



# Policy-Regulatory Reforms and Institutional Support for enhanced Productivity of Smallholder Agriculture in Mozambique

POLICY | LAW

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## Acronyms and Abbreviations

AGRA	Alliance for a Green Revolution in Africa
ANS	National Seed Authority
BS	Basic Seed
BRS	Breeder's Seed
CAADP	Comprehensive African Development Program
CGIAR	Consultative Group on International Agricultural Research
COMESA	Common Market for Eastern and Southern Africa
CNS	National Seed Committee
CS	Commercial Seed
DG	Director General
DINAS	National Directorate of Agriculture and Forestry
DIFD	Department of International Development - UK
DINAS	National Directorate of Agriculture and Forestry
DTMASS	Drought Tolerance Maize for Africa Seed Scaling
DUS	Distinctiveness Uniformity and Stability
EDR	Rural Development Strategy
EGS	Early Generation Seed
GDP	Gross Domestic Product
FIAAC	Fund for the Improvement and Adoption of African Crops
ICRISAT	International Centre for Research in the Semi-Arid Tropics
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Institute
IIAM	Institute for Agricultural Research of Mozambique
IITA	International Centre for Tropical Agriculture



IPPC	International Plant Protection Convention
ISPM	International Standards for Phytosanitary Measures
ISSD	Integrated Seed Sector Development
ISTA	International Seed Testing Association
KIPPRA	Kenya Institute for Public Policy Research and Analysis
LOLE	Law of Local Institutions
MASA	Ministry of Agriculture and Food Security
MOU	Memorandum of Understanding
NGOs	Non-Governmental Organization
NSC	National Seed Committee
NPPO	National Plant Protection Organization
NVRC	National Variety Release Committee
OECD	International organization of economic Cooperation and Development
OPVs	Open Pollinated Varieties
PAEI	Agricultural Policy and Implementation Strategy
PAPA	Plan of Action for Food Production
PBR	Plant Breeder's Rights
PEDSA	Strategic Plan for Agricultural Development
PFCS	Program for Strengthening the Seed Chain
PINISA	National Investment Plan for the Agricultural Sector
PRG	Governments Five Year Plan
SADC	Southern Africa Development Community
SEMOC	Seeds of Mozambique
SEMEAR	Semente Melhorada para uma Agricultura Renovada
USAID	United States Agency for International Development



USEBA	Basic Seed Unit at IIAM (Mozambique Institute of Agricultural Research)
UPOV	International Union for the Protection of New Variety Plants
WTO	World Trade Organization



## Executive Summary

Mozambique has a very high potential for Agriculture with a diverse range of agro-ecological zones with potential to support a diverse spectrum of crops and varieties. The country is endowed with an excellent network of corridors and ports to facilitate agricultural and seed export to the region and beyond. However, for the country to realize this potential to the full, the government has to create among other things an enabling climate for all agricultural actors to operate effectively. One of the key strategies by governments globally to create a conducive environment for agricultural transformation and growth, is the development and deployment of progressive agricultural policies, laws and regulations which are sensitive to the complexity of agriculture as an industry and the complex and variable enablers articulated in this report which influence agricultural transformation and growth positively or adversely. Agricultural or seed policies, laws and regulations are therefore government legal or pseudo-legal instruments meant to provide a conducive environment for transformation and growth of the agricultural industry. These instruments are interrelated to each other. The policy as the mother of all these instruments is the government's aspirational and strategic intent on the overall direction the agricultural sector must take. The law on the other hand is the legal execution and enforcement mechanism of the policy while regulations are the operational execution mechanism of the law. Although these instruments are distinct documents but they are related to one another and provide synergies to each other and therefore they should not contradict each other.

The Agricultural and Seed sectors in Mozambique are currently governed by the agricultural policy framework guiding agricultural development. It consists of the "Strategic Plan for the Development of the Agricultural Sector 2011-2020 (PEDSA)" supported for its implementation by the "National Investment Plan for the Agricultural Sector 2013-2017 (PNISA)". The two are aligned with the Government's Five Year Plan (PQG) and the regional initiative and the Comprehensive African Development Program (CAADP).

To achieve its objectives, the PEDSA outlines key areas of intervention as follows;

- To increase smallholder producer productivity and emergency response capacity;
- To enlarge the area of land under sustainable management and the number of reliable water management systems;





- To increase access to the market through improved infrastructure and interventions in marketing;
- To improve research and extension for increased adoption of appropriate technologies by producers and agro-processors (Suit et al., 2015).

The strategy also recognizes the need to integrate the vision of key stakeholders, remove barriers to increase investor confidence, encourage in-country production and provision of the necessary factors of production such as fertilizer and to harmonize sectoral activities to improve the sustainable use of land, water and forests (*MINAG, 2011*).

In absence of a seed law, the Comprehensive Seed Regulation (*Ministerial Decree 12/2013*) which was updated in 2013 is the closest document to a formal legal frame work through an Act of Parliament. This document was fortunately harmonized with the SADC seed regulation on variety release and registration, seed quality control and certification, and seed import/export requirements. To support this is the plant variety protection decree (*Ministerial Decree 26/2014*) for plant breeders' rights which is aligned with UPOV guidelines and then approved as the Protection of New Plant Varieties. The aspect of variety protection and plant breeders' rights has yet to be fully implemented as a regulation. The final version of this decree is also harmonized with those applicable at the regional level, according to the SADC protocol but the benefit accruals are not fully realized because of poor compliance due to weak in-country institutional capacity.

Mozambique has plans in the pipeline to develop or revise their government agricultural legal or pseudo-legal instruments (Agricultural Policy, Seed Policy, Seed Law with a focus on Phytosanitary law and the Plant Variety Protection and Plant Breeders' Rights laws, MADER Planning and Policy Directorate capacity building in policy formulation, implementation, analysis and monitoring). To support this process this consultancy was set up and all the assignments undertaken are detailed in the main report. The highlights are here below summarized as key findings and recommendations;

### **Key Findings and Recommendations Chapter by Chapter**

I. The MADER Planning and Policy Directorate has a functional directorate with departments of policy analysis, study and projects, monitoring and evaluation, statistics and planning. The directorate and even NAS are fully operational in policy formulation but they both have



challenges with policy implementation, analysis and monitoring, hence the following recommendations;

- *MADER and NAS to develop policy implementation 5 year strategic plans taken from PEDSA, break the strategic plan to annual work plans and the annual work plans into milestones, activities and SMART targets which are assigned to individuals to action and be appraised on;*
- *MADER and NAS to develop robust policy indicators to inform policy monitoring. The indicators should be such that they meaningfully reflect the positive impacts of implementing the policy;*
- *MADER and NAS to consider emerging issues affecting agriculture (Climate change, Smart Agriculture, Sustainable Agriculture) in transiting PEDSA to a full-fledged Policy document;*
- *MADER and NAS to own the policy development, implementation and monitoring processes because policies are government strategic instruments to drive agriculture and the seed sectors to the desired levels;*
- *MADER and NAS to improve their data collection, analysis, storage and retrieval to support policy implementation and monitoring. This calls for a robust qualitative and quantitative data analysis and management support;*

*All these recommendations are urgent and can be done co-currently depending on availability of resources. Some are purely management issues that will benefit from existing performance management and appraisal systems. For example, institutions routinely develop their strategic plans spanning 5 years. To deliver the plan, prudent management calls for breaking some aspects of the strategic plan to annual work plans and to activities and finally SMART targets for staff members. **If this is not happening, then there is an urgent need for a technical assistance in this area because good performance of institutions is driven by this.***

II. There is need for the Planning and Policy Directorate at MADER to adjust their organizational structure and enhance focus in the areas of policy implementation, research, analysis and monitoring in order to enhance the value and functionality of the Directorate to the state, hence the following recommendations;

- *The department of **Policy Research and Projects** is critical because this department will be responsible for the collection and analysis of data to inform policy formulation,*



*implementation and monitoring so critical for any meaningful policy process. Secondly this department will be responsible for research to determine whether policies that have been implemented for some time have been effective or value adding. Projects have been included in this department because it is not possible for the department to have researchers in all the disciplines and so the department will have the responsibility to contract out or procure consultants/experts to conduct research in areas they are deficient.*

- *In order to enhance policy monitoring which is a function of development of indicators for various policy thrusts and processing available data to inform the extent to which the implementation of specific policies have been effective, the statistics department has to be renamed as **Data Management and Statistics** because the data management such as analysis, graphics development, storage and retrieval is very instrumental in the overall policy processes;*
- *In order to support policy implementation, MADER has to develop or deploy skills in development of policy strategic plans, breaking down the strategic plans to annual plans and annual work plans to activities and finally SMAR targets for staff. The entire process will need to be augmented by performance management and appraisal skills. Secondly the implementation will benefit from the renaming of the department of Monitoring and Evaluation to **Policy Implementation and Monitoring** because the team implementing will be best placed to determine whether what they have implemented is as per the plan;*
- *MADER Planning and Policy Directorate leadership should be scouting for emerging issues affecting agriculture (Climate change, Smart Agriculture, Sustainable Agriculture) so that existing policy document can always be aligned accordingly through revisions;*
- *MADER Planning and Policy Directorate leadership to ensure that the linking of policy thrusts to specific indicators is interrogated and signed off before use in order to guarantee that monitoring of indicators delivery will translate to policy delivery.*

**III.** The design of a flagship institution for policy analysis/research and monitoring in terms of operational structure with functional roles and delivery mechanism with budget has been developed modelled on national and international agricultural public policy institutions. The



budget to finance the actualization of this institute has also been developed and it amounts to about 16 million USDs. The institution whose name is proposed as the **Mozambique Institute for Public Policy Research, Analysis and Monitoring** will have the overall goal and mandate to improve public policy making for realization of national development goals, through economic forecasting, policy analysis and research, and formulation of medium and long-term strategic perspectives for economic and social development. The proposed specific mandates which are not cast in stone and hence can be customized to local National circumstances, include the following;

- Develop capacities in public policy research and analysis and assist the Government in the process of policy formulation and implementation;
- Identify and undertake independent and objective programs of research and analysis, including macroeconomic, inter-disciplinary and sectoral studies on topics affecting public policy in areas such as human resource development, social welfare, environment and natural resources, agriculture and rural development, trade and industry, public finance, money and finance, macroeconomic and microeconomic modeling;
- Provide advisory and technical services on public policy issues to the Government and other agencies of the Government;
- Communicate the findings and recommendations of the Institute's research programs to the agencies of the Government concerned with the implementation of public policy;
- Serve as a point of communication and encourage the exchange of views between the Government, the private sector and other bodies or agencies of the Government on matters relating to public policy research and analysis;
- Collect and analyze relevant data on public policy issues and disseminate the Institute's research findings to persons it deems appropriate to publicize such research findings;
- Develop and maintain a reservoir of research resources on public policy and related issues and make these available to the Government, the private sector and learning institutions in Mozambique;



- Organize symposia, conferences, workshops and other meetings to promote the exchange of views on issues relating to public policy research and analysis; and
- Undertake public policy research relevant to governance and its implications to development.

*In regard to this institution the following are the key recommendations;*

- *If Mozambique takes the decision to invest in a public policy institute, it has to be a National Institute with the mandate of public policy research and analysis for all sectors of the economy. This means that the economy specific directorates of policy like the case of the MADER Planning and Policy Directorate will still run in order to give a more focused sector related policy services.*
- *This is an expensive venture, the budget presented which is based on a modest public sector type of institution is about 16,622,240 USD. For this sort of investment there must clear evidence of demand of evidence based policy services at this level by most sectors of the economy. The Kenyan situation of low demand for evidence based policy analysis is not unique to Kenya (Smith and Karuga, 2004). It is the situation I encounter in many African countries, I have worked in. This means that the sectors of the various economies in the country or countries are not profiling policy adequately and therefore their demand for evidence based policy is low meaning that a policy institution is as important as the National demand of evidence based policy services.*

**IV.** The seed law including the Phytosanitary and Plant Variety Protection and Plant Breeders' Rights law are currently under development in Mozambique but the drafts are in Portuguese. Because of language limitations, I changed the strategy to covering key benchmarks, elements and best practices to be used as checklists of developing the laws in order to assist the teams to ensure that they consider or include the key elements in development of the said laws.

**V.** A seed law is an Act of Parliament to confer power to regulate transactions in seeds, including provisions for the testing and certification of seeds, the control of the export and import of seeds and establishment of a Tribunal to hear appeals and other proceedings. From the initial interactions with the team, a confusion between seed law and seed regulations was evident. I made it clear that the main purpose of regulations is to operationalize the law.



To ensure that the team from NAS are well equipped with key principles and guidelines to develop or improve the ongoing work on the seed law, my presentation (Annex 5), covered the following areas;

- The distinction between Ministerial Decrees and Seed law and why the seed law is the preferred legal tool;
- The elements of a seed law;
- The Provisions of the seed law;

I also made it clear that in compliance with the best practice the plant variety protection and plant breeders' rights will be part of the seed law and hence the law will be titled as the **Seed and the Plant Variety Protect Act**. The elements of this Act are detailed in chapter 5 of this report.

VI. The Phytosanitary Legislation is a set of basic laws meant to Protect the National Plant Resources from the Spread and Introduction of Pests while facilitating International Trade. This Law is enforced by the National Plant Protection Organization (NPPO). For this law to be useful to Mozambique both regionally and internationally, it should be aligned to the International Plant Protection Convention (IPPC) standards because Agricultural trade is critical for Mozambique. Alignment of the law to the World Trade Organization Sanitary and Phytosanitary (WTO – SPS) Agreement is also critical. It is important to note that, the Agreement respects the sovereign rights of any government to provide the level of health protection it deems appropriate, but to ensure that these sovereign rights are not misused and do not result in unnecessary barriers to international trade.

In the capacity building of the team on this law, I covered the key elements of the law and the global best practice of developing this law with reference to use of the International Phytosanitary Measures (ISPMs) or standards as guidelines. This is detailed in chapter 5.

VII. As already articulated in this report, the Plant Variety Protection and Plant Breeders' Rights component will be part of the seed law. This is why most countries refer to this law as the **Seed and Plant Variety Protection Act**. To assist the team with the ongoing work of development of this law, my presentation was aligned to the UPOV 1991 Act. This is in conformity with the best global practice because it facilitates the process of countries joining the UPOV convention, for benefits which have already been mentioned elsewhere in this report. The specific areas covered include key provisions of the 1991 UPOV Act (Breeders and



Varieties, Species and Genera, National Treatment, Conditions of Protection, Breeders Rights and Exceptions), conditions for granting Breeders' Rights, requirements for BPR application, exceptions to Breeders' Rights, licensing, infringement, cancellation of PBR and arbitration as detailed in chapter 5.

*The Key Recommendations on Seed, Phytosanitary, and Variety Protection and Plant Breeders Laws, are as highlighted below:*

- *The seed law to include the plant variety protection and plant breeders' rights component in order to give rise to the **Seed and Plant Varieties Protection Act, 2022.***
- *NAS to align the seed law to the seed law elements discussed and the current PEDSA document to avoid contradiction of the policy. For example, within the PEDSA document the small holder farmer is given very high prominence and profile while NAS focuses on official regulation of commercial crops such as maize at the expense of the farmer seed systems (FSS) and hence the food security crops (Sorghums, Millets, Legumes, Roots and Tuber crops);*
- *NAS to align the Phytosanitary law development to the IPPC standards which were covered in my presentation in order to foster international agricultural and seed trade;*
- *NAS to align the plant variety protection and plant breeders' rights law to the UPOV convention ACT 1991, in order to enhance global germplasm exchange and foster trade in the process;*
- *Article 31 of the Regulation of Protection of New Varieties and the Rights of Plant Breeders' in Mozambique, allows for remunerative value/loyalties. This however cannot be implemented because NAS does not have the execution of the DUS skills which is a mandatory requirement. These skills however are with the IIAM breeders. To proceed on this NAS and IIAM should develop a memorandum of understanding (MOU) to jointly carry out DUS testing. This is an administrative process which can immediately bring to life the operationalization of the plant breeders' rights law in Mozambique.*

**VIII.** The Seed Regulations of Mozambique (Ministerial Decree 12/2013) are functional as they are and they are already harmonized with the SADC seed regulation on variety release and registration, seed quality control and certification, and seed import/export requirements.



*In the interest of continuous improvement to make them more robust and value adding to Mozambique, the following recommendations are suggested;*

- *Article 12 for variety registration considers DUS and 1 Value for Cultivation. To drive farmers' adoption of varieties, include organoleptic/taste traits;*
- *Article 14 focuses on SADC Variety Release and Regulations. For market expansion include COMESA as well;*
- *Article 35 on labels for seed classes according to SADC protocols. In order to access the global market, include according to OECD Seed Schemes as well;*
- *Article 51 on seed export accompaniment by the seed lot certificate from NAS. In order to enhance the seed export outside SADC, this article should read "the seed export will be accompanied by the orange certificate" which appeals across all borders and which can only be issued by an ISTA accredited lab.;*
- *Articles 57 and 61 on fees for provision of service by NAS. Article 61, clause 2 apportions the fees to the state at 40% and NAS at 60%. In order to enhance funding to NAS which is currently inadequate, clause 2 should read "all the fees payable as a result of services by NAS should be payable to the authority".*
- *Article 31 of the Regulation of Protection of New Varieties on the Rights of Plant Breeders' allows for remunerative value/loyalties. In order for this to drive farmer adoption of the variety include and according to the area planted to the variety;*
- *Article 40 on the fees payable to NAS as a result of inspection of plant varieties for DUS and VCU is currently 60% to the state and 40% to NAS. In order to address the operational funding problem of NAS, this should be revised to 100 % to NAS.*

**IX.** USEBA is part of the Mozambique strategy to produce high quality pre-basic and basic seed with a focus on food security crops (Sorghums, Millets, Legumes, Tuber and Root crops). This strategy is not delivering yet. My report (Onsando, 2020) gives a detailed account of what needs to be done to make this strategy deliver sustainably. A more specific consultancy on restructuring USEBA with a focus on development of a business plan was given in 2021. I had the opportunity to sit in the presentation of the report to the IIAM team. My observations are as follows;

The USEBA status has not changed from when I was here in March 2020

- ❖ From the presentation, the General Manager reports to the DG, IIAM;





- ❖ No Board of Management;
- ❖ It is still a government outfit with predominantly agricultural and plant breeding skills;
- ❖ It is still not anchored on any law to empower the outfit as a business enterprise;
- ❖ Although USEBA needs both technical and business skills to function, the business skills are critically still lacking;
- ❖ The demand for their basic seed is still weak. For example, this year's basic seed has not been sold because USEBA demanded payment upfront. This cannot be a strong enough reason because an appealing product/variety will be bought anyway if customers understand the product commercial value. This calls for business skills even more.

