

Malawi Government

MINISTRY OF AGRICULTURE, IRRIGATION AND WATER DEVELOPMENT

NATIONAL SEED POLICY



Department of Agricultural Research Services Malawi

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MINISTRY OF AGRICULTURE, IRRIGATION AND WATER DEVELOPMENT

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Department of Agricultural Research Services P.O. Box 30779 Lilongwe 3

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Foreword

More than 80% of Malawi population depends on agriculture for household food security, livelihood and income. The Malawi government, through the Ministry of Agriculture, Irrigation and Water Development, is determined to develop and improve the seed sector to alleviate poverty and hunger as stipulated in the National Agriculture Policy (NAP). Seed is an important catalyst for the development of agriculture and the availability of high quality seed is the



Hon. Joseph Mwanamvekha, MP

foundation for crop production and productivity. Seed is a precursor to crop and food diversification which is a goal pursued by many governments in the region, including Malawi.

At present, the Malawi seed sector operates under the National Seed Policy of 1993 and without a strategy. The seed sector has undergone massive transformation over the years due to the mushrooming of seed companies, agro-dealers and numerous other players along the entire value chain. This development necessitated a comprehensive review of the policy and development of a strategy in order to provide for all aspects of a modern seed industry. This Policy document provides for the regulation and control of all seed issues, protects consumers and dealers and also promotes a responsible and productive seed industry, and defines the regulatory role of the government.

Effective seed trade is an essential component of activities to improve food security in the region. Legislation should facilitate the development and distribution of new plant varieties between countries in the region and beyond. For this reason, it is necessary to harmonize seed laws and associated legislation at regional level so that seed trade is appropriately facilitated. The successful implementation of the National Seed Policy will mainly depend on the involvement and participation of all concerned Ministries, Departments and Agencies, other public institutions, the media and many other seed industry stakeholders including Civil Society Organizations. It requires concerted efforts from all partners.

I wish to express my sincere gratitude to all the institutions and individuals who were actively involved in the review of the policy and development of the strategy for their support and immense contribution.

anamvehl

Hon. Joseph Mwanamvekha, MP Minister of Agriculture, Irrigation and Water Development

Preface

Seed is a basic and vital input for successful agriculture production, as such, it is very important to maintain its purity and quality through the different recommended procedures for seed production.

A competitive seed sector is a key to ensuring timely availability of high quality seeds of improved and appropriate varieties at affordable prices to both large and small scale farmers in the country. The National Seed Policy addresses the challenges in



the seed industry in respect of research, imports and exports, production and quality control, marketing, distribution and institutional and legal frameworks.

In the Malawi Growth and Development Strategy III (MGDS III) agriculture remains the priority area number one. One of the key outcomes under the agriculture and climate change priority area is to increase agricultural production and productivity. High quality seed is a key to increased agricultural production and productivity.

It is necessary to harmonize seed laws and associated legislation at regional and international level so that seed trade is appropriately facilitated. Instruments from the Convention on Biological Diversity (CBD), *Agreement on* Trade-related Aspects of Intellectual Property Rights (TRIPS), World Trade Organization (WTO), International Treaty on Plant Genetic Resources for Food and Agriculture (IT-PGRFA), Organization of Economic Cooperation and Development (OECD), International Seed Testing Association (ISTA), the Common Market for Eastern and Southern Africa (COMESA) and Southern Africa Development Community (SADC) Seed Harmonization Frameworks were reviewed in order to provide a robust policy that is in harmony with the existing pieces of legislation in the region and beyond to which Malawi is a signatory. I trust that the National Seed Policy will receive the fullest support of all Government Ministries, Departments and Agencies, plant breeders, seed producers and all other stakeholders in the seed industry so that it may serve as a catalyst to meet the objectives of sustainable development of agriculture, food and nutritional security for the population, and improved standards of living for farming communities.

I wish to thank the Department of Agricultural Research Services for spearheading the review of the National Seed Policy and development of the Strategy and promoting the agenda for harmonization of the seed legislation in the region in a quest to enhance seed production and trade.

Gray S.V.K. Nyandule Phiri Secretary for Agriculture, Irrigation and Water Development

List of Acronyms and Abbreviations

ADMARC ATCC ARET CBD CBOS COMESA DAES DARS DARS DUS FRIM GDP GMO ISF ITPGRFA ISTA MGDS MOAIWD NAP NBRC NGO NAP NBRC NAP NBRC NAP NBRC NGO NSC NSCM NSCM NSCM NSCM NSC NSCM SADC SSES SSMGS SSU STAM TRIPS	Agricultural Development and Marketing Corporation Agricultural Technology Clearing Committee Agricultural Research and Extension Trust Convention on Biological Diversity Community Based Organizations Common Market for Eastern and Southern Africa Department of Agricultural Extension Services Department of Agricultural Extension Services Department of Agricultural Research Services Distinctiveness, Uniformity and Stability Forestry Research Institute of Malawi Gross Domestic Product Genetically Modified Organism International Seed Federation International Treaty for Plant Genetic Resources for Food and Agriculture International Seed Testing Association Malawi Growth and Development Strategy Ministry of Agriculture, Irrigation and Water Development National Agriculture Policy National Biosafety Regulatory Committee Non-Governmental Organization National Seed Company of Malawi National Seed Company of Malawi National Variety Release Committee Organization of Economic Cooperation and Development Open Pollinated Varieties Public Private Partnerships Quality Declared Seed Southern Africa Development Community Smallholder Seed Enterprises Smallholder Seed Multiplication Groups Seed Services Unit Seed Trade Association of Malawi Trade Related Aspects on Intellectual Property Rights
TRIPS UPOV	Trade Related Aspects on Intellectual Property Rights International Union for the Protection of New Varieties of Plants

