CONSUMPTION OF RESILIENT ORPHAN CROPS & PRODUCTS FOR HEALTHIER DIETS
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACRONYMS AND ABBREVIATIONS</td>
<td>4</td>
</tr>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>5</td>
</tr>
<tr>
<td>1.0 INTRODUCTION</td>
<td>6</td>
</tr>
<tr>
<td>2.0 FRAMEWORK OF ANALYSIS</td>
<td>8</td>
</tr>
<tr>
<td>3.0 STUDY PURPOSE AND METHODOLOGY</td>
<td>10</td>
</tr>
<tr>
<td>3.1 Purpose of the Study</td>
<td>10</td>
</tr>
<tr>
<td>3.2 Methodology</td>
<td>10</td>
</tr>
<tr>
<td>4.0 SEED SYSTEMS IN TANZANIA</td>
<td>11</td>
</tr>
<tr>
<td>5.0 SEED POLICY AND REGULATORY FRAMEWORK: THE STATE OF PLAY</td>
<td>13</td>
</tr>
<tr>
<td>5.1 Introduction</td>
<td>13</td>
</tr>
<tr>
<td>5.2 The Seed Regulatory Framework in Tanzania: Origin &amp; Development</td>
<td>13</td>
</tr>
<tr>
<td>5.3 Implications of the Legal Framework to FMSS</td>
<td>15</td>
</tr>
<tr>
<td>6.0 REGIONAL HARMONISATION OF THE LEGAL FRAMEWORK IN SEED SECTOR</td>
<td>17</td>
</tr>
<tr>
<td>6.1 The Objectives of Harmonisation</td>
<td>17</td>
</tr>
<tr>
<td>6.2 Challenges of Harmonisation to the Farmer Managed Seed System</td>
<td>18</td>
</tr>
<tr>
<td>7.0 ACTORS AND THE POLITICS OF SEEDS</td>
<td>20</td>
</tr>
<tr>
<td>7.1 Introduction</td>
<td>20</td>
</tr>
<tr>
<td>7.2 Advocates of the Formal Seed Sector</td>
<td>20</td>
</tr>
<tr>
<td>7.3 Advocates of FMSS and Potential Platforms</td>
<td>21</td>
</tr>
<tr>
<td>7.4 Key Departments and their Services in the Formal Seed Sector</td>
<td>22</td>
</tr>
<tr>
<td>8.0 CONCLUSIONS AND RECOMMENDATIONS</td>
<td>24</td>
</tr>
<tr>
<td>8.1 Conclusions</td>
<td>25</td>
</tr>
<tr>
<td>8.2 Recommendations</td>
<td>26</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>25</td>
</tr>
</tbody>
</table>
# ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACB</td>
<td>African Centre for Biodiversity</td>
</tr>
<tr>
<td>AFSA</td>
<td>Alliance for Food Sovereignty in Africa</td>
</tr>
<tr>
<td>AGRA</td>
<td>Alliance for Green Revolution in Africa</td>
</tr>
<tr>
<td>ARI</td>
<td>Agricultural Research Institute</td>
</tr>
<tr>
<td>ASARECA</td>
<td>Association for Strengthening Research in East and Central Africa</td>
</tr>
<tr>
<td>BMGF</td>
<td>Bill &amp; Melinda Gates Foundation</td>
</tr>
<tr>
<td>CBD</td>
<td>Convention on Biological Diversity</td>
</tr>
<tr>
<td>CSOs</td>
<td>Civil Society Organizations</td>
</tr>
<tr>
<td>DUS</td>
<td>Distinctness, Uniformity and Stability</td>
</tr>
<tr>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>FAO</td>
<td>The Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FMSS</td>
<td>Farmer Managed Seed System</td>
</tr>
<tr>
<td>FSS</td>
<td>Farmer Seed System</td>
</tr>
<tr>
<td>GMO</td>
<td>Genetically Modified Organism</td>
</tr>
<tr>
<td>GoT</td>
<td>Government of Tanzania</td>
</tr>
<tr>
<td>ITPGRFA</td>
<td>International Treaty on Plant Genetic Resources for Food and Agriculture</td>
</tr>
<tr>
<td>MAFC</td>
<td>Ministry of Agriculture Food Security and Cooperatives</td>
</tr>
<tr>
<td>MVIWATA</td>
<td>Mtandao wa Vikundi vya Wakulima Tanzania</td>
</tr>
<tr>
<td>NAFCO</td>
<td>National Agriculture and Food Corporation</td>
</tr>
<tr>
<td>NARCO</td>
<td>National Ranching Company Limited</td>
</tr>
<tr>
<td>OPV</td>
<td>Open Pollinated Varieties</td>
</tr>
<tr>
<td>PBR</td>
<td>Plant Breeders Rights</td>
</tr>
<tr>
<td>QDS</td>
<td>Quality Declared Seeds</td>
</tr>
<tr>
<td>RECs</td>
<td>Regional Breeder Rights</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern Africa Development Cooperation</td>
</tr>
<tr>
<td>SHFs</td>
<td>Smallholder Farmers</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>SSE</td>
<td>Small-Scale Enterprises</td>
</tr>
<tr>
<td>TANSEED</td>
<td>Tanzania Seed Company Ltd</td>
</tr>
<tr>
<td>TNCs</td>
<td>Transnational Corporations</td>
</tr>
<tr>
<td>TOAM</td>
<td>Tanzania Organic Agriculture Movement</td>
</tr>
<tr>
<td>TOSCA</td>
<td>Tanzania Official Seed Certification Agency</td>
</tr>
<tr>
<td>TOSCI</td>
<td>Tanzania Official Seed Certification Institute</td>
</tr>
<tr>
<td>UPOV</td>
<td>International Union for the Protection of New Varieties of Plants</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VCU</td>
<td>Value for Cultivation or Use</td>
</tr>
</tbody>
</table>
This study set out to investigate the existing policies, the legal framework, and initiatives in the seed sector in Tanzania, the East African region and SADC to establish a roadmap for improving seed policies and laws to ensure the existence of instruments favourable to farmers’ seed systems. AFSA commissioned the study in anticipation that the study’s outcome will help the consortium composed of AFSA, FiBL and SWISSAID to better understand the current state of seed legislation and policies in Tanzania, including the actors playing a direct or indirect role in the seed sector. The study employed a qualitative approach and used qualitative data that was collected through interviews and documents review. Several seed systems are used in terms of seed production and distribution in Tanzania and East Africa. However, informal seed systems are discouraged, favouring commercial seeds that are largely the domain of Transnational Corporations (TNCs) and a few private local seed companies.

The Tanzania seed legal framework, guided by the Agriculture Policy 2013; the Seeds Act, 2003 and its regulations of 2007; the QDS Regulations of 2020; and the PBR Act of 2012, does not harness FMSS. They generally incentivise seed capitalism, and they look at SHFs as ineffective in the production equation. In the long run, the national regulatory framework seeks to softly coerce SHFs to abandon FMSS and become regular certified seeds users. The regulatory harmonisation process in EAC and SADC is guided by the philosophy of entrenching the formal seed system in the regions at the expense of SHF’s rights to seed. Worse still, there are yawning gaps in the regulatory harmonisation framework such that issues regarding seed diversity, accessibility and affordability are not considered. In addition to that, the harmonised regulatory framework does not lay down a remedial mechanism in case of non-performance of the seeds traded across countries in the RECs. Most importantly, the harmonisation process is a threat to seed sovereignty and national sovereignty, especially when questions of diversity, accessibility, and affordability are deeply connected to food self-sufficiency and sovereignty.