The organizational Plan proposed in the plan, still has a public sector demeanor and character with the following highlights;

- ❖ For profitability and sustainability, USEBA has to produce both pre-basic and basic seed. Secondly if USEBA focuses on Pre-basic seed only, there will be no basic seed of the food security crops in Mozambique;
- ❖ The profitability model is based on predetermined volumes of basic seed per region. The problem with this is that these volumes are not based on baseline data and hence they could be too ambitious and unachievable. This could jeopardize the profitability and hence sustainability agenda;
- ❖ In the business case development, the current assets particularly land and infrastructure were not computed but a nominal value was considered for the computation. This might have been based on the TORs but it is not the best practice;
- ❖ It is still a government outfit with predominantly agricultural and plant breeding skills;
- ❖ Business skills are still lacking;
- ❖ The investment value to operationalize USEBA is 7,9 USDs for two sites.

*In view of the fore-going, I propose an immediate intervention of retooling or bringing on board the much needed business skills through the key personnel undergoing internship with a regional or international seed company. The urgent skills are as follows;*

- ❖ **Seed demand forecasting** variety by variety along the respective crops quality seed value chains in order to determine, the volume of breeders seed to feed to basic seed and finally commercial seed to avoid undersupply or oversupply;



- ❖ **Forward planning** in order to develop an overlapping volumes of the seed classes which are time phased because seed is a biological product requiring a number of seasons to develop the right volumes of the seed class feeding to the next class. It is not uncommon to start the production of breeders' seed for basic seed two years earlier;
- ❖ **Product/Variety Development and Profiling** according to the requirements of the market with full knowledge that people eat with the mouth, eyes and nose, making farmer attributes like taste, mouth feel, color and aroma critical;
- ❖ **Product/Variety differentiation** which is a strategy to profile the uniqueness of the product/variety to enhance customer appeal;
- ❖ **Back of the envelope profitability** figures to help customers make a commercial decision.



# Chapter 1

## 1.1. Introduction

It is generally agreed globally that the role of governments in fostering agriculture and agriculture related functions should focus on the creation of an enabling climate in which agriculture can thrive. Agriculture through the lens of growing crops and keeping animals is too simplistic a concept of Agriculture. This is a complex industry which is driven by an equally complex matrix of dimensions, activities, sectors, farmers, governments, environments, markets, investors, transboundary trade etc. The specific factors include;

- State of the National Economy;
- Climate;
- Networks of transport corridors;
- In-country technical human resource in terms of numbers and skill mix;
- Agricultural institutions in terms of diversity and capacity;
- Ease of doing business index;
- Positioning of small holder farmers and the farmer seed systems (FSS) appropriately to address food and nutrition security and farmer livelihoods;
- Responsiveness to emerging issues such as climate change, sustainable development, smart agriculture, regionalization and globalization etc.

The interplay and synergies of the factors above is influenced by the character of National policies and legal frameworks. The more progressive the policies and the laws the better the enabling environment to re-direct the positive impacts of the factors towards agricultural transformation and growth

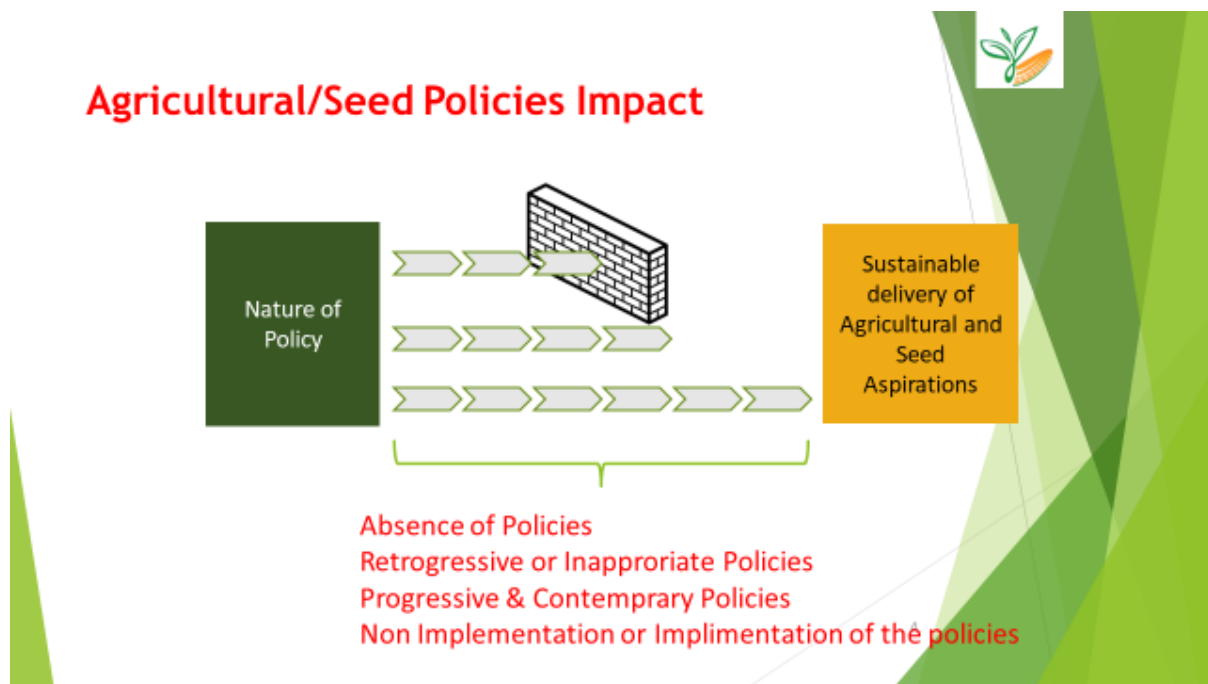
Achieving transformation of agricultural market systems for example, will require a strong partnership between science and policy, as well as a collaborative dialogue between the private sector and multiple levels of government. A Feed the Future Enabling Environment for Food Security (EEFS) survey of private investors across Africa, Asia and Latin America found that investors in new industries seek an enabling environment with a clear and supportive regulatory framework early in the investment lifecycle. Governments that are proactive,



flexible and collaborative in their policies and regulatory responses to new technologies are more likely to attract innovation and hence product resilience and the impacts (USAID, 2021).

One of the key strategies by governments globally to create a conducive environment to agricultural transformation and growth, is the development and deployment of progressive agricultural policies, laws and regulations which are sensitive to the complexity of agriculture as an industry and the complex and variable enablers articulated above which influence agricultural transformation and growth positively or adversely. Agricultural or seed policies, laws and regulations are therefore government legal or pseudo-legal instruments meant to provide a conducive environment for transformation and growth of the agricultural industry as illustrated by figure 1 below.

**Figure 1 impact of state of Agricultural or Seed Policies on Delivery**



These instruments are largely misunderstood and are often used interchangeably even in supposedly very high caliber publications. A policy is basically a strategic intent by government on the direction they are taking in the path of agricultural or seed transformation and growth. It therefore becomes the mother of all legal or pseudo-legal instruments. The law on the other hand is the legal execution and enforcement mechanism of the policy while



regulations are the operational execution mechanism of the law. None of these instruments should contradict each other. One key contradiction in Mozambique for example, is the case of small holder farmers who are given an appropriately high profile by the pre-policy document (PEDSA) while the seed Ministerial Decree focuses on regulation of commercial crops leaving out the informal seed sector which constitutes over 80% of seed in Mozambique. This contradiction relegates farmer seed systems (FSS) in Mozambique to the periphery while it should be at the center according to PEDSA.

*In view of this the National Seed Authority should put in place mechanisms or approaches to facilitate the widening of the seed certification scope to include Farmer Seed Systems which in effect drive food security crops in the country. This way there will be a visible effort to recognize that farmers are central to the Mozambique National Agriculture as stipulate by PEDSA. One of these mechanisms is the deployment of Quality Declared Seed (QDS) as a quality assurance mechanism.*

## **1.2. Evolution and Status of the Agricultural Policy**

Agricultural-related policies, strategies and plans in Mozambique cover a number of progressive policy components such as promotion of production and productivity, market access, food and nutrition security, institutional development and reforms, natural resources and sustainable agriculture. There is a huge scope however for the policy direction to shift towards a stronger focus on the smallholder sector through more predictable and longer-term support for the provision of essential services and private sector participation through facilitative legislation (Cammaer, 2016).

Like in all countries, agricultural policy in Mozambique has evolved over time. The post-independence document (Agenda 2025) was developed through a participatory process involving citizens of all regions and representatives of all interest groups to reflect on the future of Mozambique. In this document, published in 2003, the ideal scenario for agricultural development was based on a number of pillars (Republic of Mozambique, 2003):

- the commercialization and development of agro-industry;
- a more efficient extension service to respond to the immediate needs of farmers;
- increased productivity through improved varieties;



- initiatives to increase access to essential services (such as infrastructure, education, credit) to facilitate the production, conservation and export of agricultural products.

The Agricultural Policy and Implementation Strategy (PAEI) was developed in 1995. The policy aimed at fighting food insecurity and poverty and achieving sustainable economic growth through support to smallholder farmers (among others) and commercial farming which was also a government priority (CARE & ActionAid, 2015). However, foreign direct investment and the production of cash crops (tobacco, cotton, tea sugar) was given priority as a source of government revenue at the expense of small holder farmers (Do Rosário, 2011).

Another strategy document was developed in 2006 whose priorities were market interventions and so resources were directed at activities that have the potential for market competition (local, regional and international), poverty reduction, promotion of diversification for food security, building resilience to climate and market fluctuations, and for adopting improved technologies (MASA, 2006).

A year later, in 2007, the Alliance for a Green Revolution in Africa (AGRA), strongly defended policies that support small-scale farmers, rural development, environmental sustainability, and marketing that is favorable to poor farmers (AGRA, 2015b). Based on the AGRA orientation, Mozambique formulated its own Green Revolution Strategy (MINAG, 2007c) whereby intensification of agriculture was looked at in a wider context including greater focus on the family farming sector, the promotion of associations, the development of markets for inputs and agricultural commodities and the conservation and sustainable use of natural resources. In its outline for implementation it also emphasized the need for an integrated approach and encouraged the involvement of other state actors, the private sector and non-governmental organizations (MINAG, 2007c).

The agricultural programs I and II (PROAGRI I & II) was developed in 1998–2005 supporting strategies for improving service delivery and institutional reforms but the impact of this at local/district level was poor (CARE & ActionAid, 2015).

In order to improve service delivery at district level, the government developed the Law of Local Institutions (LOLE) in 2005. The objective was to decentralize planning, resource



allocation and management and integrating local communities in the decision-making process. Although 300,000 USD was dispersed to each of the 127 districts, the impact was small because of the disconnect between central government and the districts (Do Rosário, 2011) and hence lack of coordination of the operations.

In order to address the district focus coordination, the Rural Development Strategy (EDR) was approved in 2007. The strategy focuses on a rural development that is sound and sustainable in the long term. It was intended as an instrument that triggers action and mobilization with the objective of tripling the level of human development in the rural areas by 2025 taking 2005 as a baseline. (CARE & ActionAid, 2015).

The 2008 Plan of Action for Food Production (PAPA) was a response to the global food price crisis of 2007 which triggered a change in direction from market-oriented cash and food crops to the production of food crops such as wheat, rice, cassava, potatoes and oilseeds for national consumption and to reduce the dependence on imports. The delivery of the plan was not robust because issues such as crop agro-ecological fit, post-harvest handling and markets were not considered (Do Rosário, 2011).

A strategic development which has strongly influenced the latest agricultural development strategies is Mozambique's commitment to the Comprehensive African Development Program (CAADP) in 2003. This is an initiative of African governments to accelerate economic growth and development in their countries. It provides a common framework and an opportunity for policy, technical and financial support to countries with strategies and investment plans aligned with CAADP principles. This resulted to the Maputo Declaration in 2003 which aims at a 6% annual growth rate for the agricultural sector and a commitment of the African Countries to allocate at least 10% of the state budget to the agricultural sector. Mozambique signed its CAADP compact in 2011, which is currently implemented through PEDSA (Republic of Mozambique, 2011b). PEDSA then constitutes the current and prevailing agricultural strategy/policy document in Mozambique. The evolution of the Agricultural strategy/plans in Mozambique has been gradual and largely reactive to prevailing economic, agricultural circumstances. This approach has however given rise to the current agricultural pre-policy document (PEDSA) (see table 1).



**Table 1: Summary Evolution of Agricultural Policy in Mozambique**

National Strategy	Agenda 2025
National Strategy	Priorities for Development of the Agricultural Sector (2006–2009) Green Revolution Strategy
National Strategy	PROAGRI I (1998–2005) and PROAGRI II (2005–2009)
National Strategy	Law of Local Institutions (LOLE)
National Strategy	Rural Development Strategy (EDR)
National Strategy	2008 Plan of Action for Food Production (PAPA)
National Strategy	Poverty Reduction Strategy Paper 2010–2014 (PARP)
National Strategy	Five-Year Government Plan 2014–2019 (PQG)
Pre - Policy	The National Investment Plan for the Agricultural Sector 2014 – 2018 (PNISA)
Current Policy	The Strategic Plan for the Development of the Agricultural Sector 2011–2020 (PEDSA)
Regional Development	Comprehensive African Development Program (CAADP)

The current agricultural policy framework guiding agricultural development consists of the “Strategic Plan for the Development of the Agricultural Sector 2011-2020 (PEDSA)” supported for its implementation by the “National Investment Plan for the Agricultural Sector 2013-2017 (PNISA)”. The two are aligned with the Government’s Five Year Plan (PQG) and the regional initiative, the Comprehensive African Development Program (CAADP). The previous PQG (2010-2014), envisaged a transformation from subsistence agriculture to a prosperous, competitive and sustainable agricultural sector (Technical Brief, 2016). The current PQG plan runs from 2014 to 2019 and its vision is also embedded and expressed in the current agricultural strategy which is founded in the Mozambique’s Agenda 2025 which seeks for an integrated, prosperous, competitive and sustainable agriculture sector guaranteeing food security, farmer livelihoods, social and gender equity (*Technical Brief, 2016*).





To achieve its objectives, the PEDSA outlines key areas of intervention as follows;

- To increase smallholder producer productivity and emergency response capacity;
- To enlarge the area of land under sustainable management and the number of reliable water management systems;
- To increase access to the market through improved infrastructure and interventions in marketing;
- To improve research and extension for increased adoption of appropriate technologies by producers and agro- processors (Suit et al., 2015).

The strategy also recognizes the need to integrate the vision of key stakeholders, remove barriers to increase investor confidence, encourage in-country production and provision of the necessary factors of production such as fertilizer and to harmonize sectoral activities to improve the sustainable use of land, water and forests (*MINAG, 2011*).

To implement the PEDSA, the Government formulated its National Agricultural Investment Plan, the PNISA. To achieve this, 21 programs and 65 sub-programs under five components, which are aligned with the main strategic objectives of the PEDSA and pillars of the CAADP have been formulated as follows;

- production and productivity;
- market access;
- food and nutrition;
- natural resources;
- institutional reform and strengthening;
- Sustainability (economic, social and environmental).

The agricultural policies, strategies and plans target the most vulnerable smallholder farmers in terms of productivity, market access, research and development, due regard for different agro-ecologies, sensitivity to gender equity, sustainable agriculture, provision to extension services, access to credit, access to markets, and conservation, storage and processing (*CARE & ActionAid, 2015*).



It is important to note that the PEDSA document has been revised through a compressive consultative process by the Directorate of Planning and Policy of the Ministry of Agriculture and Rural Development. This is a significant milestone towards the development of a resilient, progressive and more current agricultural policy document for Mozambique. *It would be important however that further analysis is carried out to ensure that this document is adequately aligned to the global emerging issues such as climate change, sustainable development, smart agriculture and biotechnology developments. Secondly significant institutional government restructuring has taken place in Mozambique since 2014. These restructuring changes with changes in the missions of different public institutions and ministries need to inform the new policy.*

### **1.3. Status of seed policy and legal framework**

Currently Mozambique does not have a seed policy or a seed law. The main policy instruments guiding the agricultural and seed sectors are the Strategic Plan for Development of the Agricultural Sector (PEDSA) through the Program for Strengthening of the Seed Chain (PFCS), and the Comprehensive Seed Regulation. PFCS is aligned to PEDSA, and is implemented under the Seed Division at DINAS. The overall aim of PFCS is to strengthen the entire seed value chain. PEDSA established the National Seed Committee (NSC), as an advisory committee to the Ministry of Agriculture, and also the Subcommittee for Variety Registration and Release, as the technical advisory committee to the NSC for registering new varieties. Mozambique is however a signatory to the Southern African Development Community (SADC) seed harmonization protocols (TASAI, 2017). This is a very positive development for purposes of Mozambique expansion of its seed market to the region.