VCU Value for Cultivation and Use

WTO World Trade Organisation

Acknowledgments

The Ministry of Agriculture, Irrigation and Water Development (MoAIWD) led and coordinated the review of the National Seed Policy through the Department of Agricultural Research Services (DARS) with financial support from the Government of Malawi and development partners, particularly the World Bank through Agricultural Productivity Programme for Southern Africa (APPSA). The National Seed Policy was reviewed through a highly consultative process incorporating input from a broad range of stakeholders. The Ministry is grateful to Agricultural Research and Extension Trust (ARET); Civil Society Agriculture Network (CISANET); Farmers Union of Malawi (FUM); National Smallholder Association of Malawi (NASFAM); Food and Agriculture Organization (FAO); Self Help Africa; UN Women; the Centre for Environmental Policy Advocacy (CEPA); Forest Research Institute of Malawi (FRIM); Lilongwe University of Agriculture and Natural Resources (LUANAR); International Crops Research Institute for Semi-Arid Crops (ICRISAT); International Centre for Tropical Agriculture (CIAT); International Institute for Tropical Agriculture (IITA); International Centre for Research in Agroforestry (ICRAF); International Potato Centre (CIP); Seed Trade Association of Malawi (STAM); World Vision; Total Landcare; Irish AID; Africare; Parliamentary Committee on Agriculture and Natural Resources; the Ministry of Justice and Constitutional Affairs; the Ministry of Industry and Trade; the Office of the President and Cabinet; the Ministry of Finance, Economic Planning, and Development; and many more participants to the National Seed Policy consultations across the country. We would also like to thank the leadership and hardworking staff of the Department of Agricultural Research Services (DARS) and other collaborating ministries of the government of Malawi. In particular, thanks are accorded to the task team that coordinated the National Seed Policy review and consultations.

Glossary of terms

In this Policy:-

"Agriculture" is "the cultivation of plants, fungi, and other life forms for food, fiber, biofuel, medicinal and other products used to sustain and enhance human life. The major agricultural products can therefore be broadly grouped into food, fiber, fuel, and raw materials, such as lumber and bamboo."

"Commission" means National Seed Commission (NSC)

"Nagoya protocol" states the access to genetic resources and fair and equitable sharing of benefits arising from the utilization.

"Seed orchard" means an intensively-managed plantation of specifically arranged trees for the mass production of genetically improved seeds to create plants, or seeds for the establishment of new plantations.

"Phytosanitary measure" means any legislation, regulation or official procedure having the purpose of preventing the introduction or spread of quarantine pests, or limiting the economic impact of regulated non-quarantine pests;

"Quality Declared Seed" refers to a seed system in which 10 percent of the seed produced and distributed is checked by a certifying agency.

"Seed" is defined as: "a botanical structure that contains at least one ripened ovule with or without accessory parts and may also include any plant or plant part used as propagation material such as: fruit, root, rhizomes, corm, stem, sprout, tree seedling and leaf capable of regenerating crops, trees, shrubs and pastures that is true to its type"

"Vegetative propagated material" refers to any plant or plant part used as propagation material such as: fruit, root, rhizomes, corm, stem, sprout, tree seedling and leaf capable of regenerating crops, trees, shrubs and pastures that is true to its type.

1.0 Introduction

The Government of Malawi recognizes the fundamental importance of a sustainable seed industry in contributing to increased agricultural production and diversification. Through appropriate policies and programmes, Government endeavors to establish a conducive environment for the development of the seed industry. Furthermore, government recognizes the importance of both public and private investments in research, training, marketing and the provision of support services in the seed industry.

In order to realize improved productivity in the agricultural sector, increased access to affordable and high quality inputs such as seed is critical. The crop sub-sector forms the bulk of both the rural livelihoods and about 30 per cent contribution to the country's GDP. There are a number of commodities within the crop sub-sector that contribute to the rural economic livelihoods as well as the country's GDP. Amongst the major crops being cultivated are cereals, legumes, oil seeds, tuber crops, fiber crops, plantation crops, and horticultural crops. For the agricultural sector to thrive there is need for a vibrant, sustainable, and dynamic seed industry which has to be supported by a comprehensive and dynamic seed policy.

1.1 Overview of Malawi's Seed Industry

A review of the Malawi National Seed Policy (1993) revealed a number of gaps considering the various developments that have taken place in the seed industry since the policy came into effect. Amongst the many gaps in the 1993 Seed Policy is the absence of the definition of the term "seed". Omission of the definition of seed in the National Seed Policy of 1993 limited the scope of commodities that fell under the mandate of the policy. For example, the 1993 Seed Policy was not explicit enough on matters related to forestry, horticultural and other special seed systems. It is based on this background that the revised National Seed Policy defines seed to avoid ambiguity on what type of commodities that should be under the mandate of the revised National Seed Policy. In addition to omitting the definition of seed, the 1993 National Seed Policy was also not explicit on issues to do with biotechnology.

The seed industry in Malawi is comprised of the formal and informal seed systems as main sources of seed to farmers. The formal seed system is the one that is regulated. The commercial seed is the one that has gone through the formal seed system. The informal seed system on the other hand, constitutes the major source of seed for the majority of smallholder farmers. The source of seed in the informal sector is farm saved seed. This national seed policy focuses on the formal seed systems in order to catalyze productivity improvement by increasing production, access to and the use of improved varieties and high quality seed. Furthermore, it provides for distinctiveness, uniformity and stability (DUS) as well as the Value for Cultivation and Use (VCU) of varieties' tests. Informal seed is, therefore recognized only to the extent that it maintains known genetic purity and is produced under recommended conditions that maintain its genetic purity. The focus on formal seed systems improves traceability and management of seed and its associated technologies as released by Agricultural Technology Clearing Committee (ATCC), unlocking opportunity for Government to deploy new scientific innovations in its development agenda.