The study has uncovered that the activities of actors are sharply divided into two main categories. Seed capitalists are a dominant group composed of powerful western states (the G8), TNCs and private seed companies, regional quasi-aid giving organisations, and influential philanthropic organisations. These actors are very influential, and they target getting their interests addressed in national and regional seed policies and laws. The seed sovereignist camp, which fights for the rights of FMSS, needs to organise itself better to match the influence of the seed capitalists.

The study concludes that it is not by default that the Tanzania legal framework is not designed to cater for the interests of smallholder farmers and small-scale enterprises, but by design. This logic also informs the design of the QDS system, which is met with restrictions on land size for production and the market area to discourage actors involved from growing bigger. There are heavy penalties to dealers of uncertified seeds, but also donor-funded programs such as the National Input Voucher Scheme (NAIVS) are initiated to orient SHFs to use improved seed varieties produced by TNCs.

The study recommends that efforts should be increased to lobby for the recognition of landraces and other varieties in the Tanzania seed regulatory framework along the same line these varieties are recognised in the SADC harmonised regulatory framework. One notable trend that has given success to advocates of seed capitalism is teaming up with scientists and seed breeders, including public ARIs. AFSA should consider working with these institutions to improve the quality and legitimise FMSS. AFSA should also exploit the opportunity of the mandate given to TOSCI by teaming up with this important institute to train smallholder farmers and small-scale enterprises on how to maintain quality in seeds, including producers of QDS. Finally, given the sharp divisions between seed capitalists and seed sovereignists, AFSA and other stakeholders should be prepared for a middle ground, calling for an integrated seed system that calls for the co-existence of formal and informal seed systems.
Seeds are primarily the source of food and plant life. But in Africa, particularly the Sub-Saharan region, seeds also play other significant roles such as offering employment for seed producers through sale in the market, diversification of consumptions, increasing income through exchange and productivity, spreading risks, especially when varieties of different origins are used, as well as other cultural and traditional uses (FAO, 2010). Multiple sources of seed supplies exist, but three typologies are often mentioned: formal, informal, and integrated seed systems. However, studies have consistently indicated that farmers access between 80%-90% of their seeds from informal systems (TOAM 2015; MacGuire & Sperling 2016; Marechera et al. 2016, Akpo et al. 2020; Sperling et al. 2020).

There is, however, a sharp disagreement amongst scholars of agrarian studies as to the desirability of accessing seeds from the informal seed system. For some analysts, informal seed varieties have deprived the smallholder farmers of the opportunity to increase productivity in their agriculture (Marechera et al. 2016; Akpo et al. 2020), while for others, the informal seed systems ensure the availability of a wide range of crops and varieties of acceptable quality, but also guarantees accessibility to farmers even when they are poor and operate in remote areas (MacGuire & Sperling 2016; Sperling et al. 2020; ISSD Africa 2017). Those who support the informal seed system are concerned that interventions geared towards elevating the formal seed sector without sorting out the informal seed sector are not delivering the crop portfolio or achieving the social and geographic breadth needed in the sector (Sperling et al., 2020; TOAM 2015).

Nonetheless, the legal and policy framework in many countries in sub-Saharan Africa (SSA) challenge the very existence of the informal seed system. It is held in many countries of SSA that «seed is only ’seed’ if it is formally produced by a registered set of growers and sold in clearly stipulated outlets» (ISSD Africa 2017). In that regard, informal seeds are just regarded as grains. This has broader implications for both seed traders and SHFs as seed producers. Dealers who sell informal seeds fear legal prosecution or monetary fines if they advertise their products as ‘seed’ and sell them to farmers. But also, the smallholder farmers themselves are deprived of their right to save, re-use and sell seeds as a means of earning their livelihood.

In Tanzania, which is the focus of this study, farmer managed seed system (FMSS) or simply farmer seed system (FSS), which falls into the category of an informal seed system, is the basis of rural livelihoods and agricultural production. It is argued that the seed sector in Tanzania is dominated by the informal seed system, where 25 per cent of formal seed is used, and most farmers use seeds that have been saved from the previous season (Marechera 2016). Likewise, a detailed study by TOAM, which was done in 2015 for all agro-ecological zones in Tanzania, uncovered that FMSS was a major source of seed for most of the crops that are grown (TOAM 2015). There are variations, however, depending on the type of crop, but the accessibility of paddy, groundnuts and bean was over 90 per cent from informal seed system, while sunflower was 46%, vegetables 45% and maize 46% all from the informal seed sources.
Smallholder farmers have broad albeit unleveraged knowledge about the food, fodder, and medicinal properties of plant species, which remain their traditional heritage. These SHFs desire to ensure that seeds are accessible through their informal systems so that they can retain seed sovereignty in their farms by maintaining a high diversity of species. However, FSS is under pressure from policymakers who are lobbied by multiple actors to favour the industrial seed system or simply seed capitalism. This study sought to investigate the existing policies, the legal framework, and initiatives in the seed area in Tanzania and East Africa to establish a roadmap for improving seed policies and laws towards instruments favourable to farmers’ seed systems. The study’s outcome is expected to help the consortium composed of AFSA, FiBL and SWISSAID to better understand the current state of seed legislation and policies in Tanzania, including the actors playing a direct or indirect role in the seed sector. The study will contribute to a long-term project under the general theme of agrobiodiversity to improve food security and nutrition in the selected case studies.
This study is hinged on seed sovereignty as a framework of analysis. Credit related to the origin of this framework is rightly given to La Via Campesina, an international peasant organisation’s movement that emerged in the early 1990s. This movement recognises seed sovereignty as the ‘fourth resource’ alongside land, air, and water (LVC 2001). However, the framework has continued to be shaped over time by agrarian scholarship. For example, through a review of Via Campesina’s position papers, Kloppenburg (2008) drew eight elements to describe the seed sovereignty framework. However, the elements fall into two processes: resistance and defence of farmers’ indigenous knowledge and creativity. The elements are listed below:

1. Resistance against patenting of plant genetic materials. This flows from the logic that plant genetic materials are a source of life and should not be under an exclusive right of an entity.
2. Resistance against bioprospecting/biopiracy.
3. Opposition against the use of farmer derived genetic resources in proprietary breeding programs.
4. Opposition against development and deployment of GMOs.
5. Call for the development of a legal/institutional framework that recognises farmers’ collective sovereignty over seeds.
6. Call for the development of a legal/institutional framework that allows farmers to freely exchange, save, improve, and sell seeds.
7. Demand for establishing an institutional framework in which farmers cooperate with plant scientists to develop new plant varieties that contribute to a sustainable food system.
8. Demand for a framework for marketing of seed that is not patented or use restricted.

To understand the seed sovereignty framework, it is imperative to revisit Moore’s (2018) seed advocacy discourses that align with the various existing coalition groups. Moore (Ibid) identifies three discourses related to seed, namely seed capitalism, seed pluralism and seed sovereignty. We can locate these discourses on the line...
of continuum, whereas the two (Seed capitalism and Seed sovereignty) are located at the extreme end and the third in the middle. Seed capitalism is a discourse that promotes the dissemination of improved seeds in societies through market-based solutions. On the other extreme is seed sovereignty, which calls for protecting farmers’ rights and plant genetic resources from patents. However, in the middle, there is seed pluralism, a discourse that pushes for market-based solutions to seeds but also the recognition and protection of FMSS (Ibid).