This strategic plan document for the development of the Agricultural sector in Mozambique is clearly a good strategic document but it cannot replace a Seed Policy with the much needed focus on the seed value chain from pre-basic to commercial seed. A seed Policy development and operationalization for Mozambique is on its own a strong statement to the region and the world (donors, investors and CGIAR) that their value and profile for seed sub-sector is high enough and the overall strategic road map and thrusts/levers are clearly spelled out for all and sundry to read and determine where they fit in the strategic journey (Onsando, 2020).



*This consultancy will build capacity on seed policy development, implementation, analysis and monitoring.*

#### **1.4. Status Seed Law/Regulations and regional Harmonization**

In absence of a seed law, the Comprehensive Seed Regulation (*Ministerial Decree 12/2013*) which was updated in 2013 is the closest document to a formal legal frame work through an Act of Parliament. This document was fortunately harmonized with the SADC seed regulation on variety release and registration, seed quality control and certification, and seed import/export requirements. This therefore theoretically allows for germplasm access by Mozambique from the other SADC countries and cross border trade. In practice however this is not fully functional, making it difficult for the country to maximize on its good opportunities for the cross-border trade of agricultural commodities due to the existence of high agricultural potential, development corridors and ports. This weak state is attributed to weak institutional (Regulatory and R&D) capacity, the low level of awareness throughout the seed sector concerning the SADC protocol (*Fintrac, 2016*) and overall non fulfillment of the regulations and procedures.

It is however important to note that the Ministerial Decrees are anchored in the constitution of Mozambique and they can therefore serve as any laws although they can be changed easily (*USAID, 2019*). The fact that they can be changed easily can be positive or negative depending on where one seats. Because laws are the ultimate reference in case of a dispute, they are supposed to go through the due parliamentary process to guarantee fairness, balance, trust and deterrence without hurting national operations. From this view point, laws attract more trust particularly by international stakeholders than Ministerial Decrees, because they give a positive perception and “halo” effect, a sense of permanency, sustainability and predictability.

The plant variety protection decree (*Ministerial Decree 26/2014*) for plant breeders’ rights which is aligned with UPOV guidelines and then approved as the Protection of New Plant Varieties, has yet to be fully implemented as a regulation. The final version of this decree is also harmonized with those applicable at the regional level, according to the SADC protocol



but the benefit accruals are not fully realized because of poor compliance due to weak in-country institutional capacity.

Mozambique is currently implementing favorable trading arrangements under SADC and COMESA. This is evidenced by seed companies' testimonies of the time it takes to process seed imports. This favorable development could be exploited to enable seed companies to access breeder's seed (for research and variety development) and certified seed (for sale to farmers) from neighboring countries that have more developed seed sectors such as South Africa, Tanzania, Zambia and Zimbabwe (TASAI, 2017).

A robust harmonization of the Seed Regulatory Systems in Mozambique which is an intricate ensemble of rules, standards, procedures and supporting measures necessary to facilitate the movement of seed (as a commodity) between countries in the region is not fully operational. The system establishes commonly agreed regulatory standards, rules and procedures related to: Seed Variety Release; Seed Certification and Quality Assurance and Quarantine and Phytosanitary Measures for Seed. The rationale for this System is premised on the need to facilitate enhanced seed trade in the region and to increase the availability of high quality seed to farmers through rationalizing and removing national regulatory barriers for the movement of seed across borders. This is expected to promote economies of scale in seed supply and to reduce market uncertainty (Rohbrach, 2003). The system represents an attempt to remove technical barriers to trade (TBT) in the regional seed market. Therefore, harmonization is not about enacting uniform seed rules in each SADC countries, but it is about developing a common legal culture on seed regulation that is consistent with the commonly agreed standards, rules and procedures. It about ensuring that the inter-country rule of equivalency is still obeyed by all countries in the region. From the foregoing background, Mozambique is very far from being able to fully capitalize on the seed trade opportunities which come with Regional Economic Communities domestication of the seed regulations.

*This consultancy will support in capacity building of development of seed law and plant variety protection and plant breeders rights law as articulated in the subsequent chapters.*



## Chapter 2

### 2. Support agricultural and seed policy development, implementation strategy, analysis, and monitoring.

The support was given through presentations covering development of a policy from scratch and improvement of an existing policy document which for this case is the Strategic Plan for the Development of the Agricultural Sector 2011-2020 (PEDSA) and therefore was treated as the current policy (Annex 1). It was also revealed by the Directorate of Planning and Policy of the Ministry of Agriculture and Rural Development (MADER) that this strategic plan has been revised and we now have the second version. For the development of the policy from scratch, the process is more robust if it starts with a SWOT analysis of the Agricultural sector and the seed sub-sector in case of an agricultural policy and seed policy respectively. After SWOT analysis which is the mechanism of determining the strengths, weaknesses, opportunities and threats in the sector and sub-sector. The other steps are as shown by the slide below;

#### Policy Development Process



- The Formation of key stakeholders (agriculture and seed) to constitute the policy team;
- A thorough assessment of the current status of the relevant technical, operational, trade and institutional aspects of the agricultural and seed sectors;
- A careful **problem analysis** to determine the need for an agricultural and seed policy through the **participatory/consultative** policy formulation process;
- Establishment of policy levers/options that if implemented will fulfil the aspirations of all the stakeholders;
- Collation of the options into a draft policy document;
- Holding of a stakeholders' validation workshop;
- Drafting of the National agricultural and seed policy after validation;
- Approval and adoption of the National Agricultural and Seed Policy;
- Raising awareness to facilitate implementation;

4

The other aspects of the presentation covered policy implementation strategy, analysis and monitoring. The presentations were followed by a questions and answers session where all the clarifications and responses were effectively attended to.



From the interactions, it was clear that the policy development/formulation component was well understood by most participants. There were however significant gaps in the areas of policy implementation, analysis and monitoring which were addressed accordingly.

### **2.1. Gaps on Policy Implementation**

A number of gaps were evident on implementation and every effort was made to address the gaps. The specific gaps are as follows.

- Awareness that a policy implementation will be impossible unless it is linked to or domiciled in an institution or a directorate/department in the Ministry with accountability responsibility. For the agricultural policy the most natural house will be the National Planning and Policy Directorate of the Ministry of Agriculture and Rural Development (MADER) while the seed policy will need to be domiciled at the National Seed Authority or the new Authority which is being operationalized;
- Awareness that the responsible institution or directorate will have to develop a policy strategic plan lasting 5 years or more and its implementation plan;
- Ability to break down a policy strategic plan into annual work plans which if implemented every year will be in effect gradually implementing the strategic plan;
- Ability to break down policy strategic thrusts into milestones and further breaking the milestones into activities;
- Ability to convert the activities into SMART targets for the respective and relevant team members with an accountability tag;
- Ability to conduct objective performance appraisals of the team members by their line managers with implications of incentives/rewards or disincentives/penalties. The incentives can range from a compliment to a promotion or a bonus.

The entire process is summarized by the slide below.





### Policy implementation strategy support,

- Identification of institutions or an institution or a department best suited in terms of capacity and technical skills to implement the policies such as the National Planning and Policy Directorate of MADER for agricultural policy and the National Seed Authority (NAS) for the seed policy;
- Capacity building to identify aspects of the policy that are critical in the development of agriculture and the seed sectors and capturing the aspects of the policy in the institutional strategic plan and annual work plans;
- Capacity building to break down the strategic thrusts into milestones;
- Capacity building to break down the milestones into activities;
- Capacity to break the activities into SMART targets for the relevant institutional staff and subjecting these to the institutional monitoring and evaluation processes.

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## 2.2. Policy Analysis Strategy


A number of gaps were evident on policy analysis and every effort was made to address the gaps. The specific gaps are as follows.

- Awareness that this is majorly applicable to an existing pre-policy document such as PEDSA or a contemporary policy document where the objective is to quickly determine or assess the impact of a policy that has been implemented for a while. The case study in this regard is the impact of the Mozambique Government reduction of corporate tax from 32 to 10% to incentivize investments. This case study is addressed below under Fiscal Policy Monitoring section 2.6 and it was used as to demonstrate the other meaning of policy analysis or policy research.
- Awareness that for the contemporary or existing policy to be analyzed objectively there will be need to upgrade the policy road map or blue print and this will have to be informed by stakeholders' aspirations;
- Awareness that the analysis will be guided by the upgraded or revised policy blue print or road map as a bench mark;
- Awareness that anything in the policy which is not aligned or does not meet the expectations of the upgraded benchmark will constitute a gap or gaps;



- Revising the existing pre-policy or policy documents to address the gaps and challenges while leveraging on the opportunities is the key benefit of policy analysis.

The details are as highlighted by the slide below;



### Policy Analysis Support

- This is applicable to pre-policy documents like PEDSA where the objective is to identify current gaps and challenges for mitigation or opportunities for leveraging. The process is as below;
  - Identification of the gaps in the technical, operational, business, institutional and legal components of the agricultural or seed processes;
  - Determination of the policy levers to mitigate the gaps and challenges;
  - Interrogation of the applicable policy levers in order to determine whether they are adequately aligned and supportive of the National strategic aspirations;
  - Revising the existing pre-policy or policy document to address the gaps and challenges while leveraging on the opportunities.
  - Revision of PEDSA to Version 2 has already taken place

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### 2.3. Policy Monitoring and Evaluation

A number of gaps were evident on monitoring and evaluation and every effort was made to address the gaps. The specific gaps are as follows.

- Ability to appreciate that a policy statement is a strategic aspirational intent which can be implemented after analysis to determine the indicators of the policy statement delivery and this normally constitutes the enablers and spinoff benefits and hence the implementation will therefore focus on how the enablers and the benefits are being implemented being part of the indicators as illustrated by the examples on the slide below;





## Policy monitoring and evaluation

- Generally speaking, policy monitoring and evaluation should **measure the extent to which policies adapt to growth, resilience and sustainability needs of a country.** A few examples of policy thrusts will illustrate the principle better as follows;
  - *Main streaming of the farmers seed systems and the Mozambique food security crops* – the measurable policy success factors will be the **deployment of Quality Declared Seed (QDS) by the National Seed Authority** to farmers as this quality assurance mechanism is farmer centered, the volume of seed of food security crops which is a product of QDS, **the yield enhancement of the specific crops per unit area** etc.
  - *Enhancement of transboundary seed trade* – the measurable policy success factors will include, **the domestication of SADC seed regulations**, the ISTA accreditation of the National Seed Authority laboratories, **the volume of seed sold outside Mozambique per unit area** etc.
  - *Positioning horticulture for export market* – the measurable success factors will include, the ratification of the International Plant Protection Convention (IPPC) and the WTO – SPS Agreement, aligning the National Phytosanitary law to the IPPC trade standards, **the volume of horticultural exports from Mozambique** etc.

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### 2.4. Agricultural and Seed Policy Drafting

I covered Policy drafting principles which are common to both the agricultural and seed policies. The only difference is on the elements being covered and this is clearly demonstrated by presentations (see Annexes 2 and3). Although the focus in the narrative here is seed, it should be borne in mind that the distinction between the two comes in only at elements section. I made it clear that Policy drafting is more than lists of rules that employees need to follow. That this document communicates the mission, values, aspirations and guiding principles of an industry/ministry. It is about the big-picture goals and values of the ministry or the sector.

The content of a seed policy document should be concise, to the point and action-oriented, with a logical and coherent structure. In drafting a seed policy, important factors must be taken into account in order to communicate effectively with the intended users of the document (FAO, 2015) as follows;

- General characteristics, including style, the use of language, construction of sentences, coherence and clarity of expression;
- The document must be easy to read and interpret, so use a plain language;



- The text should be clear and concise, making use of “every day” words as far as possible and avoiding ambiguity. The use of language should be consistent. In other words, it should be effectively communicative;
- Use appropriate words and phrases. Make it clear whether provisions in the policy are mandatory or discretionary by using the words “must” or “may”; use gender-neutral language, for example: “chairperson” rather than “chairman”; and do not include information (e.g., specific names or titles) that may become quickly outdated;
- Use authoritative language: Agricultural or Seed policy statements should reflect authoritative and clear positions of the government in all matters regarding the sectors. Therefore, use affirmative phrases such as “the Government believes that” and “the Government recognizes that”;
- Take a practical approach: Agriculture or Seed policy statements should be practical and realistic, and reflect strong intentions and commitments on the part of the government. In this case, the members of the drafting task force should also maintain close contacts with relevant government authorities and other stakeholders in order to seek clarifications of official positions on specific issues.

#### 2.4.1. Policy layout/ Structure

**A forward** - A foreword outlines the aims of the policy and expresses clearly the commitment of the government to ensuring its implementation for the benefit of the industry, farmers and the country as a whole. It should be signed by the Minister of Agriculture to give the policy the profile and weight.

**Introduction** - The introduction should provide an overview of the current agriculture or seed sectors status and why the new policy is needed to improve it, how the policy was developed, the links between the policy and broader national policies for agriculture, food security and nutrition, rural development and research and how the policy document supersedes a previous policy for the sector, complementarities and changes in focus should be explained.

**Context** – This is the general framework within which the policy has been conceived and prepared and will be implemented. It should include a brief analysis of the main linkages between the agricultural or seed sectors and broader issues in agriculture and crop



production in order to put the seed policy in perspective and to provide a better understanding of the processes or changes that may arise as a result of the policy.

**Objectives** - This section contains an exposition of the seed policy's rationale and the needs it seeks to address. The thrust and direction of the entire policy, the key elements and the main activities that will be undertaken, are derived from the policy's principal objectives. It defines the role of the seed sector in achieving the overall goals of the government in agriculture and in economic and social development such as increased agricultural productivity, food and nutrition security, farmer livelihoods, economic and the GDP growth.

**Scope and Strategy** - This section should define the boundaries of the seed policy and how the policy relates to other issues in the agriculture sector. Within the scope of the policy, strategies should be developed to achieve the specified policy objectives. Since more than one strategy may be needed, depending on the range of objectives, a strategic choice should be made among the priorities.

**Administration of the Policy** - The administration and monitoring of the policy should be assigned to a body such as the National Seed Authority or MADER for the Agricultural policy with the responsibility to implement and review the policy. This responsibility should be explained in the policy as well.

**Elements of the Policy** – These are sections on all areas of the seed sector having significant policy dimensions. These key elements are the actual building blocks of the seed policy document and cover all the pertinent technical issues. These should be presented in sections or sub-sections with clearly defined headings and arranged in logical order. Each key element should be introduced with a short statement describing its current status and the government's overall position regarding related issues. This should be followed by an explanation of the main options and strategies adopted by the government, and the expected outcome.

**Implementation of the Policy** – The implementing authority such as NAS or MADER should be specified in the Policy document. The organization should also be in charge of monitoring and evaluation. Aspects related to resources and facilities for implementation also need to be described and estimated.



**Effective date of entry into force** - It should be clear when the policy will come into force.

**Revision and updating of the policy** – The Policy is a living and dynamic document and so periodic reviews in order to align it to the prevailing circumstances is critical.

**2.4.2. Key Elements of the Seed Policy – Note that the key elements of the Agricultural Policy are in Annex 2.**

1. Crop Variety Development;
2. Seed Production (EGS and Commercial Seed);
3. Seed Quality Assurance;
4. Agricultural Extension;
5. Seed Distribution and Marketing;
6. Seed Import and Export;
7. Seed Enterprise Development;
8. Seed Value Chain;
9. Seed Security;
10. Capacity Building;
11. Seed Legislation/ Seed Law;
12. Other Related Legal Instruments such as international seed conventions

**2.5. Recommendations on Policy Formulation, Implementation and Monitoring**

*The following are key recommendations on Policy Formulation, Implementation and Monitoring;*

- *MADER and NAS to develop policy implementation 5 year strategic plans taken from PEDSA, break the strategic plan to annual work plans and the annual work plans into milestones, activities and SMART targets which are assigned to individuals to action and be appraised on;*



- *MADER and NAS to develop robust policy indicators to inform policy monitoring. The indicators should be such that they meaningfully demonstrate the positive impacts of implementing the policy;*
- *MADER and NAS to consider emerging issues affecting agriculture (Climate change, Smart Agriculture, Sustainable Agriculture) in transiting PEDSA to a full Policy document;*
- *MADER and NAS to own the policy development, implementation and monitoring processes because policies are government strategic instruments to drive agriculture and the seed sectors to the desired levels;*
- *MADER and NAS to improve their data collection, analysis, storage and retrieval to support policy implementation and monitoring. This calls for a robust qualitative and quantitative data analysis and management support;*

*All these recommendations are urgent and can be done co-currently depending on availability of resources. Some are purely management issues that will benefit from existing performance management and appraisal systems. For example, institutions routinely develop their strategic plans spanning 5 years. To deliver the plan, prudent management calls for breaking some aspects of the strategic plan to annual work plans and to activities and finally SMART targets for staff members. **If this is not happening, then there is urgent need for a technical assistance in this area because good performance of institutions is driven by this.***

## 2.6. Fiscal Policy Monitoring

This was an emerging subject not even covered by the TORs. I took up this as an opportunity to build capacity on policy monitoring using an example of a policy decision by the government of Mozambique to enhance private sector investment by lowering corporate tax from 32 to 10%. I had to first put the entire subject in context as follows:

Fiscal Policies are mechanisms by government to foster National Economy leveraging on taxation and other mechanisms that enhance easy of doing business and hence private sector investment. MADER had been tasked by government to determine whether the reduction of corporate tax from 32 to 10% by government of Mozambique is paying off and they wanted



to know how to go about it. My response was they should begin with developing the indicators to measure this as follows;

- The number of new companies post policy and the corporate tax remissions;
- The number of employees by the new corporate bodies and their pay as you earn tax reemissions;
- Socio-economic impacts arising from some of the investments of the employees in their rural areas for example some employees might out of the employment, take bank loans to build agro-dealerships which brings agricultural inputs including seed nearer the people.;
- For monitoring to be effective, the data collection and analysis, storage and retrieval is critical. This calls for a robust qualitative and quantitative data analysis and management within MADER. It will be very difficult without this to determine socioeconomic impacts for example.