1.2 Linkages with other Policies and Legislation

The National Seed Policy is internationally linked with instruments from the Convention on Biological Diversity (CBD), *Agreement on* Trade-related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO), International Union for the Protection of New Varieties of Plants (UPOV), International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), Organization of Economic Cooperation and Development (OECD), International Seed Testing Association (ISTA) and the Common Market for Eastern and Southern Africa (COMESA) and Southern Africa Development Community (SADC) Seed Harmonization Frameworks. Locally, the policy is linked with a number of sectoral policies and Acts which include; the National Agriculture Policy, Environment Management Act, Forestry Act, Bio-safety Act, Plant Protection Act and Education Act.

1.3 **Problem Statement**

The seed sector has undergone massive transformation over the years due to the mushrooming of seed companies, agro dealers, growers and other players involved in seed industry. For example in 1980 there was only National Seed Company of Malawi (NSCM) involved in seed production and ADMARC as a seed seller. Meanwhile, the country has over 25 and 700 seed companies and agrodealers respectively. The Seed Services Unit has inadequate capacity to couple up with the increased demands as a regulator.

Effective seed trade is one of the essential components in the attainment of food security in the region. However, there are some challenges being faced such as lack of access to high quality seed due to high seed prices, unavailability of high quality seed in the rural areas, and lack of credit facilities for farmers to buy high quality seed. SADC and COMESA have different seed regulations including standards of different crops. Malawi has to harmonise its standard with standard regimes of both SADC and COMESA in order to be able to trade with countries in the two regional blocks.

2.0 Broad Policy Directions

2.1 Policy Goal

The overall goal of the National Seed Policy is to provide clear guidelines for the development and promotion of the seed industry in order to raise agricultural productivity through the provision of sustainable, adequate and high quality seeds.

2.2 Policy Outcomes

- 2.2.1 Enhanced appropriate and effective seed regulatory framework
- 2.2.2 Enhanced seed quality assurance for better performance of agriculture
- 2.2.3 An established reliable and internationally acceptable seed certification system
- 2.2.4 Enhanced growth of the local seed industry to ensure farmers' access to improved varieties and seeds

2.3 Policy Objective(s)

Specifically, the National Seed Policy objectives are:

- 2.3.1 To enhance appropriate and effective seed regulatory framework
- 2.3.2 To enhance seed quality assurance for better performance of agriculture
- 2.3.3 To establish reliable and internationally acceptable seed certification system
- 2.3.4 To enhance growth of the domestic seed industry

3.0 Policy Priority Areas

The National Seed Policy has areas that need attention and are presented as policy priority areas. The Policy Statements associated with these priority areas contribute towards providing solutions to the issues. The policy priority areas include: institutional, regulatory and legal framework; seed certification and quality control; information system for the seed industry; production of different classes of seed; biotechnology and biosafety research; seed marketing and distribution; seeds orchards and vegetative propagated materials and integration of seed topics in education curriculum

3.1 Policy Priority Area 1: Institutional, Regulatory and Legal Framework

Government recognizes the importance of an effective institutional, regulatory and legal framework in order to undertake the required activities in the seed industry. The current institutional, legal and regulatory framework does not support the effective and efficient functioning of the seed industry in Malawi. It is characterized by the presence of seed related legislation, rules and regulations that are not harmonized and are applied in a non-coordinated manner. These include the Seed Act, the Forestry Act, the Biotechnology and Biosafety Act, the Environment Act, the Tobacco Act and the Cotton Act. Furthermore, the current seed legislation is outdated and therefore not aligned with legislative frameworks within the region and beyond.

The Seed Services Unit under the Ministry of Agriculture is the only institution entrusted with the responsibility of ensuring that farmers have access to high quality seeds and planting materials in Malawi. It is therefore required to provide seed certification services, conduct research in seed science and technology, provide extension services to farmers and other stakeholders in seed production, and monitor all stakeholders in the seed industry. Yet the unit is dogged with serious capacity challenges in terms of human resources, finances and infrastructure. At the same time, the current setup of the institutional arrangements does not support the unit to exercise its comprehensive mandate. Hence need for the formation of the National Seed Commission.

Policy Statements

- i. The policy will ensure the transformation of the Seed Services Unit (SSU) to National Seed Commission through:
 - a) Drafting the Seed Bill to transform the SSU into a National Seed Commission
 - b) Establishing a Fund to finance operations of the National Seed Commission
 - c) Establishing the National Variety Release Committee to evaluate a proposed new variety,

release and enter it in the variety catalogue or withdraw from it

- d) Promoting the establishment of breeders and other related technology developers' associations
- ii. The policy will spearhead the putting in place of all the legal frameworks for the smooth operation of the Commission through:
 - Facilitating periodic reviews of the national seed policy and any related legislation pertaining to seed
- iii. The policy will put in place measures to harmonize Seed Legislation with those of SADC, COMESA and beyond through:
 - a) Reviewing periodically the Seed Legislation on seed trade in the light of seed certification standards and phytosanitary measures while developing and promoting both domestic and international seed industry.
 - b) Enforcing implementation of Technical Agreements on Harmonization of Seed Legislation for purposes of safeguarding the Malawi seed industry
 - c) Regulating Imports and exports of seed when need arises

3.2 Policy Priority Area 2:Seed Certification and Quality Control

Seed certification is a legally sanctioned system for quality control of seed multiplication and production with the aim of making available to the public high quality seed and propagating materials. The objective of seed certification is to supply high quality seed to farmers and other growers, which is true to identity, high in purity and germination capacity and free from certain pests and diseases. Seed quality is most important in crop production, as high quality seed is essential for high crop yields.