What is important to note is that seed is the critical nexus where contemporary battles over control, the technical, social, and environmental conditions of production and consumption converge and are made manifest by different actors (Shiva 1997; Walshe 2017). Western powers and their beneficiary TNCs have been on the frontline lobbying for integration of local seed systems into the market-led commercial seed system. However, this has raised many concerns, particularly over the loss of local seed varieties, dependence on seed imports, and environmental damage to the land and surrounding communities (Petersen 2014).

According to Kloppenburg (2008), until the 1930s, farmers in both the North and South enjoyed nearly complete sovereignty over their seeds. They had the power to decide «what seeds to plant, what seeds to save, and who else might receive or be allocated their seed as either food or planting material». Seed sovereignty thrived in a largely open system based on reciprocity and gift exchange rather than the market. However, since the 1930s, seed sovereignty for farmers has been eroded as TNCs took charge of the global seed industry with the view to appropriate profit. They have been able to do that by capturing science for private gains, which helped them replace classical crop breeding methods with approaches that deprive farmers of control over the seed management process. But also, they have captured public research institutions to serve private commercial interests, while states are forced to legislate rules such as PBR laws that erode farmers’ seed sovereignty.
3.0 STUDY PURPOSE AND METHODOLOGY

3.1 PURPOSE OF THE STUDY

The purpose of the study was to undertake a national mapping of existing seed policies and regulatory frameworks; an analysis of seed-related laws and regulations; and an investigation of the actors who intervene politically, legally, and technically (agricultural practices) at the national level on seed. The study identified existing threats and opportunities for the promotion of biodiversity and farmers’ seed systems. Finally, the study has identified East Africa’s political, legal, and financial forces that influence seed policy and regulation in Tanzania. The study’s goal is to establish a roadmap for improving seed policies and laws towards instruments favourable to farmers’ seed systems. In particular, the study was guided by the following objectives:

I. To analyse the roles and functions of the different seed systems in Tanzania and East Africa.

II. To review policies and legal frameworks impacting seeds in the Regional Economic Community and to identify gaps in existing policies and specific bottlenecks regarding farmers’ seed systems and seed rights.

III. To identify the ongoing law harmonisation processes in EAC and SADC, those that have already been reviewed, and document resistance (activities) to these processes by the concerned actors.

IV. To assess the political dynamics of seed policy development in the country and the region through (online) interviews with leading experts on national and regional seed policy processes and regulatory frameworks.

V. To identify key policy actors, policy fora, meetings, and platforms for potential advocacy intervention for policies that support FSS.

VI. To provide recommendations that will inform the implementation of the advocacy strategy of AFSA and the consortium, including policy spaces, entry points, and advocacy opportunities.

3.2 METHODOLOGY

A qualitative research approach was employed to achieve the above objectives in which qualitative research methods and materials were used. Relevant information was tapped from key informants, and some important official documents were consulted. The type of data was both primary and secondary. Primary qualitative data was collected using Key Informant Interviews/In-depth interviews with a select few respondents from the Government and CSOs. Given the threat of the COVID-19 pandemic, all interviews were conducted by phone. The respondents were sampled purposively, and a snowball sampling approach was at times employed. Secondary data was collected through documents review, where a wide range of literature on the subject matter has been reviewed. Finally, a qualitative data analysis approach was employed.
4.0 SEED SYSTEMS IN TANZANIA

A review of the literature on agrarian studies and the seed legal framework has presented us with four major seed systems, namely formal, semi-formal, informal, and an integrated seed system (CTA 2014; MAFC 2014; McGuire & Sperling 2016; Sperling et al. 2020; ISSD Africa 2017; Marechera et al. 2016; Louwaars & de Boef 2012). However, these are simply broad typologies of the seed systems, which must be broken down into specific seed channels through which farmers access seed. This section attempts to present the seed systems used in Tanzania and the East African region. At the most basic level, there is the farmer-saved seed system. This is the main source of seed to most producers in the region. It is an informal system that deals with local food and cash crops. The mechanism through which seeds are obtained is exchanging gifts from relatives or neighbours, bartering with other farmers, or purchasing seeds from the local market. Key determinants for a successful farmer-sighted seed system are availability, quantity, reliable quality in germination, and affordability.

Next to the farmer saved seed system are Quality Declared Seed (QDS). QDS refers to seeds produced by individual smallholder farmers or an organised and/or registered group of smallholder farmers in conformity with the required quality standards. It is a local seed quality control system initiated by the Food and Agriculture Organisation of the United Nations (FAO 2006). This is a semi-formal seed system and at times lumped together with farmer saved seed system as an informal category (TOAM 2015). In Tanzania, the regulatory framework of QDS requires seeds to be sold only in the district where production is carried out. In Kenya, the USAID (2016) Country report indicates that there is no QDS. In Tanzania, although they are certified seed by TOSCI, yet they are still regarded as less formal seeds, an upgrade of farmer saved seeds. Such seeds usually serve the under-resourced communities, and they often target food security crops and programmes (ASARECA/ KIT, 2014; Louwaars & de Boef 2012).

The third category of the seed system is the Public-Private Seed system. This normally involves NGOs and community-based groups that collaborate to produce seeds. This system falls within the semi-formal seed system since the seeds produced are, in most cases QDS (AGRA-SSTP 2016).
Public Seed System falls within the category of formal seed system. In Tanzania, it refers to seeds produced by public agencies, mainly the Agricultural Seed Agency (ASA)\(^1\) and Agricultural Research Institutes (ARI). Public research institutes that breed seeds include ARI-Ukiriguru, ARI-Dakawa, ARI-Uyole, ARI-Ilonga and ARI-Selian. These entities produce pre-basic and basic seeds for Government Agro Dealers or the private sector. The private Local Seed System entails seeds that are produced and sold by local private seed companies. The leading local private companies in Tanzania are Tanseed International LTD, SATEC and Meru Agro Tours and Consultants Ltd. The final category in the formal seed system is Private International Seed System. They usually produce highly demanded marketable varieties in Tanzania. The list of private seed companies in Tanzania is very long, including Monsanto, Cargill, Pioneer, and Pannar Seed Co. Ltd. An integrated seed system accommodates both formal and informal seed systems. It is intended to better link between the two sectors and to balance and mitigate the impacts of each other in societies (Louwaars & de Boef 2012).

The debate on the advantages and disadvantages of formal and informal seed has been raging from time to time. It has been very well summarised by Louwaars & de Boef (Ibid) and McGuire & Sperling (2016). For example, in the informal seed sector, farmers tend to possess good knowledge of the crops and agriculture such that they become reliable custodians of agrobiodiversity and seed diversity. Most importantly, these farmers have always developed new OPV varieties by selecting available modern seed sources from public research institutes and breeders. They are also dependable guardians of self-fertilising crops like cereals and legumes that fare well in the farm-saved system. However, the informal system is limited in some ways. First, they face diseases, processing, and storage problems, which may damage the seed to reduce the chances of germination. Moreover, cross-pollinated varieties may degenerate over time which may affect their general performance in terms of yields. One criticism that some scholars have against QDS is that they are still embedded into the formal seed sector to deliberately orient farmers into using certified seeds (ACB 2018). As such, the QDS system sets a stage for more advanced certification systems.