## Chapter 3

### 3.1. A policy Institution

It is generally accepted that a policy institution is an organization (typically a non-profit think tank) that conducts original research on issues, makes governmental policy recommendations based on its findings, and disseminates its work to the appropriate audiences or sectors of the economy. Most governments might have one policy institute doing research for all sectors of the economy and making recommendations accordingly. This is mostly the case for purposes of achieving economies of scale and cost effectiveness. But even with this arrangement different Ministries such as Agriculture will still have a more focused department or directorate of Planning and Policy as is the case in Mozambique. Policy institutes are however important because policy making in general and within the ministry of agriculture in particular, is tending towards evidence-based findings from research undertakings of local consultants, universities and policy research institutes (PRIs) (Patrick and Rosemary, 2006). Examples of these institutes include the Kenya Institute for Public Policy Analysis and Research (KIPPRA), the Institute for Development Studies (IDS) of the University of Nairobi and the Egerton University based Tegemeo Institute of Agricultural Policy and Development. Even with all these institutions in Kenya, the demand for evidence based policy analysis in Kenya is still low (Smith and Karuga, 2004). This means that the sectors of the various economies in the country are not profiling policy adequately and therefore their demand for evidence based policy is low meaning that a policy institution is as important as the National demand of the policy services. Internationally we have the International Food Policy Institute (IFPRI). The International Food Policy Research Institute (IFPRI) provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries. Established in 1975, IFPRI currently has more than 600 employees working in over 50 countries. It is a research center of CGIAR and a worldwide partnership engaged in agricultural research for development.



### 3.2. The Institutional Mandate of the proposed Policy Institute of Mozambique

The institution whose name is proposed as the **Mozambique Institute for Public Policy Research, Analysis and Monitoring** will have the overall goal and mandate to improve public policy making for realization of national development goals, through economic forecasting, policy analysis and research, and formulation of medium and long-term strategic perspectives for economic and social development. The proposed specific mandates which are not cast in stone and hence can be customized to local National circumstances, include the following;

- Develop capacities in public policy research and analysis and assist the Government in the process of policy formulation and implementation;
- Identify and undertake independent and objective programs of research and analysis, including macroeconomic, inter-disciplinary and sectoral studies on topics affecting public policy in areas such as human resource development, social welfare, environment and natural resources, agriculture and rural development, trade and industry, public finance, money and finance, macroeconomic and microeconomic modeling;
- Provide advisory and technical services on public policy issues to the Government and other agencies of the Government;
- Communicate the findings and recommendations of the Institute's research programs to the agencies of the Government concerned with the implementation of public policy;
- Serve as a point of communication and encourage the exchange of views between the Government, the private sector and other bodies or agencies of the Government on matters relating to public policy research and analysis;
- Collect and analyze relevant data on public policy issues and disseminate the Institute's research findings to persons it deems appropriate to publish such research findings;
- Develop and maintain a reservoir of research resources on public policy and related issues and make these available to the Government, the private sector and learning institutions in Kenya;
- Organize symposia, conferences, workshops and other meetings to promote the exchange of views on issues relating to public policy research and analysis; and





- Undertake public policy research relevant to governance and its implications to development.

### **3.3. Institutional Organizational Structure**

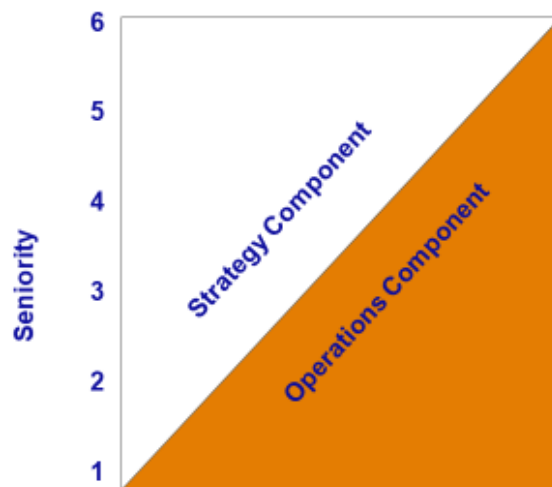
An Institutional Structure is an organization's complex system of mutually connected and dependent elements or parts, which if properly done creates synergies, enhances productivity and delivery of service but even more important makes institutional governance more structured and complementary to each other. The structure is also referred to as the institutional Organogram. Generally, the flatter this structure is the better as flatter structures tend to minimize red tape and instead enhance decision making and service delivery. The proposed organizational structure below therefore will be as flat as possible with a focus on functionality of directorates, divisions, departments and hence the overall institution. The structure will also obey the conventional norm of a pyramidal shape. In this model, as the seniority increases the strategic/policy/ leadership roles increase and as the seniority decreases the operational roles increase. This is the case because at operational level there are many functions and this is where the work activities are executed at. The management structure on the other hand will take a triangular form where by strategy and policy team will constitute the leadership team with very few individual with a track record and who should be competitively hired. The strategic/policy leadership structure vs. the operational structure is highlighted in figure 2 below.

#### **Figure 2 The strategic/Policy Leadership Structure Vs. Operational Structure**



## Strategy & Operations Model

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### 3.4. Components of the Structure and Governance

The proposed components of the institutional structure are generic for public policy institutions and are open to domestication based on the unique National circumstances in Mozambique such as the National aspirations and ethos. The components are articulated below and illustrated by figure 3 below;

#### 3.4.1. The Board of Management

The Board of Management of the Institute will be highest center of authority and leadership of the institute. It will be responsible for strategy and policy issues of the institute including approvals of budgets, strategic plans, policy documents and performance management systems including monitoring and evaluation of the institutional deliverables. The Board will also hire the Director General and senior members of management. The director General will report directly to the board. The Board will oversight progress towards achievement of the institutional mission, strategic plan, cost effectiveness and judicious use of resources, financial integrity, and accountability, oversight of investments such as capital investments, and ensures compliance with relevant legal and regulatory requirements.

#### 3.4.2. The Director General (DG).

The DG is the CEO of the institute. The holder of this office must be a versatile professional with technical skills on the institutional core function of public policy research and analysis



with demonstrated appreciation at operational level of related areas such as finance management, resource mobilization, IT, HR, project development and management, business, networking, PR, communication. The individual should also bring to the table competencies such as a strategic mind, analytical skills, people/social/interpersonal skills, negotiation skills (bilateral and multi-lateral), integrity and leadership and management.

This being a cross functional role covering all sectors of the economy the holder must have a very good appreciation of the government and government functions, drivers of the economy, the ease of doing business environment and investment, the role of private sector and the international community on the economic growth as measured by the GDP.

### **3.4.3. Directors**

Directors who will head institutional divisions will report directly to the DG. These are individuals whose profile is largely similar to the DG, except for the core technical skills which will normally be aligned to the technical skills mix needs of the specific division. These individuals should have the potential to take up the position of the DG if it fell vacant. They are hired by the board. Since they are closer to operations, their people, analytical, strategic, project management, HR, IT and financial skills must be demonstrable. Because some directorates will occupy a lower profile depending on the local National situation, the following directorates are recommended as a bare minimum;

- Directorate of Economic Management;
- Directorate of Integrated Development;
- Directorate of Policy Research/Analysis
- Directorate of Corporate Affairs.

### **3.4.4. Heads of Departments**

Heads of Departments will report directly to the Directors. They are basically subject matter specialists. They should have a track record of technical skills for the department for which they are hired. Because they are generally younger they can be mentored by the senior managers on those competencies that they are weak in hence the focus on functional/technical requirements of the department. No individual should qualify to join the institution at this level without post-graduate training (Masters or PhD). The departments



which constitute a public policy institute vary from country to country depending on where most policy gaps are but the following list is significantly adequate;

- Corporate Affairs;
- Macroeconomics;
- Social Sector;
- Productive Sector which covers agriculture and other natural resources;
- Infrastructure and Economic Services;
- Private Sector Development and Business;
- Trade and Foreign Policy;
- Strategy, Planning;
- Finance;
- HR and Administration;
- Data management, Statistics and IT;
- Communication and Public Affairs;
- Supply Chain Management;
- Capacity Building;
- Governance;
- Partnerships and Project Management.

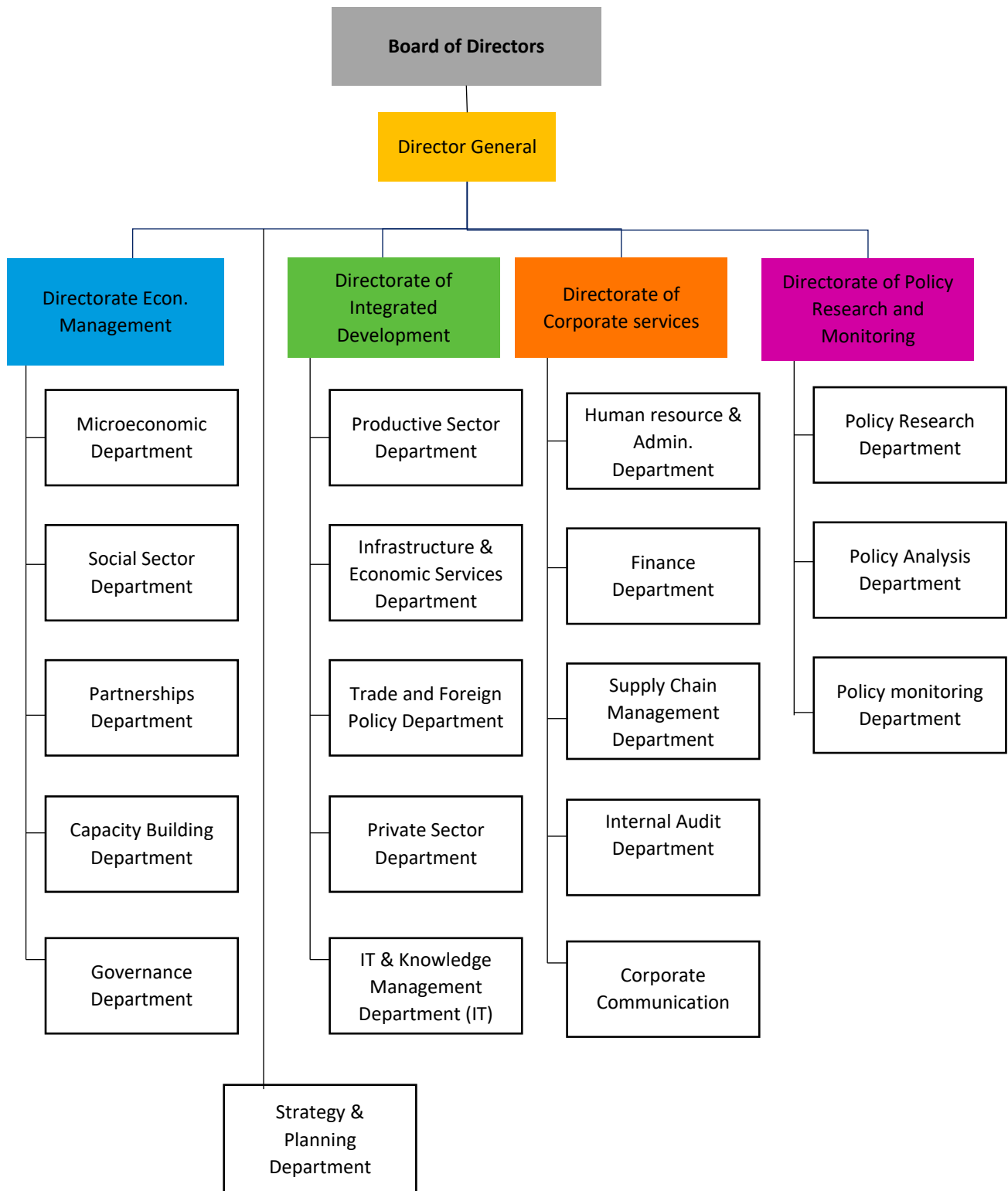
#### **3.4.5. Support Team**

The scope and profiles of the support team/staff will be determined by the senior management team which will also hire the team but competitively. The team will consist of the accountants, finance officer, human resource officer, IT officers, planning, monitoring and evaluation officer, statisticians, policy field officers, policy research assistant officers etc.



### 3.4.6. The institutional Organogram

**Figure 3 The proposed Institutional Organizational Structure of the Mozambique Public Policy Research and Analysis.**



### **3.5. The budget**

A good budget is informed by the knowledge available on the details that inform the various elements of the budget. However, the details available on the Mozambique Institute for Public Policy Institute are scanty for now. This status then means that there will be need to allow for scope of adjustments that will need to be undertaken on the ground as more data gets available. One key assumption in the development of this budget is that the government will allocate land for the headquarters construction. The second assumption is that this budget is generic and it is based on a modest African parastatal type institution. Based on this second assumption there will be need to customize the budget to the planners' specific and type of institution they have in mind in terms of size, quality of workmanship, quality of finishes, whether the offices will be stand alone or open plan office system. All these will impact on the costs and hence the need for customization at the time of undertaking the project. There is even a possibility that the government may decide to domicile the institute within an existing institution in which case there will be no need for the 13,255,000 USDs in this budget.

The budget elements for this institute will be as follows;

- Headquarters designs and drawings;
- Bill of Quantities;
- Construction of the Headquarters (Offices, Conference facilities, Cafeteria etc.;
- IT infrastructure (Soft wares, wiring, savers);
- Perimeter wall construction;
- Landscaping;
- Hiring costs of laboratory services;
- Maintenance of buildings and the grounds;
- Staff Costs (Salaries, Benefits, Medical, Pension;
- Executive and Field Vehicles;



- Maintenance of the Vehicles;
- Field related Costs;
- Consultancy Costs/Contracting out laboratory services;

### 3.5.1. Budget Details

**Table 2. Budget details**

Budget Element	Budget Element Details	Number of Elements	Element Cost	Total Cost in USDs
Construction of Headquarters	Designs & Drawings	1	1*20,000	20,000
	Bill of Quantities	1	1*15,000	15,000
	Construction	1	1*13,000,000	13,000,000
	IT Infrastructure	1	1*100,000	100,000
	Land Scarping & Road works	1	1*30,000	30,000
	Perimeter Wall	1	1*60,000	60,000
	Maintenance of buildings and the grounds	12	2500*12	30,000
Staff Costs	Salaries & Benefits of Senior Management	6	4000* 6*12	288,000
	Salaries & Benefits of Middle Cadre Management	20	2,000*20*12	480,000
	Salaries & Benefits of Support Team	60	800*60*12	576,000
Travel & Field related Costs per year	Executive Vehicles	6	80,000*6	480,000
	Field Vehicles	15	25,000*15	375,000
	Maintenance of the Vehicles;	21	2000*21	42,000



Contracting out Costs per year	Laboratory Services	8	1000*8*4	32,000
	Consultancies	20	30,000*20	600,000
	Security Services	12	2,000*12	24,000
	Medical Insurance	86	3000*86	258,000
	External Audits	1	30,000*1	30,000
	Cafeteria Services	12	1000*12	12,000
Operational Costs	Field related costs	86	86* 30*40	103,200
	Local Strategic Meetings Costs	6	6*6*40	1,440
	International Strategic Meetings Costs	4	4*6*400	9,600
	International Technical Meetings for Middle cadre Staff	20	20*14*200	56,000
<b>Grand Totals In USDs</b>				<b>16,622,240</b>

### 3.5.2. Budget Notes for items that are not straight forward

- Salaries & Benefits of Senior Management – 6 staff members at 4,000 USDs per month;
- Salaries & Benefits of Middle Cadre Management – 20 staff members at 2,000 USDs per month;
- Salaries & Benefits of Support Team – 60 staff members at 800 USDs per month;
- Laboratory Services – 8 services 4 times a year;
- Field related costs – 86 visits for 30 members of staff at 40 USDs;
- Local Strategic Meetings Costs – 6 meetings for 6 members of staff at 40 per visit;
- International Strategic Meetings Costs – 4 meetings for 6 members of staff at 400 USDs per visit;





- International Technical Meetings for Middle Cadre Staff – 20 meetings for 14 staff members at 200 USDs per visit.



## Chapter 4

### **4. Support establishment of a more functional policy analysis department within MADER and capacity building of staff in policy formulation, implementation, analysis and monitoring.**

#### **4.1. A functional Policy Analysis Department**

A functional policy analysis department should understand the role of this function which is to help public officials or governments to understand how social, technical, economic, and political conditions change and how public policies must evolve in order to meet the changing needs of a changing society. The department must also touch base with the emerging issues and how policy should be aligned to these issues to mitigate the adverse impacts. For example, Agriculture in Africa and indeed globally is now confronted with climate change requiring interventions of development and deployment of climate smart varieties and the dwindling extension support requiring interventions of Smart Agriculture. These emerging issues will require the department to analyze and determine gaps which if addressed will support development of policies which will support interventions to mitigate the adverse impacts of the emerging issues. The department should also evaluate issues of public importance with the objective of providing facts and statistics about the extent and impact of the various policies of the government. The basic objective of public policy analysis is to assess the degree to which the policies are meeting their goals.

