The support for farmer-led seed systems in African seed laws
Full report

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EXECUTIVE SUMMARY

The objective of this report is to compare regional and national seed laws in Africa, and analyse the extent to which they support (or undermine) farmers’ participation in seed systems. The paper pays particular attention to how or whether these laws recognize farmers as conservers and breeders of crop varieties, and as potential multipliers and providers of seed through a range of potential means, from traditional exchanges at local levels to commercial sales on a national or even regional scale. The study is intended to encompass all African countries. Ultimately, we identified and analysed combinations of national policies, legislation, regulations and executive decrees regulating the seed sector in 35 African countries: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cote d’Ivoire, the Democratic Republic of the Congo (DRC), Ethiopia, Egypt, Gabon, Ghana, Guinea, Kenya, Madagascar, Mali, Morocco, Mauritania, Malawi, Mauritius, Niger, Nigeria, Rwanda, South Africa, Senegal, South Sudan, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe (the list of instruments is included in Annex 2). We have concluded that the following 13 African countries do not have a seed law: Comoros, Djibouti, Eritrea, Cape Verde, Guinea Bissau, Congo, Chad, the Central African Republic, Equatorial Guinea, Lesotho, Libya, Namibia, Sao Tome and Principe, and Somalia. We understand that Gambia, Liberia and Sierra Leone have relevant laws, but we were not able to obtain copies so they could not be included in the scope of this study.

In addition, we analysed three regional seed law harmonization agreements for the Economic Community of West African States (ECOWAS), the South African Development Community (SADC) and the Common Market for Eastern and Southern Africa (COMESA) sub-regions. Set up to regulate and harmonize rules largely governing so-called formal system actors, these instruments provide little encouragement to support smallholder farmers as breeders or enhancers of crop varieties, or as multipliers or providers of seed (either through exchange or sale). In the ECOWAS region, personal use of farm grain and seed by farmers, and exchange among themselves, is allowed if not destined for the market; members of SADC or COMESA have to endorse this freedom for smallholder farmers. In all three regions, national governments may set up variety lists that include farmers’ varieties. SADC is establishing regional regulations for quality declared seed (QDS). Very few crops are considered in the regional as well as the national laws.

In relation to sale and exchange of seed within farmer-led seed systems, francophone countries seem to put less emphasis on guaranteeing this freedom to smallholder farmers in their legislation than the English-speaking countries; only three of the 18 countries (Senegal, Niger and Burkina Faso) have a related provision. To summarize, it can be asserted that seed laws in the following 23 countries forbids the trade of unregulated seed: Algeria, Angola, Benin, Botswana, Burundi, Burkina Faso, Cameroon, Cote d’Ivoire, DRC, Egypt, Gabon, Ghana, Guinea, Kenya, Madagascar, Mali, Morocco, Mauritania, Mauritius,

1 For Comoros, Djibouti and Eritrea, see Mukuka (2014); for Cape Verde and Guinea Bissau, see Figure 2 by P. Senghor in Kuhlmann and Zhou (2016, p. 9).
2 Seed refers to planting material that is officially approved for use by national authorities.
3 The farmer-led seed system is entirely managed by farmers, and is mainly based on mass selection; it focuses predominantly on satisfaction of seed demands from family, friends or neighbours, rather than market demand.
Rwanda, Sudan, Togo and Tunisia. While seed legislation in the following nine countries allows for local sale and exchange within farmer-led seed systems: Senegal, Niger, South Africa, Tanzania (full certification is not obligatory, yet seeds do need to have their quality declared), Zimbabwe, Zambia, Malawi, Ethiopia and South Sudan. Exchange of farm-saved seed is allowed by two countries: Uganda and Nigeria; the law of Swaziland is silent on the matter of exchange.

Generally, countries require testing for distinctness, uniformity and stability (DUS), and value for cultivation and use (VCU), before admitting a variety to the national catalogue. South Africa, besides DUS data, only requires VCU in case of doubt. Only Benin has an actual list in which farmers’ varieties are registered. Seven countries have expressed policy commitments with no actual alternative list (or criteria) worked out: Niger, Malawi and Uganda will register landraces using looser criteria; Burkina Faso, Mali and Kenya have provisions that protect ownership over and/or strive to preserve local varieties; Ghana does not aim to register farmers’ varieties, but will support farmers in releasing their varieties officially.

Broadly speaking, the seed laws of African countries reviewed in this study recognize and promote five different classes of seed: breeder seed, basic (foundation) seed, certified seed (one or more generations), standard (or ‘emergency’) seed and quality declared seed (QDS). Currently, eight countries mention QDS in their acts or policies: Ethiopia, Ghana, South Sudan (draft policy), Tanzania, Uganda (draft policy), Mozambique, Malawi and Zambia. Contrary to its current law, the new 2013 Draft Seed Act of Malawi does not include QDS, thereby removing one potential form of accommodation for the farmer-led seed systems.

The status quo in Africa is that registration in the formal system is required for growers, sellers and often processors and distributors. Four countries exempt registration or have fewer criteria to enlist as a seed producer within a farmers’ community (Mozambique, Malawi, Nigeria and Zimbabwe). Tanzania and Ethiopia mention smallholder farmers as seed producers in relation to the production of QDS, yet we did not find different registration criteria. The seed policies of South Sudan, Uganda and Zambia express support for smallholder seed producers, and the governments of Zambia and Ghana state in their policies to provide for the supply of breeder seed to farmer-led seed systems.

Provisions not addressed in the previous sections but relevant to smallholder farmers were found in the seed policies of Ghana, South Sudan (draft), Uganda (draft), Zambia, Niger and Benin. These policies recognize the role of the farmer-led seed system and seek ways to strengthen it. In essence, it can be said that strategies and interventions for the farmer-led seed system are aimed at capacity building, moving the farmer-led seed system closer towards the formal system. In the policies of Swaziland, Madagascar and Chad, there is little or no recognition of the farmer-led seed system.

Aside from Mauritius, all countries that describe the membership of the authorities regulating the seed system, like seed committees or variety release committees, include farmers in one of these authorities. However, the inclusion of farmers does not guarantee that different farming systems are represented.
1. INTRODUCTION

“A clear and properly designed legal framework on seeds is one of the most important requirements for the development of the agricultural sector, as it facilitates the development of the seed sub-sector and creates a suitable environment for seed stockholders” (FAO, 2011).4

The practice of saving, using, exchanging and selling seed produced by smallholder farmers is an integral part of agriculture, yet varietal development and selection, and seed production has also become a separate and specialist scientific and business activity (Dutfield, 2008). From their earlier development, seed laws were conceived with the aim of regulating this emerging specialist area of agriculture, in order to prevent the supply of poor quality seed in the markets, thus ensuring that farmers always have access to seed of known origin produced according to prescribed quality standards. The need for seed legislation stems from the fact that the seed itself does not show the quality and identity of the variety and so, in the formal system, farmers become dependent on labels and certificates, for they can no longer rely on the trust established between farmers and seed sellers based on former community trade. “Seed laws protect the farmer by establishing a legal obligation for the seller to guarantee the quality of seed by means of standardized inspection and testing procedures” (FAO, 2015, p.7). Also, they intend to create a ‘level playing field’, because the laws set the rules of the market for different seed suppliers (Louwaars, 2005). Yet, civil society has voiced critical statements, arguing that seed laws are only in place to adapt to demands of the seed and biotechnology industry, and in effect could criminalize farmers (La Via Campesina, 2015).

A policy and legal framework regulating the seed sector may include a combination of higher level policies, strategies, legislation, regulations, decrees and administrative guidelines. In the policy, the vision for the seed sector is envisioned and goals and strategies are defined. This vision is translated into enforceable laws, which define the framework and essential principles that govern seed practices. The law usually contains provisions to establish authorities, procedures and requirements for variety release and seed certification, and may define registration obligations for operators in the sector.

Legal frameworks for the seed sector in developing countries started to come into place in the 1960s and 1970s. The logic was guided by a linear model (Douglas, 1980) in which farmer-led seed systems would be rapidly replaced by a regulated seed system. Regulatory frameworks aimed at increasing the availability of high-yielding varieties for farmers, in order to push the green revolution forward. In the late 1980s and early 1990s, the privatization of former public seed production entities in the seed sector took place in many countries. However, the linear model, and the legislation that derived thereof, might not be suitable for the reality of many African farmers. A study based on six countries and 40 crops shows that farmers access 90.2% of their seed from farmer-led systems. Of this 90.2%, 50.9% comes from the local market (McGuire and Sperling, 2016). While the percentage of informal seed system usage may differ in African countries, and between crops and farming systems within the same country, the farmer-led seed systems play a significant role in the supply of seed.

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The Integrated Seed Sector Development (ISSD) initiative was born partly as a reaction to this state of affairs. The ISSD approach, endorsed by the African Union (AU) Commission in 2011\(^5\), is emerging as one of the strategies pursued by the AU in the implementation of its broader agricultural development programmes, such as the Comprehensive Africa Agriculture Development Programme (CAADP) and the African Seed and Biotechnology Programme (ASBP). Since the main objective of these programmes is a food-secure Africa, it is important to recognize the critical role of quality seed in agricultural productivity, and to embark on a strategy that will ensure that quality seed is not only available but also accessible to a cross-section of farmers, including smallholder farmers and commercial farmers. The ISSD approach recognizes that there are many seed systems that make up the seed sector of a country and aims at the development of a “vibrant, pluralistic and market oriented seeds sector in Africa, providing both female and male smallholder farmers access to quality seeds of superior varieties” (De Jonge, et al., p. 2).

Seed systems can be defined based on a number of parameters, including the domains in which they operate (public, private, formal or informal), the types of crops involved (food or cash crops), the types of varieties used (landraces, improved, hybrid, exotic), the types of seed quality assurance mechanisms that are applied (certification, QDS, informal), and the mechanisms for seed dissemination (local exchange, agro-input distribution scheme, agro-dealers and seed merchants) used (ISSD, 2014). These parameters can work together in different combinations to form various categories of seed systems. The ISSD approach organizes seed systems that may be operational in any given country or region into three mains clusters, namely: the farmer-led seed system, the formal seed system and intermediary systems (ISSD, 2014). The formal and farmer-led seed systems are illustrated in Figure 1.

**Figure 1. Formal and farmer-led seed systems\(^6\)**

Examples of farmer-led seed systems are the farmer-saved and community-based seed systems. Formal seed systems include public research organizations, and public or private seed companies, which may operate at national and international levels. Relief seed and local seed businesses are systems operating in the intermediary cluster. Every country has its own landscape of informal, intermediary and formal seed systems (ISSD, 2014); the manner and frequency in which the systems interact also differs per

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\(^5\) See, for example, African Union Commission (2013).

\(^6\) Louwaars and de Boef (2012).
country. This study focuses on all farmer-led seed systems, including the farmer-saved and community-based seed systems and, for example, farmer-led seed businesses.

Seed sector development interventions, in line with the ISSD approach, should be based on eight guiding principles (ISSD, 2014). Among the eight guiding principles, two directly address the informal seed system, including its recognition (principle 4) and the establishment of interactions with the formal seed system (principle 5). Considering therefore the strong recognition of the relevance of the informal and intermediary seed systems in any given country’s seed sector, this report explores the extent to which these seed systems are recognized and their needs taken into account (or not) in existing seed laws and policies, and whether governments aim to establish some degree of linkages between the formal and informal seed systems.

2. METHODOLOGY

This report has been compiled through a review of literature concerning seed policies, and a desk (comparative) study of national seed policies, laws and regulations, and regional seed policy harmonization agreements. Documents were retrieved through direct contact with experts inside or outside the countries reviewed, and from online databases such as FAOLEX and the Collection of Laws for Electronic Access (CLEA), and the farmers’ rights website www.farmerrights.org. All African countries were included in the scope of our search. The collection of legislative documents provided the basis for our initial analysis of the state of national laws. When uncertain about how to interpret sections of those documents, we contacted key informants from the countries concerned for additional information. We also asked experts to review key sections of text. Finally, we compared our results with academic literature or other relevant reports. The analysis does not include laws governing intellectual property rights (IPRs), like patents or plant variety protection (PVP), therefore the paper does not look at how farmers’ practices to save, exchange and sell seed might be affected by national IPR laws. Phytosanitary issues are also beyond the scope of this paper. The following topics will be discussed in order to clarify the extent to which the objectives of the legislation can be viewed to influence small-scale farmers:

- The freedom to exchange and sell seed within farmer-led seed systems
- The inclusion of farmers’ varieties in the variety release system
- The inclusion of other quality assurance systems, like QDS in the certification system
- Requirements for registration to produce seed

Other guiding principles are: foster pluralism and build programmes on diversity of seed systems; work according to the structure of the seed value chain; promote entrepreneurship and market orientation; recognize complementary roles of the public and private sector; support enabling and evolving policies for a dynamic sector; and promote evidence-based seed sector innovation. For further information, see issduganda.org/about-us/issd-guiding-principles/, accessed 22 February 2017.

Contributions to this report were made by: Niels Louwaars, Peter Gildemacher, Bert Visser, Willem Heemskerk, Mohamed Hassena, Gloria Otieno, Enock K. Maereka, John Mukuka, Joan Sadie, Kalipochi Kawonga, Marja Thijsen, Asante Krobea. We also used information from an earlier version of this report written by Marcellin Tonye Mahop. We would like to thank them for their valuable contributions. Any errors made in this report remain our own.
- Special provisions in support of smallholder farmers’ needs
- Inclusion of farmers in relevant authorities and policymaking.

Even though we realize that whether such seed systems are supported or obstructed by the regulatory framework also depends on the extent to which the policies and laws are actually implemented on the ground, it is beyond the scope of this report to assess such implementation. On the basis of this report, a synthesis article will be written to be submitted to a peer-reviewed journal.
3. REGIONALLY HARMONIZED SEED REGULATORY INSTRUMENTS

Regional communities of African countries have been establishing regional seed regulations with the aim of enhancing the seed business, by harmonizing the rules governing seed quality and reducing the costs and time associated with seed trade in the region. This section focuses on three regional seed regulations of the following partnerships:

- The Common Market for Eastern and Southern Africa (COMESA, 19 member countries)
- The Southern African Development Community (SADC, 15 member countries\(^9\))
- The Economic Community of West African States (ECOWAS, 15 member countries).