The formal seed system is touted to be reliably uniform because it has been evaluated for adaptation in the specified farming systems. This gives them an advantage over informal seed varieties since the breeding and multiplication process is guided by scientific methods (Louwaars & de Boef, Op Cit). However, the commercial formal seed system is often limited to several crops such as hybrids and high-value horticultural crops. Since the breeders’ focus is commercial, they will likely not invest in self-pollinating varieties where FMSS is faring well. Moreover, malfunctioning of the supply chain may delay the formal seeds to reach farmers on time. When faced with storage issues, they may also fail in germination capacity and vigour. But the main criticism against formal commercial seed is that they undermine seed sovereignty to smallholder farmers and third world governments. Analysts hold that Government seed agencies and research institutes should breed OPVs and self-pollinating varieties that feed into the FMSS.

---

\(^1\) ASA was established under the Executive Agencies Act [Cap.245 R.E. 2002] as a semi-autonomous body under the Ministry of Agriculture, Food Security and Cooperatives (MAFC). It was launched in June 2006, mandated to ensure availability of affordable high quality agricultural seeds to farmers.
5.0 SEED POLICY AND REGULATORY FRAMEWORK: THE STATE OF PLAY

5.1 INTRODUCTION

This section discusses the seed policy and regulatory framework in Tanzania. It is important to note that the existing literature in Tanzania indicates no seed sector in Tanzania before 1973, when the regulatory framework was put in place (MAFC 2014; USAID 1984). This is a wrong assumption since it assumes that farming started with the establishment of the formal seed sector. However, farming was in progress, and the farmers had access to seeds from informal sources, and their varieties have been improved from time to time. The most appropriate description of this period is that the nature of production and seed use was based on the agriculture commons. Two farming systems were encouraged during this time, namely communal farming through Ujamaa Villages and State farms under the National Agriculture and Food Corporation (NAFCO) and the National Ranching Company Limited (NARCO). It should also be noted that the orientation of the First Phase Administration was to discourage capitalistic tendencies such as the accessibility of seeds was based on the global commons. The origin of the formal seed sector and the establishment of the regulatory framework is discussed in the subsequent subsections.

5.2 THE SEED REGULATORY FRAMEWORK IN TANZANIA: ORIGIN & DEVELOPMENT

Partly because of the financial support of USAID, which ran from 1970-1982, Tanzania established a formal seed sector, but under the armpit of the government (USAID 1984; TOAM 2015). USAID offered Tanzania a Seed multiplication aid totalling around USD 14.507 million, with a view to producing foundation seed on a large scale, which could be used by both large and small-scale farmers (USAID, Ibid). The Project evaluation report cited above indicates that USAID was not impressed by low productivity in agriculture because of using informal seeds. Their objective was to ensure the enactment of seed legislation that resembles the strict seed laws of developed countries; to establish viable seed institutions and ensure that farmers in their categories adopt improved seed varieties.

In the early 1970s, research in developing new varieties was introduced, as Seed Farms were established. In 1973, the Government of Tanzania (GoT) legislated the Seed (Regulations of Standards) Act, No. 29. The purpose of this legislation was to control the quality of seeds. This enactment went hand in hand with the establishment of the Tanzania Seed Company (TANSEED) Limited, which was given the mandate to oversee the production, processing, and marketing of certified seeds. As noted earlier, TANSEED, a quasi-public company, was one of the seed institutions envisioned in the seed multiplication project. The TANSEED’s performance received mixed feelings from stakeholders. In many pieces of literature, it is argued that TANSEED did not fare any better. For instance, the USAID (1984) project evaluation report indicates that TANSEED was inefficient and performed well below its capacity. However, the World Bank Report suggests otherwise in some of its projects. It is reported, for example, that beginning in 1982, TANSEED did well in distributing about 1700 tons of maize, sorghum and barley seed were sold over the 1981/85 period for the Mwanza-Shinyanga Rural Development project (World Bank 1987).

In 1976, Seed Regulations were formulated to enforce the Seed Act of 1973. The formulation of the Seed Regulations went hand in hand with the establishment of the Tanzania Official Seed Certification Agency (TOSCA). This was the sole body mandated to undertake the regulatory enforcement of the seed industry regarding seed certification and quality assurance (MAFC 2014). TOSCA was attached to the then Ministry of Agriculture in the Crop & Livestock Development Department under the seed unit. In an interview with the TOSCI general director, TOSCA was not semi-autonomous, and its institutional set-up delayed key decisions that were to be made. This was the major reason for disbanding TOSCA later.

It should be noted that after the first President, Mwalimu Julius Kambarage Nyerere, had relinquished power, Tanzania agreed to the IMF proposed Structural Adjustment Programmes (SAPs) in the late 1980s. Accession to these policies meant agreeing to the neoliberal project manifested in three processes, namely liberalisation, privatisation, and marketisation. This called for private companies in many sectors of the economy, including the seed sector. To allow free operation of private companies involved in the seed business, «it was necessary for the government to create a conducive environment that encourages private sector to play a greater role in the industry guaranteeing the availability of seeds of improved varieties and of assured quality to

2 A phone interview with Patrick Ngwediaji on 16th February 2021
the farmers» (MAFC 2014). Therefore, the Seeds Act, No.18 of 2003 was enacted to be followed by the Seed Regulations of 2007.

The Act repealed the Seed (Regulations of Standards) Act, 1973 to provide for an institutional framework for the control and regulation of the standards of agricultural seeds in the country. In terms of institutional set-up, Section 3 of the new seed law establishes the National Seeds Committee, which operates as a Stakeholders’ Forum for advising the Government on all matters relating to the development of the seed industry, including policies and regulations. The Seed Act also reaffirmed the mandate of Tanzania Official Seed Certification Institute, which replaced TOSCA, making it a semi-autonomous authority for seed inspection and certification in the country.

However, the Convention on Biological Diversity (CBD), which was adopted by the United Nations in 1992, had some influence on Tanzania’s plant variety policy. Tanzania became a party to the CBD by ratification in June 1996. The CBD, which emphasises biodiversity protection, can be stated as the obvious factor that pushed Tanzania to legislate the Plant Protection Act, 1997. In its preamble, the Plant Protection Act hints at fulfilling international obligations for perseveration of the natural environment, but also points towards the centrality of the agricultural sector, which must be sustained by the availability of proper plant varieties. As such, the Plant Protection Act was premised on preventing harmful plant varieties that could be imported to destabilise the biological diversity with tremendous effects to the agricultural sector.

In 2002 Tanzania enacted the Plant Breeders Rights (PBR) Act, which can also be viewed as an attempt to fulfill an international obligation, particularly Article 27.3.b of the TRIPS agreement. This article obligates member states to legislate laws to enhance plant protection, whether it is by patent or by a sui generis Plant Variety Protection (PVP) regime. The 2002 PBR Act appeared to comply with this article by creating a sui generis system that, to some extent, considered the interests of smallholder farmers. Tanzania is obliged to consider the interests of the smallholder farmers since it is still largely an agrarian country and the seed sector is vastly informal where, at the time, approximately 90 per cent of the seeds were bred and managed by farmers. As such, policies and laws related to seeds were supposed to reflect this reality. However, the 2002 PBP Act was later repealed to be replaced by the Plant Breeders Act, 2012, a UPOV 1991 model law. The adoption of UPOV model law has been an issue of contention regarding smallholder farmers’ right to save, sell and re-use seeds.

Tanzania also acceded to the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) on 30th April 2004. The ITPGRFA is a legally binding instrument adopted by the Food and Agriculture Organization of the United Nations on 3rd November 2001, and it entered into force on 29th June 2004. This treaty calls for the protection of farmers’ traditional knowledge, ensuring that they participate in decision-making processes, and allowing them to share the benefits of the genetic resources. Article 9 of the ITPGRFA recognises the contribution of farmers and other local communities regarding conservation and development of plant genetic resources but it also gives responsibility to governments to protect and promote such rights. The Treaty requires the contracting parties to ensure farmers’ rights to save, use, exchange and sell farm saved seeds and propagating materials. Until November 2020, the ITPGRFA had 148 contracting parties including one member organisation, which is the European Union. Even though Tanzania is a contracting party to this treaty, her legal framework indirectly discourages traditional breeding knowledge pushing the farmers instead of the formal seed system.