#### **4.1.2. Policy Analysis Approaches**

Two approaches are commonly used as follows;

- Analysis for Policy
- Analysis of Policy

Analysis *for* policy refers to research conducted to inform actual policy development from scratch. It is sometimes critical because during policy formulation or development, some recommendations may require data in order to determine the feasibility of a policy direction.

Analysis *of* policy on the other hand is research undertaken in order to understand why a particular policy was developed at a particular time and assess the effects intended or



otherwise, of that policy when it was implemented. It is a determination of whether the policy was effective or not.

Policy Analysis can also help with the determination of indicators of measuring the effectiveness of a certain policy.

#### **4.1.3. Policy Analysis Process**

The commonly used process starts with the identification of the problem, proceeds to an examination of the different policy tools that could be used to respond to that problem, then goes on to the implementation stage, in which one or more policies are put into practice (e.g., a new regulation or subsidy is set in place) and finally, once the policy has been implemented and run for a certain period, the policy is evaluated. During evaluation, levers such as policy effectiveness, cost-effectiveness, value for money and outcomes or outputs are determined.

#### **4.1.4. Methodology**

A number of methods are used as follows;

- Qualitative research which includes case studies and interviews with community members or policy target groups. This approach usually uses questionnaires;
- Quantitative research which involves data collection, analysis and model building.

In both methods the objective is to determine whether the policy implementation has given the desired outcomes i.e. determination of policy effectiveness, cost-effectiveness and value addition to the target groups.

### **4.2. The MADER Planning and Policy Directorate**

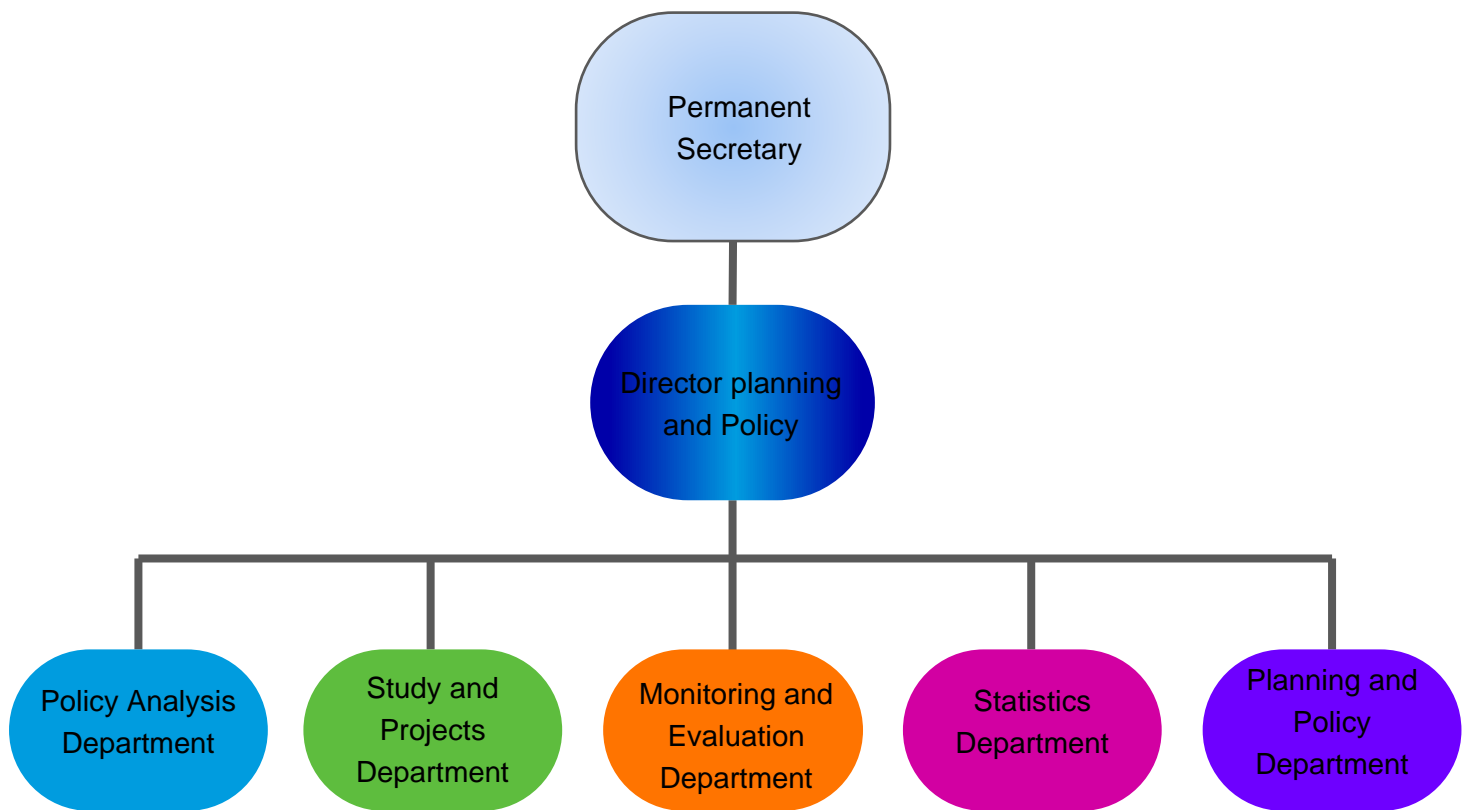
As currently constituted, the MADER Planning and Policy Directorate reports to a Director who reports directly to the Permanent Secretary. Reporting directly to the Director are five departments as follows;

- Policy Analysis;
- Study and Projects;
- Monitoring and Evaluation;
- Statistics;
- Planning.



The organizational structure is detailed in Fig. 4 below;

**Figure 4: The current Planning and Policy Directorate at MADER Organizational Structure**



#### **4.2.1. The proposed changes on the Planning and Policy Directorate**

This directorate is largely a policy outfit. As currently constituted it falls short of a robust range of departments in order to execute the roles of policy formulation, analysis, implementation and monitoring robustly as highlighted below;

- To enhance the functionality of the directorate, a stand-alone department of Policy Research is critical. This is in view of the value of Analysis *for* policy approach which refers to research conducted to inform actual policy development from scratch as already highlighted above in this chapter. Because it is not possible for the Directorate to have all the necessary researchers to do the required research in all the agricultural disciplines, this department will be responsible for the coordination of projects, so that they can easily contract out or procure consultancies to do the research to

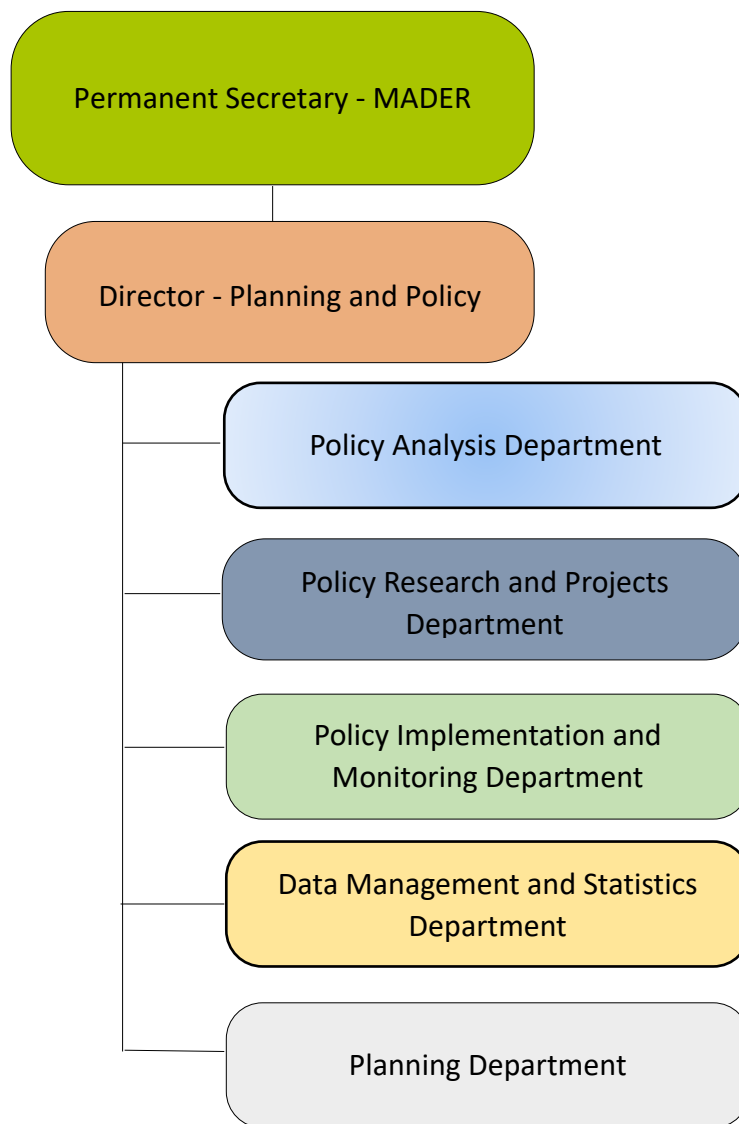


generate the relevant data required to input into policy formulation, implementation and monitoring hence the proposed name of the department as **Policy Research and Projects**. Secondly in order to determine policy effectiveness, cost-effectiveness and value addition to the policy target groups there will be need for Qualitative research which includes case studies and interviews with community members or policy target groups and Quantitative research which involves data collection, analysis and modeling.

- After data collection which is a research function, there is need to have a robust data management, processing, storage with easy retrieval mechanisms and development of clear graphics which can inform policy monitoring in particular hence the proposed name of the department as **Data Management and Statistics** from just Statistics.
- Without effective policy implementation, the policies will seat in records and will not create the intended positive impact. Similarly, even with the best implementation, without monitoring, it will be very difficult for Mozambique government to tell whether their policies are working or not. Because of the significance of these functions, the department of Evaluation and Monitoring is renamed as department of **Policy Implementation and Monitoring**. This will enhance focus on the implementation of policies and determination on their effectiveness.

The proposed organizational structure of the Directorate of Planning and Policy, taking into consideration of the proposals is as indicated by Fig. 5 below;

**Figure 5: Proposed Organizational Structure of the Directorate and Policy Directorate at MADER**



**4.3. Capacity Building of staff in policy formulation, implementation, analysis and monitoring.**

The capacity building of staff of the Planning and Policy Directorate at MADER on policy formulation, implementation, analysis and monitoring was given through power point presentations and discussions to guarantee that every member of staff was clear on the issues. The details of this capacity building are articulate in chapter two of this report and Annexes 1, 2 and 3 attached.



#### **4.4. Recommendation on Support establishment of a more functional policy analysis department within MADER and capacity building of staff in policy formulation, implementation, analysis and monitoring.**

*To enhance the value and functionality of the Directorate of Planning and Policy of MADER the following Recommendations are made as follows;*

- *The department of **Policy Research and Projects** is critical because this department will be responsible for the collection and analysis of data to inform policy formulation, implementation and monitoring so critical for any meaningful policy process. Secondly this department will be responsible for research to determine whether policies that have been implemented for some time have been effective or value adding. Projects have been included in this department because it is not possible for the department to have researches in all the disciplines and so the department will have the responsibility to contract out or procure; consultants/experts to conduct research in areas they have gaps in.*
- *In order to enhance policy monitoring which is a function of development of indicators for various policy thrusts and processing available data to inform the extent to which the implementation of specific policies has been effective, the statistics department has to be renamed as **Data Management and Statistics** because the data management such as analysis, graphics development, storage and retrieval is very instrumental in the overall policy processes;*
- *In order to support policy implementation, MADER has to develop or deploy skills in development of policy strategic plans, breaking down the strategic plans to annual plans and annual work plans to activities and finally SMAR targets for staff. The entire process will need to be augmented by performance management and appraisal skills. Secondly the implementation will benefit from the renaming of the department of Monitoring and Evaluation to **Policy Implementation and Monitoring** because the team implementing will be best placed to determine whether what they have implemented is as per the plan;*
- *MADER Planning and Policy Directorate leadership should be scouting for emerging issues affecting agriculture (Climate change, Smart Agriculture, Sustainable Agriculture) so that existing policy document can always be aligned accordingly;*
- *MADER Planning and Policy Directorate leadership to ensure that the linking of policy thrusts to specific indicators is interrogated and signed off before use.*



## Chapter 5

### **5. Support consultations and dialogue on finalization of draft agricultural laws and regulations i.e. phytosanitary law and regulations, seed law and regulations, harmonize seed law to cover plant variety protection and plant breeders' rights.**

On the realization that the documents (Phytosanitary law and regulations, seed law and regulations and the plant variety protection and plant breeders' rights) were in Portuguese, I had to change strategy in my presentation to cover the elements and levers that must be included in these documents in order to enhance their progressiveness and value to Mozambique. I made it very clear to the relevant teams that these elements/levers were meant to serve as a check lists to guarantee robust and progressive documents for the country. The chapters to follow will articulate the specifics.

#### **5.1. Phytosanitary Law**

On the phytosanitary law the presentation (Annex 4) covered an array of important benchmarks and guidelines that should be used as a guide in the finalization of the phytosanitary law which is in the pipeline as follows;

- The Phytosanitary Legislation is a set of basic laws meant to Protect the National Plant Resources from the Spread and Introduction of Pests while facilitating International Trade. This Law is enforced by the National Plant Protection Organization (NPPO). For this law to be useful to Mozambique both regionally and internationally, it should be aligned to the International Plant Protection Convention (IPPC), because Agricultural trade is critical for Mozambique, alignment of the law to the World Trade Organization Sanitary and Phytosanitary (WTO – SPS) Agreement is critical. Fortunately, alignment to IPPC to a large degree is equivalent to alignment to the WTO – SPS Agreement. It is important to note that, the Agreement respects the sovereign rights of any government to provide the level of health protection it deems appropriate, but to ensure that these sovereign rights are not misused and do not result in unnecessary barriers to international trade.
- Functionally the law should protect National Agriculture and other plant resources from harm by insects and diseases while facilitating agricultural trade at the same





time, create the administrative and technical infrastructure necessary for carrying out phytosanitary activities also referred to as the NPPO and define the scale of sanctions and penalties in the event of infringements.

#### **5.1.1. Elements of the Phytosanitary Law**

These elements help to determine the completeness of the law and its progressiveness and they are as follows;

- Phytosanitary surveillance,
- Diagnostics and inspection,
- Inspection & Certification,
- Litigation Powers against infringements,
- Robust and functional import and export of plants and plant products executed by border phytosanitary facilities,
- A functional Plant Quarantine infrastructure.

#### **5.1.2. Development of the Phytosanitary Law**

My presentation on phytosanitary law development and the elements of the law was aligned to the International Plant Protection Convention and the WTO –SPS Agreement and SADC. This way the law development in the country will automatically support agricultural trade nationally, regionally and internationally. The specific areas covered were as follows;

- The definitions of the phytosanitary law and how it is different from the Ministerial Decree and its enforcement by the NPPO;
- Main functions of the phytosanitary law;
- Elements of a good Phytosanitary law pegged on the protection of national agriculture while facilitating trade at the same time;
- The significance of IPPC, WTO – SPS Agreement and the relationship with the NPPO;
- The standards (SPMs) guiding the development of a national phytosanitary law, which are highlighted in the next slide;



In order to guarantee that the phytosanitary law under development meets the key requirement of alignment to the IPPC standards use of the International Standards for Phytosanitary Measure (ISPMs) guidelines is critical. The ISPM guidelines are as follows;

- ▶ [ISPM 2 Framework for pest risk analysis](#)
- ▶ [ISPM 4 Requirements for the establishment of pest free areas](#)
- ▶ [ISPM 6 Surveillance](#)
- ▶ [ISPM 7 Phytosanitary certification system](#)
- ▶ [ISPM 11 Pest risk analysis for quarantine pests](#)
- ▶ [ISPM 17 Pest reporting](#)
- ▶ [ISPM 20 Guidelines for a Phytosanitary import regulatory system](#)
- ▶ [ISPM 23 Guidelines for inspection](#)
- ▶ [ISPM 25 Consignments in transit](#)
- ▶ [ISPM 34 Design and operation of post-entry quarantine stations for plants](#)

## **5.2. Seed Law**

A seed law is an Act of Parliament to confer power to regulate transactions in seeds, including provision for the testing and certification of seeds, the control of the export and import of seeds and establishment of a Tribunal to hear appeals and other proceedings.

The same strategy as in phytosanitary law was deployed here as well. From the initial interactions a confusion between seed law and seed regulations was evident with the seed stakeholders making this assignment useful in my view. The confusion was clarified.

To ensure that the team from NAS are well equipped with key principles and guidelines to develop or improve the ongoing work on the seed law, my presentation (Annex 5), covered the following areas;

- The distinction between Ministerial Decrees and Seed law and why the seed law is the preferred legal tool;



- The elements of a seed law;
- The Provisions of the seed law;

### **5.2.1. Elements of the seed law**

The elements of the seed law as covered were meant to serve as a check list to be used to ensure that in the development of the seed law, no key element is left out. The elements covered were as follows and those in blue, are the Plant Variety Protection and Plant Breeders Rights component of the seed law now harmonized.