The East African Community (EAC) also intends to harmonize seed legislation, as is required under the EAC Treaty, but has not yet done so. Therefore, it is not included in this analysis. In 2008, the ECOWAS Council of Ministers adopted a regional agreement on harmonized seed legislation\(^{10}\); SADC’s memorandum of understanding (MoU) on implementing the harmonized seed regulations was enforced in 2013\(^{11}\); and COMESA’s Council of Ministers approved seed trade harmonization regulations in 2014 (Kuhlmann, 2015). The regional harmonized seed regulations might be further integrated in the future through the tripartite agreement that SADC, EAC and COMESA started to develop in 2008 and launched officially in June 2015. Table 1 provides an overview of seed harmonization regulations in the three African communities in discussion.

Table 1. Key aspects of regional regulatory instruments for seed harmonization in Africa

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<th>COMESA</th>
<th>SADC</th>
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<td>Legal status</td>
<td>Binding, domestication required. Additional national legislation is allowed.</td>
<td>MoU. Regulation is in harmony with national legislation; national authorities remain in full control.</td>
<td>Not legally binding. Additional national legislation is allowed.</td>
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<td>Institutions</td>
<td>Seed Coordination Unit: coordinates all activities related to the administration and operation of the system. Seed Committee: provides technical support for the implementation and</td>
<td>Seed Centre: is the key advisor to SADC in all areas of seed policy and seed availability in the region, and assists in capacity building. Seed Committee: provides technical support for</td>
<td>West African Seed Committee: implements extant regulations in matters of seed quality control, certification and marketing. National Seed Committee.</td>
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\(^9\) DRC, Madagascar, Malawi, Mauritius, Seychelles, Swaziland, Zambia and Zimbabwe are members of COMESA as well as SADC. Five countries, including Zimbabwe, have not signed the memorandum of understanding (MoU) on the harmonized seed regulations (USAID, 2016).


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<td>Pearl millet, sorghum,</td>
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ISSD Africa, Seed Law Study
| Certification requirements | Registered variety; field and laboratory tests conducted; labelled according to regulations; post-control tests carried out. | Registered variety; seed produced in registered fields; field inspections and laboratory tests conducted; seed packaged and labelled according to regulations; certified seed lot; post-control tests conducted. | Registered variety, produced by licensed producer; tested at four stages in cropping cycle; packaged, labelled and stored according to regulations; sold by licensed seller. |
| Consideration (smallholder) farmers | • Member states can endorse the exchange and sale of quality seed of improved varieties by farmers.  
• Countries are not precluded from establishing alternative national variety lists (which include landraces). | • Member states can endorse the exchange and sale of seed by farmers.  
• A variety can be denied for registration if it is not acceptable by farmers because of specific well-known characteristics.  
• In addition to certified seed, QDS seed can also be traded regionally.  
• Landraces will be registered in the database, without further consequences/benefits.  
• Countries are not precluded from establishing alternative national variety lists. | • The personal use of farm grain and seed by farmers, and exchange among themselves, is allowed if not destined for the market.  
• Countries are not precluded from establishing alternative national variety lists (which include landraces). |

### 3.1 COMESA Seed Trade Harmonization Regulations, 2014

The COMESA regulations require member states to adopt the COMESA Variety Release System, COMESA Quarantine Pest List and the COMESA Seed Certification Rules. The regulations do not forbid member

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12 See SADC Regulations, Art. 3.3.2: Seed classes.
states from establishing alternative rules purely applicable at domestic level. Next to the COMESA catalogue for officially released varieties, a database will be kept in which accepted and rejected varieties are included\(^\text{13}\). There are no implications for varieties in the database, the main function is the collection of information. Even though the database is not public now, it will be in the future. The COMESA agreement does not prohibit member states from choosing to create national lists for farmer varieties (or any varieties for that matter) that don’t necessarily satisfy the DUS and VCU requirements (J. Mukuka, personal communication, 1 November 2016).\(^\text{14}\) Of course, there is no commitment under the COMESA agreement to allow marketing of the seed of varieties in such alternative national lists in other countries. They are only of national relevance. If member states want to allow farmers to trade farm-saved seed, member states have to endorse this in national legislation (J. Mukuka, personal communication, 1 November 2016). Regulations are silent on the requirements of seed producers or sellers. The COMESA regulations are also silent on issues of consultation regarding the establishment of the regulations, or which members should be included in the authorities. This creates a certain level of flexibility for countries, in the context of domestic seed policymaking processes, to ensure that (smallholder) farmers or their representatives are properly represented in the national agencies.

Part of the COMESA Seed Harmonization Implementation Plan (COMSHIP) is dedicated to smallholder farmers. COMSHIP describes several benefits of the harmonized seed regulations, of which two point out smallholder farmers:

- “Improving seed quality as seed companies will be breeding seed adaptable to farmers’ local systems and smallholder farmers will also be involved in selection of germplasm to suit their needs.
- Wide range of varieties for all farmers (small, medium and large) to choose from – increased diversity of crop species, varietal choice and crop rotations options”. (Mukuka, 2014, p. vi).

According to COMSHIP, these benefits can be achieved through a multi-stakeholder approach, with a focus on public-private partnership (PPPs) arrangements. COMESA has also identified some key challenges regarding the effective implementation of harmonized seed regulations. One is that COMESA strives to improve the genetics within this system and scale up its practices, because the farmer-led seed system is an important provider in the current seed supply and for some crops it is the only supplier (Mukuka, 2014, p. 10). Initiatives, such as those of development partners, should support informal seed systems and contribute to these goals.

The implementation plan states an exemption of the regulations for indigenous seed varieties or farm-saved seeds: “The approved regulations support improvements in the seed industry, and the production and trade in commercial seeds within the COMESA region, but do not preclude farmers from producing or utilising their own indigenous seed varieties or farm saved seeds, or utilising informal seed production systems, working with civil society and farmer groups and public sector providers”. (Mukuka, 2014, p. vi).

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\(^{14}\) John Mukuka, Seed Development Officer, Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA).
John Mukuka confirmed the limited nature of this caveat; even though countries may establish national legislation that allows farmers to carry out these practices, under the COMESA agreement, seed sale and exchange by farmers of varieties registered in the COMESA Variety Catalogue is not allowed (J. Mukuka, personal communication, 1 November 2016).

3.2 Technical agreements on harmonization of seed regulations in the SADC region, 2008

SADC set up regulatory systems for variety release, certification and quality assurance, and quarantine and phytosanitary measures, which make use of existing national facilities. The implementation of these systems is regarded as a national concern. There are no special provisions to stimulate breeding efforts focusing on local conditions, nor to involve farmers in variety breeding or include them in committees recommending the release of new varieties. The motivation behind this is that SADC does not address the method of seed development and production, but the product itself. Its regulations focus solely on defining the variety (K. Kalipochi, personal communication, 19 September 2016).

SADC gives special attention to farmers in the provision relating to permission to prohibit the use of a new variety. Within the SADC regulatory system, a new variety may be rejected if the variety is not acceptable to farmers because of specific well-known variety characteristics. Only varieties listed in the SADC Variety Catalogue can be submitted for certification under the SADC system. Seed produced under other quality assurance systems may be traded in or among SADC member states. Currently, the procedures for the QDS system are being developed. Discussions with civil society, community seed producers and representatives of the national regulatory systems are being held. In December 2016, a working paper was due to be published, in which the requirements and implications of QDS would be established. The current regulations follow FAO’s QDS guidelines (FAO, 2006), and state three principles on which the production of QDS will be based: “only varieties that are registered in the catalogue are eligible for seed production, thus the variety has shown satisfactory results on DUS and VCU trials, seed producers are required to register with the national seed authority (NSA), and the NSA will check 10% of the seed crops”. The SADC regulatory system does not include certification for vegetable seed, or vegetatively propagated material; standards for these crops have not yet been developed. Until they are included in the regulatory system, these and other crops not covered by the SADC Variety Catalogue can be traded outside the system. In addition to the catalogue, SADC maintains a database that includes varieties that have not been approved for registration in the catalogue, landraces and local plant varieties, based on a description of the performance and merit of a variety and farmers’ experiences. A procedure will be developed, taking into consideration the “difficulties that may be associated with the provision of DUS and VCU information for such varieties”, and based on field tests conducted by the NSA. Yet, there are no implications for the varieties included. The main function of the database is the

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15 Kawonga Kalipochi, Interim Coordinator, SADC Seed Centre.
16 SADC Regulatory system, Art. 2.3.6: Access to prohibit marketing.
17 SADC Regulatory system, Art. 3.3.2: Seed classes.
18 Ibid.
19 Ibid.
20 Ibid.
21 SADC Regulatory system, Art. 2.3.7: Registration of landraces or and other local varieties.
collection of information for the seed authorities; the database will not be available to the public as it includes privacy-sensitive information (K. Kalipochi, personal communication, 19 September 2016). Farmers’ varieties have thus to pass DUS and VCU trials, before they are eligible for certification within the SADC system, and can be sold on commercial scale. The public function of the database remains unclear.

3.3 Regulation C/REG.4/05/2008 on Harmonization of the Rules Governing Quality Control, Certification and Marketing of Plant Seeds and Seedlings in ECOWAS Region, 2008

Under the ECOWAS regulation, countries are able to develop and implement alternative seed regulations at national level, which reflect the needs of their farmers. The extent to which smallholder farmers and civil society organizations were involved and/or consulted in the development of these regulations has not been described in the regulations. Yet, Article 8 of the regulation pushes for the inclusion of all stakeholders in decision-making processes: “member states shall ensure the full participation of the seed sector players in the process of public decision-making in seed related matters, member states shall organize public access to the seed related information available to public authorities and member states shall help train and build the awareness of seed sector players”.22 The regulation does not specifically point out the inclusion of smallholder farmers in information distribution and decision-making processes, nor does it point out any other stakeholder, which appears to be left to the member state.

“All plant seed produced for the purpose of marketing in the ECOWAS region shall be certified in accordance with the provisions of this regulation”.23 When seed meets the quality standards applicable in the ECOWAS community, it can be traded and exchanged freely throughout the region.24 The regulation applies to all seed-related activities, especially those pertaining to seed quality, control, certification and marketing.25 However, farm grain and seed, which are defined as “any seed or grain produced by a farm meant for the personal use of the farmer and not destined for the market”26, are exempted and can be freely used. The understanding here is that farm grain and seed can be freely used by the farmers on their own holdings, and exchanged among themselves and with family and friends, but not sold in the market.27 Professional cards should be issued to entities in the seed chain: seed/plant breeders, producers of basic seed, producers of certified seed, plant producers (nursery farmers), wholesalers, retailers, importers/exporters, associated operators such as packaging professionals, brokers, transporters and packers.28 Individuals or corporate bodies can apply for quality control. The

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23 ECOWAS Regulation, Art. 59: Certification.
24 ECOWAS Regulation, Art. 69: Mutual recognition of certification.
25 ECOWAS Regulation, Art. 3: Field of application.
26 ECOWAS Regulation, Art. 1: Definitions.
27 ECOWAS Regulation, Art 3: Field of application.
28 ECOWAS Regulation, Art. 16.3: Professional card.
following conditions need to be met: observe regulations, have sufficient land and qualified technical staff, and possess appropriate facilities and equipment. In the definitions, a distinction is made between a “farmer-multiplicator” and seed producers. Farmer-multiplicators is a “category of farmers specialized in seed multiplication”, while seed producers are described as “any individual or corporate body specialized in the production of seeds and registered for inspection”. Quality control can be applied to seed producers, and a seed producer may sign contracts with one or several farmer-multiplicators. Farmer-multiplicators are only allowed to sign multiple contracts with seed producers, once the contract does not cause prejudice to any of the seed producers. The farmers need to respect existing regulations, allow the quality control agents to inspect their crops and not inconvenience neighbouring seed farms.

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29 ECOWAS Regulation, Section I: General provisions; Chapter 1: Definitions.
30 ECOWAS Regulation, Art. 20.2: Seed producer and farmer-seed grower.
4. ANALYSIS OF NATIONAL SEED LEGISLATION

Generally, only a limited number of major cash and food crop species are covered in national seed legislation, thereby falling under compulsory certification. Crops that do not fall under the law may be multiplied, exchanged and sold without any requirements. In West and Central Africa, these crops generally include maize, rice, sorghum, millet, cowpea, groundnut/peanut, soybean, cassava, yam, onion, tomato and legumes. Many other species that contribute greatly to food and nutrition for humankind and animals are classified as minor crops and are excluded. For several countries, the crops for which certification is required are listed below.

Table 2. Food crops included in national seed legislation

<table>
<thead>
<tr>
<th>Country</th>
<th>Crops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana31</td>
<td>Maize, hybrid maize, self-pollinated sorghum, open-pollinated millet, self-pollinated rice, self-pollinated groundnut seed, self-pollinated cowpea, self-pollinated soybean, self-pollinated tomato, cross-pollinated pepper, cross-pollinated eggplant, cross-pollinated okra, onion, cassava, yam, sweet potato, mango, citrus, pineapple</td>
</tr>
<tr>
<td>Kenya32</td>
<td>Maize, wheat, barley, sorghum, millet, oats, triticale, dry beans, green-podded beans, peas, cowpea, pigeon pea, sunflower, oil-seed rape, linseed, soybean, sesame, Irish potato</td>
</tr>
<tr>
<td>Mozambique33</td>
<td>Maize, rice, sorghum, groundnut, sunflower, common beans, cowpea, pigeon pea, sesame, millet, soybean, bambara groundnut, Irish potato, wheat, sweet potato and cassava cuttings, fruit trees; as well as quality declared seed of improved varieties of maize, rice, sorghum, groundnut, common beans, cowpea and millet</td>
</tr>
<tr>
<td>South Africa34</td>
<td>Onion, groundnut, oats, forage rape, pumpkin and squash, carrots, soybean, barley, white lupin, narrow leaf lupin, tomato, lucerne, dry beans, garden beans (runner), garden beans (dwarf), forage sorghum, wheat, triticale, high quality protein maize, white grain maize, yellow grain maize</td>
</tr>
<tr>
<td>Zambia35</td>
<td>Maize, sorghum, wheat, soybean, sunflower</td>
</tr>
</tbody>
</table>

31 Revised Seed Regulations of Ghana, 2014.
4.1 Exchange and sale of seed within farmers-led seed systems

The next section clarifies the positions of 35 countries on the sale and exchange of farm-saved seed. One observation is that legislation from francophone countries is not very concerned with guaranteeing the freedom of farmers to sell and exchange farm-saved seed; only three out of the 18 countries (Senegal, Niger and Burkina Faso) have a related provision. Furthermore, seed legislation in 23 countries forbids the trade of unregulated seed – Algeria, Angola, Benin, Botswana, Burundi, Burkina Faso, Cameroon, Cote d’Ivoire, DRC, Egypt, Gabon, Ghana, Guinea, Kenya, Madagascar, Mali, Morocco, Mauritania, Mauritius, Rwanda, Sudan, Togo, Tunisia. On the other hand, legislation in nine countries allows for local sale and exchange within farmer-led seed systems: Senegal, Niger, South Africa, Tanzania (full certification is not obligatory, yet seeds do need to have their quality declared), Zimbabwe, Zambia, Malawi, Ethiopia and South Sudan. In addition, the exchange of farm-saved seed is allowed by two countries: Uganda and Nigeria; the law of Swaziland is silent on exchange. The specific provisions, stating the conditions under which trading is allowed, are discussed in this paragraph.