One should also bear in mind that there is no specific seed policy for Tanzania. However, some guidelines were formulated for regulating the seed sector, namely the Seed Policy and Implementation Guidelines (NSPIG), 1994 but the guidelines did not materialise into a full-fledged policy. In the absence of a specific seed policy, the National Agricultural Policy, 2013 provides general guidelines related to seeds.
in Tanzania. However, this policy has a neoliberal orientation. For example, it laments about challenges in the seed sector such as «inadequate knowledge on intellectual property rights; low participation of local and foreign bodies in seed production and breeding; and limited involvement of the private sector in the multiplication of breeders and foundation seed in order to enable a more ample supply of improved seeds» (ASARECA/KIT 2014). Stakeholders from different backgrounds, such as those who support strict regulations of the seed sector (seed capitalists) and those who advocate for farmers seed rights (seed sovereigntists), have been lobbying the GoT for a specific seed policy, but to no avail. A review of the National Agricultural Policy is currently in the pipeline, which is expected to have provisions on seeds.

5.3 IMPLICATIONS OF THE LEGAL FRAMEWORK TO FMSS

In general terms, Tanzania is designated as having a strong legal framework for the regulation of seed variety release, seed certification, quarantine, and phytosanitary measures (New Market Lab 2016). The legal regime is comprised of (a) the Seeds Act of 2003, read together with the Seeds Regulations of 2007; (b) the Plant Protection Act of 1997, read together with the Plant Protection Regulations of 1998; and (c) the Plant Breeders Right (No 222, 2002). What is vividly being recognised in the Seeds Act, 2003 is Quality Declared Seed, which is defined as a «seed produced by a registered smallholder farmer which conforms to the specified standards for crop species concerned and which has been subject to the quality control measures prescribed in the regulations to be made under the same Act». Section 19-(2) of the Seeds Act provides that the Act does not in any way prevent the sale of QDS by farmers to a neighbour, and where such seeds are grown by a smallholder farmer for use as seeds in his farm.

However, the Written Laws (Miscellaneous Amendments) Act, 2014 repealed Section 14 of the Seeds Act, 2003, which regulated the sale, importation, and exportation of seed varieties. Initially, the dealers had the duty to ensure that the seeds met the prescribed requirements in accordance with the law. However, the 2014 amendments imposed a hefty penalty on the dealers who sell seeds without certification. The amended section 14-(5) of the Seeds Act, 2003 provides that any person who is found guilty of selling uncertified seed is liable to a fine of not less than TGS 100 million or to imprisonment to a term of between 5 and 12 years, or both. But most importantly, the Act makes mandatory registration requirements for one to become a seed dealer. According to Section 15 dealers are required to register with TOSCI, and there is a penalty of TGS 5 million as a fine, or jail term of 3 to 5 years or both, for unregistered dealers. This means, therefore, SHFs who sell uncertified seed, or act as seed dealers without registration are likely to land themselves into trouble in accordance with this law.

Moreover, when you read the Seeds (Control of Quality Declared Seeds) Regulations, 2020, which have been enacted in accordance with Section 26(4) of the Seeds Act, QDS dealers are mentioned as small-scale farmers or a group of small-scale farmers who are engaged in the processes of seed production or seed processing for their own use of for sale. However, the regulations limit the scope of operation to be only within the district where QDS is produced. But most importantly, there are conditions that are attached to those who are engaged in QDS production and processing. First, they must be registered as per the regulations. Second, they must show evidence of basic knowledge on seed aspects through training. Third, for individuals, the land size is limited to only 5 acres (equivalent to 2 hectares) and for groups the land size is limited to only 12 acres. And the certificate issued to QDS producers is only valid for three years.

We learn from these regulations that first they want to ensure that all seed dealers are officially registered, which means that local farmers who are not registered dealers are not allowed to sell their traditional seed varieties. Secondly, limiting the acreage of land to be used to produce QDS ensures that such seeds are not produced in large quantities. This is only done in favour of commercial seed production, discouraging the small-scale enterprises as players in the seed sector, they also deprive farmers of the right to choose seeds that are appropriate for their agriculture. In addition to that the registration of QDS is also not a straightforward exercise since the seed dealers had to undergo training under TOSCI, and the seed varieties must be tested every seven months to determine their quality.

In an interview with the TOSCI Director General, the researcher quizzed him on whether there are efforts towards recognition and protection of landraces and other farmer saved varieties as provided for in the SADC seed regulations harmonisation framework. His response was very predictable. He argued that in strict business terms, the GoT does not see any logic of recognising grains produced by small-scale farmers because they do not adhere to the indicative standards

---

2 These details were recorded in the interviews with Abdallah Mkindi, Sabrina Masinjila and Patrick Ngwediagi interviews in different occasions.
of quality. However, on a side note, he informed the researcher that they often provide education and training to SHFs to select the best seeds, store them in good places, and not re-use the seeds for more than three sowing seasons. He concluded that he and TOSCI believe in certified improved seed varieties, and he encourages all small-scale farmers to graduate from using informal seeds to using formal seeds. He insisted that it is good agronomical practice to buy new seeds every planting season.

On the other hand, the PBR Act of 2002, to some extent contained provisions that could be interpreted as deliberate measures to recognise smallholder farmers’ seed varieties and protection of biodiversity. For instance, anticipating the consequences of the dominance of private breeders, this provision gave power to the Minister for Agriculture to ensure that the implementation of the PBR Act did not affect farmers’ rights and access to traditional plant varieties. Moreover, Section 57 (2) of the PBR Act stated explicitly that the fees collected from the PBR applicants would be used to benefit traditional farmers and conservation of traditional plant varieties. However, such provisions were quashed when the Act was repealed and replaced by the PBR Act, 2012.
6.0 REGIONAL HARMONISATION OF THE LEGAL FRAMEWORK IN SEED SECTOR

6.1 THE OBJECTIVES OF HARMONISATION

Tanzania is a member of two regional blocs, the East African Community (EAC) and the Southern Africa Development Community (SADC). Tanzania was a member of the Common Market for Eastern and Southern Africa since 1994 but withdrew its membership in 2000. One notable feature amongst these regional blocs is overlapping membership because many countries are members of more than one regional group. Most of the countries in these regions, including Tanzania, are determined to achieve the green revolution agenda, but they have different national legal systems for seeds. According to the SADC document on technical agreements on harmonisation, the harmonisation system does not intend to replace current national seed systems but to create common national standards and regulatory procedures (SADC 2008). The philosophy drives the harmonisation that having common regional standards and procedures will evade repetitive processes in national testing. As such the movement of seed varieties across the regions will be easier, faster, and cheaper.

It is reported that with the financial support of USAID Kenya, the EAC Secretariat engaged a consultant to draft harmonised EAC seed legislation and regulations (ACB 2018b). Meetings of experts and regional stakeholders were also convened in June 2018, with a view to generating technical and legal inputs to inform and guide the process. Finally, the EAC Seed and Plant Varieties Bill and the EAC Seed and Plant Varieties Regulations were drafted. What is notable is that the EAC harmonised framework «incorporates seed registration, variety release, seed certification and marketing, and phytosanitary measures with plant variety protection (PVP), all in one law» (Ibid). The implication this has to national laws is that they will not have flexibility in regulating seeds and PBR issues.