Seed certification and quality control involves registration of seed growers, seed field inspections, seed sampling, laboratory seed testing, and conducting pre- and post-control plots. It also involves monitoring of seed processing plants and seed markets. The seed certification and quality control functions also includes provision of training, advisory services, and licensing of agro-dealers and para-seed inspectors. This is done in collaboration with relevant stakeholders in the seed industry.

However, there is weak public private partnership and internal quality control which leads to untimely provision of seed certification services and poor quality seed. Furthermore, there are low penalties on fake seed, restricted entry to seed warehouse, manipulation/tampering of seed samples and seed lots, altering confidential seed documents, and false advertisement and information.

Policy Statements

- i. The policy will empower the Commission and the private sector to establish dissemination channels of appropriate technologies and their institutional linkages through:
 - a) Disseminating messages on seed production, handling, distribution and usage to stakeholders
 - b) Strengthening linkages among stakeholders in the seed industry
- ii. The policy will ensure that every seed producing organisation, must have its own internal quality control unit for adequate control of seed quality which requires constant supervision, checks, inspection and tests through:
 - a) Developing quality control procedures for any type of seed processes for monitoring compliance
 - b) Monitoring seed producers and agro-dealers for compliance on standards for production, processing, storage, marketing and general management of seed
 - c) Retrieving unsold seed from the market and sample for retesting a month after main selling season
 - d) Facilitating establishment and regular review of an inventory of all seed producers and agro-dealers.
- iii. The policy will ensure the imposition of penalties for misleading and false adverts on improved seeds through: Conducting awareness on advantages of using high quality seed and penalties for misleading and false adverts through mass media, meetings and open days

3.3 Policy Priority Area 3: Information System for the Seed Industry

Seed management information system is very important in the development and management of the seed industry. Data and information for the seed industry need to be maintained and managed effectively to support easy retrieval and utilization by all users. However, there is no single institution that is maintaining a comprehensive database on the Malawi seed industry despite the information being important. There is also no web based system for data and information management. The flow of information is also hampered by lack of communication strategy.

Policy Statements

The policy will provide for the establishment of a web based variety catalogue and database through developing a web based variety catalogue and data base

The policy will provide for the establishment and update of the seed website to make seed information accessible to the public through:

- i) Developing an inventory of all public and private sector key stakeholders in the seed industry for sharing of information
- ii) Conducting periodic updates for the variety catalogue and database

The policy will establish a communication strategy through developing and implement a communication strategy for the seed industry

3.4 Policy Priority Area 4: Production of Different Classes of Seed

In seed production, there are different classes of seed representing different generations that have to be controlled to maintain genetic purity and identity. The following are the classes of seed and their definitions:

Nucleus Seed/Parental lines – Seed that is 100% genetically and physically pure. **Breeder Seed** - Seed directly controlled by the originating or sponsoring plant breeding institution, firm or individual.

Pre-Basic Seed - Progeny of breeder or pre-basic seed, handled so as to maintain specific genetic purity and identity.

Basic Seed - Progeny of breeder or per-basic seed, handled under procedures acceptable to the certifying agency to maintain satisfactory genetic purity and identity.

Certified Seed - Progeny of breeder, pre-basic or basic seed, handled under procedures acceptable to the certifying agency to maintain satisfactory genetic purity and identity.

Quality Declared Seed (QDS) - refers to a seed system in which 10 percent of the seed produced and distributed is checked by certifying agency.

It is very important to maintain different classes of seed because this leads to increased

volume and availability of seed. However, there is inadequate availability of Nucleus/parental lines, Breeders', Pre-basic, Basic, and Certified Seed. In addition, there is over recycling of self-pollinated crops and open pollinated varieties beyond their genetically recommended recycling period.

Policy Statements

The policy will ensure that enough quantities of all classes of seed are available through:

- i) Registering and monitoring activities of all qualified individuals/firms to produce specified classes of see
- ii) Encouraging seed houses to bulk pre basic and basic seed for certified seed production

The policy will discourage the recycling of self-pollinated seeds beyond their genetically recommended period through creating awareness on the disadvantages of over recycling seed beyond their genetically recommended period

3.5 Policy Priority Area 5: Biotechnology and Biosafety Research

Biotechnology is defined as "any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use". Biosafety is the safe development, transfer, application and use of biotechnology and its products.

Agriculture biotechnology has capacity to increase agricultural productivity, enhance human health and nutritional well-being. It can also increase efficiency in quality control, conserve biodiversity, natural resources and the environment. However, there is limited capacity in biotechnology and biosafety research and development.

Policy Statement

The policy will enhance the capacity to conduct research on Biotechnology and Biosafety through:

- i) Building capacity on biotechnology and biosafety for local scientists and stakeholders.
- ii) Putting in place appropriate infrastructure for biotechnology and biosafety research
- iii) Enforcing the application of guidelines on utilization of seeds from biotechnology and biosafety research in line with the Biosafety Act

3.6 Policy Priority Area 6: Seed Marketing and Distribution

Increased production of crops depends not only on development of high yielding varieties but also on the efficiency of the systems available to ensure that high quality seed of the improved varieties reach farmers on time. It is also important that high quality seed should be made available to farmers at affordable prices. However, the cost of accessing high quality seed to the majority of smallholder farmers remains high and unaffordable, partly due to limited competition among seed producers, high cost of imported equipment and materials used in seed production and packaging of seed in packages that do not suit the interests of smallholder farmers.