The rationale behind the differences in restrictions can be found in seed policies. We were able to find the seed policies of Madagascar, Mali, Benin (draft), Chad (draft), Guinea (draft), Togo (draft), Zambia, Ghana, South Sudan (draft), Swaziland and Uganda (draft). Zambia wants to promote an integrated seed industry involving both the formal and informal system, yet it expresses the responsibility to protect “farmers from using insufficiently tested varieties” and aims at ensuring “that quality seed of various crops is made available to farmers”. Also, the Government of Swaziland considers itself responsible for the supply of improved seed. The policy of Ghana focuses on quality seeds and points towards smallholder farmers as distributors of less well-performing varieties: “Currently, due to the dominance of small-scale holders, the use of quality seed is very much limited. If not checked, this trend will lead to a continuous diminishing of agricultural productivity and compromise the cherished national goal of food security”. This perspective, that farmer varieties might have the adverse effect of reducing farm output, emerges in the Seed Act of Ghana, which imposes restrictions on the exchange and sale of farm-saved seed. Contrary to this point of view, the draft policy of Uganda, while acknowledging the low output of smallholder farmers, aims to turn smallholder farmers into commercial entities, and recognizes the value of farmer-led seed systems: “[...] the informal seed system dominates Uganda’s seed sector, providing 80% of the national seed requirement. In addition, the informal seed system is strategically positioned to conserve biodiversity of land races and neglected varieties through communities’ preservation systems for food security requirements and food safety”. The policy provides space for the role of smallholders in the development of the seed sector, specifically in the second objective of the law aimed at increasing “the availability of and access to quality seed of preferred varieties not provided for by the formal system”. In this objective, farmer and community groups are seen as potential

38 Seed Policy of Swaziland, 1993.
41 Draft National Seed Policy of Uganda, 2014, p. 16, paragraph 3.3.
producers of “quality seed with the focus on crops and varieties that have a high food security value”. In South Sudan, Mali, Benin and Guinea recognition can also be found for the important roles played by landraces and local varieties in the context of crop improvement, adaptation to climate change and resistance/tolerance to pest/disease/soil disorders etc. Therefore, the governments are committed to preserving these varieties and allowing farmers to multiply and share seed among themselves.

In defining the scope of the acts or regulations, most countries describe that seed that is sold needs to be from a variety that is listed in the national catalogue and/or that has been certified or had its quality declared. For example, Tanzania states that “No seed shall be offered for sale unless it is certified in accordance to these regulations or rules made under regulation 26(4)”, while Malawi affirms that “Only varieties that have been approved for release and notified and included in the variety list may be sold”. This can be followed by provisions exempting practices of farmer-led seed systems. In Francophone countries, most of the exemptions relevant to smallholder farmers are related to the local or traditional genetic diversity (neglected and underutilized species, and landraces) that local communities conserve. There are few exemptions related to sale and exchange of farm-saved seed for any variety.

The following countries allow for the sale of seed produced by smallholder farmers under certain conditions: Senegal, Burkina Faso, Niger, South Africa, Tanzania, Zimbabwe, Ethiopia, South Sudan, Malawi and Zambia.

- In Senegal, seed from farmers’ personal seed reserves are not effected by Articles 9, 18 and 44 of the 1997 Decree. Article 9 relates to specific criteria for registration of species; Article 18 is about categories of certified seed (R1 or R2); and Article 44 concerns labelling of seed packages for sale. Article 45 states that seed that does not conform to Articles 9, 18 and 44 are not allowed for sale. Normally, planting materials that do not conform to these articles are forbidden in the seed market. However, this regulation does not apply to seed from farmers’ reserves.

- Burkina Faso’s law recognizes local genetic diversity as national heritage that should be preserved for today’s and future use. It guarantees the farmers’ right to freely use any varieties on their farms. The use and sharing of farm-saved seed locally is allowed, but the sale of such seed in large markets is prohibited.

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42 Ibid.
45 Decree 97-616 of 17 June 1997, Senegal, regulates production, certification and commerce of seed and planting materials.
• In Niger, the national seed policy allows farmers to use and share freely any seed on their farms. The policy recognizes the farmers’ right to freely use any variety for sowing on their farms. It also recognizes their right to use, exchange or sell products from their farms that are obtained from any varieties without any restriction.

• In South Africa, the Draft Plant Improvement Bill provides an important exemption that is not included in the current law. The draft bill states that it does not apply to non-commercial varieties. A non-commercial variety is defined as: “(a) an unprotected variety of any kind of plant regulated by this Act that is available for cultivation and sale on such non-commercial scale as may be prescribed; and (b) in the case of any kind of plant of which seeds are regulated by this Act, means any open-pollinated variety of that kind of plant.” So, farmers can sell any seed of open-pollinated varieties.

• Tanzania provides an exemption to the rule that all seed that is sold needs to be certified: “Nothing in this Act shall be construed as preventing the sale of quality declared seeds as such to a neighbour farmer, whereby such seeds are grown by a smallholder farmer for use as seeds in his own farm”. Quality-declared seed is “seed produced by a registered smallholder farmer, which conforms to the specified standards […] and which has been subject to quality control measures”. As seed that is sold between farmers also needs to have its quality declared, it appears that the sale of farm-saved seed is illegal.

• In Zimbabwe, the Seeds Act “shall not apply to the sale of seed (a) which is intended only for use as food or stock feed or for industrial purposes”. This provision does not provide space to smallholder farmers to sell their seed produce, yet a provision that exempts sellers from registration does allow farmers to sell their seed for planting, if it concerns “the sale of seed which is grown by any farmer and sold by him to a person for use as seed by such person”. Thus, farmers are allowed to sell seed for seed use. The provision does not define the conditions of the sale itself, so it does not specify whether farmers are allowed to sell to neighbours or if they are also able to sell the seed in the local market.

• In Zambia, the Plant Variety and Seeds Act “shall not apply (a) to any sale of prescribed seed (which is not Zambia certified seed), which has been produced by a seed producer on his own land, and is sold by him (i) for sowing by the buyer, and not for purposes of re-sale (…) (b) to any sale of prescribed seed (which is not certified seed) by or to a person who is a member of a class exempted from the provisions of this Act”. A seed producer is defined as anyone who

52 Seeds Act 2001, Zimbabwe, Art. 8.1 and Art. 2: Unregistered person or laboratory may not sell or test seed.
produces seed for sale, whether he does this exclusively or as part of a farm or other trade or business.

- In accordance with the Seeds Act in Malawi, “The provisions of this Act shall not apply (i) to any sale of prescribed seed, which is not Malawi certified seed, which has been produced by a seed producer on his own land and is sold by him for sowing by the buyer and not for the purpose of resale”. This exemption is also included in the draft law. In the draft law, a seed producer is defined as anyone who produces seed for sale, while in the current law only definitions for registered entities are given. During an ISSD expert meeting, it was clarified that farmers cannot sell farm-saved seed on the market, but are allowed to use and share their seed as grain.

- The Ethiopian Seed Proclamation affirms that “This Proclamation may not be applicable to (a) the use of farm-saved seed by any person (b) the exchange or sale of farm-saved seed among smallholder farmers or agro-pastoralists”. A ‘small farmer’ in Ethiopia is someone who is not registered; it is not related to the size of the land (M. Hassena, personal communication, 6 December 2016). In practice, the difference is usually found in the fact that smallholder farmers pay taxes for their land, while companies lease ground. Small-scale farmers may exchange and sell landraces as well as registered varieties to neighbours and in the markets. When a group of smallholder farmers registers as a cooperative, the regulations do not apply to its individual members.

- The scope of South Sudan’s draft policy is specified in the definition of the informal seed sector: “Farmers or any group of farmers who produce seed for their own use or for use by their neighbours or others in their immediate area. Such seed and operations shall be exempt from government controls on seed but shall be eligible for all government guidance and support, so as to improve the quality of their seed and operations. Notwithstanding, if (1) such seed are advertised and promoted for sale in a manner which indicates that the informal operation has become a commercial activity; or (2) as otherwise provided by regulations hereunder, the Informal status no longer applies, and the operation has entered the Formal Seed Sector. Provided, that village seed production and supply groups shall be classified as the Informal Sector, so long as the above descriptions apply.”

Uganda, Nigeria and Swaziland do not allow for the sale of seed, but farmers can exchange certain seed.

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54 Seed Act 1996, Malawi, Art. 67.
57 Mohammed Hassena, Deputy Project Manager, Integrated Seed Sector Development (ISSD) Ethiopian Project.
58 Draft Seed Policy 2013, South Sudan: Definitions, 12.
Uganda specifies in the Draft Seed Policy that “Farmers will be allowed to save, use, exchange and share farm produce of all protected varieties”. However, the Seeds and Plant Act of 2006 needs to be revised in order to enforce the freedom that is defined in the draft policy. The act states that: “A person shall not sell any prescribed seed for sowing if - (a) that prescribed seed does not conform to the standards of germination and purity prescribed for that seed; (b) it is reported in the test report by a national seed testing laboratory or an accredited seed testing laboratory that the prescribed seed does not conform to the standards”.

Nigeria’s National Agricultural Seeds Decree describes the following exemption: “Nothing in this Decree shall apply to any seed of any notified kind or variety grown by a person and delivered by him on his own premises direct to another person without any monetary consideration for being used by that person for the purpose of sowing or planting”. The exemption extends to any seed, so improved varieties as well as farmers’ varieties can be shared or bartered, yet not sold, under these circumstances.

In Swaziland, the Seeds and Plant Varieties Act states that “Only varieties of plants that are listed in the variety list may be sold”, and those that are sold for the purpose of cultivation should meet the following requirements: (a) be of a prescribed variety which is entered in the variety list; (b) comply with relevant requirements, and have been tested for germination within a period of six months before it is intended to be sold; and (c) be packaged and labelled in a prescribed manner. The word ‘only’ seems to indicate that seed sale of unregistered varieties is forbidden. The law is silent on the issue of seed exchange.

In Rwanda, Ghana, Kenya and Mauritius besides restriction on the sale of seed by farmers, the practice of exchange is also not allowed. These countries have no provisions aimed at facilitating the practices of seed sale or exchange by farmers. The legislation therefore puts severe restrictions on farmers’ distribution of seed.

Rwanda states in its draft law that all produced or sold seed must have a quality certificate.

According to the Seed Bill of Mauritius, “No person shall cultivate, for commercial purposes, the seed of any variety of any kind of plant unless that variety is registered”, and “Any person who, having produced or acquired any seed which has not been tested [...] and intends to sell the seed for the purposes of cultivation, shall cause a sample of the seed to be delivered to NPVSO for testing”.

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59 Draft Seed Policy 2014, Uganda, Principle 4: plant breeders’ rights will be protected to foster innovation in the seed sector.
63 Seeds and Plant Varieties Act 2000, Swaziland, Art. 14: Requirements relating to the sale of seed.
64 Law N005/2016 of 05/04/2016 Governing Seeds and Plant Varieties in Rwanda, Art. 15: Granting of seed quality certificate.
65 Seeds Act, 2013, Mauritius, Art. 7: Cultivation of seed.
• In Kenya, crops that are listed in the Seed and Plant Varieties Regulations require full certification, and all other seed must have its quality declared before it is sold. Yet, the quality declaration that is obligatory in Kenya is not the QDS class that was initiated by FAO (FAO, 2006), for Kenya does not allow for this seed class. So, one can assume that requirements that need to be met in order to have quality declared must be those of certified seed.

• Ghana restricts persons to the following: “Subject to the Exports and Imports Act 1995, (Act 503) a person shall not produce, condition or market any seed unless (a) the seed is of a registered variety; (b) is of a standard prescribed by this Act or its Regulations; (c) it is multiplied in a seed multiplication farm, conditioned in a seed conditioning plant or tested in a registered laboratory; and (d) packaged and labelled as prescribed by this Act or its Regulations.” This restriction complies with the goal of the policy of preventing the distribution of less well-performing varieties that the government believes are grown by farmers.

4.2 Special criteria for registration of farmers’ varieties

Most African countries explicitly state that one prerequisite for entering the formal system is that varieties must be officially released. Ethiopia defines the release of a variety as: “the permission by which a registered seed can be multiplied, produced or supplied to the domestic market”. Moreover, the recognition of a variety is commonly associated with ownership or recognition of origin, and can therefore have consequences for breeders’ rights and aspects of access and benefit sharing. Lastly, in order to submit seed for certification, varieties have to be officially released.