The EAC harmonisation process was met with reaction from CSOs that claimed to have been marginalised in the proceedings. For instance, on 5th – 6th March 2019, the East African farmer and civil society organisations met in Arusha to discuss the East African Community (EAC) Seed and Plant Varieties Bill 2018. They noted that the Bill has broader implications to smallholder farmers and their seed systems such as displacing local seed systems, and entrenching inequalities in society. In the long run it is intended to facilitate the corporate capture of food and seed systems, and marginalise the rural poor, especially women, undermining seed sovereignty and national sovereignty⁴.

However, according to the TOSCI Director General⁵, to date, there is no harmonisation agreement in the East African region. Apart from the Bill that has not been adopted, he noted that there were discussions on the harmonisation process facilitated by ASARECA from 1999. He asserted that the proposed harmonisation was done when the countries adopted their seed laws such

⁴ Interview with Barbara Ntambirweki of Uganda and Sabrina Masinjila who is working for ACD in Tanzania.
⁵ Op Cit
as the Seeds Act, 2003. The TOSCI Director General’s argument is collaborated by the ASARECA report (2011) that considerable progress has been made in the harmonisation and rationalisation6 of seed laws, policies, and regulations within the Eastern and Central African region. The report further states that the «harmonised seed policies, laws and regulations within the region, are expected to lead to an improved policy environment. This is expected to generate net welfare benefits to the region» (Ibid). According to ACB (2018) it should be noted that, for a seed variety to be available for the regional trade in EAC, it should only be released in one member state and once the laws have been adopted, they become binding within Member States.

The SADC harmonisation process is probably the most comprehensive. The process covers three areas namely variety testing, registration, and release: seed certification and phytosanitary measures. Regarding variety testing, before it can be registered and released, a seed variety must be tested for distinctness, uniformity, and stability (DUS) as well as Value for Cultivation or Use (VCU). Regarding distinctness, the variety must be clearly distinguishable from any other variety. A variety must also be sufficiently uniform in its relevant characteristics; and finally, the relevant characteristics must continue unchanged after repeated propagation to meet the criterion of stability. For the SADC guidelines, the VCU testing is done in field experiments over two years and in two countries with comparable ecological zones. The VCU test is done to determine maturity period, resistance to diseases and pests as well as yield storability. Seed certification refers to a system that ensure the seeds have the desired quality and genetic purity before they are released. Phytosanitary measures refer to regulations that aim at preventing the spread of pests and/or diseases. Generally, the SADC Technical Agreements on Harmonisation of Seed Regulations became operational in 2013, once two-thirds of SADC countries had signed the MoU. It is reported that a few countries namely Angola, Madagascar, Seychelles, and Zimbabwe, are yet to sign the MoU (ACB, 2018). Finally, the SADC Council approved the Seed Charter in August 2017.

6.2 CHALLENGES OF HARMONISATION TO THE FARMER MANAGED SEED SYSTEM

The harmonisation process adheres to international standards that are followed by entities in developed countries. The report by the Centre for Biodiversity lists such entities as «the Organisation for Economic Co-operation and Development’s (OECD) Schemes for the Varietal Certification or the Control of Seed Moving in International Trade; the International Seed Testing Association (ISTA), which develops and publishes international rules for seed testing and certification and offers an accreditation programme for seed laboratories; and the International Union for the Protection for the Protection of New Varieties of Plants (UPOV), which lists the criteria for the protection of new plant varieties and the rights conferred on the breeder of a protected variety» (ACB, Op Cit). These are strict seed regulations that have far reaching implications to the farmer managed seed system. For example, it is the UPOV 91 framework, a binding international treaty, which sets standards for plant variety protection under the criteria of novelty, distinctness, uniformity, and stability (NDUS) (Mbunda 2017).

Advocates of the harmonisation process do not find the exercise being inimical to farmer managed seed systems. Ngwediaji, for example believed the seed laws have no impact on farmers’ activities and farmer managed seed systems, rather it regulates the seed trade for their benefit. In an interview with Abdallah Mkindi7, he also pointed out that the seed produced in the informal sector is not considered ‘real’ seed by the national laws but grain, thus they do not fit the criteria of DUS to be certified for trading. As such, even in national laws that are harmonised FMSS do not qualify as seeds.

One important element to note in the harmonisation process is that unlike in the EAC and COMESA, the SADC Technical Agreement on the Harmonisation of Seed Regulations recognises landraces8 and other local plant varieties and directs that they should be registered in the SADC Variety Database (SADC 2008). Their registration will be based on the available description of the variety in terms of performance, farmer experiences during cultivation, name, and the qualities of the variety. In the SADC harmonisation framework, it is understood that these varieties are unlikely to pass the DUS and VCU tests. Therefore, SADC looks forward to developing a procedure for registration that will outline different characteristics that are essential for identifying these varieties. They will be based on field tests, but landraces and other local varieties with adequate documentation are to be exempted from field tests.

However, there are several challenges of the harmonisation process for smallholder farmers and small-scale seed enterprises. To begin with the

---

6 Rationalization is defined by ASARECA (2011) as change in the way business is done to increase efficiency. It focuses on how a country conducts business in each sub-sector and determines what should be done to make it more efficient. For example, instead of having an imported good cleared by 5 different offices, there can just be one stop centre for clearance.

7 Abdallah Mkindi, Interviewed on 16th February 2021.

8 This is defined as a domesticated, locally adapted, traditional variety of a species of animal or plant that has developed over time, through adaptation to its natural and cultural environment, and due to its isolation from other populations of the same species.
strict certification standards adopted by the regional harmonisation frameworks exclude farmer varieties and small-scale seed producers to participate in both the national and regional seed markets. This is done in two ways: first, the process involves high costs. When this is coupled with the cumbersome nature of the certification process makes it difficult to certify and trade in seed, both nationally and regionally. Secondly, although they claim harmonisation is not largely intended to change the regulatory rules, but in fact, it allows for differences in national legal and regulatory systems if they meet the regional standards. Notably, as seen earlier, most of these countries in SADC and other RECs have modelled their seed regulatory framework along strict international standards. And the emphasis has been only varieties that meet these standards qualify to be certified as seeds and to be marketed. As a result, the rules criminalise small-scale seed businesses amongst smallholder farmers and even the exchange of traditional varieties. Therefore, the foundations that prop up the FMSS are being attacked and at worst criminalised.

Moreover, the harmonisation process is only focused on servicing the formal seed system and seed trade in the RECs. This process promotes genetic uniformity narrowing down in turn the range of agricultural biodiversity and genetic diversity especially when seeds that could have been available in the market through the informal seed system are excluded. The harmonisation process misses the fact that to the large extent seed that are used in the regions are accessible through networks of FMSS, which logically calls for the FMSS to be strengthened and protected including employing measures for farmer-led quality control systems. In the long run, these may lead to loss of plant varieties that have been improved for a long period of time and adapted to both physical and cultural conditions. The harmonisation process also focuses largely on commercial crops, and this can raise concerns on the African food system since little or no consideration is put on crops that are central for nutritional and traditional diet.

But most importantly several key players in seed production and trade are being excluded by the harmonisation process. The harmonisation process seems to favour the largest seed companies such as Monsanto, Syngenta, Du Point Pioneer, Pannar, Seed Co and others who operate commercially in accordance with the international standards. As pointed out in the ACB (2018) report, the historically key role played by farmers and farmer seed systems such as developing and maintaining agricultural biodiversity and ensuring seed and food availability and affordability is not appreciated by the harmonisation process. It is under the influence of and for the benefit of corporate seed breeders, that the harmonisation of legislations is done, but also at the expense of smallholder farmers and small-scale seed enterprises.