- Variety Release System
- Plant Variety Protection System
- *Registration of Seed, Producers, Importers, Exporters, Dealers and Laboratories;*
- *Seed production;*
- *Seed Inspection, Testing and Certification*
- *Seed marketing*
- *Seed Quality Control Mechanisms*
- *Seed Offences & Penalties*
- *The Legal Provisions on False Declarations*
- *Breeders*
- *Species and Genera*
- *National Treatment*
- *Denominations*
- *Conditions of Variety Protection*
- *Breeders' Rights and Exceptions*
- *Requirements for PBR application*



- *Exceptions to the Breeders' Rights*
- *Licensing*
- *Infringement*
- *Cancellation of PBR*
- *Arbitration*

### **5.2.2. The Legal Provisions**

The legal provisions of the law were highlighted accordingly. The provisions allow sale of good quality seed and not deleterious seed, require the registration of seed growers and sellers, disallows sale of diseased seed, ensures seed treatment, prescribes conditions under which seed is sold, allows movement of seed that meets plant health requirements, may prescribe the mode of packaging, may need from growers and sellers' specific responses on production and sale of seed, etc.

### **5.2.3. The Legal Provisions on False Declarations**

The legal provisions on false declarations were also covered. The key one is that any person or institution who includes in a statutory statement anything which is false shall be guilty of an offence punishable by a court of law.

### **5.3. Seed Regulations**

The Comprehensive Seed Regulation (*Ministerial Decree 12/2013*) which was updated in 2013 constitutes the seed regulations in Mozambique. This document is already harmonized with the SADC seed regulation on variety release and registration, seed quality control and certification, and seed import/export requirements.

In my presentation, I made it clear that these regulations are functional as they are, however there is a scope to improve a few clauses here and there.

Further work through USAID Seed Trade Project on the harmonization of these regulations to SADC seed regulations has been undertaken. The consultancy was executed through a series of stakeholders' consultations and the draft report was shared with NAS and their inputs



taken on board. The report has been accepted. This further attests to the effort of alignment of the regulations to the SADC regulations. The regulations from my perspective are good and functional.

### **5.3.1. Seed Regulations Gaps**

*A number of enhancements were presented to the seed stakeholders in order to facilitate, fast-tracking of the suggested improvements as follows;*

- *Article 12 for variety registration considers DUS and 1 Value for Cultivation. To drive farmers' adoption of varieties, include organoleptic/taste traits;*
- *Article 14 focuses on SADC Variety Release and Regulations. For market expansion include COMESA as well;*
- *Article 35 on labels for seed classes according to SADC protocols. In order to access the global market, include according to OECD Seed Schemes as well;*
- *Article 51 on seed export accompaniment by the seed lot certificate from NAS. In order to enhance the seed export outside SADC, this article should read "the seed export will be accompanied by the orange certificate" which appeals across all borders and which can only be issued by an ISTA accredited lab.;*
- *Articles 57 and 61 on fees for provision of service by NAS. Article 61, clause 2 apportions the fees to the state at 40% and NAS at 60%. In order to enhance funding to NAS which is currently inadequate, clause 2 should read "all the fees payable as a result of services by NAS should be payable to the authority".*
- *Article 31 of the Regulation of Protection of New Varieties on the Rights of Plant Breeders' allows for remunerative value/loyalties. In order for this to drive farmer adoption of the variety include and according to the area planted to the variety;*
- *Article 40 on the fees payable to NAS as a result of inspection of plant varieties for DUS and VCU is currently 60% to the state and 40% to NAS. In order to address the operational funding problem of NAS, this should be revised to 100 % to NAS.*



#### **5.4. Inclusion of Plant Variety Protection and Plant Breeders' Rights into the Seed Law**

Plant Variety Protection and Plant Breeders' Rights component is usually part of the seed law. This is why most countries refer to this law as the Seed and Plant Variety Act.

To deliver on this I did a presentation on the Plant Variety Protection and Plant Breeders Rights Law but fully aligned to UPOV (Annex 6). The presentation was meant to act as a benchmark to inform the on-going work on this law. The alignment of this law to UPOV would make it very easy for Mozambique to join the membership to the UPOV convention. It will also integrate the law to regional and global plant variety protection and plant breeder's rights law. The spinoffs out of this are as follows;

- Access of germplasm for business or breeding globally;
- Facilitation of cross border germplasm trade;
- Support of germplasm disputes between parties when they do occur;
- Global recognition and trust on the varieties developed locally.

The specific key features or elements of this law were covered as follows;

##### **5.4.1. Key Provisions of the UPOV Law - 1991 Act**

The key provisions of the law and their meanings (see Annex 6) which have to inform the ongoing development of the Mozambique Plant Varieties Protection and Plant Breeders Rights law were covered are as follows;

- Breeders and varieties
- Genera and species
- National treatment
- Conditions of protection
- Breeder's rights and exceptions

##### **5.4.2. Conditions for Granting Breeders' Rights**

These conditions have been adopted in every country I know including Mozambique but for completeness they were covered as below;

- Novelty;



- Distinctiveness;
- Uniformity;
- Stability;
- Variety Denomination.

#### **5.4.3. Requirements for PBR Application**

These requirements are better included in the law to standardize the process and they are as highlighted below;

- Duly filled application forms;
- Completed Technical Questionnaire;
- Letter of Assignment of Rights by breeder;
- Power of Attorney;
- Detailed colour photograph of variety;
- Application fee.

#### **5.4.4. Exceptions to the Breeders' Rights**

Not all plant breeders' rights are protectable, there are exceptions as follows;

- Use of plants or parts of the protected variety for human consumption or other non-propagating purposes;
- Use of plants or parts of the protected variety for experimental purposes;
- Acts done for the purposes of breeding other varieties;
- Farmers privileged to save and replant seeds harvested from protected variety in their own holdings.

#### **5.4.5. Licensing**

Understanding the clause on licensing is important because licensing is the mechanism through which breeders earn their royalties, the various types of licensing were therefore covered as follows;

- Exclusive licensing which is executed between a breeder and an individual or company;



- Non-exclusive licensing which is executed between a breeder and several people or several companies;
- Compulsory licensing which is given by the state to ensure adequate availability of the variety to farmers for example but the breeder still earns royalties due to him or her.

#### **5.4.6. Infringement**

When infringement is committed, there should be robust evidence to sustain a case in court.

The facts collected to constitute evidence are as follows;

- Variety identity through a descriptor or other associated characteristics;
- Name of the variety;
- Origin of the variety;
- Commercial routes, and
- Quantity of the material involved.

Infringement is prosecutable in court of law if it is proven to be intentional i.e. with the knowledge of the variety.

#### **5.4.7. Cancellation of PBR**

This is important because some breeders can abuse the process. For cancellation to be effected the following must apply;

- The variety did not meet the criteria when the rights were granted;
- The person granted the rights was not entitled to the rights, and the rights have not been subsequently transferred to him or to his successor in title;
- The variety does not meet the protection criteria anymore;
- The rights holder can no longer provide the propagating materials of the variety;
- Failure to pay the prescribed fees to keep the Right in force.





#### 5.4.8. Arbitration

The Seed and Plant Variety Protection Act provides for Plant and Seed Tribunal to determine any dispute arising from PVP.

#### 5.4.9. Recommendations on Seed Law, Phytosanitary Law and Variety Protection and Plant Breeders Law

- *The seed law to include the Plant Varieties Protection and Plant Breeders' Rights component in order to give rise to the **Seed and Plant Varieties Act, 2022**;*
- *NAS to align the seed law to the seed law elements discussed and the current PEDSA document to avoid contradiction of the policy. For example, within the PEDSA document the small holder farmer is given very high prominence and profile while NAS focuses on official regulation of commercial crops such as maize at the expense of the farmer seed systems (FSS) and hence the food security crops (Sorghums, Millets, Legumes, Roots and Tuber crops);*
- *NAS to align the Phytosanitary law development to the IPPC standards which were covered in my presentation in order to foster international agricultural and seed trade;*
- *NAS to align the plant variety protection and plant breeders' rights law to the UPOV convention ACT 1991, in order to enhance global germplasm exchange and foster trade in the process;*
- *Article 31 of the Regulation of Protection of New Varieties and the Rights of Plant Breeders' allows for remunerative value/loyalties. This however cannot be implemented because the NAS does not have the execution of the DUS skills which is a mandatory requirement. These skills however are with the IIAM breeders. To proceed on this NAS and IIAM should develop a memorandum of understanding (MOU) to jointly carry out DUS testing. This is an administrative process which can immediately bring to life the operationalization of the plant breeders' rights law.*

## Chapter 6

### 6. USEBA Restructuring Plan

This assignment was not part of my assignment's TORs but because some consultancy had been undertaken on the business plan and I had also undertaken the assignment on Early Generation Seed in March 2020, we found it logical for me to engage in this restructuring also.

#### 6.1. My USEBA March 2020 Restructuring Report highlights

The production of EGS in Mozambique is under the jurisdiction of IIAM and CGIAR. This process is supported by about 20 breeders and a number of donor funded programs. Although a significant effort (SMEAR, DTMASS, ISSD, FIACC etc.) has gone into the development of EGS in Mozambique the output in terms of sustainability is not quite commensurate to the effort. This is attributable to a number of factors and key ones are highlighted as follows;

- Breeders in both the IIAM and CGIAR are subject matter specialists in breeding. They do not possess the versatile product development, profiling, and differentiation skills which are critical in developing the varieties as commercial products in order to appeal to customers such as seed companies in order for them to invest in their commercialization. This dampens the market pull for the EGS hence its demand;
- Production of breeders' seed and basic seed should be synchronized with the commercial seed demand. In tune with best global EGS production practice this is achieved through forecasting of the volumes needed at each stage of the mini value chain. If this is not spot on as the case in Mozambique, seed companies can make their seed production annual plans and they end up not getting the right quality and volumes of either pre-basic seed or basic seed. These erratic volume variations characterized by oversupply and undersupply makes trust and planning by seed companies difficult hence erosion of the incentive to invest in the USEBA pre-basic or basic seed;
- The capacity of NAS is weak in terms of numbers, vehicles and funding. This capacity is mitigated by private sector providing transport and in some cases per-diems. If the capacity is weak for commercial seed inspection, the situation would be worse for EGS whose inspection protocols and standards are significantly more stringent. This would easily adversely impact the EGS integrity and quality. In fact, seed sector players in



Mozambique alluded to the suspect nature of the quality of EGS in Mozambique (World Bank, 2012);

- EGS production sustainability depends on the market suction created by demand of the commercial seed for which EGS feeds to. Without commercial seed commensurate market demand, EGS production in Mozambique and indeed elsewhere cannot meet the business case threshold so critical for private sector investment. This further compounds the sustainability of this venture. According to a World Bank study the low demand of improved seed in Mozambique is attributable to the fact that smallholder farmers prefer to plant a mix of varieties as a hedge against the failure of a single variety. They also prefer to use their own retained seed, despite reputedly lower yields compared to certified seed, because of its heterogeneity and other farmer attributes. The study further indicates that farmers' main criterion for choosing a variety is not necessarily its biological yield potential. Traditional varieties typically have other attributes that farmers value, such as better storability (associated with resistance to boring insects), drought resistance, or pest/disease resistance in the field (World Bank, 2012). The breeding at IIAM focuses on yield and other agronomic traits such as disease and pest tolerance without commensurate input of the farmer preferred traits including the organoleptic valuations. EGS needs to have a customer appeal which eventually will drive commercial seed appeal and subsequently a demand at the two levels of seed production.

To mitigate the above factors in view of the need for a sustainable EGS production in Mozambique a fully differentiated public private partnership (PPP) EGS model partially modeled on the Qualibasic EGS Company, is proposed. The model proposal has fully taken cognizance of the interventions before such as SEMOC, SEMEAR with CGIAR and IIAM input and it is unique in structure, governance, skills mix and business focus. The levers to make it sustainable are fully articulated as well. The model will still need IIAM, CGIAR, AGRA, USAID and the Mozambique government to succeed. It is recommended that the model will first develop a business case before investment. If the business case is weak which will be the case for most crops, then a mode of funding by government and development partners to a professionally constituted business outfit probably domiciled at the IIAM campus will be the



way to go. The funding levels will be guided by the costs of establishing the company/outfit which will consist of the following;

- A Non- Executive Board consisting of a Chairman with Agriculture background and track record of seed business and 6 board directors consisting of, a Breeder with private sector background, HR, Finance, Monitoring and Evaluation, IT and Engineering professionals;
- A management leadership team led by a General Manager with Agricultural and MBA backgrounds and a track record of having run a successful seed business, a Production Manager with a similar background and a track record of having done a similar job elsewhere, a Processing Manager with Engineering background and a track record of work at a seed processing facility, a finance Manager who is a certified accountant who has worked for an Agricultural Company. A work experience of a minimum of 5 years in the same role to be the minimum requirement in all cases;
- Operations team of 3 breeders for maize, legumes and Root and tuber crops and support workers. The alternative will be to work with IIAM breeders under some honoraria arrangement and not salary;
- An existing or new seed processor with all accessories including packaging and deployment of the existing smaller processors to the regions;
- Existing or new irrigation systems for 4 agro-ecological zones;
- Land big enough to allow crop rotation and isolation to be provided by government as part of the investment to support food security and farmer livelihoods.
- IIAM to provide office and infrastructural operational space

The total cost of the outfit will be determined by an audit to evaluate the assets already in place so that only the additional assets with running costs will be used in the active business case determination. The funding will be 70 % donor support for 6 years and 30% by government for 10 years. The funding ratio will apply for both capital and re-current expenditures. The timelines of 6 and 10 years are meant to allow the company to be profitable in order to fund the business. While the focus of this company will be legumes, sorghums and millets, root and tuber crops, they will run a business stream of high end maize varieties to raise revenue to fund the rest of the crops. The government support is longer because of the



vested interest on national food security and farmer livelihoods. The alternative approach is to competitively source an existing company with the requisite infrastructure and human capacity including breeders and negotiate for a co-investment proposal of government, a donor and the company at 30:40:30 respectively where by the donor effort is for 6 years, government for 10 and the company throughout. The qualifying company must commit to produce or access the best available pre-basic seed to produce basic seed for legumes, sorghums and millets and root and tuber crops alongside the more profitable crops such as maize and soya bean. Once the company is weaned off in 6 and 10 years respectively, it should commit to continue EGS production with the same crop mix. The initial government and donor support/subsidy will be to cater for seed of OPV and clonally propagated crops whose EGS production is hardly profitable and yet the crops are important for food security. This company being allowed to do maize and soya bean seed as a business is eventually to make up for the unprofitability of OPVs and clonally propagated crops.

This model is different from SEMOC because for SEMOC the donor (CIDA) was providing money for seed production for government to give farmers. There was no timely inflow of revenue through sales of seed and so it could not survive after funding stopped. Secondly the SEMOC and farmer interface was lacking because they had no networks with their customers as they served farmers through the government. Thirdly the leadership and operational teams did not have the right skills mix (technical and business). Seed co which bought SEMOC did not make money because there was no company/customer connection to capitalize on.

## **6.2. USEBA 2021 Restructuring Business Plan – Key Outcomes**

In this plan the organizational structure has not changed much but in my recommendations I had the management team reporting to the board and I clearly defined the skills mix for the board members and the management team. The business plan outcomes however are as follows;

- The General Manager reports to the DG IIAM;
- No Board of Management;
- It is still a government outfit with predominantly agricultural and plant breeding skills;
- It is still not anchored on any law to empower the outfit as a business enterprise;



Although this operation needs both technical and business skills, unfortunately the business skills are critically still lacking and still impacting the operations adversely. For example, the demand for the basic seed is still very weak. This year's basic seed has not been sold because USEBA demanded payment upfront. This cannot be a strong enough reason because an appealing product/variety will be bought anyway if customers understand the product commercial value. This calls for business skills which are lacking.

### **6.3. The Business Plan – Key Highlights**

It is important to note that this business plan has taken on board or proposed an organizational Plan which still has a public sector demeanor and character with the following highlights;

- For profitability and sustainability, USEBA has to produce both pre-basic and basic seed. This is further supported by the fact that if USEBA focuses on Pre-basic seed only, there will be no basic seed for the food security crops in Mozambique because these crops are not commercially attractive to private sector;
- The profitability model is based on predetermined volumes of basic seed per region. The problem with this is that these volumes are not based on baseline data and hence they could be too ambitious and hence unachievable and this can jeopardize the profitability and hence sustainability agenda;
- In the business case development, the current assets particularly land and infrastructure were not computed but a nominal value was considered for the computation. This might have been based on the TORs but it is not the best practice;
- As in the plan, USEBA is still a government outfit with predominantly agricultural and plant breeding skills;
- Seed production especially EGS, requires both technical and business skills. The business skills however are critically lacking;
- The investment value to operationalize USEBA is 7,9 million USDs for two sites. This will automatically call for phasing out the project implementation.