Varieties need to go through an official testing procedure and be evaluated by a committee before they can be released and admitted to a national and/or variety catalogue. The procedure often includes both DUS and VCU tests. A DUS trial is an evaluation to determine whether a candidate variety meets the criteria set for the particular species or crop concerning its distinctness, uniformity in important characteristics, and stability in repeated multiplication cycles. VCU testing, which is commonly conducted in (national) performance trials (NPTs), is carried out to see if the cultivation of newly developed varieties have any substantial increased benefits in value for cultivation and use compared to the local or standard varieties. These tests are usually executed over the course of two years or two seasons, in a prescribed minimum number of sites. While it is not clearly indicated in the legislation, a case study in Kenya shows that it is possible to apply for a variety registration for a specific agro-ecological zone (Kuhlmann and Zhou, 2015). Such trials may be conducted by officials or on behalf of the breeder. The average length of the variety release process in Kenya takes 37 months, 12 in South Africa, 37 in Uganda and 22 in Zimbabwe (TASAI, 2015). The process of release is expensive and time consuming, and is therefore often not accessible to smallholder farmers. Aside from that, farmers’ landraces and local varieties are characterized by a high degree of genetic and phenotypic diversity that is said to make them more resilient and adaptable to local agro-ecology conditions. Farmers’ varietal

68 Plants and Fertilizer Act 2010, Ghana, Art. 3 8.2: Seed production and marketing.
69 Ethiopian Seed Proclamation No. 782/2013: Definitions, 2(17).
selection maintains this diversity, which is considered undesirable from the perspective formulated in the legislation. Furthermore, landraces are commonly adapted to quite specific local conditions, and do not perform well in national trials. Varieties admitted to the catalogues are therefore those that do well ‘on average’ and may not always be those most preferred by farmers. Farmers who wish to engage in the production of certified seed, will have to multiply these released varieties. Current practice requires DUS and VCU data before a variety will be included in national catalogues. South Africa is the exception in Africa, requiring only a VCU trial in case of doubt, which makes registration merely a formality providing DUS data to describe the variety characteristics. Mozambique registers varieties that only pass the DUS test in a ‘National Variety List’, whilst those varieties that have passed both DUS and VCU testing, and whose use in agriculture is sufficiently proven, are recorded in a the ‘List of Recommended Varieties’. A third list, the ‘Official Variety List’, includes the varieties that are authorized for use in Mozambique. Another important exception made by some African countries is to accept varieties of vegetables with no or automatic variety registration; Kenya, Uganda and Nigeria are known to do this (Gisselquist, et al., 2013).

Table 3. Overview of official testing procedures for variety release in Africa

<table>
<thead>
<tr>
<th>Country</th>
<th>DUS</th>
<th>VCU</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>Not indicated</td>
<td>Not indicated</td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Burundi</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gabon</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Guinea</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mali</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mauritania</td>
<td>Not indicated</td>
<td>Not indicated</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>X</td>
<td>X</td>
<td>Registration of landraces and local varieties</td>
</tr>
<tr>
<td>Mauritius</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>X</td>
<td>In order to be included</td>
<td></td>
</tr>
</tbody>
</table>

70 See, for example, Gisselquist et al. (2013).
<table>
<thead>
<tr>
<th>Country</th>
<th>In the List of Recommended Varieties</th>
<th>Not established yet. Regulations state that a crop may be required to undergo a minimum of two years of tests to determine adaptability</th>
<th>In case of doubt</th>
<th>Sufficient merit in at least one agronomic character</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niger</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rwanda</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
<td>Not established yet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swaziland</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>X</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Togo</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>X</td>
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<tr>
<td>Zambia</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>X (Syngenta report)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

While only Benin has an actual list in which farmers’ varieties are registered, seven other countries have expressed policy commitments in relation to farmers’ varieties with no actual alternative list: Niger, Malawi and Uganda (expressed in draft policy) register landraces using looser criteria; and Burkina Faso, Mali and Kenya have provisions that protect ownership over and/or strive to preserve local varieties. Ghana does not aim to register farmers’ varieties, but will support farmers in releasing their varieties officially.

- In Benin, seed of landraces and local varieties with specific interesting traits can be multiplied and sold. There are three lists of varieties in the national catalogue of Benin: List A comprises released varieties which must undergo DUS and VCU testing to be registered; List B is composed of varieties tested for DUS only, which can be multiplied exclusively for export; and List C consists of traditional/local varieties that must undergo VCU testing to be registered. In the current catalogue, there are 16 popular traditional varieties of yam in List C, and only one improved variety in List A. Seed of these local varieties is produced and sold.
- Seed policy in Niger restricts seed production to varieties that undergo DUS and VCU testing to be registered. However, it recognizes that traditional varieties or landraces, which are known as reservoirs of useful genes and are of high economic value, belong to farming communities who are allowed to use them freely for their needs. The policy guarantees de facto ownership to farmers over these varieties. The government takes the necessary measures to collect, characterize and conserve their germplasm, to give them the importance they deserve in the national catalogue.\(^\text{72}\) The law goes further to indicate that landraces, once selected for use, are registered in the national catalogue.\(^\text{73}\) The national seed policy encourages farmers to

\(^{72}\) National Seed Policy of Niger, December 2012.

\(^{73}\) Decree N° 90-55/PRN/MAG/EL, Niger, 1 February 1990, Art. 9.
contribute to breeding and selection of new varieties. Successful farmers are rewarded.\textsuperscript{74} In this context, efforts are being made through the Nigeriens Nourish Nigeriens (3N) Initiative to strengthen seed production capacities for smallholder farmers.\textsuperscript{75}

- The 2013 Draft Seed Act of Malawi\textsuperscript{76} allows for landraces and local varieties to be admitted to the national catalogue with special provisions (E. Maereka, personal communication, 14 November 2016).\textsuperscript{77} Since the law does not specify any different requirements for the admission of landraces and local varieties, it seems that they also have to undergo DUS and VCU testing. In the past, Malawi “released” eight landraces of beans as cultivars, which were included in the national catalogue of varieties. Landraces are cleaned up in order to make them more uniform before they are approved for listing in the catalogue. In Malawi, every technology (including sowing density/spacing, fertilizer application rates, etc.) has to be cleared by the Agricultural Technology Clearing Committee (ATCC) before it can be recommended for use by farmers; extension officers only recommend varieties and technologies that are cleared by the ATCC (E. Maereka, personal communication, 14 November 2016).

- In the draft policy of Uganda, the government affirms it will support “the mapping and creating of variety registers within communities and at national level”,\textsuperscript{78} in order to promote the conservation of local varieties, indigenous knowledge and practices. A gene fund will be set up to facilitate this process (G. Otieno, personal communication, 11 December 2016).\textsuperscript{79} The implications of admission to these registers remains unclear.

- A promising amendment to the Seeds and Plant Varieties Bill in Kenya was published in 2015, with the aim to “require Parliament to enact legislation to recognize and protect the ownership of indigenous seeds and plant varieties, their genetic and diverse characteristics and their use by Kenyan communities and the protection of genetic resources and biodiversity for equitable sharing of the accruing benefits”.\textsuperscript{80}

- Burkina Faso and Mali recognize local genetic diversity as national heritage that must be preserved for today’s and future use.\textsuperscript{81}

- The policy of Ghana states that “Scientists and farmers will be encouraged and supported to test and release popular local landraces as official varieties”\textsuperscript{82}, but does not elaborate on how to put this into practice. Since the aim is to release landraces as official varieties, we assume that the requirements of DUS and VCU testing will be maintained.

\textsuperscript{74} National Seed Policy of Niger, December 2012, p. 10.
\textsuperscript{75} Initiative Les Nigériens Nourrissent les Nigériens, 2013.
\textsuperscript{76} Draft Seed Act 2013, Malawi, Art. 5.1: Official list of varieties.
\textsuperscript{77} Enock Maereka, International Center for Tropical Agriculture (CIAT) – Malawi.
\textsuperscript{78} Draft National Seed Policy 2014, Uganda, Section 3.2, Objective 2: To promote the conservation of local varieties, indigenous knowledge and practices.
\textsuperscript{79} Gloria Otieno, Associate Expert, Genetic Resources and Food Security Policy at Bioversity International.
\textsuperscript{81} National Seed Policy of Niger, December 2012; National Seed Policy of Mali, 2010.
\textsuperscript{82} National Seed Policy 2013, Ghana, Section 10.2.3: Policy action.
In the context of quality declared seed (a quality assurance scheme with less stringent requirements, discussed in the next paragraph), FAO has set up non-binding guidelines that include different registration requirements for new varieties:

- “For a bred variety: (a) a statement giving the origin of the variety and the breeding procedure used in its development; (b) a description of morphological and other characteristics of the seeds and plants, which distinguish the variety from all other varieties; (c) a statement defining the agro-ecological zone for which the variety is suited based on evidence from properly conducted trials from more than one growing season (to be eligible, a variety should normally show some advantage for cultivation and use); (d) a statement showing the procedures to be followed for maintaining the variety; (e) a statement of any special requirements essential to safeguard genetic purity during multiplication (e.g. limitation of generations or extra isolation of seed crops).

- For a local variety: (a) a statement giving the origin of the variety; (b) a simple morphological description and its value for cultivation and use with an indication of the agro-ecological zone for which the variety is suited; (c) a statement indicating the procedures to be followed for maintaining the variety.

- For a variety developed through participatory plant breeding methods: (a) a statement giving the origin of the variety; (b) data obtained during the farmer evaluation process; (c) a description of the main characteristics, which distinguish the variety from other varieties; (d) a statement defining the agro-ecological zone, for which the variety is suited, and (e) a statement indicating the procedures to be followed for maintaining the variety” (FAO, 2006).

### 4.3 Provisions on seed classes other than certified seed

A possible consequence of seed laws is that only regulated seed production is allowed and farmers are no longer able to rely on trust established through previous community trade. To secure the quality of seed offered for sale in the regulated system, quality assurance systems are put in place that result in the certification of seed. For example, in Zimbabwe, six commercially important food crops cannot be sold without certification: maize, soybean, wheat, barley, oats and potato (Mujaju, 2010). The legal recognition of these categories of seed is based on the premise that the seed is produced according to prescribed standards, and on that basis, it is trustworthy with regard to its quality (e.g. appropriate germination rate, disease free, genetic and physical purity), having been through the prescribed testing and quality control. In order to submit seed to a certification scheme, nations usually require seed to be of an officially released variety. Through certification, varietal identity and purity are measured, and through seed testing, the physiological, physical, agronomic and sanitary qualities are evaluated. The minimum requirements that seed must adhere to, as set by the minister or ministry, may differ for each seed class. Broadly speaking, the seed laws of African countries reviewed in this study recognize and promote five different classes of seed: breeder seed, basic (foundation) seed, certified seed (one or more generations), standard (or ‘emergency) seed and quality declared seed (QDS). The legislative seed documents reviewed do not yet include provisions for other quality assurance systems, like truthful labelling,
<table>
<thead>
<tr>
<th>Country</th>
<th>Recognized seed classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>Pre-basic Basic Certified Authorized/standard</td>
</tr>
<tr>
<td>Angola</td>
<td>-</td>
</tr>
<tr>
<td>Benin</td>
<td>Pre-basic Basic Certified Standard (vegetables)</td>
</tr>
<tr>
<td>Botswana</td>
<td>Certified Tested</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Chad</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Pre-basic Basic Certified QDS, emergency</td>
</tr>
<tr>
<td>Gabon</td>
<td>Parental material Pre-basic Basic Certified Standard</td>
</tr>
<tr>
<td>Ghana</td>
<td>Parental material Pre-basic or breeder Basic or foundation Certified Minimum standards, QDS, emergency</td>
</tr>
<tr>
<td>Ivory Coast/Cote d'Ivoire</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Kenya</td>
<td>Pre-basic and breeder Basic Certified 1st -4th generations Standard</td>
</tr>
<tr>
<td>Malawi</td>
<td>Malawi certified</td>
</tr>
<tr>
<td>Mali</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Mauritius</td>
<td>-</td>
</tr>
<tr>
<td>Morocco</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Mozambique</td>
<td>Pre-basic Basic Certified 1st and 2nd generation Improved guaranteed seed; basic plants; mother plants; certified plantlets</td>
</tr>
<tr>
<td>Niger</td>
<td>Mother seed/ parental material Basic Certified Registered seed</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Breeder Foundation/in-bred lines Certified QDS</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>Senegal</td>
<td>Pre-basic Basic Certified</td>
</tr>
<tr>
<td>South Africa</td>
<td>-</td>
</tr>
<tr>
<td>Country</td>
<td>Seed Type</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>South Sudan</td>
<td>Breeder</td>
</tr>
<tr>
<td>Swaziland</td>
<td>-</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Pre-basic</td>
</tr>
<tr>
<td>Togo</td>
<td>Pre-basic</td>
</tr>
<tr>
<td>Uganda</td>
<td>Breeder</td>
</tr>
<tr>
<td>Zambia</td>
<td>Pre-basic</td>
</tr>
<tr>
<td>Zimbabwe\textsuperscript{83}</td>
<td>Basic seed or breeder seed</td>
</tr>
</tbody>
</table>

An important class that provides less stringent standards for certification, and/or establishes different procedures that are less time consuming and costly is that of quality declared seed (QDS). It could provide for a seed class that is more realistic for governments to implement, and for smallholder and community seed producers to adhere to. QDS was introduced by FAO in 1993, and revised in 2006 (FAO, 2006). Formal recognition by governments or their seed agencies needs to be given to QDS in order to endorse its position as an effective quality assurance scheme. In the QDS system, a list of varieties eligible to be produced as QDS is established; seed producers are required to register with an appropriate national authority; and the national authority is responsible for checking at least ten percent of the seed crops, and at least ten percent of the seed offered for sale under the designation of QDS.

Currently, eight countries mention QDS in either in their acts or policies: Ethiopia, Ghana, South Sudan (draft policy), Tanzania, Uganda (draft policy), Mozambique, Malawi and Zambia. Rwanda also defines QDS as a seed class in its draft law governing seed and plant varieties, yet it does not specify further provisions.\textsuperscript{85}

- Ethiopia regards QDS as “seed produced by organized and/or registered smallholder farmers in conformity with the required quality standards.”\textsuperscript{86} The regulations for this seed class are in Amharic, and follow FAO’s guidelines allowing for checks on only 10% of the seed crops produced, and of the seed designated for sale as QDS. The sale of QDS is only allowed within the locality where the seed is produced eg. woreda or district (G. Otieno, personal communication, 2013).

\textsuperscript{83} Dube and Mujaju (2013).
\textsuperscript{84} Dr C. Mujaju – Head of Seed Services in Zimbabwe – in a presentation at the Expert Meeting on the Impact of Seed Laws on Smallholder Farming Systems in Africa: Challenges and Opportunities under the Auspices of the Integrated Seed Sector Development (ISSD) Africa Programme, in collaboration with partners. The meeting took place in Cape Town, 16-17 March 2016.
\textsuperscript{86} Ethiopian Seed Proclamation 2013: Definitions.
11 December 2016). Farmers’ varieties that are registered can be used in the QDS system. Currently, QDS regulations are ready for approximately 35 crops, yet the level of implementation varies (M. Hassena, personal communication, 6 December 2016). The implementation of the QDS regulations for potato is probably the most advanced. A description of inspection procedures used to control the production of quality declared planting material (QDPM) of potato, published in 2012, specifies that two field inspections and one post-harvest inspection are required to produce QDPM. These inspections should be carried out by two committees: one at district level, and the other at cooperative level. If the seed potatoes do not pass both field inspections, they can be used as ware potatoes; if they don’t pass the post-harvest inspection, they may still be sold as ‘ordinary seed’.