There are also several gaps in the harmonised framework, which have implications to national seed sovereignty and the smallholder farmers in general. One of the gaps is vividly seen where there are no provisions to monitor the long terms implications of seed accessibility, seed affordability and seed diversity, which are very critical issues as far as smallholder farmers are concerned. On top of that the harmonised regulations are silent on who bears the liability in case of non-performance of the seeds. The provisions do not also spell out plainly a mechanism for redress and compensations when such a situation happens, although they have broader implications to national control of the regional seed trade.
7.0 ACTORS AND THE POLITICS OF SEEDS

7.1 INTRODUCTION

The agriculture sector is becoming increasingly globalised and corporate entities play a significant role especially in establishing and shaping the rules of engagement (Clapp & Fuchs 2009). Notably, the key actors at the global stage are pushing for (or pulling the strings towards) industrial agriculture. This will help them to have control over the agricultural value chain. Transnational Corporations (TNCs) are generally the key players in the agricultural sector and their activities are obvious in the seed sector. But they are supported by their home governments in meeting their corporate interests. As such, the TNCs have been influencing intergovernmental organisations and states to legislate rules that facilitate the existence of a corporate-dominated seed systems within nations and at the regional level through RECs. As such, harmonising the regulatory framework in the RECs is not accidental; it has been pushed by design.

There are scholars who believe that there are advantages in integrating the seed system into the global value chain. They argue that availability of different seed varieties to farmers that have been innovated in different parts of the world is probably one of the advantages (Clapp & Fuchs, Ibid). But also, it is argued that the global seed chain will bring new food varieties to consumers and probably new markets for producers who initially had only access to certain limited/local markets (Ibid). However, when examined from the perspective of seed sovereignty, there are yet concerns of the globalised seed system especially with regards to the livelihood of the smallholder farmers. The value chain agriculture, which attempts to link producers and the market is probably the best approach to explain this trend. It is an attempt to integrate SHFs into corporate markets by depriving them of their traditional seed varieties (McMichael 2013). This section attempts to present actors and their interests in the seed sector with reference to Tanzania.

7.2 ADVOCATES OF THE FORMAL SEED SECTOR

Actors on this mission are generally referred to as seed capitalists and are categorised into several groups. They include states, particularly the G8; Transnational Corporations and local private companies; philanthropic organisations and International and Regional Non-Governmental Organizations. As noted earlier, the role of western imperialist powers to ensure that Tanzania has a formal seed sector was obvious from 1969 when
United States through USAID offered a grant to Tanzania to establish the formal seed sector. However, the G8 has also been very instrumental in pushing for more reforms towards liberalisation and privatisation. For example, after the Camp David Summit in 2012, the G8 supported establishment of the New Alliance for Food Security and Nutrition (NAFSN), which was also meant to be implemented in Ghana and Ethiopia to support food security, increase private investments as well as scaling-up agro technological innovations including on seeds (Mbunda 2017).

Philanthropic organisations that have played a key role in supporting establishment of the formal seed sector are the Bill and Melinda Gates Foundation (BMGF), and the Howard G. Buffet Foundation. Efforts of BMGF are exemplary to that end. They offered funds to Public Agricultural Research Institutes, private companies and even NGOs to support seed breeding and multiplication initiatives. Notably, these two philanthropic foundations were also funders of the Water Efficient Maize for Africa (WEMA) project, a GMO Project, which was implemented by the Tanzania Agricultural Research Institute at Makutupora in Dodoma (ACB 2016).

The push for formal seed varieties in Tanzania has also been aptly done by regional NGOs especially in the East Africa region. Two NGOs that come to the play are the Association for Strengthening Research in East and Central Africa (ASARECA) and the Alliance for Green Revolution in Africa (AGRA). ASARECA, a non-for-profit organisation based in Uganda, has been very influential in pushing for the harmonisation and rationalisation of the regulatory frameworks in COMESA and EAC region since 1999. ASARECA’s objective is to ensure enhanced sustainable production and value addition in the agricultural sector. To achieve that they focus on technology and policy issues, including seed policy. They pay little or no attention to smallholder farmers interests in seed. When you read their reports, such as on the Impacts of an improved seed policy environment in Eastern and Central Africa, which was published in 2011, you note, whether absentmindedly or deliberately, they are a perfect devil’s advocate.

AGRA is renown in the region and in Tanzania for supporting the formal seed sector. They have offered grants to local NGOs and private seed companies to produce formal seeds; they have supported research agendas that elevate the formal seed sector; and they have collaborated with similar entities such as ASARECA, USAID and the BMGF to carry out activities that support the formal seed sector. The role of AGRA is, however, not surprising. Its mission is to support private sector interests in the agricultural sector. They also aim to facilitate policy engagements with governments with the view to create a conducive environment for the private sector, but also scaling up agro technologies including seeds.

TNCs are the beneficiaries of all the efforts done by the actors listed above. As we noted earlier, they are several registered international seed companies in Tanzania. Some of them include Monsanto, Syngenta, Du Point Pioneer, Pannar, Seed Co. These companies produce high demand seed varieties such as corn and they are seeking for a wider market within EAC, SADC and COMESA. The local seed companies are also the beneficiaries in the push for entrenching the formal seed system in Tanzania. However, most of them are not true players in the seed politics but entities looking for opportunities to get money. It is important to note that some of them are becoming agents of international companies in the seed dealership arrangement. Meanwhile, ASA and ARIs are also beneficiaries of the formal seed sector.

7.3 ADVOCATES OF FMSS AND POTENTIAL PLATFORMS

Actors in this group are commonly referred to as seed sovereignists. There are several local and regional NGOs who support FMSS in the regional arrangements and in Tanzania. Some of them have done a very good job. The list of these actors includes Tanzania Organic Agriculture Movement (TOAM), Tanzania Alliance for Biodiversity (TABIO), Mtandao wa Vikundi vya Wakulima Tanzania (MVIWATA), HAKIARDHI, and Lawyers Environmental Action Team.
Regional organisations that support FMSS agenda include the South Africa based African Centre for Biodiversity (ACB) and Zambia Alliance for Agroecology and Biodiversity.

The dynamics of political influence show that the current Administration in Tanzania is regarding itself as a pro-poor government including smallholder farmers. However, being key decision makers, they are prone to all sorts of lobbying from the seed capitalists. But their pro-poor stance should be why they will pay attention to seed sovereignists in the quest to factor in interests of smallholder farmers. There are three key figures to be approached to spearhead the SHF’s agenda: Dr Bashiru Ally, who was until recently the Secretary General of Chama Cha Mapinduzi but now he has been appointed Chief Secretary of the United Republic of Tanzania. Bashiru Kakurwa is a scholar, whose PhD thesis was on urban land conflicts, and he is a staunch supporter of smallholder farmers. He has worked for so long with MVIWATA, and he speaks the language of SMFs and understands their concerns regarding FMSS. Most importantly, Kakurwa is equally being trusted by the President. Former President, Dr John Pombe Joseph Magufuli himself was once quoted stating that Bashiru Ally Kakurwa is even more principled than Magufuli himself. As Chief Secretary, he is Secretary to the Cabinet, and he prepares programmes for the cabinet meeting and bills. His role in pushing for SHFs’ policy agenda and a favourable legal framework would be significant.