Policy Statements

The policy will encourage the participation of more companies in seed marketing and distribution through:

- i) Promoting waiver on duties and taxes imposed on equipment and materials used in the seed industry
- ii) Encouraging Private Sector to pack seeds in different sizes to suit different categories of farmers depending on their land holding sizes and income levels
- iii) Promoting local seed companies in production and marketing of seed
- iv) Ensuring that high quality seed is timely made available to all farmers

The policy will ensure implementation of regional seed harmonization through enforcing measures for the implementation of regional seed harmonization

The policy will encourage the Commission to backstop and monitor internal quality control systems of the commercial seed companies to undertake necessary measures and to ensure that only high quality seed is marketed through:

- i) Enforcing certified seed producers to treat, package and label seeds according to standards
- ii) Ensuring that seed processing houses have internal Quality Seed Management Systems
- iii) Enforcing transportation rules and regulation for seed to avoid physical damage and contamination
- iv) Monitoring seed advertisement messages by the media to ensure conformity to the variety characteristics;
- v) Ensuring that seed traders market seed in line with the standards.

3.7 Policy Priority Area 7: Seed Orchards and Vegetative Propagated Materials

Seed orchard means an intensively-managed <u>plantation</u> of specifically arranged trees for the mass production of genetically improved seeds to create plants, or seeds for the establishment of new plantations. Vegetative propagated material refers to any plant or plant part used as propagation material such as: fruit, root, rhizomes, corm, stem, sprout, tree seedling and leaf capable of regenerating crops, trees, shrubs and pastures that is true to its type.

It is important to have quality control modalities for forestry seed orchards, horticultural crops, industrial plants, pastures, tubers and cuttings in order to regulate the production and distribution of the vegetative propagated materials that are true to type and free from pests and diseases. However, there are no standards/guidelines and enforcement of standards of seed orchards and vegetative propagated materials.

Policy Statement

The policy will encourage the Commission to facilitate development and production of high quality seed orchards and vegetative propagated materials through:

- i) Facilitating development of seedlings, roots, rhizomes, corms, stems, sprouts and leaf production, quality control procedures and guidelines
- ii) Developing institutional capacity (personnel and infrastructure) to deal with seedlings, roots, rhizomes, corms, stems, sprouts and leaf issues including inspection for compliance to standards
- iii) Developing seed production, quality control procedures and guidelines in collaboration with commodity specific institutions.

3.8 Policy Priority Area 8: Integration of Seed Topics in Education Curriculum

The inclusion of seed topics in the curricula of academic institutions is essential in order to improve the skills and level of knowledge of the people in seed issues. Despite of the high proportion of the population engaged in agriculture, there is low integration of seed topics in the basic teaching in order to increase general awareness levels.

Government recognizes the need for the seed policy to be relevant to the current state of development in the seed sector and the institutional capacity to undertake the required activities. As this is an evolutionary process, periodic reviews of seed policy alongside

capacity building initiatives will be undertaken to ensure that the policy continues to be appropriate to the needs of the farmers.

Policy Statement

The policy will encourage the inclusion of seed production and technology in the curricula from Primary schools to tertiary institutions through:

- i) Promoting inclusion of seed topics in the curricula at Primary, Secondary schools and tertiary institutions;
- ii) Developing and disseminating seed technology messages.

4.0 Implementation Arrangements

Seed is a very critical resource in the agriculture sector and there are many stakeholders in the seed industry who play various roles along the entire seed value chain. In this Policy and strategy, only those organizations and sectors that play key roles and assume fundamental responsibilities are included in the institutional arrangements for administration and management of seed. This section defines institutional roles and responsibilities which will facilitate efficient, effective and accountable production and supply/distribution of seed.

4.1 Institutional Arrangements

This section highlights the mandates, roles and responsibilities of all the stakeholders involved in the implementation of this Policy.

4.1.1 Ministry responsible for Agriculture

The mission of the Ministry responsible for Agriculture is to improve agricultural productivity, sustainably develop and manage land and water resources to achieve food, nutrition and income security for economic growth and development.

The Ministry's mandate will be to accelerate broad-based sustainable agriculture, water and irrigation development for socio-economic growth and development. The National Seed Policy therefore falls within the ministry's mandate. Therefore, the Ministry responsible for Agriculture will facilitate the implementation of the National Seed Policy for a vibrant seed industry.

4.1.2 The Department of Agricultural Research Services

The Department of Agricultural Research Services (DARS) will be responsible for conducting research for agricultural technology development that will provide improved varieties, technology dissemination and specialized services related to the seed industry.

4.1.3 The National Seed Commission

The National Seed Commission will be mandated to ensure that high quality seeds/propagating plant materials of improved varieties of crops including horticultural crops, forestry, industrial plants, pastures, tubers, cuttings, fiber crops and plantation crops are produced and made available to the Malawi Farming Community.

The Commission's objectives shall include: Ensuring that farmers in Malawi have access to high quality seeds and planting materials of all crops through the development of appropriate seed certification, processing and testing procedures and standards. The Commission will also be responsible for enforcement of the Seed Act that includes commissioning of tests for Distinctness, Uniformity and Stability (DUS) and Value for Cultivation and Use (VCU) as part of its certification, quality control and regulatory activities and undertake the necessary applied research including training and licensing of seed inspectors and seed analysts in seed technology in both private and public sectors to meet the needs of the Malawian seed industry.

4.1.4 Other Government Ministries, Departments and Agencies

Government Ministries, Departments and Agencies, as well as Local Authorities shall be responsible for their roles specified in the Implementation, Monitoring and Evaluation Strategy document. Besides, they will be responsible for collecting, organizing and storage of relevant information on seeds pertaining to them.

4.1.5 Other Implementing Agencies and Institutions

A wide range of public and private sector actors will participate in the implementation of the National Seed Policy.

4.1.6 Development Partners and International Agencies

Development partners will assist in providing technical and financial support for the establishment of seed administration and management systems for efficient and effective services in the seed industry.

4.2 Implementation Plan

All priority areas will be implemented concurrently according to the implementation plan. A detailed implementation plan as presented in the Annex I.