- The seed policy of Ghana describes various schemes of certification, including minimum standards, truth-in-labelling, QDS, and self-control of quality under general supervision. Minimum standards certification is in operation in Ghana for certain crops. In the policy, it is stated that “Ghana’s seed certification has provisions for situations where the Quality Declared system can be applied”. Yet, in the current Seed Law of Ghana, alternative schemes like QDS are not mentioned. The law has a provision for seed that does not require certification, stating that this seed “shall only be subject to sampling and laboratory test compliance with the relevant information on the label”. Seed that falls under this provision largely comprises vegetables and seed produced from outside Ghana (A. Krobea, personal communication, 18 October 2016).

- South Sudan recognizes ‘quality declared’ and ‘non-certified’ as seed categories in their draft policy; however, a law and regulations need to be established. The policy states that: “While Certification of seed is recommended, it shall not be compulsory. Seed which complies with Seed Law requirements may be sold without Certification”. The law requirements are not specified, but one can assume they will be less stringent then full certification.

- In 2000, Tanzania modified and adopted the QDS system, and later incorporated QDS in the Seeds Act (2003). In 2007, more than 90% of the districts in Tanzania decided to support and include QDS production in their respective areas, after a ten-year programme supported by the Danish government (Granqvist, 2009). One of the results of the programme is a strengthening of the seed supply chain for farmers, facilitating access to parental seed for QDS producers. QDS is defined in the Seeds Act as: “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”. QDS seed is sold in the locality where it is produced, by registered smallholder farmers or a group of smallholder farmers. QDS producers are recommended to produce quantities that they can sell within the same year and, in order to

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87 National Seed Policy 2013, Ghana, Art. 10.1.1: Principles and challenges.
88 Ibid.
89 Plants and Fertilizer Act 2010, Ghana, Art. 44.10: Seed quality control.
90 Mr. Asante Krobea, Directorate of Crop Services; personal communication through Email.
91 Draft Seed Policy 2013, South Sudan: Definitions 36.
92 Draft Seed Policy 2013, South Sudan, Art. 20.1 and 2: Certification.
avoid conflicts in the market place, they are advised to avoid producing QDS crops or varieties that are sold successfully by the formal sector (Granqvist, 2009). Only officially released open-pollinated varieties (i.e. not F1 hybrids) can be produced under QDS. Once a QDS producer is trained in QDS production of a certain crop, the producer can then decide to add additional crops or varieties. Local market conditions set the seed price, and normally the sale of QDS totals a few tonnes of a maize or rice variety, for example, or a few kilos in the case of a vegetable variety (Granqvist, 2009).

- Uganda is also on a path to accommodate QDS in its regulatory framework, as evidenced by its inclusion in the Draft Seed Policy, among the objectives to be achieved in relation to seed sector development. Uganda adheres to the FAO definition of QDS and, through its policy, calls for the recognition and regulation of QDS. Specifically, Objective 2, which addresses seed production and conditioning, aims to increase the availability of and access to quality seed of preferred varieties that are not sufficiently served by the formal system. One of the means identified by the policy to achieve this objective is to put in place new classes of seed, such as QDS, with accompanying regulations on standards and procedures, and own labels. The Seeds and Plant Act (2006) can support QDS systems, for “the Minister may, in consultation with the Board, make regulations for the control of a prescribed or non-prescribed seed which is not Uganda certified seed and is produced by a seed producer on his or her own land, and is sold by him or her for sowing by a buyer for the purposes of re-sale”. The next step will be to revise the act and regulations in order to comply with the policies. At the ISSD conference in Nairobi in September 2016, it was noted that Uganda has begun implementing a QDS system for self-pollinated crops. The parameters for this class are the same as for certified seed, yet testing will be carried out in the districts, rather than in centralized laboratories. Seed inspectors will test the seed for two to three seasons, depending on the crop. QDS is sold within the district of production. Farmers’ groups have to be registered as community-based organizations or companies, in order to make an application to the Ministry of Agriculture to produce QDS. The logic behind the system is that when farmers produce a lower quantity, it is easier to implement a strong internal control.

- In Mozambique, QDS can be produced from improved and local varieties, as indicated by specific labels (W. Heemskerk, personal communication, 14 December 2017). Varieties have to be included in the National Variety List (which requires DUS testing). The production of QDS from multiple seed classes – for example, 1st and 2nd generation – is permitted. Field checks, as well as checks on germination, physical purity and moisture content are conducted. In practice, QDS in Mozambique is not yet an official label; the law is in place but the regulations for operationalization are not (W. Heemskerk, personal communication, 14 December 2017).

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95 Draft National Seed Policy 2014, Uganda, Section 3.3, Objective 2: To increase the availability of and access to quality seed of preferred varieties not sufficiently served by the formal system.
96 Ibid.
98 Willem Heemskerk, a small-farmer-oriented agronomist, Royal Tropical Institute, Amsterdam.
• In Zambia, seed produced by a registered seed producer, which is unfit for full certification, may be sold as QDS seed if it conforms to the standards of germination and purity: “Where, because of non-compliance with any of the provisions of section fifty-nine, the Minister refuses to certify as quality declared seed any seed of a specified variety which was produced by a registered seed producer for the purposes of such certification, and it is shown that, upon the test prescribed, the said seed conforms to the standards of germination and purity prescribed for such variety, the registered seed producer shall not, by reason of such non-certification, be precluded from selling the said seed as quality declared seed, subject to the provisions of this Act applicable to such sale”.  

• Although South Africa doesn’t specify QDS as a seed class, plant regulations support different requirements for certified and uncertified seed, for example different standards in the percentage of germination or viability. Aside from that, South Africa is the only African county that allows, in its legislation, for persons themselves to “apply to the Registrar, with the furnishing of reasons, for exemption from compliance with one or more of the requirements set out in subsection (1)”. This means that any registered or exempted person, such as a farmer or a company, who wants to sell seed that does not comply with one or more of the requirements stated under Article 22(1) of the draft bill – for example, the listing of the variety, or requirements such as germination – may apply for exemption to sell that seed (J. Sadie, personal communication, 11 October 2016).

• Malawi’s Seed Act (1996, amended 2005) makes provisions for QDS seed; however, the new 2013 Draft Seed Act does not, thereby removing one potential form of accommodation for the farmer-led seed systems.

• Several countries have added an escape clause that allows for the loosening of standards when there is an emergency (Rwanda, Kenya, Tanzania, Tunisia), or when there is a seed shortage (Uganda). In Zimbabwe, a ‘standard grade’ class is available for crops other than the eight most commercially important crops in the country (maize, wheat, tobacco, barley, soybean, cotton, potato, oats). Only purity and germination tests are required. However, registration is required for people involved in selling seed, and seed growers cannot sell standard grade seed directly to farmers, they need to sell through official seed outlets (Dube and Mujaju, 2013). In addition, Algeria, Benin, Cameroon and Gabon have included standard seed in their laws. The standard seed class generally guarantees minimum quality and security to users, and therefore is an alternative to certified seed. It is affordable and accessible to smallholder farmers. In Algeria, standard seed is derived from certified seed and produced by seed farmers or seed units without additional control for certification. It is a second or third multiplication of basic seed (R2

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99 Plant Variety and Seeds Act 1995, Zambia, Art. 66: When seed failing to meet certification standards may be sold as quality declared seed.

100 Plant Improvement Act 1976 – Regulations Relating to Establishments, Varieties, Plants and Propagating Material of South Africa, Art. 22: Requirements for seed which is not certified.


102 Ms. Joan Sadie, Director Plant Production, Ministry of Agriculture, Forestry and Fisheries, South Africa.
or R3) depending on the context. It is produced in the same conditions as the certified seed but does not go through another certification process. Seed legislation in Algeria recognizes authorized or officially accepted seed that derives from basic seed.\textsuperscript{103} Conditions for production are not indicated. In Benin, standard seed applies only to imported vegetables whose seed is considered to be good enough to be directly used. The supplier guarantees that the seed quality conforms to national regulations. Seed law in Gabon states that standard seed is produced from seed of released varieties that is not certified.\textsuperscript{104} The conditions of multiplication or who is allowed to produce the seed are not indicated.

- A provision in the seed legislation of Tunisia states “Notwithstanding the provisions of Articles 21 and 22 of the Law, certain new plant varieties of extreme importance for the life of man or animals may be subject to a compulsory authorization to exploit. A compulsory authorization to exploit shall be given by an order of the Minister responsible for agriculture. As from publication of the order concerned, the competent authority may allocate exploitation of the new plant variety that is the subject matter of the certificate to specialized public establishments or to organisms or to private persons having the necessary technical and professional capabilities in that field. Land races and local varieties with good adaptation or resistance to diseases and pests are qualified to be multiplied and used as seed in this case”.\textsuperscript{105}

### 4.4 Registration criteria for farmers, farmers’ organizations or communities as seed producers

In general, seed laws are framed to regulate the production of certified seed of registered varieties. On that basis, entities that wish to enrol in seed production are expected to abide by the competencies, skills and infrastructural requirements prescribed by the regulations, and must undergo an evaluation process resulting in the issue of a permit, authorization or certificate. Countries differ in the type of entities for which registration is required, and few countries provide exemptions, creating specific conditions for farmer seed enterprises. As shown in Table 5 below, registration of growers, sellers, and often processors, is required.

#### Table 5. Overview of entities for which registration is required

<table>
<thead>
<tr>
<th>Country</th>
<th>Grower</th>
<th>Processor</th>
<th>Distributor</th>
<th>Seller</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


\textsuperscript{104} Ordinance N° 004/PR/2009 of 16 July 2009 on Seed Policy in the Agricultural Sector, Gabon, Art. 20.

\textsuperscript{105} Law N°. 99-42 of 10 May 1999 on Seed, Seedlings and New Plant Varieties in Tunisia.
<table>
<thead>
<tr>
<th>Country</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chad</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congo</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Gabon</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea</td>
<td>X</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Private seed production company premises</td>
</tr>
<tr>
<td>Kenya</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Premises where seed is processed, distributed and/or sold</td>
</tr>
<tr>
<td>Mali</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mauritius</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Seed production company premises</td>
</tr>
<tr>
<td>Niger</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>X</td>
<td>(foundation seed)</td>
<td></td>
<td>X</td>
<td>“Seed production company; seed enterprise production on contract for seed company; breeder seed production agency; foundation seed grower; enterprise seed processor; seeds dealer”¹⁰⁶</td>
</tr>
<tr>
<td>Rwanda (draft law)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Enterprises engaged in selling seed (Ministerial Order No003/11.30); processing establishments</td>
</tr>
<tr>
<td>Senegal</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Premises where seed business is conducted</td>
</tr>
<tr>
<td>South Sudan</td>
<td>No description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swaziland</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Businesses</td>
</tr>
<tr>
<td>Tanzania</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Seed processing factories</td>
</tr>
<tr>
<td>Uganda</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Lots</td>
</tr>
<tr>
<td>Zambia</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Fields</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>X</td>
<td>¹⁰⁷</td>
<td>X</td>
<td>X</td>
<td>Seed outlets</td>
</tr>
</tbody>
</table>

¹⁰⁷ Dube and Mujaju (2013).
Four countries have certain exemptions or fewer registration criteria for seed producers within farming communities (Mozambique, Malawi, Nigeria and Zimbabwe).

- Mozambique differentiates between formal seed producers and non-formal seed producers. Formal producers require full registration in order to produce seed for commercial goals, while non-formal producers are allowed to produce seed and vegetative production material for planting after authorization. This can imply that local authorization will be sufficient.

- In Malawi, only premises where seed is processed, distributed and sold require registration, not the persons performing these actions. Yet, registration of the premises where seed is sold is not required if the sale concerns seed “(a) which is grown and cleaned by a bona fide farmer for his own use; (b) which is sold to a bona fide cleaner of seed in order that it may be cleaned, graded or treated before it is used as seed”. The Draft Seed Act (2013) adds farmer communities to part (a) of this provision. This extension could imply that farmers may sell seed from unregistered premises directly to other farmers.

- Nigeria’s requirements of registration do not apply to “a person growing and delivering seeds of any variety direct to another person without monetary consideration for use by that other person for sowing on the latter’s own farm”. So in Nigeria, unregistered farmers can exchange, but not sell seed.

- In Zimbabwe, the rule that only registered sellers may sell seed does not apply to “the sale of seed which is grown by any farmer and sold by him to a person for use as seed by such person”. In effect, farmers are allowed to sell seed to other farmers and would not be going against the law, even if they are not registered. If Zimbabwean farmers wish to sell their seed in local markets, and therefore want to meet certification standards, meeting these standards will be facilitated (Visser, 2015).

- In the context of production of QDS, Ethiopia allows smallholder farmers that are registered to produce this class of seed. Individuals or cooperatives can be registered as a community-based organization or limited company. To be registered as a cooperative carries the advantage of having better access to the government system, which is responsible for the supply of basic seed through research institutions (M. Hassena, personal communication, 6 December 2006). The requirements of registration for individual farmers, cooperatives or the formal system are similar.

- Tanzania also provides for smallholder farmers to register as QDS producers. Farmers may register as individuals or as a group.

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109 National Agricultural Seeds Decree 1992, Nigeria, Art. 22.2: Prohibition on processing etc. of seeds for commercial purposes.
110 Seeds Act 2001, Zimbabwe, Art. 8.1 and 2: Unregistered person or laboratory may not sell or test seed.
111 Ethiopian Seed Proclamation 2013: Definitions.
• The draft law of South Africa offers individuals an opportunity to file for exemption of registration of a business or its premises. In the current legislation, the minister may exempt a business or premises from registration.

In some seed policies, recognition of, and/or support for, smallholder farmers as seed producers can be found.

• The draft policy of South Sudan supports farmers in the following provision: “Farmers or any group of farmers who produce seed for their own use or for use by their neighbours or others in their immediate area shall be eligible for all Government guidance and support, so as to improve the quality of their seed and operations.” South Sudan also intends to set up different standards for categories of seed production fields and seed lots, in order to secure high seed quality and cost-efficiency, yet finding “a balance between the needs of farmers for high quality vs. realistic production capabilities”.