### **6.3. Proposed USEBA Recommendations while awaiting the operationalization of Restructuring, Business Plan and Legal Anchorage of the outfit**

*The key personnel to undergo internship with a regional or international seed company for re-tooling in a number of lacking seed business skills as follows;*

- *Seed demand forecasting variety by variety along the respective crops quality seed value chain in order to determine, the volume of breeders' seed to feed to basic seed and finally commercial seed to avoid undersupply or oversupply;*
- *Forward planning in order to develop overlapping volumes of the seed classes which are time phased because seed is a biological product requiring a number of seasons to develop the right volumes of the seed class feeding to the next class. It is not uncommon to start the production of breeders' seed for basic seed two years earlier. In practice therefore the forward planning should be short to medium (2 to 3 years) term;*
- *Product/Variety Development and Profiling according to the requirements of the market with full knowledge that people eat with the mouth, eyes and nose, making farmer attributes like taste, mouth feel, color and aroma critical. The food has to look good, taste well and smell well;*
- *Product/Variety differentiation to enhance customer appeal;*
- *Back of the envelope profitability figures to help customers make a commercial decision.*



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## Chapter 7

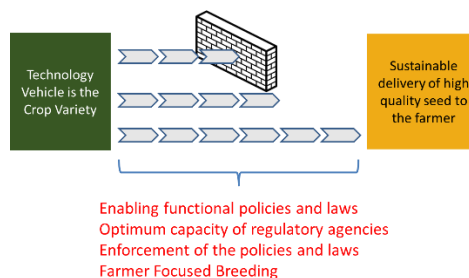
### 7. Annexes

#### Annex 1 - Support of agricultural and seed policy development, implementation strategy, analysis, and monitoring in Mozambique

##### Agricultural & Seed Policy

- The policy is essentially a ‘declaration of intent’ by the government on how it wishes the agricultural and/or the seed sector to develop. It is a national strategic aspiration or aspirations on the future of agriculture and seed sectors in a country;
- The policy document is meant to be a strategic road map or blue print for the agricultural and seed sectors;
- The policy document is as useful as its progressiveness, relevance and its contemporary nature;
- The policy document can be facilitative/progressive or retrogressive see the next slide on the seed policy as an example.
- Mozambique is not developing an agricultural or seed policy from scratch, it already has the Strategic Plan for Development of the Agricultural Sector (PEDSA).

##### Seed Policy Impact on seed sector



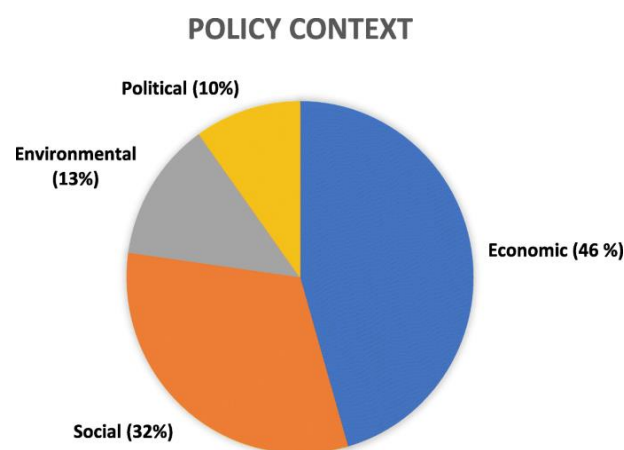
##### Policy Development Process

- The Formation of key stakeholders (agriculture and seed) to constitute the policy team;
- A thorough assessment of the current status of the relevant technical, operational, trade and institutional aspects of the agricultural and seed sectors;

- A careful problem analysis to determine the need for an agricultural and seed policy through the participatory/consultative policy formulation process;
- Establishment of policy levers/options that if implemented will fulfil the aspirations of all the stakeholders;
- Collation of the options into a draft policy document;
- Holding of a stakeholders' validation workshop;
- Drafting of the National agricultural and seed policy after validation;
- Approval and adoption of the National Agricultural and Seed Policy;
- Raising awareness to facilitate implementation;

### Policy Context

- Policy formulation is influenced by economic, social, environmental and political contexts as indicated below;



### Policy implementation strategy support,

- Identification of institutions or an institution or a department best suited in terms of capacity and technical skills to implement the policies such as the policy Directorate at MADER for agricultural policy and the National Seed Authority (NAS) for the seed policy;
- Capacity building to identify aspects of the policy that are critical in the development of agriculture and the seed sectors and capturing the aspects of the policy in the institutional strategic plan and annual work plans;
- Capacity building to break down the strategic thrusts into milestones;
- Capacity building to break down the milestones into activities;

- Capacity to break the activities into SMART targets for the relevant institutional staff and subjecting these to the institutional monitoring and evaluation processes.

#### **Policy implementation Challenges,**

- gaps in financial and human resources;
- difficulty coordinating across implementing agencies;
- interference or opposition from powerful interest groups;
- frontline implementers may reinterpret policies and exercise discretion in ways that deviate from original policy designs;
- fragmented governance that leads to inconsistent implementation of policies conceived at the national level;
- lack of capacity in key agencies to carry out key operational steps;
- most National Agriculture Investment Plans are too ambitious;
- moreover, poorly coordinated donor assistance in the agriculture sector can lead to incoherent implementation.

#### **Policy Analysis Support**

- This is applicable to pre-policy documents like PEDSA where the objective is to identify current gaps and challenges for mitigation or opportunities for leveraging. The process is as below;
  - Identification of the gaps in the technical, business, institutional and legal components of the agricultural or seed processes;
  - Determination of the policy levers to mitigate the gaps and challenges;
  - Interrogation of the applicable policy levers in order to determine whether they are adequately aligned and supportive of the National strategic aspirations;
  - Revising the existing pre-policy or policy document to address the gaps and challenges while leveraging on the opportunities.
- Policy analysis can also apply to policy research where policy data collection and analysis is carried out to determine the effectiveness of the policy implementation.

#### **Policy monitoring and evaluation**

- Generally speaking, policy monitoring and evaluation should measure the extent to which policies adapt to growth, resilience and sustainability needs of a country. The monitoring



is supported better by prior determination of indicators for various policy thrusts. A few examples of policy thrusts will illustrate the principle better as follows;

- Main streaming of the farmers seed systems and the Mozambique food security crops – the measurable policy success factors will be the deployment of Quality Declared Seed (QDS) by the National Seed Authority to farmers as this quality assurance mechanism is farmer centered, the volume of seed of food security crops which is a product of QDS, the yield enhancement of the specific crops compared with baseline when adjusted for area expansion etc.
- Enhancement of transboundary seed trade – the measurable policy success factors will include, the domestication of SADC seed regulations, the ISTA accreditation of the National Seed Authority laboratories, the volume of seed sold outside Mozambique compared with the baseline adjusted for area increase etc.
- Positioning horticulture for export market – the measurable success factors will include, the ratification of the International Plant Protection Convention (IPPC) and the WTO – SPS Agreement, aligning the National Phytosanitary law to the IPPC trade standards, the volume of horticultural exports from Mozambique etc.

### **Policy Evaluation Support**

- Introduction of the concept of performance management which follows the scaling down of policy/strategic thrusts to milestones, activities and targets;
- Introduction of a dash board/traffic lights concept (Green, yellow, red and blue);
- Implementation of policy through an institutional or departmental framework;
- The measurable attribute is not the policy *per se* but the spinoff benefits arising from the policy implementation or the indicators of various policy thrusts. For example, aligning the seed regulations to the RECs as policy, the success factor will be the volume of regional seed trade.



## Annex 2 - Agricultural Policy Drafting - Best Practice

### ► Policy and other Legal Instruments & Relationships

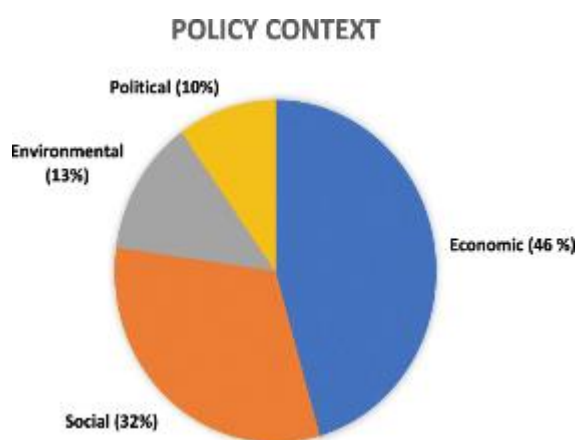
- ❖ A Policy is the mother of all other legal or pseudo-legal instruments;
- ❖ The law is the legal execution and enforcement mechanism of the policy;
- ❖ Regulations are the operational execution mechanism of the law;
- ❖ Standards and SOPs as the Regulation Benchmarks;
- ❖ None of these instruments should contradict each o.

### ► The Policy Document

- ❖ The content of the agricultural policy document should be concise, to the point and action-oriented, with a logical and coherent structure;
- ❖ In drafting the policy, important factors must be taken into account in order to communicate effectively with the intended users of the document:

### ► Policy Context

- ❖ Policy formulation is influenced by economic, social, environmental and political contexts as indicated below;



### ► General Characteristics of the Policy

- ❖ The general characteristics, including style, the use of language, construction of sentences, coherence and clarity of expression.

### ► Specific Characteristics

- ❖ The document must be easy to read and interpret, so use a plain language;

- ❖ The text should be clear and concise, making use of “every day” words as far as possible and avoiding ambiguity. The use of language should be consistent. In other words, it should be effectively communicated;
- ❖ Use appropriate words and phrases. Make it clear whether provisions in the policy are mandatory or discretionary by using the words “must” or “may”; use gender-neutral language, for example: “chairperson” rather than “chairman”; and do not include information (e.g., specific names or titles) that may become quickly outdated;
- ❖ Use authoritative language: Policy statements should reflect authoritative and clear positions of the government in all matters regarding the sector. Therefore, use affirmative phrases such as “the Government believes that” and “the Government recognizes that”;
- ❖ Take a practical approach: Policy statements should be practical and realistic, and reflect strong intentions and commitments on the part of the government. In this case, the members of the drafting task force should also maintain close contacts with relevant government authorities and other stakeholders in order to seek clarifications of official positions on specific issues.

► **Policy Structure**

- ❖ **A forward** - Outlines the aims of the policy and expresses clearly the commitment of the government to ensuring its implementation. It should be signed by the Minister of Agriculture to it the profile and weight;
- ❖ **Introduction** - Provides an overview of the current seed sector status and why the new policy is needed to improve it, how the policy was developed and the links between the agricultural policy and broader national policies such as environment, trade, finance, economic development etc.
- ❖ **Context** – Puts the policy in perspective such as its links with the rest of the related sectors or industries with the objective of fostering Agricultural Transformation
- ❖ **Objectives** – Articulate why the policy and defines the role of the sector in achieving the overall goals of the government in agriculture and in economic and social development;



- ❖ **Scope and Strategy** – This defines the boundaries of the seed policy and how the policy relates to other issues in related sectors. Within the scope of the policy, strategies should be developed to achieve the specified policy objectives.
  - ❖ **Administration of the Policy** - The administration and monitoring of the policy should be assigned to a body such as the National Directorate of Planning and Policy with the responsibility to implement and review the policy. This responsibility should be explained in the policy as well;
  - ❖ **Elements of the Policy** - These are sections on all areas of the sector having significant policy dimensions such as agricultural extension. Research and Development, data management and retrieval, smart agriculture, emerging issues, crop production, animal production etc. The key elements are the actual building blocks of the policy document and cover all the pertinent technical issues. These should be presented in sections or sub-sections with clearly defined headings and arranged in logical order. Each key element should be introduced with a short statement describing its current status and the government’s overall position regarding related issues. This should be followed by an explanation of the main options and strategies adopted by the government, and the expected outcome.
  - ❖ **Implementation of the Policy** - The implementing authority should be specified in the Policy document. The authority should also be in charge of monitoring and evaluation. Aspects related to resources and facilities for implementation also need to be described and estimated.
  - ❖ **Effective date of entry into force** - It should be clear when the policy will come into force.
  - ❖ **Revision and updating of the policy** – The Policy is a living and dynamic document and so periodic reviews in order to align it to the prevailing circumstances is critical.
- ▶ **Key Elements of the Policy**
- ❖ High quality crop and animal seed (Embryos, Semen, Bulls);
  - ❖ Crop and Animal Production;
  - ❖ The role of small holder farmers in Agriculture and farmer livelihoods;
  - ❖ Agricultural Extension;





- ❖ Agricultural Produce Distribution and Marketing;
- ❖ Agricultural Import and Export;
- ❖ Agricultural Enterprise Development;
- ❖ Agricultural Value Chains;
- ❖ Food and Nutrition Security;
- ❖ Capacity Building;
- ❖ Agricultural Legislation/Law;
- ❖ Sustainable Agriculture;
- ❖ Smart Agriculture;
- ❖ Climate Change Impact Mitigation;
- ❖ Institutional Development;
- ❖ Food Safety;
- ❖ Biosafety;
- ❖ Commercial Crops Development;
- ❖ Food security Crops Development;
- ❖ Other Related Legal Instruments such as international Agricultural conventions (WTO, ILO, IPPC etc.)

### **Annex 3 - Drafting Seed Policy - Best Practice**

#### **▶ The Policy Document**

- ❖ The content of a seed policy document should be concise, to the point and action-oriented, with a logical and coherent structure;
- ❖ In drafting a seed policy, important factors must be taken into account in order to communicate effectively with the intended users of the document.

#### **▶ General Characteristics of the Policy**

- ❖ General characteristics, including style, the use of language, construction of sentences, coherence and clarity of expression;

#### **▶ Specific Characteristics**

- ❖ The document must be easy to read and interpret, so use a plain language;
- ❖ The text should be clear and concise, making use of “every day” words as far as possible and avoiding ambiguity. The use of language should be consistent. In other words, it should be effectively communicated;



- ❖ Use appropriate words and phrases. Make it clear whether provisions in the policy are mandatory or discretionary by using the words “must” or “may”; use gender-neutral language, for example: “chairperson” rather than “chairman”; and do not include information (e.g., specific names or titles) that may become quickly outdated;
- ❖ Use authoritative language: Seed policy statements should reflect authoritative and clear positions of the government in all matters regarding the seed sector. Therefore, use affirmative phrases such as “the Government believes that” and “the Government recognizes that”;
- ❖ Take a practical approach: Seed policy statements should be practical and realistic, and reflect strong intentions and commitments on the part of the government. In this case, the members of the drafting task force should also maintain close contacts with relevant government authorities and other stakeholders in order to seek clarifications of official positions on specific issues.

#### ► **Policy Structure**

- ❖ **A forward** - Outlines the aims of the policy and expresses clearly the commitment of the government to ensuring its implementation. It should be signed by the Minister of Agriculture to give it the profile and weight;
- ❖ **Introduction** - Provides an overview of the current seed sector status and why the new policy is needed to improve it, how the policy was developed and the links between the seed policy and broader national policies for agriculture e.g. food security, farmer livelihood & GDP growth;
- ❖ **Context** – Puts the policy in perspective such as its links with the rest of the Agricultural industry and its role in fostering Agricultural Transformation;
- ❖ **Objectives** – Articulate why the policy and defines the role of the seed sector in achieving the overall goals of the government in agriculture and in economic and social development;
- ❖ **Scope and Strategy** – This defines the boundaries of the seed policy and how the policy relates to other issues in the agriculture sector. Within the scope of the policy, strategies should be developed to achieve the specified policy objectives;



- ❖ **Administration of the Policy** - The administration and monitoring of the policy should be assigned to a body such as the National Seed Authority with the responsibility to implement and review the policy. This responsibility should be explained in the policy as well;
- ❖ **Elements of the Policy** - These are sections on all areas of the seed sector having significant policy dimensions. The key elements are the actual building blocks of the seed policy document and cover all the pertinent technical issues. These should be presented in sections or sub-sections with clearly defined headings and arranged in logical order. Each key element should be introduced with a short statement describing its current status and the government's overall position regarding related issues. This should be followed by an explanation of the main options and strategies adopted by the government, and the expected outcome;
- ❖ **Implementation of the Policy** - The implementing authority should be specified in the Policy document. The authority should also be in charge of monitoring and evaluation. Aspects related to resources and facilities for implementation also need to be described and estimated;
- ❖ **Effective date of entry into force** - It should be clear when the policy will come into force;
- ❖ **Revision and updating of the policy** – The Policy is a living and dynamic document and so periodic reviews in order to align it to the prevailing circumstances is critical.

▶ **Key Elements of the Seed Policy**

- ❖ Crop Variety Development;
- ❖ Seed Production (EGS and Commercial Seed);
- ❖ Seed Quality Assurance;
- ❖ Agricultural Extension;
- ❖ Seed Distribution and Marketing;
- ❖ Seed Import and Export;
- ❖ Seed Enterprise Development;
- ❖ Seed Value Chain;
- ❖ Seed Security;



- ❖ Capacity Building;
- ❖ Seed Legislation/ Seed Law;
- ❖ Other Related Legal Instruments such as international seed conventions

#### **Annex 4 - Seed Law Development, Elements and Regulations**

##### **What is A Seed Law?**

- ❖ It is an Act of Parliament to confer power to regulate transactions in seeds, including provision for the testing and certification of seeds, the control of the export and import of seeds and establishment of a Tribunal to hear appeals and other proceedings.