4.3 Monitoring and Evaluation

The Monitoring and Evaluation Plan will be used to track the implementation of the Policy. Monitoring will be done on a regular basis. Evaluations will be conducted to assess whether and to what extent policy implementation has succeeded in making the intended impact as in the Annex II.

The National Seed Policy will undergo necessary periodic and regular reviews during its life span in relation to its key elements to meet changing developmental objectives and priorities. Policy reviews will be carried out every five years.

ANNEX I IMPLEMENTATION PLAN

Policy Statement 1: The policy will spearhead the putting in place of a	arhead the putting in place of all the legal frameworks for the smooth operation of the Commission:	smooth operation of the Commissi	on:
Objective	Strategy	Responsibility	Timeframe
To enhance appropriate and effective seed regulatory framework	To enhance appropriate and effective seed Facilitate periodic reviews of the national seed policy and any related Ministry responsible for Agriculture regulatory framework	Ministry responsible for Agriculture	2018 - 2022
Policy Statement 2: The policy will ensure the transform	ure the transformation of the SSU to National Seed Commission:		
	Draft the Seed Bill to transform the Seed Services Unit into a National Ministry responsible for Agriculture Seed Commission	Ministry responsible for Agriculture	2019
	Establish a Fund to finance operations of the National Seed Commission Ministry responsible for Agriculture,	Ministry responsible for Agriculture,	2018
	Establish the National Variety Release Committee to evaluate a proposed new variety, release and enter it in the variety catalogue or withdraw from it	Ministry responsible for Agriculture,	2018
	Promote the establishment of breeders and other related technology Ministry responsible for Agriculture, developers' associations	Ministry responsible for Agriculture,	2018
Policy Statement 3: The policy will put	Policy Statement 3: The policy will put in place measures to harmonize Seed Legislation with those of SADC, COMESA and beyond:	SADC, COMESA and beyond:	
	Review periodically the Seed Legislation on seed trade in the light Ministry responsible for Agriculture, of seed certification standards and phytosanitary measures while developing and promoting both domestic and international seed industry.	Ministry responsible for Agriculture,	2020, 2022
	Enforce implementation of Technical Agreements on Harmonization Ministry responsible for Agriculture, of Seed Legislation for purposes of safeguarding the Malawi seed industry	Ministry responsible for Agriculture,	2018-2022
	Regulate Imports and exports of seed when need arises	Ministry responsible for Agriculture,	2018

ANNEX I IMPLEMENTATION PLAN

National Seed Policy

Objective	Strategy	Responsibility	Timeframe
To enhance seed quality assurance for better performance of agriculture sector	Disseminate messages on seed production, handling, distribution and usage to stakeholders	National Seed Commission	2018-2022
	Strengthen linkages among stakeholders in the seed industry	National Seed Commission	2018 - 2022
Policy Statement 2: The policy will ensure that every seed of seed quality which requires con	e policy will ensure that every seed producing organisation, must have its own internal quality control unit for adequate control of seed quality which requires constant supervision, checks, inspection and tests	internal quality control unit for adec ts	quate contro
Objective	Strategy	Responsibility	Timeframe
To enhance seed quality assurance for better performance of agriculture	Develop quality control procedures for any type of seed processes for monitoring compliance	National Seed Commission	2018
	Monitor seed producers and agro-dealers for compliance on standards for production, processing, storage, marketing and general management of seed	National Seed Commission	2018 - 2022
	Retrieve unsold seed from the market and sample for retesting a month after main selling season	National Seed Commission	2018 - 2022
	Facilitate establishment and regular review of an inventory of all seed National Seed Commission producers and agro-dealers.	National Seed Commission	2018 - 2022
Policy Statement 3: The policy will adv	Policy Statement 3: The policy will advocate for imposition of penalties for misleading and false adverts on improved seeds	ts on improved seeds	
Objective	Strategy	Responsibility	Timeframe
To enhance seed quality assurance for better Conduct awareness t performance of agriculture sector	Conduct awareness through mass media, meetings and open days	National Seed Commission	2020, 2022

National Seed Policy

Policy Priority Area 3: Information System for the Seed	em for the Seed Industry		
Policy Statement 1: The policy will prov	Policy Statement 1: The policy will provide for the establishment of a web based variety catalogue and database.	d database.	
Objective	Strategy	Responsibility	Timeframe
To establish and maintain web based variety catalogue and data base	To establish and maintain web based variety Develop a web based variety catalogue and data base catalogue and data base	National Seed Commission	2018 - 2022
Policy Statement 2: The policy will provide for the estab	vide for the establishment and update of the seed website to make seed information accessible to the public	ake seed information accessible to t	he public
	Develop an inventory of all public and private sector key stakeholders National Seed Commission, in the seed industry for sharing of information	National Seed Commission,	2018 - 2022
	Conduct periodic updates for the variety catalogue and database	National Seed Commission	2018 - 2022
Policy Statement 3: The policy will establish a communi	blish a communication strategy		
	Develop and implement a communication strategy for the seed National Seed Commission industry	National Seed Commission	2018 - 2022

Policy Priority Area 4: Production of Different Classes of	ferent Classes of Seed		
Policy Statement 1: The policy will ensure that enough q	ire that enough quantities of all classes of seed are available:		
Objective	Strategy	Responsibility	Timeframe
To enhance production of all classes of seed	To enhance production of all classes of seed Register and monitor activities of all qualified individuals/firms to National Seed Commission produce specified classes of seed	National Seed Commission	2018 - 2022
	Encourage seed houses to bulk pre basic and basic seed for certified seed production		
Policy Statement 2: The policy will discourage the recycl	ourage the recycling of self-pollinated seeds beyond their genetically recommended period:	tically recommended period:	
Objective	Strategy	Responsibility	Timeframe
	Create awareness on the disadvantages of over recycling seed beyond National Seed Commission their genetically recommended period	National Seed Commission	2018 - 2022