• Uganda, in its draft policy, strives to transform the informal seed system into a regulated system, yet gives credit to the role of the farmer-led system in relation to biodiversity conservation of landraces and neglected varieties. It states that “Breeders include both public and private breeding institutes and farmers and may register their varieties for protection. Laws covering variety development and plant variety protection shall protect the rights of Plant Breeders and the local communities’ traditional breeding”. However, the does not follow up on this statement of principle. Farmers’ and community groups are seen as possible producers of quality seed with the focus on crops and varieties that have a high food security value. In the draft policy, one of the objectives of the government is to promote and increase “the capacity of farmer and community groups to produce and market quality seed with the focus on crops and varieties that have a high food security value”. Another objective in the draft policy is to increase the availability of and access to quality seed of preferred varieties not sufficiently served by the formal seed system. The Seeds and Plant Act (2006) does not provide provisions that support the policy objectives.

• Zambia also encourages the participation of farmers in local germplasm conservation and utilization, and in the establishment of small seed enterprises.

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114 Draft Seed Policy 1993, South Sudan: Definitions.
115 Draft Seed Policy 1993, South Sudan, Section 17.2: Seed and seed field quality control.
116 Draft National Seed Policy 2014, Uganda, Principle 4: Plant breeders’ rights will be protected to foster innovation in the seed sector.
117 Ibid.
118 Draft National Seed Policy 2014, Uganda, Section 3.3, Objective 2: To increase the availability of and access to quality seed of preferred varieties not sufficiently served by the formal seed system.
119 National Seed Policy 1999, Zambia, Section 5.0 Policy measures/strategies, Art. 5.5.
120 National Seed Policy 1999, Zambia, Section 5.0 Policy measures/strategies, Art. 5.33.
The supply of breeder seed to the farmer-led system is supported by the governments of Zambia and Ghana. In Ghana, this can be either local cultivars or adapted research releases.\textsuperscript{121} Zambia provides for this seed on a cost recovery basis.\textsuperscript{122}

The previous paragraph has shown that seed producers of QDS also need to be registered. QDS is a seed class that provides an alternative for crops, areas and farming systems when a fully developed seed quality control system is not suitable. The FAO guidelines on QDS – which are not binding – suggest that to be eligible for registration, a QDS seed producer must:

- “Have access to seed which is of an eligible variety and suitable for further multiplication.
- Have suitable land for the proposed production programme, or be in a position to contract with suitable farmers to have the seed grown.
- Nominate person(s) suitably qualified in seed production technology to supervise and exercise quality control over the production and conditioning. The area of seed crop which each of such persons may supervise must be limited to enable the supervision to be effective. The authority may refuse to accept a nomination when there is evidence that a person is not suitably qualified.
- Have access to suitable seed conditioning equipment and storage facility to deal with the proposed production.
- Have access to a seed testing laboratory with trained staff capable of conducting the required tests”. (FAO, 2006, p. 13).

Lastly, in all countries, the relevant ministries may provide opportunities for smallholder farmers to be exempt from registration or to adjust the requirements for registration. For example, in South Africa the minister may exempt any type of business and any premises from registration;\textsuperscript{123} in Swaziland, “the Minister may provide for the manner in which and the control subject to which seed intended for certification under a scheme shall be produced and treated”;\textsuperscript{124} while in Malawi, the minister may exempt any person or class of persons from the provisions of the Seed Act.\textsuperscript{125}

4.5 Other provisions in support of smallholder farmers

No other relevant provisions were found in the acts and regulations, yet the countries that have published seed policies do address the role and the needs of farmer-led seed systems. While Swaziland and Zambia published seed policies in the 1990s (1993 and 1999 respectively), other seed policies are more recent: Mali published in 2010, Niger in 2012, Ghana in 2013, Uganda in 2014 and Benin in 2015; South Sudan has a draft from 2013, and Togo and Chad have drafts from 2015. Aside from the

\textsuperscript{121} National Seed Policy 1999, Zambia, Section 8.3 Policy action.
\textsuperscript{122} National Seed Policy 1999, Zambia, Section 5.0 Policy measures/strategies, Art. 5.9.
\textsuperscript{124} Seeds and Plant Varieties Act 2000, Swaziland, Art. 23f: Provision of a scheme.
\textsuperscript{125} Seed Act 1996, Malawi, Art. 68: Exemptions from the provisions of this Act.
acknowledgement of the systems, the governments of South Sudan\textsuperscript{126} and Swaziland\textsuperscript{127} support monetary arrangements for farmers for the purchase of quality seed of improved varieties. A summary of the provisions related to farmer-led seed systems is provided below.

- The National Seed Policy of Ghana accords an entire section to the informal seed system. The government sees the farmer-led system as “a huge entry point and opportunity for quality seed production and supply to meet the seed needs of farmers”.\textsuperscript{128} The objective is to “support the informal seed sector to integrate with the formal seed sector and systematically upgrade some of its practices with a view to portions of it eventually evolving into the formal seed sector”.\textsuperscript{129} Important actions include incorporating modern processes of variety selection, seed production and quality assurance to enable relevant participants of the farmer-led seed system to systematically evolve into formal system entities; establishing farmers’ rights legislation; and supporting interactions between the two systems to develop an integrated seed sector in which the strengths of both systems are exploited: “the formal seed sector can build on the informal sector farmers’ capacities and knowledge of local conditions, seed selection and traditional mechanisms of seed exchange to address more effectively seed demands of small-scale farmers. The informal system on the other hand can be significantly strengthened through the introduction into it of improved genetic materials and the adaptation of formal quality assurance into its practices”.\textsuperscript{130}

- The Draft Seed Policy of South Sudan “recognizes that there is an essential role for both the formal and informal seed sector. MAFCRD activities, controls, and support shall be tailored to the needs of the sector to which they apply, help the sector operate efficiently and best serve the needs of farmers while ensuring maximum seed quality which is economically feasible”.\textsuperscript{131} The Ministry of Agriculture, Forestry, Cooperatives and Rural Development (MAFCRD) aims at the increased use of improved varieties and therefore will educate farmers in the use of this seed.\textsuperscript{132} “Through relevant institutions, the Ministry shall promote crop production credit for farmers, including credit for purchase of improved seed. Such credit shall permit farmers to select the supplier of their seeds”.\textsuperscript{133}

- Similarly, Swaziland’s policy states that the “Government shall encourage and expand institutionalized agricultural credit as a means of enhancing farmer usage of improved seeds and other inputs”.\textsuperscript{134}

- In the draft policy of Uganda, aside from recognizing the important role that farmer-led seed systems play in the supply of seed, special attention is given to quality seed developed by

\textsuperscript{126} Draft Seed Policy 2013, South Sudan, Section 24: Credit.
\textsuperscript{127} Seed Policy 1993, Swaziland, Section 10: Agricultural credit and seed prices.
\textsuperscript{128} National Seed Policy 2013, Ghana, Section 8: The informal seed sector, p. 45.
\textsuperscript{129} Ibid.
\textsuperscript{130} National Seed Policy 2013, Ghana, Section 8.3: Policy action.
\textsuperscript{131} Draft Seed Policy 2013, South Sudan, Section 4: Formal and informal seed sector roles.
\textsuperscript{132} Draft Seed Policy 2013, South Sudan, Section 23: Seed extension and promotion.
\textsuperscript{133} Draft Seed Policy 2013, South Sudan, Section 24: Credit.
\textsuperscript{134} National Seed Policy 1993, Swaziland, Section 23: Seed extension and promotion.
farmers that is neglected by formal research and breeding programmes. In order to improve this, the policy plans on the following strategies: “Promoting participatory breeding and plant variety selection, promotion of local seed selection and preservation methodologies, promoting the introduction of improved affordable and gender friendly technologies to support seed multiplication and post-harvest handling”. The National Seed Board is responsible for advising the minister on the farmer-led system and vegetatively propagated materials.

- Zambia, which has the second oldest policy, promotes an integrated seed industry involving both the formal and farmer-led system. The National Seed Policy of Zambia specifies that the “Government will continue its involvement in crop research focusing more on strategic and long-term research which takes care of the traditional and minor crops that are important for household food security amongst small-scale farmers and vulnerable communities including research not attractive to the private sector”. The government will monitor the farmer-led systems and encourage non-governmental organizations (NGOs) to focus on capacity building.

- The draft policy of Benin, aside from recognizing the important role played by the farmer-led seed system in the supply of seed, recommends that the government invests more financial resources in strengthening this system. The policy states that the government withdraws progressively from the production and commercialization of seed, giving full responsibility to professionals (farmers’ groups, private sector).

- In Niger, the National Seeds Policy is flexible, and plans to move gradually from the current situation, in which about 90% of seed demand is supplied by the farmer-led system, to a fully functional formal system as recommended by ECOWAS regulations. To achieve this, the government aims to encourage and support seed producers to create associations, cooperatives, federations or other strong structures that will take on responsibilities in the seed business. The government will facilitate access to credit and capacity development for the development of these organizations.

In short, it can be said that strategies and interventions for the farmer-led seed system are aimed at capacity building and facilitated access to credit, moving the farmer-led seed system closer towards the formal system. No policy points out the importance of enhancing or keeping the farmer-led seed system in place, operating next to the formal system.

4.6 Inclusion of farmers, civil society and/or the private sector in authorities and in the establishment of legislation

Draft National Seed Policy 2014, Uganda, Section: 3.3 Seed production and conditioning; Objective 3: To enhance the production of quality seed within the informal system.


National Seed Policy 1999, Zambia: Objective 4.3.


National Seed Policy 1999, Zambia: Strategy 5.34.

To execute the mandate of the law, authorities are established to advise the minister or relevant ministries on seed-related issues, or to perform functions like variety release and certification. Most countries specify which members should be included in their authorities. Farmers are often represented, next to a larger number of other representatives, like decision makers, researchers and specialists, and the private sector. The inclusion of farmers does not guarantee that different farming systems are represented. The following paragraph clarifies which countries have included representatives of farmers or civil society in these bodies (see also Table 6).

Table 6. Inclusion of farmers or civil society in authorities

<table>
<thead>
<tr>
<th>Country</th>
<th>Authorities</th>
<th>Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>Policy Committee</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Angola</td>
<td>No mention</td>
<td></td>
</tr>
<tr>
<td>Benin</td>
<td>Technical Commissions</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Botswana</td>
<td>No mention</td>
<td></td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>National Seed Committee</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Burundi</td>
<td>Certification Unit</td>
<td>Certification scheme open to volunteers; farmers can apply to take part</td>
</tr>
<tr>
<td>Cameroon</td>
<td>National Council on Seed and Planting Material</td>
<td>One representative of farmers</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>National Seed Industry Council; National Variety Release Committee</td>
<td>“Appropriate members from relevant organizations”(^{141}) (council)</td>
</tr>
<tr>
<td>Gabon</td>
<td>Not indicated</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>National Seed Council; Technical and Variety Release Committee</td>
<td>One representative of farmers (Council); two representatives of farmers (Committee)</td>
</tr>
<tr>
<td>Kenya</td>
<td>Seed Regulation Committee</td>
<td>General Manager of Kenya Farmers’ Association, and Chief Executive of Kenya National Farmers’ Union</td>
</tr>
<tr>
<td>Mali</td>
<td>National Seed Committee</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Madagascar</td>
<td>Board of Official Service for Control and Certification &quot;SOC&quot;</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Malawi</td>
<td>National Variety Release Committee</td>
<td></td>
</tr>
<tr>
<td>Mauritius</td>
<td>National Plant Varieties and Seed Office; Seed Committee</td>
<td>Representative of farmers’ organization</td>
</tr>
<tr>
<td>Mozambique</td>
<td>National Seed Authority; Subcommittee for Variety Registration and Release.</td>
<td>Representatives of seed producer associations, and the National Union of Farmers (in both the authority and sub-committee)</td>
</tr>
</tbody>
</table>

\(^{141}\) Council of Ministers Regulations No. 16/1997 Ethiopian Seed Council of Ministers, Ethiopia: Definitions.
<table>
<thead>
<tr>
<th>Country</th>
<th>Member Bodies</th>
<th>Farmer Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niger</td>
<td>National Seed Committee</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Nigeria</td>
<td>National Agricultural Seeds Council; several other bodies, eg. Variety Release Committee</td>
<td>Representative of the Cooperatives Societies of Nigeria (Council); no description (Committee)</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Variety Release Committee</td>
<td>Two representatives of small farmers’ organizations and a farmer field school expert (from extension services)</td>
</tr>
<tr>
<td>Senegal</td>
<td>National Advisory Committee</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>South Africa</td>
<td>Advisory Committee</td>
<td>Two representatives of farmers; one representative of indigenous interests in respect of plant varieties and the source, use and impacts of plant varieties</td>
</tr>
<tr>
<td>South Sudan</td>
<td>Seed Services; Seed Committee</td>
<td>No description (Services); a representative of farmers’ organizations (Committee)</td>
</tr>
<tr>
<td>Swaziland</td>
<td>Seed Quality Control Services; National Seed Committee</td>
<td>Representative of farmers</td>
</tr>
<tr>
<td>Tanzania</td>
<td>National Seeds Committee; Tanzania Official Seed Certification Institute; National Variety Release Committee; National Performance Trials (NPT)-Technical Committee</td>
<td>Representative of seed consumer association (Seeds Committee); no description (Institute); representative of farmers’ association (Variety Release Committee); no inclusion (NPT Technical Committee)</td>
</tr>
<tr>
<td>Togo</td>
<td>No mention</td>
<td></td>
</tr>
<tr>
<td>Tunisia</td>
<td>National Seed Committee</td>
<td>Representative of Tunisian Union for Agriculture and Fishery</td>
</tr>
<tr>
<td>Uganda</td>
<td>National Seed Board; National Seed Technical Committee; National Seed Certification Services</td>
<td>Representative of farmers (Board); no inclusion (Committee); no description (Services)</td>
</tr>
<tr>
<td>Zambia</td>
<td>Seed Control and Certification Institute</td>
<td>No description</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>National Variety Release Committee; Seed Service Institute (Dube and Mujaju, 2013)</td>
<td>Representative of farmers’ union and organizations (Committee); no description (Institute)</td>
</tr>
</tbody>
</table>

Of the countries that describe the membership in their legislation, almost all countries (except Mauritius) include a farmers’ representative in their seed commissions – i.e. Algeria, Benin, Burkina Faso, Cameroon, Mali, Madagascar, Burundi (participation is open to volunteers), Morocco, Tunisia, Kenya, Ghana, Nigeria, Mozambique, South Africa (in draft law), South Sudan (in draft policy), Swaziland.
and Uganda. Farmers are included in variety release and certification agencies in Ghana, Malawi, Mozambique, Rwanda and Swaziland. Tanzania includes farmers in the variety release committee, but not in the National Performance Trial Technical Committee; the documents found for this study do not describe the members of Tanzania’s certifying agency. When identifying which groups should be represented, the laws do not distinguish between large commercial farmers and smallholder farmers, except in the case of Rwandan legislation, which specifies that the representatives should come from small farmers’ organizations.