##### **Key Elements**

- ❖ Preliminaries e.g title and interpretations and definitions of terms used;
- ❖ Development of the Administrative Authority;
  - (a) Functions & Powers;
  - (b) Organizational Structure & Governance;
  - (c) Operational Structure;
  - (d) Mode of funding.
- ❖ Variety Release System;
  - (a) Formation of the variety release committee;
  - (b) Composition of the Committee;
  - (c) Functions and Powers of the Committee;
  - (d) Development and Management of the Plant Variety Catalogue.
- ❖ Plant Variety Protection System;
  - (a) Formation of the plant variety protection committee;
  - (b) Composition of the Committee;
  - (c) Functions and Powers of the Committee;
  - (d) Development and Management of the Plant Variety Catalogue;
  - (e) Grant of Plant Breeders' Rights
- ❖ Registration of Seed Importers, Exporters, Producers, Dealers and Laboratories  
This responsibility will be executed by the National Seed Authority in consultation with the competent National Plant Protection Organization (NPPO).
- ❖ Seed Certification



- (a) The certification shall include all classes of seed (breeders to commercial seed) according to specified standards;
  - (b) Field inspection and laboratory testing;
  - (c) Post control tests as a quality control mechanism;
  - (d) Authorization of third party seed inspection & testing;
  - (e) Sampling, testing and issuance of results;
  - (f) Processing, Packaging and Labeling of certified seed.
- ❖ Seed production and marketing
- (a) All classes of seed shall be produced and marketed according to specified standards;
  - (b) Marketing of seed to include registered varieties and improved seed through the farmer seed systems;
  - (c) Post control tests as a quality control mechanism;
  - (d) Authorization of third party seed inspection & testing;
  - (e) Sampling and testing;
  - (f) Processing, Packaging and Labeling of certified seed.
- ❖ Seed Quality Control Mechanisms
- (a) Seed inspection & certification, self-regulation, third party authorizations, QDS, truthful labelling;
  - (b) Seed Inspectors to inspect all activities in the seed value chain from breeders' seed to agro-dealers;
  - (c) If an Inspector has reasonable grounds that any of the provisions or regulations of the law have been violated, may seize, cause to be removed or stop sale of the seeds in question.
- ❖ Seed Offences & Penalties
- (a) Any person who contravenes any legal provision along the seed value chain and its regulations commits an offence and shall be liable to conviction to a fine. The respective offences and fines need to be stated in the law;
  - (b) Any person or legal entity that feels aggrieved by any decisions taken by the authority in the terms of the law, may appeal the said decision in accordance with



the appeal procedure established on the regulations of the law and to the court of law.

## **Annex 5 - Phytosanitary Law, Elements and Development**

### **The Phytosanitary Law**

- ❖ The Phytosanitary Legislation is a set of basic laws meant to Protect the National Plant Resources from the Spread and Introduction of Pests while facilitating regional and International Trade;
- ❖ This Law is enforced by the National Plant Protection Organization (NPPO) or the national competent authority executing the phytosanitary mandate.

### **The International Plant Protection Convention (IPPC)**

- ❖ The IPPC's aim is to protect the world's plant resources from the spread and introduction of pests while promoting safe trade;
- ❖ It is the repository of Phytosanitary Measures or Standards for the Contracting Parties;
- ❖ It has the guidance necessary for countries to use in order to align their national legislation to the international legislation.

### **Main Functions of the Phytosanitary Law**

- ❖ To tackle the problems posed by pests (local, national or international);
- ❖ To enable countries to protect their agricultural resources and natural environment from the introduction or spread of pests;
- ❖ To facilitate safe transboundary agricultural trade;
- ❖ To make it possible to create, at the national level, the administrative and technical infrastructure necessary for carrying out phytosanitary mandates;
- ❖ To define the scale of sanctions and penalties in the event of infringements.

### **Elements of a good Phytosanitary Law**

Generally speaking, a good phytosanitary law should facilitate international trade while protecting the National Agriculture and therefore the following elements are critical;

- ❖ Phytosanitary surveillance,



- ❖ Diagnostics and inspection,
- ❖ Inspection & Certification,
- ❖ Litigation Powers,
- ❖ Robust and functional import and export of plants and plant products executed by border phytosanitary facilities,
- ❖ A functional Plant Quarantine infrastructure.

### **Development of Phytosanitary law**

The development of the phytosanitary law should be guided by the following standards/ISPMs

- ❖ ISPM 2 Framework for pest risk analysis
- ❖ ISPM 4 Requirements for the establishment of pest free areas
- ❖ ISPM 6 Surveillance
- ❖ ISPM 7 Phytosanitary certification system
- ❖ ISPM 11 Pest risk analysis for quarantine pests
- ❖ ISPM 17 Pest reporting
- ❖ ISPM 20 Guidelines for a Phytosanitary import regulatory system
- ❖ ISPM 23 Guidelines for inspection
- ❖ ISPM 25 Consignments in transit
- ❖ ISPM 34 Design and operation of post-entry quarantine stations for plants.

### **Phytosanitary Capacity Evaluation (PCE)**

- ❖ The PCE as a management tool which helps to recognize whether the existing legal and regulatory framework for phytosanitary activities is sufficient and what are the major gaps in the current national framework of Phytosanitary Law/Act, regulations and standards;
- ❖ It is an experience based tool;
- ❖ In this consultancy/support system, we will use the tool, to help identify both strengths and gaps in the existing Mozambique phytosanitary systems in order to determine the missing phytosanitary elements so that the new phytosanitary law is more robust and aligned to the IPPC or the WTO – SPS Agreement.



## **The WTO SPS Agreement**

- ❖ Because Agricultural trade is a critical for Mozambique, alignment of the phytosanitary law to this agreement is strategically important. By taking the guidance of the IPPC in the development of the phytosanitary law, a country is already aligned to the WTO SPS Agreement to a large degree (WTO, website, 2021);
- ❖ The Agreement sets out the basic rules for food safety and animal and plant health standards. It allows countries to set their own standards so long as the process is science based. The rules should be applied only to the extent necessary to protect human, animal or plant life or health. And they should not arbitrarily or unjustifiably discriminate between countries where identical or similar conditions prevail;
- ❖ The Agreement respects the sovereign right of any government to provide the level of health protection it deems appropriate, but to ensure that these sovereign rights are not misused and do not result in unnecessary barriers to international trade.

## **The National Plant Protection Organization (NPPO)**

- ❖ The NPPO is the official competent authority for plant protection systems and it is one of the key obligations for contracting parties of IPPC;
- ❖ The establishment or update of an NPPO by each contracting party is a major step towards international cooperation to prevent the introduction and spread of plant pests (IPPC, 2015);
- ❖ The Phytosanitary law in Mozambique should therefore provide for the formation or the development of the Mozambique NPPO modeled on KEPHIS in Kenya for example.

## **Annex 6 - Plant Variety Protection and Plant Breeders Rights law aligned to UPOV**

### **Introduction of UPOV**

- ❖ UPOV is an Independent Science based Intergovernmental Organization with the mandate of Plant Variety Protection

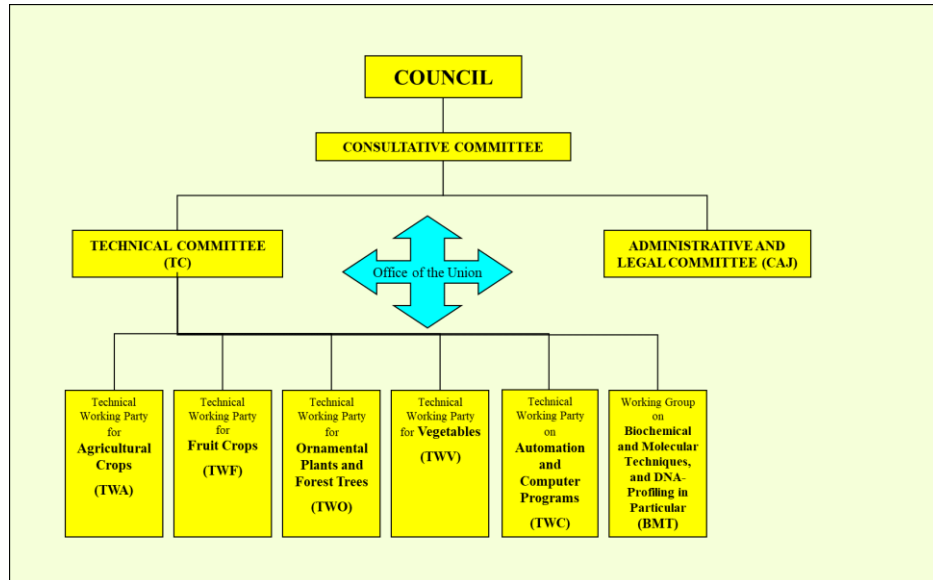
### **UPOV Mission Statement**





- ❖ “To provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society”

### UPOV Organizational Structure



### Some Key Provisions of the 1991 UPOV Act

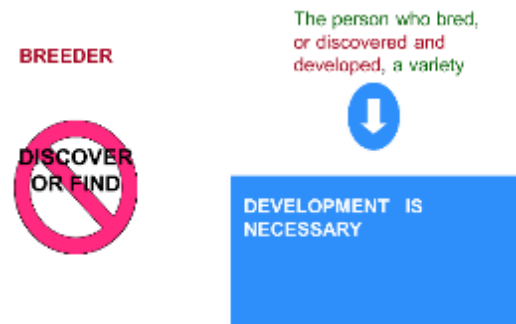
- Breeders and varieties
- Genera and species
- National treatment
- Conditions of protection
- Breeder’s right and exceptions

### Breeders and Varieties

- ❖ **A Breeder** - is the person who bred or discovered and developed a variety or his employer or the one entitled to protection as illustrated below



- ❖ **A breeder** - is also the commissioned person through contractual law if available or - the successor in title of the first or second aforementioned person. As illustrated below development is critical



- ❖ **A variety** - is a group of plants within a species which have certain characteristics some of which are utilisable by growers while others help to identify the variety as illustrated below;



- ❖ **Genera and Species to be protected in case new members according to the UPOV Act** 1991

- (a) At least 15 plant genera or species on becoming bound by the UPOV Convention
- (b) ALL plant genera and species within 10 years

- ❖ **National Treatment**

- (a) National treatment means equal treatment of all plant variety players within the territory of a member of the Union.



(b) No discrimination on the basis of race, nationality or creed.

❖ **Conditions for granting a Breeder's Rights**

(f) Novelty

(g) DUS

(h) Variety Denomination

(i) Formalities such as application on official form and duly filled

(j) Payment of fees due

❖ **Novelty** - The variety shall be deemed to be new and not having been given out for commercial within and outside the territory of protection.

(a) For within territory – Not having been commercialized for 1 year.

(b) For outside the territory - Not having been commercialized for 4 years and 6 years for trees and vines.

❖ **Determination of Novelty** - this is determined through examination using data or information given by a breeder on a specified and official form which has to be developed by the competent authority.

❖ **The Distinctness, Uniformity and Stability criteria** - this is as illustrated below;

**DISTINCTNESS**

Apple: Fruit color

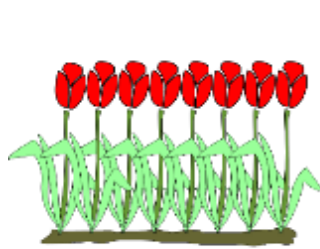


Apple: Flower bud color

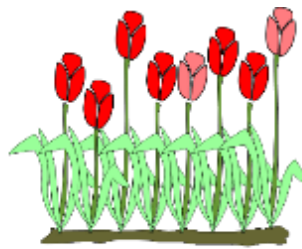


**UNIFORMITY**



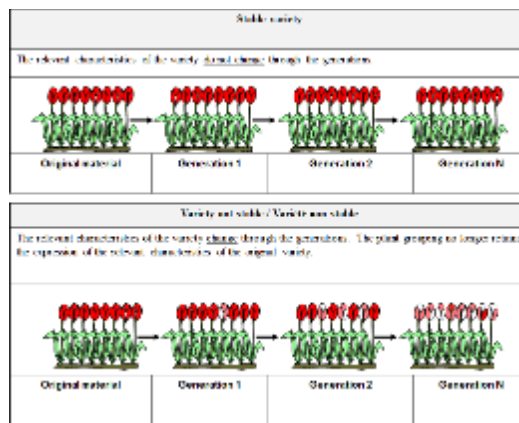


A uniform variety



A variety lacking uniformity

## STABILITY



- ❖ **Denomination** – is the naming of a variety. It must **enable the variety to be identified and it must be used** when offering a variety **for sale or marketing propagating material** of the variety. It is preferred that **same denomination is used in all UPOV members**, unless unsuitable due to unique country circumstances. It may not consist of numbers only except where it is established practice for designating varieties. This and other requirements are illustrated by the slides below;



## CONDITIONS FOR GRANTING A BREEDER'S RIGHT

### DENOMINATION

It **may not consist solely of figures ...**

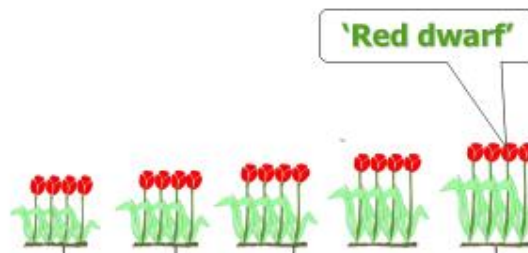
Variety: '~~137~~'

**... except where this is an established practice for designating varieties**

## CONDITIONS FOR GRANTING A BREEDER'S RIGHT

### ► *Characteristics of the denomination*

It **must not be liable to mislead or to cause confusion** concerning the characteristics, value or identity of the variety or the identity of the breeder.



## CONDITIONS FOR GRANTING A BREEDER'S RIGHT

### *Characteristics of the denomination*

In particular, it **must be different from every denomination** which designates, in the territory of any Contracting Party, **an existing variety** of the same plant species or of a closely related species.



### ❖ Requirements for PBR application

1. Duly filled application form
2. Completed Technical Questionnaire
3. Letter of Assignment of Rights by breeder
4. Power of Attorney
5. Detailed Colour photograph of variety
6. Application fee (200 USD)

### ❖ PBR Application Processing

1. Application gazettelement
2. Submission of objections (within 60 days)



3. Objections presented before tribunal
4. Apply for protective direction
5. DUS tests – 2 seasons
6. Takeover of DUS test results (UPOV members)
7. Grant determination
8. Grant maintenance

**Duration of Protection** - this has to be counted from the date of grant

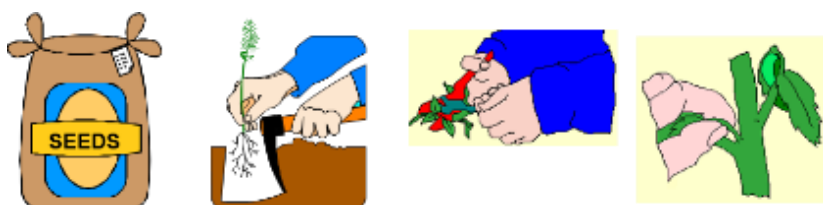
1. Trees and vines                      25 years
2. Other Plants                         20 years

**Authorization of breeder required for the following processes;**

- (1) Production or reproduction (multiplication)
- (2) Conditioning for the purpose of propagation
- (3) Offering for sale
- (4) Selling or marketing
- (5) Exporting
- (6) Importing
- (7) Stocking for any of the above purposes

**Materials Covered** – as illustrated below

**All propagating material**



**Harvested material under certain conditions**

- **Materials Covered – Harvested Material as illustrated below;**





- If obtained through **unauthorized use** of propagating material **unless**, reasonable **opportunity** for breeder to **exercise his right**

### Varieties Covered

- **not** clearly **distinguishable** from the protected variety
- whose production **requires the repeated use** of the protected variety  
*e.g. hybrids*
- which are **essentially derived** from the protected variety

### Exceptions to the Breeder's Rights

- ▶ **Use of plants or parts of the protected variety for human consumption or other non-propagating purposes**
- ▶ **Use of plants or parts of the protected variety for experimental purposes**
- ▶ **Acts done for the purposes of breeding other varieties**
- ▶ **Farmers privileged to save and replant seeds harvested from protected variety in their own holdings**

**Exploitation of Varieties** – See details in the slides below;

- **Exclusive**
- **Licensing**





## Exclusive licensing

- PBR holder licences one individual/company to exploit the protected variety
- The licensee pays royalties to the grant holder
- Grant holder still retains all rights over the variety

## Non-exclusive licensing

- PBR holder licences several individuals/companies to exploit the protected variety
- The licensees pay royalties to the grant holder
- Grant holder still retains all rights over the variety

## Compulsory Licensing

- Given by the state to ensure adequate availability of protected variety
- Can be given under special circumstances e.g. drought, famine
- PBR holder retains the rights over the variety and receives royalty from exploitation of the variety

### Infringement

- Refers to unauthorized exploitation of protected variety
- Adequate evidence is required to establish PBR infringement
- Actioned through criminal or civil prosecution

### Evidence for infringement

Facts collected on suspect material to establish infringement:

1. Identity/characteristics
2. Name
3. Origin
4. Commercial routes, and
5. Quantity of the material involved

### Actions against infringement

- *Unintentional infringement*: Infringer unaware and had no adequate grounds to be aware of the PBR subsisting in the variety



- Ordered to stop his infringing activities
- Advised to seek authorization to exploit the protected variety from the rights holder
- *Intentional infringement*: infringer aware or had sufficient grounds to be aware of the PBR subsisting in the variety
- PBR holder may institute civil suit or criminal prosecution against infringer seeking compensation for the damages

#### **Actions against convicted infringer**

1. Permanent interdiction restraining the infringer from conducting his infringing activities anymore
2. Payment of damages adequate to compensate the rights holder for the injury suffered
3. Removal of all the offending plants or parts of the variety held by the infringer from his possession
4. Any combinations of 1 to 3 above

#### **Cancellation of PBR**

- The variety did not meet the criteria when the rights were granted
- The person granted the rights was not entitled to the rights, and the rights have not been subsequently transferred to him or to his successor in title
- The variety does not meet the protection criteria any more
- The rights holder can no longer provide the propagating materials of the variety
- Failure to pay the prescribed fees to keep the Right in force

#### **Plant Breeder's Rights Enforcement**

- The enforcement of rights is by the owner of the rights
- The Act has provision for the Plant Breeder whose rights are infringed to seek remedy in the courts of law by means of damages, injunction, account or otherwise



- The Act also provides for Plant and Seed Tribunal to determine any dispute arising from PVP

#### **PBR Fee schedule**

1. **Determined at Country level;**
2. Varies from Country to Country.





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