The second key figure is Minister for Agriculture Food Security and Cooperatives Prof. Adolf Mkenda. He is newly appointed but a quick learner in the sector, and he has shown glimpses of loyalty to the idea of food and seed sovereignty. For example, he recently ordered to stop GMO trials in the country, and he told researchers to improve local seed varieties to ensure that the country is seed and food sovereign. If successfully lobbied to go with the SHF’s agenda, Prof Mkenda can be an equally important ally in advocating for FMSS.

Deputy Minister, Ministry of Agriculture Food Security and Cooperatives, Hon. Hussein Bashe, has been on the lips of many analysts ever since he was appointed to that post in the first term of the fifth phase administration. He is hardworking with the motive to impress, but he also listens to advice given to him in different quarters. This is a man who also appears to be trusted by the Head of State. When he was taking the oath of office, the former President told him he wants Deputy Ministers to be innovative and active. Hon. Bashe was very vocal about the ministry of agriculture when he was a mere member of parliament. I think he just needs the right agenda about SHFs, and he can be a great champion of their cause.

The potential platforms for advocacy may include holding discussion sessions about FMSS in universities such as the University of Dar es Salaam and Sokoine University of Agriculture, and forums organised by NGOs such as MVIWATA, HAKIARDHI, TOAM and TABIO.

7.4 KEY DEPARTMENTS AND THEIR SERVICES IN THE FORMAL SEED SECTOR

Before we highlight the key departments/Institutes/Agencies and the services they offer to the formal seed sector, it is important we understand the powers vested into the Minister for Agriculture Food Security and Cooperatives by the legal framework. The Minister is a very important person in operation of the formal seed sector. For example, the legal framework empowers the Minister to appoint Members of the National Seeds Committee, but also the Seed Regulations, 2007 (Regulation 39) empowers the Minister by order published in a Gazette, to exempt some seed or class of seeds from provisions of the regulations. This means the Minister has power to exempt some seed varieties from adhering to the strict quality control measures demanded by the Act and its regulations.

The National Seeds Committee is a stakeholders’ forum established by the Seeds Act, 2003. This is composed of inter alia, members from seed trade association, seed consumers’ association and higher learning institutions responsible for agriculture. The National Seeds Committee is a Government advisory body on all matters related to the seed industry such as seed policies, seed legislations and implementation of such instruments.
The **Tanzania Official Seed Certification Institute** (TOSCI) is a semi-autonomous body, which was also established by the Seeds Act, 2003, mandated with overseeing the certification and promotion of quality agricultural seeds in Tanzania. As noted earlier, TOSCI is fascinated with promotion of formal seeds in the country. The institute is also responsible for registering QDS dealers and small-scale enterprises and offering training to producers of QDS to ensure that they meet the prescribed quality standards. The institute is in Morogoro region.

The **Agricultural Seed Agency** (ASA) was established under the Executive Agencies Act (Cap.245 R.E. 2002) as a semi-autonomous body under the Ministry of Agriculture, Food Security and Cooperatives (MAFC) and launched in June 2006. ASA is mandated to ensure availability of affordable high-quality agricultural seeds to farmers. ASA produces formal seeds. The functions of ASA are, inter alia, to increase production and distribution of formal seeds to farmers; but it also works with the private sector through joint ventures along the lines of Public-Private Partnership (PPP) to produce seeds with the view to increase the participation of private sector in seed industry.
8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 CONCLUSIONS

This study was set out to investigate the policy and legal framework guiding Tanzania the EAC and SADC seed sectors and their implications to FMSS and farmers’ rights. To understand the broader legal and institutional setup, the study investigates other issues such as the regional harmonisation efforts and the orientation of different actors involved in pushing for the formal seed sector. The study concludes that the Tanzania legal framework is not designed to cater for the interests of smallholder farmers and small-scale enterprises. SHFs and SSEs are allowed to produce QDS but with restrictions on land size for production and the market area to discourage them from growing. Therefore, the policy and legal environment is created in such a way that it should discourage the informal seed sector and softly coerce people to adapt to the formal seed system. The soft coercion is discernible in many ways. For example, first, there is a heavy penalty to dealers of uncertified seeds, but secondly, programs such as the National Input Voucher Scheme (NAIVS) was initiated to orient SHFs to use improved seed varieties.

The regional regulatory harmonisation process is used as one of the initiatives to entrench the formal seed sector in the regions and partner states. The harmonisation process took different routes in EAC and SADC. This study did not map out where the EAC harmonisation initiative has ended, but stakeholders think it is still in the process. The SADC initiative is at an advanced stage of harmonisation. There are some critical gaps on the harmonised legal framework including the fact that there are no provisions related to the monitoring of seed accessibility, seed affordability and diversity. Most importantly there are no provisions that impose liability in cases of damage or losses because of the certified seeds’ non-performance. Nonetheless, one notable plus for FMSS in the SADC harmonised framework is that it recognises landraces and other farmer managed varieties. However, the same spirit is not conveyed to Member States like Tanzania. Finally, the study has found out that there is a chain of actors, who are international, regional, and local who champion for seed capitalism. They are influential with both financial and lobbying capacity to ensure that policies and laws match their interests. The seed sovereignty camp must pull up their socks to match the resolute seed capitalism movement.

8.2 RECOMMENDATIONS

• Alliance for Food Sovereignty in Africa (AFSA) should lead an advocacy campaign on the role and importance of FMSS in Tanzania.

• The project should organise programs that would train smallholder farmers and small-scale enterprises about maintaining the quality of the seeds through processing and storage to ensure their germination capacity and vigour. The training should also involve mechanisms for combating pests and diseases through biopesticides.

• AFSA should support research institutes and work with them to invent ideologically inclined innovations to support FMSS. Public research institutes are underfunded; if AFSA can support some researchers in such institutes, they will make a huge statement in areas such as breeding seeds, research related to plant pathogens, and improving local varieties.

• AFSA should lobby the recognition of landraces and other varieties in the Tanzania seed regulatory framework in the manner they are recognised in the SADC harmonised regulatory framework.

• Given the nature of the division regarding seed, AFSA and other stakeholders should be prepared for a middle ground, calling for an integrated seed system that calls for the co-existence of formal and informal seed systems.
REFERENCES


ACB (2018b) Concerns with the draft EAC Seed and Plant Varieties Bill, September 2018 version, Cape Town: African Centre for Biodiversity.


La Via Campesina (2001), Our World Is No For Sale: Priority to Peoples’ food sovereignty, WTO out of Food and Agriculture. Available at hhttp://www.voiceoftheturtle.org/library/2001-11-


CROPS4HD (Consumption of Resilient Orphan Crops & Products for Healthier Diets) is an international collaborative project of three NGOs co-financed by the Swiss Agency for Development and Cooperation and the Global Programme for Food Security (SDC GPFS). Under the overall coordination of Swissaid, it started in 2021 and will run for ten years. The collaborators of CROPS4HD are SWISSAID, FiBL (Research Institute of Organic Agriculture) and AFSA (Alliance for Food Sovereignty in Africa).

The project deploys its potential and leverage to influence global policy frameworks to adopt farmer seed systems (FSS) as an important pillar for food security and agrobiodiversity. AFSA, which is in charge of the advocacy component, is a broad alliance of civil society actors involved in the struggle for food sovereignty and agroecology in Africa.

Its members represent small-scale farmers, pastoralists, hunter/gatherers, indigenous peoples, faith-based organisations and environmentalists from across Africa. It is a network of networks, currently with 37 members operating in 50 African countries.