Only four policy documents describe the processes involved in formulating legislation, and often only stating that farmers and/or civil society have been included. The regulations of Ethiopia state that a strategy will be developed by public and private stakeholders to enable the production and distribution of registered varieties.\textsuperscript{142} The National Seed Policy of Ghana was developed through a participatory process involving farmers.\textsuperscript{143} The draft Plant Improvement Bill of South Africa was written after a formal consultation workshop, which included civil society.\textsuperscript{144} Uganda describes the process of formulating the draft Seed Policy as “consultative and participatory, with key stakeholders which include civil society and farmers”.\textsuperscript{145} One of the policy’s actions that relates to the seed law and governance is to “provide a platform for involvement of stakeholders in seed strategy development, review of seed acts and regulations and other institutions”.\textsuperscript{146} The draft policies in Benin and Niger pay due attention to all key actors, including farmers’ groups. In most French-speaking countries of West Africa, farmers and civil society are involved in the formulation of seed policies and regulations; their roles and responsibilities vary from one country to another. In this context, representatives of the Regional Network of Farmers and Agricultural Producers’ Organizations in West Africa (ROPPA) are very active.

\textsuperscript{142} Council of Ministers Seed Regulation No. 375/2016, Ethiopia, Art. 16.1: Seed production and planning database.
\textsuperscript{143} National Seed Policy 2013, Ghana, Section 1.2: The seed policy formulation process.
\textsuperscript{144} Draft Plant Improvement Bill 2015, South Africa, Appendix 3.4: Consultation.
\textsuperscript{145} Draft National Seed Policy 2014, Uganda, Section: Forward.
\textsuperscript{146} Draft National Seed Policy 2014, Uganda, Section 4.6.1: Seed and plant act and regulations.
5. CONCLUSION
Regulating the seed handling approaches of smallholder farmers is not the primary goal of seed laws; however, the formulation of the law can impose restrictions on the practices of smallholder farmers. When seed laws only allow the establishment of the formal seed system, smallholder farmers and their production, exchange and sale of seed can become marginalized or even incriminated. In essence, it can be said that seed laws in 23 countries forbid the trade of unregulated seeds: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cote d’Ivoire, DRC, Egypt, Gabon, Ghana, Guinea, Kenya, Madagascar, Mali, Morocco, Mauritania, Mauritius, Rwanda, Sudan, Togo, Tunisia. While seed legislation in nine countries allows for local sale and exchange within farmer-led seed systems: Senegal, Niger, South Africa, Tanzania (full certification is not obligatory, yet seed does need to have its quality declared), Zimbabwe, Zambia, Malawi, Ethiopia and South Sudan. Exchange of farm-saved seed is allowed by two countries: Uganda and Nigeria; the law of Swaziland is silent on exchange. Other topics discussed in this report were less frequently mentioned in legislative documents. Four countries allow the registration of farmers’ varieties with less stringent requirements (Benin, Niger, Malawi (draft) and Uganda); and eight countries mention QDS in their legislation (Ethiopia, Ghana, South Sudan (draft policy), Tanzania, Uganda (draft policy), Mozambique, Malawi and Zambia). Four countries have looser registration criteria standards for local farmer seed producers (Mozambique, Malawi (draft), Nigeria and Zimbabwe). These are encouraging examples, yet the majority of national laws don’t include many (or any) provisions that recognize or aim to support farmer-led seed systems. Also, few regional agreements include or support any of the exemptions/special treatment that we see in some national laws, and since those agreements are one of the main driving forces in the next generation of national seed law development, they represent lost opportunities to promote seed system integration. As a result, any such accommodations in national law will be purely voluntary efforts at national levels, without the benefit of encouragement from the actors supporting regionalization. Recognition and support for the benefits and needs of farmer-led seed systems seems to be growing. Seed policies, which are often more recent than the seed laws in respective countries, include more recognition for farmer-led seed systems than the seed laws themselves. Still, most laws and regulations require revision in order to represent all seed systems in all diverse aspects. While allowing for the benefits of a free market seed system, the legal framework should take into consideration local/smallholder needs and livelihoods (Otieno et al., 2016).
6. REFERENCES


Annex 1 Overview provisions related to guiding questions

Highlighted text is translated

Algeria

Definitions
Les semences et plants standards : Semences et plants dérivés du matériel certifié qui répondent aux critères phytotechniques et phytosanitaires imposés par les règlements techniques. (law 05-03, art. 3 des objectifs et des définitions)

Standard seeds and seedlings: Seeds and seedlings derived from certified materials which meet the genetic and plant health criteria imposed by the technical regulations (law 05-03, art. 3 objectives and definitions)

Sale and exchange:
Sous réserve des dispositions législatives en vigueur en matière de ressources biologiques et des dispositions de l'article 6 de la présente loi, seules les variétés homologuées et inscrites à ce titre sur le catalogue officiel des variétés, selon les modalités et conditions fixées par la présente loi, sont autorisées à être produites, multipliées, importées, exportées, distribuées et commercialisées. (law 05-03, art. 17 production et de la commercialisation des semences et des plants)

Subject to the existing legislation concerning biological resources and to the provisions of Article 6 of this Law, only varieties registered in the official catalogue of varieties, according to the terms and conditions are authorized to be produced, multiplied, imported, exported, distributed and marketed. (Law 05-03, art. 17 Production and marketing of seeds and seedlings)

Registration of varieties:
Les variétés végétales nouvelles au sens de la présente loi sont soumises:

- soit à une demande d'homologation en vue de l'inscription au catalogue officiel institué en vertu des dispositions de l'article 9 de la présente loi en vue de la seule reconnaissance de son caractère variétal ;

- soit à une demande de protection de cette nouvelle variété ;

- soit, de façon simultanée, aux deux procédures d'inscription au catalogue officiel et de protection des droits. (law 05-03, art. 7 champ d’application)

New plant varieties within the meaning of this Law shall be subject to

- an application for approval for registration in the official catalogue established under the provisions of section 9 of this Act for the sole purpose of recognizing its varietal character;

- an application for protection of this new variety;

or simultaneously, the two procedures for listing in the official catalogue and protection of rights. (Law 05-03, article 7 scope)

Certification
Certification: processus officiel garantissant la conformité de la production de semences et plants
par rapport aux normes phytosanitaires et phytotechniques définies par voie réglementaire. (law 05-03, art. 3 des objectives et des définitions)

Certification: official process to ensure compliance of seed and plant production
*In relation to plant health and genetic standards defined by regulation. (Law 05-03, article 3 of the objectives and definitions)*

Registration producers:
L'activité de toute personne physique ou morale de production, de multiplication ou de vente en gros et demi-gros des semences et plants est soumise à un régime d'agrément préalable. Les conditions d'agrément ainsi que les modalités de son octroi sont définies par voie réglementaire. (law 05-03, article 3 of the objectives and definitions)

The activity of any natural or legal person producing, multiplying or wholesale and semi-wholesale of seeds and seedlings is subject to a prior approval scheme. The conditions for authorization and the procedure for granting it are laid down by regulation. (Law 05-03, section 19, production and marketing of seeds and seedlings)

Other:
Sous réserve de tout document, fait, donnée ou information relevant des dispositions de l'article 12 de la présente loi, les droits liés au certificat d'obtention végétale ne s'étendent pas aux actes effectués : par les agriculteurs à des fins de culture, sur leur propre exploitation, en utilisant le produit de la récolte qu'ils ont obtenu par la mise en culture de la variété protégée à l'exception des plantes ornementales et florales. (law 05-03, art. 19, de la production et de la commercialisation des semences et des plants)

Subject to any document, fact, data or information under the provisions of article 12 of this Law, the rights relating to the plant variety certificate do not extend to actions undertaken:
- by farmers for cultivation purposes, on their own holding, using products harvested on their farms by the cultivation of the protected variety with the exception of ornamental plants and floral. (Law 05-03, art.45 of the limits of the right of protection)

Inclusion:
Silent
Angola

Definitions:
“Produtores de sementes”, as entidades que se dedicam à produção de semente básica e certificada [Act, Definições].
“Seed producers”, the entities that are producing basic and certified seed [Act, definitions].

Sale and exchange:
1. Pode ser comercializada ou transportada a semente que tiver, em lugar visível da sua embalagem, rótulo, etiqueta ou carimbo de identificação; claramente escrito, contendo as informações exigidas por regulamento. 2. Pode ser comercializada ou transportada a muda que for identificada por uma etiqueta, claramente escrita, contendo os elementos que são especificados em regulamento, excepto a muda produzida para uso próprio [Act, Art. 6 Comércio de sementes e mudas].

1. Seed can be marketed or transported, if it has in a visible place on the bag/pack, an identification label, ticket or stamp; clearly written, containing the information required in the regulation.
2. Plantlets can be marketed or transported, if identified by a label or ticket which is clearly written, containing the information required in the regulation; plantlets produced for local use are exempted.
   [Act, Art. 6 Seed and plantlet business].

Variety release:
Silent.

Quality control:
Semente pré-básica, semente básica, semente certificada [Act, Definições].
Pre-basic seed, basic seed, certified seed [Act, definitions]

Registration chain:
Para efeito de licenciamento, as pessoas referidas no artigo 3.°, para produzirem, comercializarem, importarem ou exportarem sementes e mudas, devem efectuar o seu registo no Ministério da Agricultura e Desenvolvimento Rural, após reunirem os requisites estabelecidos no regulamento [Act, Art. 5 Registro].
For purposes of licensing, the persons referred to in article 3, for production, marketing, import or export of seed and plantlets, have to register at the Ministry of Agriculture and Rural development, after presenting the required documents, established in the regulation [Act, Art. 5 Register]

Other:
Silent.

Inclusion:
Silent
Benin

Definitions:

Les “variétés traditionnelles” ou “écotypes locaux” constituent un patrimoine national qui doivent être à ce titre bien gérées dans l’intérêt de la nation et conformément aux conventions internationales ratifiées par le Bénin. A cet effet, l’Etat veillera à préserver ce matériel végétal sélectionné in situ durant des décennies par les populations et à garantir en conséquences la préservation du patrimoine semencier qui en est issu. (Draft national seed policy p. 28)

“Traditional varieties” or “landraces” constitute a national patrimony which must be properly managed in the interests of the nation and in conformity with the international conventions ratified by Benin. To this end, the country will ensure the preservation of this plant material selected in situ for decades by the populations and consequently guarantee the preservation of the this genetic diversity (Draft national seed policy, page 28)

Sale and exchange:

La commercialisation de semences sur le territoire national se limite aux semences des espèces et variétés de plantes agricoles ayant une valeur agronomique et d’utilisation pour le pays. Ces semences concernent les variétés homologuées au Bénin ainsi que celles des autres pays de la CEDEAO enregistrées au catalogue régional. (Draft national seed policy p. 24)

The marketing of seed within the national territory is limited to seeds of agricultural plant species and varieties having agronomic and use value for the country. These seeds concern the varieties registered in Benin as well as those of the other ECOWAS countries registered in the regional catalogue (Draft national seed policy p. 24)

Registration of varieties:

L’homologation consiste à conduire des tests de détermination des critères de Distinction, d’Homogénéité et de Stabilité et de vérifier également la valeur Agronomique et Technologique de toutes les variétés proposées. Toutes les variétés homologuées auront une identification moléculaire afin de s’assurer qu’elles sont uniques. (Draft national seed policy p. 16)

The registration consists of conducting tests to determine the criteria of Distinction, Homogeneity and Stability and also to check the agronomic and technological value of all the varieties proposed. All registered varieties will undergo molecular characterization to ensure that they are unique. (Draft national seed policy p. 16)

Certification:

La Commission Nationale de Règlementation de Contrôle et de Certification est chargée de veiller à l’harmonisation des procédures de contrôle, des méthodes d’inspection et d’analyse selon les normes de l’Association Internationale d’Essais des Semences (ISTA) (National seed policy p. 16)

The National Control Commission for Control and Certification is responsible for ensuring the harmonization of inspection procedures, inspection methods and analysis according to the standards of the International Seed Testing Association (ISTA) (National seed policy p. 16)
Other:
Le catalogue national comprend la liste A constituée par les variétés homologuées dont les semences peuvent être multipliées et commercialisées sur le territoire des États Membres de la CEDEAO, la liste B constituée par les variétés homologuées dont les semences peuvent être multipliées sur le territoire des États membres de la CEDEAO en vue de leur exportation hors dudit territoire. Une liste spécialement réservée à des variétés traditionnelles est également établie (liste C)

The national catalogue shall comprise a list A consisting of approved varieties whose seeds may be propagated and marketed in the territory of ECOWAS Member States, a list B consisting of approved varieties whose seeds may be propagated in the territory of the Member States Of ECOWAS for export from that territory. A list specifically reserved for traditional varieties is also established (List C)

Inclusion:
Les travaux du Comité National des Semences et Plants sont préparés par les commissions techniques suivantes :
- commission de contrôle et des règlements ethniques de production des semences ;
- commission d’élaboration du catalogue des espèces et des variétés.
Ces commissions comprennent obligatoirement les Directeurs Généraux des services intéressés, les représentants des organismes de recherche et de développement, les utilisateurs des semences.(Arrêté 87-302 art. 7, création, composition et fonctionnement du Comité National des Semences)

The work of the National Committee for Seeds and Plants shall be prepared by the following technical commissions:
- commission for control, ethics matters and seed production;
- commission to elaborate the catalogue of species and varieties.
These committees shall include the Directors-General of the departments concerned, representatives of research and development organizations, users of seeds (Order No. 87-302, Article 7, creation, composition and functioning of the National Seed Committee)
Botswana

**Definitions:**
"owner", in relation to any seeds, includes any person having for the time being the possession thereof; "registered seed grower" means any person for the time being registered under this Act as a seed grower of the crop or crops in respect of which he is so registered.