Policy Priority Area 5:Biotechnology and Biosafety Research	d Biosafety Research		
Policy Statement 1: The policy will enhance the capacity t	ance the capacity to conduct research on Biotechnology and Biosafety:	safety:	
Objective	Strategy	Responsibility	Timeframe
To enhance the capacity to conduct biotechnology and biosafety research	To enhance the capacity to conduct Build capacity on biotechnology and biosafety for local scientists and National Seed Commission biotechnology and biosafety research stakeholders.	National Seed Commission	2018 - 2022
	Put in place appropriate infrastructure for biotechnology and biosafety National Seed Commission research	National Seed Commission	2018 - 2022
	Enforce the application of guidelines on utilization of seeds from National Seed Commission biotechnology and biosafety research in line with the Biosafety Act	National Seed Commission	2018 - 2022
Policy Statement 1: The policy will enco	Policy Statement 1: The policy will encourage wide participation of seed companies		
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Objective	Strategy	Responsibility	Timeframe
To ensure timely accessibility and availability of high quality seed	Promote waiver on duties and taxes imposed on equipment and Ministry responsible for Finance materials used in the seed industry	Ministry responsible for Finance	2018 - 2022
	Encourage Private Sector to pack seeds in different sizes to suit different categories of farmers depending on their land holding sizes and income levels	National Seed Commission	2018 - 2022
	Promote local seed companies in production and marketing of seed	National Seed Commission	2018 - 2022
	Ensure that high quality seed is timely made available to all farmers	National Seed Commission	2018 - 2022
Policy Statement 2: The policy will ensu	Policy Statement 2: The policy will ensure implementation of regional seed harmonization		
	Enforce implementation of regional seed harmonization	Ministry responsible for Agriculture	2018 - 2022
Policy Statement 3: The policy will en companies to un	Policy Statement 3: The policy will encourage the Commission to backstop and monitor internal quality control systems of the commercial seed companies to undertake necessary measures and to ensure that only high quality seed is marketed.	quality control systems of the com ity seed is marketed.	mercial see
	Enforce certified seed producers to treat, package and label seeds National Seed Commission according to standards.	National Seed Commission	2018 - 2022
	Ensure that seed processing houses have internal Quality Seed Management Systems	National Seed Commission	2018 - 2022
	Enforce transportation rules and regulation for seed to avoid physical National Seed Commission damage and contamination	National Seed Commission	2018 - 2022
	Monitor seed advertisement messages by the media to ensure conformity to the variety characteristics	National Seed Commission	2018 - 2022
	Ensure that seed traders market seed in line with the standards	National Seed Commission	2018 - 2022

Policy Priority Area 7: Seed Orchards and Vegetative Propagated Materials	id Vegetative Propagated Materials		
Policy Statement 1: The policy will encourag propagated materials	Policy Statement 1: The policy will encourage the Commission to facilitate development and production of high quality seed orchards and vegetative propagated materials	on of high quality seed orchards an	id vegetative
Objective	Strategy	Responsibility	Timeframe
To ensure availability and accessibility of the high quality seed orchards and vegetative propagated materials	To ensure availability and accessibility of the Facilitate development of seedlings, roots, rhizomes, corms, stems, National Seed Commission high quality seed orchards and vegetative sprouts and leaf production, quality control procedures and guidelines propagated materials	National Seed Commission	2018
	Develop institutional capacity (personnel and infrastructure) to deal National Seed Commission with seedlings, roots, rhizomes, corms, stems, sprouts and leaf issues including inspection for compliance to standards	National Seed Commission	2018 - 2022
	Develop seed production, quality control procedures and guidelines in National Seed Commission collaboration with commodity specific institutions	National Seed Commission	2018

Policy Priority Area 8: Integration of Seed Topics in Education Curriculum	ed Topics in Education Curriculum		
Policy Statement 1: The policy will en institutions.	Policy Statement 1: The policy will encourage the inclusion of seed production and technology in the curricula from Primary schools to tertiary institutions.	the curricula from Primary schools	s to tertiary
Objective	Strategy	Responsibility	Timeframe
To enhance knowledge and skills, and create awareness	To enhance knowledge and skills, and create Promote inclusion of seed topics in the curricula at Primary, Secondary National Seed Commission awareness		2018 - 2022
	Develop and disseminate seed technology messages	National Seed Commission 20	2018 - 2022

ANNEX II MONITORING AND EVALUATION PLAN

Outcome: Enhanced a	Outcome: Enhanced appropriate and effective seed regu	regulatory framework	100			
Objective	Output	Performance Indicator	Target	Baseline	Source of Verification	Assumptions/ Risks
To enhance appropriate and effective seed regulatory framework	Periodic reviews of the national seed policy and any related legislation pertaining to seed facilitated	No. of dissemination workshops/ meetings	9	0	Reports	
	The Seed Bill drafted to transform the Seed Services Unit into a National Seed Commission	A copy of a Seed Act	-	÷	Seed Act copy	
	A Fund established to finance operations of the National Seed Commission	Commission Fund in place	÷	0	Reports	
	The National Variety Release Committee established	National Variety Release Committee in place	~	0	Reports	
	The establishment of breeders and other related technology developers' associations promoted	Association in place	÷	0	Report	Willingness of the Breeders and other Technology developers
	The Seed Legislation on seed trade in the light of seed certification standards and phytosanitary measures periodically reviewed	No. of review meetings	2	0	Reports	

ANNEX II: MONITORING AND EVALUTION PLAN

Agreements on Harmonization of Seed Legislation enforced	Copy of gazetted technical agreement	F.	o	A copy of gazetted technical agreement
Imports and exports of seed regulated	No. of copies of international seed testing certificates and phytosanitary certificates	10,000	2,000	copies of certificates

