARIs.

4.2 Farmer's Rights

The international position on farmers' rights is as espoused in the concept of 'Farmer's Privilege of UPOV 1991 (Article 15.2). On the other hand, Farmer's Rights, which is negotiated under the FAO IT-PGRFA has a much broader scope than the Farmer's Privilege.

"Farmers' Rights" mean rights arising from the past, present and future contributions of farmers in conserving, improving and making available plant genetic resources, particularly those in the centres of origin, diversity, etc. (FAO, 1989). The rights of farmers are therefore critical in the consideration of IPR for agricultural innovations and technologies development. Farmer's Rights shall also apply as entrenched

in the Plant Variety Protection (PVP) Act No 5 of 2021.

Farmers will maintain their right to use, exchange, or share their farm-saved seed among themselves without any restriction and will have the right to continue using any cultivar of their choice without being hampered by the system of compulsory registration provided they do not commercialise production emanating from proprietary varieties.

CHAPTER FIVE

IMPLEMENTATION FRAMEWORK, MONITORING AND REVIEW

For the successful implementation of the seed policy, NASC acts as the superintending agency of government to manage the public funds and other resources at its disposal, and to coordinate the activities of private seed companies and other actors in the seed market; this with a view to increasing crop productivity in Nigeria.

5.1 Policy Implementation Framework

NASC shall liaise with the relevant line departments of FMARD to ensure that the policy implementation is consistent with the overall National Agricultural Policy. Particularly the Planning and Policy Coordination Department (P&PC).

Government shall through participatory process with the private sector and other relevant agencies undertake the full formulation of strategies for implementing the seed policy with a view to fully specifying the various dimensions and instruments to be adopted.

The strategy of implementation of the National Agricultural Seed Policy shall be formulated against the need for proper programming of its various components.

The critical aspects of the implementation strategy shall be formulated in terms of work plan, implementation manuals, budget implications, logical framework, among others.

5.2 Monitoring and Evaluation

The internal and external monitoring of the implementation of seed policy shall be transparently carried out by appropriate organs of government in order to ensure that the policy objectives are achieved. This shall be carried out in a participatory manner involving all the stakeholders in the seed industry.

Government, in collaboration with stakeholders shall undertake the impact assessment of the seed policy periodically to ensure desired impact is made.

Effort shall be made on annual basis to undertake the monitoring and evaluation of the implementation of the seed policy. Report generated from these shall be published.

5.3 Policy Review

Effort shall be made on annual basis to source for funds for the review process at the appropriate time. Government shall involve relevant stakeholders in the seed policy review process which shall be technically sound and due process shall

be followed in conducting the exercise, including programme accountability to stakeholders.

The seed policy review exercise shall take place at least once every five years because of the dynamic nature of the seed industry and this shall be done in consultation with stakeholders in the seed industry. Government shall involve relevant stakeholders in the evaluation process and this shall be done within the ambit of global best practices.

ENTRY INTO FORCE

Effective Date:

This Policy Document shall be effective as National Agricultural Seeds Policy 2022 from WEDNESDAY 22ND MARCH, 2023.

Applicability:

All the components of the policy shall have long-term application, and shall continue in force indefinitely, until specifically modified under provisions of this Policy However, such modifications shall not change the intent or philosophy of this National Agricultural Seed Policy.

THIS DAY:

Name/Signature: Dr Mohammad Mahmood Hoth K

Mahabakar

Hon, Minister of Agriculture and Rural Development