Outcome: Enhanced seet	Outcome: Enhanced seed quality assurance for better performance of agriculture sector	mance of agriculture secto				
Objective	Output	Performance Indicator	Target	Baseline	Source of Verification	Assumptions / Risks
To enhance seed quality assurance for better performance of agriculture sector	Messages on seed production, handling, distribution and usage disseminated to stakeholders	No. of messages disseminated	°,	o	Reports	
	Linkages among stakeholders in the seed industry strengthened	No. of meetings conducted	10	0	Reports	
	Quality control procedures on seed processes for monitoring compliance developed	No. of copies of guidelines	3	0	No of copies developed	
	Seed producers and agro-dealers monitored	No. of seed producers and agro-dealers visited	3000	2000	Reports	
	Unsold seed retrieved from the market and sampled for retesting	No of samples collected	500	300	Reports	
	Establishment and regular review of an inventory of all seed producers and agro-dealers facilitated.	Inventory of seed producers and agro- dealers in place	ъ.	-	Reports	
	Awareness through mass media, meetings and open days conducted	No. of awareness campaigns conducted	10	0	Reports	

Outcome: Enhanced acc	Outcome: Enhanced access of information amongst various stakeholders	stakeholders				
Objective	Output	Performance Indicator Target	Target	Baseline	Source of Verification	Assumptions / Risks
To establish and maintain web based variety catalogue and data base	A web based variety catalogue and data base developed	A web based variety catalogue in place		o	Reports	
	An inventory of all public and private sector key stakeholders in the seed industry developed for sharing of information	An inventory in place	-	0	Reports	
	Periodic updates for the variety catalogue and database conducted	Updated variety catalogue in place	-	0	Reports	
	A communication strategy for the seed industry developed and implemented	A copy of a strategy in place	÷	o	Reports	6-

Outcome: Enhanced produ	Outcome: Enhanced production of all classes of seed					
Objective	Output	Performance Indicator Target	Target	Baseline	Source of Verification	Assumptions / Risks
To enhance production of all classes of seed	To enhance production of all Hectares and quantities of all classes classes of seed of seed registered and monitored	No. of hectares and quantities	20,000	16,000	Reports	
	Bulking of pre basic and basic seed by Seed houses for their own certified seed production done.	No of seed houses	25	20	Reports	
	Awareness on the disadvantages of over recycling seed beyond their genetically recommended period created	No of awareness campaigns	10	2	Reports	

Outcome: Enhanced seed quality assurance on biot						
Objective	Output	Performance Indicator	Target	Baseline	Source of Verification	Assumptions / Risks
To enhance seed quality assurance on biotechnology and biosafety research	Local scientists and stakeholders trained on biotechnology and biosafety	No. of people trained	10	2	Reports	
	Appropriate infrastructure for biotechnology and Biosafety research procured and installed	An inventory of infrastructure	8	S	Reports	
	The application of guidelines on utilization of seeds from biotechnology and biosafety research enforced	No. of guidelines in place	2	-	Reports	

Outcome: Enhanced seed	Outcome: Enhanced seed quality assurance for better performance of the agriculture sector	rformance of the ag	riculture sector			
Objective	Output	Performance Indicator	Target	Baseline	Source of Verification	Assumptions / Risks
To ensure timely accessibility and availability of high quality seed	Waiver on duties and taxes imposed on equipment and materials used in the seed industry promoted	Copy of gazette on waiver	F	0	Reports	
	Private Sector encouraged to pack seeds in different sizes to suit different categories of farmers including smallholder farmers	No. of different small pack sizes found on the market	2	Ē	Reports	
	Local seed companies' production and marketing of seed promoted	No. of local seed companies available	22	20	Reports	
	Timely availability of high quality seed is ensured	Time when seed will be available on the market	A month before on the set of the rains or throughout the year	After on-set of the rains	Reports	
	Implementation of regional seed harmonization enforced	Copy of gazette on regional seed harmonization	÷	0	Reports	
	Treatment, packaging and labelling of certified seed enforced.	No. of monitoring visits	10	5	Reports	

Reports	Reports	Reports	Reports
10 5	10 5	3 0	10 5
No. of monitoring visits	No. of monitoring visits	No. of disseminated messages monitored	No. of monitoring visits
Internal quality seed management systems in seed processing houses ensured	Transportation rules and regulation for seed enforced	Seed advertisement messages by the media monitored	Seed marketed in line with the standards

Outcome: Enhanced availabi	Outcome: Enhanced availability and accessibility of high quality seed orchards and vegetative propagated materials	eed orchards and vegetative	propagat	ed materials		
Objective	Output	Performance Indicator Target	Target	Baseline	Source of Verification	Assumptions / Risks
To ensure availability and accessibility of high quality seed orchards and vegetative propagated materials	Development of seedlings, roots, rhizomes, corms, stems, sprouts and leaf production, quality control guidelines facilitated	No of Guidelines in place	2	o	Report	
	Institutional capacity for compliance to seed orchards and vegetative propagated materials standards developed	No of personnel trained No of structures developed No of pieces of equipment acquired	300 50 100	50 10 20	Reports	
	Seed production, quality control guidelines developed	No of guidelines in place	2	Ţ.	Reports	

Objective	Output	Performance Indicator Target	Target	Baseline	Source of	Assumptions
	The Andrews				Verification	
To enhance knowledge and skills, and create awareness	Inclusion of seed topics in the curricula at Primary, Secondary schools and tertiary institutions promoted	No. of curricula included	ę		Reports	
	Seed technology messages developed and disseminated	No. of messages developed and disseminated	2	0	Reports	

Designed by Agriculture Communication Branch P.O. Box 594 Lilongwe