**Sale and exchange:**
No person shall sell any seeds as Government-tested seeds, or any seeds purporting to be Government-tested seeds, or any seeds bearing any label or mark indicating or implying that such seeds are Government-tested seeds, unless- (a) a sample of the seed, taken in the prescribed manner, has been tested at a seed-testing station; (b) a certificate in the prescribed particulars in respect of purity and germination of the seeds, has been issued to the seller; and (c) a copy of such certificate is delivered by the seller to purchaser on or before any sale or, if the seeds are not delivered at the time of sale, on or before delivery thereof; or in the case of a packet of seeds, such packet is distinctly marked in the prescribed manner to the effect that the contents thereof conform with the provisions of this section.

[Act, Art. 8.1 Control of sale of Government-certified seed]

No person shall sell any seeds as Government-certified seeds, or any seeds purporting to be Government-certified seeds, or any seeds bearing any label or mark indicating or implying that such seeds are Government-certified seeds, unless- (a) the crop from which the seeds were obtained was inspected in the field by an inspector; (b) a sample of the seeds, taken in the prescribed manner, has been tested at a seed-testing station; (c) a certificate in the prescribed form and containing the prescribed particulars in respect of the variety, trueness to variety, purity and germination of the seeds has been issued to the seller; and (d) a copy of such certificate is delivered by the seller to the purchaser on or before a sale or, if the seeds are not delivered at the time of sale, on or before the delivery thereof; or in the case of a packet of seeds, such packet is distinctly marked in the prescribed manner to the effect that the contents thereof conform with the provisions of this section [Act, Art. 9.1 Control of sale of Government-tested seeds]

Any person who exports any agricultural or garden seeds, other than Government-certified or Government-tested seeds, except with the permission in writing of the Minister, shall be guilty of an offence [Act, Art. 6 Control of export, etc., of seeds]

**Registration of varieties:**
Silent.

**Certification:**
See Sale and exchange.

**Registration seed growers:**
Any person wishing to grow any crop for the production of Government-certified seeds shall register himself with the Minister as a seed grower in respect of such crop [Act, Art. 11.1 Registration of seed growers].
Other:
Silent.

Inclusion farmers:
Silent.
Burkina Faso

Definitions
La variété traditionnelle est une variété qui existe dans son milieu naturel sans aucune intervention humaine, autre que la sélection massale, pour son amélioration Art 5 Law 010/2006/AN

The traditional variety is a variety that exists in its natural environment without any human intervention, other than mass selection, for its improvement. Art 5 Law 010/2006 / AN

Sale and exchange:
Toute production des semences à des fins de diffusion et de commercialisation doit être certifiée conformément aux normes et règles définies par les règlements techniques ; (Law 010-2006, art. 12 de la production)

La protection que confère le droit d’obtention végétale ne porte pas atteinte au droit des agriculteurs d’utiliser librement la variété à des fins de semis pour leur propre champ, ni au droit d’autres sélectionneurs d’utiliser la variété à des fins de recherche. (Law 010-2006, art. 12 de la protection des variétés)

Any seed production for dissemination and commercialization must be certified in accordance with the relevant standards as defined by the technical regulations; (Law 010-2006, art. 12 of the production)

The breeder right obtained by by the breeder for a variety does not prevent farmers to freely use the variety for the purpose of seed for their own field, nor for other breeders to use the variety for research purposes. (Law 010-2006, Article 12 of the protection of varieties)

Registration of varieties:
Les conditions d’homologation et d’inscription des variétés et matériels forestiers de base au catalogue national sont précisées par arrêté conjoint des ministres chargés de la recherche, de l’agriculture et des forêts (Law 010-2006, art. 9 de la gestion des variétés)

The conditions for the homologation and registration of basic varieties and forestry materials in the national catalogue are specified by decree jointly signed by ministers responsible for research, agriculture and forestry (Law 010-2006, Article 9 management of varieties)

Certification:
Le contrôle de qualité, dans le cadre de la certification des semences, est effectué au champ et au laboratoire (Law 010-2006, art. 29 du contrôle de qualité)

Quality controls undertaken for seed certification are conducted in the field and in the laboratory (Law 010-2006, article 29 of the quality control)

Registration producers:
Il est institué, par arrêté conjoint des ministres chargés de l’agriculture, des forêts, du commerce et de la recherche, un cahier des charges précisant l’ensemble des droits et des obligations des différentes catégories
d’acteurs du secteur semencier, notamment l’obligation d’information. (Law 010-2006, art. 31 du cahier des charges)

*It is established by joint order by the Ministers for Agriculture, Forestry, Trade and Research the rights and obligations of the various categories of actors in the seed sector, in particular the obligation to provide information.* (Law 010-2006, Article 31 of the Tender Specifications)

**Other:**
La loi ne s’applique pas aux grains dont l’usage est libre sous réserve des lois et règlements en vigueur au Burkina Faso. (Art 2 Law 010-2006/AN)

Les variétés traditionnelles constituent un patrimoine national. Elles doivent être gérées dans l’intérêt de la nation et conformément aux conventions internationales ratifiées par le Burkina Faso. (Law 010-2006, Art 3).

*The law does not apply to grains whose use is free subject to the laws and regulations in force in Burkina Faso. (Art 2 Law 010-2006 / AN)*

*Traditional varieties are a national heritage. They must be managed in the interests of the nation and in accordance with the international conventions ratified by Burkina Faso. (Law 010-2006, Art 3).*

**Inclusion:**
Silent
Burundi

Definitions:
Certification semencière: ensemble des procédures, méthodes et techniques permettant de garantir la qualité des semences Durant le processus de multiplication et d’assurer l’identité variétale, la pureté variétale et l’état sanitaire (Law 1/08, Art. 3)

Seed certification: all procedures, methods and techniques to guarantee seed quality during the process of multiplication and ensuring varietal identity, varietal purity and health status (Law 1/08, Article 3)

Sale and exchange:
Les semences non certifies peuvent également être exportées dans les conditions de droit commun qui régissent le commerce d’exportation en général Law 1/08, art. 34)

Uncertified seeds may also be exported under the general conditions of the export trade in general (Law 1/08, Art. 34)

Registration of varieties:
Pour être inscrite au catalogue, une variété doit être distincte, stable et suffisamment homogène; elle doit en outre posséder une valeur agronomique et technologique suffisante pour l’agriculture. (Law 1/08, art. 13)

Le catalogue comporte deux listes.
- Une liste A des variétés anciennes ou nouvelles inscrites sur proposition des obtenteurs, les pouvoirs publics ou d’autres personnes ayant un intérêt dans l’inscription de la variété et répondant aux critères de l'article 13
- Une liste B des variétés traditionnelles cultivées qui sont inscrites sur proposition des obtenteurs, des utilisateurs ou des pouvoirs publics et qui répondent aux critères de distinction par rapport à des variétés existantes. (Law 1/08, art. 14)

Toute variété faisant objet de demande d’inscription est soumise à des essais comparatifs en cultures portant sur la composition génétique, la stabilité, l’homogénéité et la valeur agronomique et technologique. .....Le nombre de cycles de ces essais ainsi que le protocole sont précisés par une ordonnance du Ministère ayant l’Agriculture dans ses attributions ((Law 1/08, art. 18).

To be registered in the catalogue, a variety must be distinct, stable and sufficiently homogeneous; It must also possess an agronomic and technological value as may be requested for agricultural production. (Law 1/08, Article 13). The catalogue contains two lists.

A list A of old or new varieties registered on the proposal of breeders, public authorities or other persons having an interest in the variety and meeting the criteria of Article 13

A list B of the cultivated traditional varieties which are registered on the proposal of breeders, users or public authorities and which are distinct from existing varieties. (Law 1/08, Article 14)

Any variety candidate for registration shall be subjected to comparative crop tests on genetic composition, stability, homogeneity and agronomic and technological value. ..... The number of cycles of these tests and the protocol are specified by an ordinance of the Ministry in charge of Agriculture (Law 1/08, article 18).
Certification:
Sur proposition de l’Office National de Contrôle et de certification de Semences et après avis de la Commission Nationale Semencière, le Ministère ayant l’Agriculture dans ses attributions fixe par ordonnance le contrôle de qualité et la certification des semences (Law 1/08, art.4)
Le Ministre ayant l’Agriculture dans ses attributions détermine, sur proposition de la Commission Nationale Semencière, les variétés à soumettre à une certification obligatoire et celles qui bénéficient d’une certification volontaire (law 1/08, art. 8, )

On the proposal of the National Board of Seed Control and Certification, and following the advice of the National Seed Commission, the Ministry of Agriculture in its attributions determines by quality control and seed certification (Law 1/08, Art.4).

The Minister responsible for Agriculture shall, on a proposal from the National Seed Commission, determine the varieties to be subjected to compulsory certification and those which are voluntarily certified (Law 1/08, Article 8).

Registration of producers:
Tout producteur des semences qui désire adhérer au système de certification officielle des semences peut le demander à l’Office National de Contrôle et de Certification des Semences. Seuls les producteurs de semences agréés peuvent faire certifier les semences par l’Office. (Law 1/08, art. 7)

Any seed producer wishing to join the official seed certification system may request it from the National Seed Control and Certification Office. Only certified seed growers can propose seed for certification by the Board. (Law 1/08, Article 7)

Other:
Silent

Inclusion:
Silent
Cameroon

Definitions:
Les semences de toutes les espèces et variétés végétales sont classées en trois (3) catégories:
- semences de base;
- semences certifiées;
- semences standard.
Les critères de classification des semences sont fixés par voie réglementaire. (Law n° 2001/014, Art. 9)

Seeds of all species and plant varieties are classified in three (3) Categories:
- basic seed;
- certified seed;
- standard seed.
The criteria for classifying seed are laid down by regulation. (Law No. 2001/014, Article 9)

Sale and exchange:
(1) Ne peuvent être commercialisées au Cameroun que les semences de variétés végétales inscrites au Catalogue Officiel des espèces et Variétés dans l’une des catégories visées à l’article 9 de la présente loi.
(2) Les semences commercialisées doivent répondre aux normes générales de traitement chimique, de stockage, d’emballage et d’étiquetage fixées par arrêté conjoint de Ministre chargé de l’agriculture et du Ministre chargé du commerce. (Law n° 2001/014, Art. 14)

In Cameroon only seeds of plant varieties listed in the Official Catalogue of Species and varieties in one of the categories referred to in Article 9 of the law can be marketed. (Law No. 2001/014, Art.)
Marketed seeds must meet basic standard of health, storage, packaging, and labelling jointly approved by the Minister in charge of Agriculture and the Minister in charge of Trade (Law 2001/014 art. 14).

Registration of varieties:
Il est institué un Catalogue Officiel des espèces et Variétés dans lequel sont inscrites les variétés végétales développées ou introduites au Cameroun suivant les modalités fixées par voie réglementaire. (Law n° 2001/014, Art. 10)

An Official Catalogue of Species and Varieties is instituted in which are registered the plant varieties developed or introduced in Cameroon in respect of the modalities fixed by regulation. (Law No. 2001/014, Article 10)

Certification:
Les semences de base et les semences certifiées produites au Cameroun font l’objet d’une certification par l’Administration semencière. (Law n° 2001/014, Art. 11):

Basic seed and certified seed produced in Cameroon are certified by the Seed Administration. (Law No. 2001/014, Article 11)

Registration producers:
L’activité semencière s’exerce librement sur l’étendue du territoire national par toute
personne physique ou morale dans le respect des lois et règlements en vigueur, des exigences des normes techniques applicables en la matière ainsi que des engagements internationaux souscrits par le Cameroun notamment la Convention Internationale sur la Biodiversité.
Toutefois, l’exercice de l’activité semencière est soumise à une déclaration préalable suivant les conditions et modalités fixées par voie réglementaire. (Law 2001/014, art.5)

Seed activity is freely exercised over the entire national territory by any moral or legal person in compliance with the laws and regulations in force, the requirements of the technical standards applicable in this matter as well as the international commitments subscribed by Cameroon including the International Convention on Biodiversity.

However, the exercise of the seed business shall be subject to prior declaration in accordance with the terms and conditions laid down by regulation. (Law 2001/014, Art. 5)

Other:
Silent

Inclusion:
Silent
Côte d'Ivoire

Definitions:
Aux termes du présent décret, les semences et plants sont des végétaux ou parties de végétaux de toute nature destinées à la production ou à la multiplication (Décret N° 92-392, art. 2).

According to the present decree, seeds and plants are plants or parts of plants of any kind intended for production or propagation (Decree No. 92-392, article 2).

Sale and exchange:
Les variétés végétales nouvelles sont soumises à homologation avant leur multiplication en vue de leur commercialisation, conformément aux règles techniques fixées par arrêté du Ministre chargé de l’Agriculture. L’homologation résulte de l’inscription de la variété végétale au « Catalogue officiel des espèces et variétés » tenu par le Ministère chargé de l’Agriculture. L’inscription au catalogue est accordée à des variétés distinctes, stables, suffisamment homogènes et présentant une amélioration agronomique et technologique par rapport aux variétés existantes. (Decree 92-392 of July, 1, 1992, article 3)

New plant varieties shall be subject to approval before being propagated for marketing in accordance with the technical rules laid down by order of the Minister responsible for Agriculture. The registration results from the inclusion of the plant variety in the "Official Catalogue of Species and Varieties" maintained by the Ministry of Agriculture. Cataloguing is granted to distinct, stable, sufficiently homogeneous varieties with an agronomic and technological improvement over existing varieties. (Decree 92-392 of July, 1, 1992, article 3)

Registration of varieties:
See sale and exchange

Certification:
Toute semence ou plant destiné à la commercialisation doit faire l’objet d’une certification. 
La certification est effectuée par des services compétents du Ministère en Charge de l’Agriculture (Décret N° 92-392, art. 10).

Any seed or plant intended for marketing must be certified.

Certification is carried out by competent departments of the Ministry in charge of Agriculture (Decree No. 92-392, article 10).

Registration of producers
La production de semences et de plants par la multiplication de matériels végétaux à plusieurs niveaux de générations en vue de leur commercialisation ne peut être assurée que par des personnes physiques ou morales agréées par arrêté du ministre chargé de le l’agriculture (Décret N° 92-392, art. 9).

The production of seeds and seedlings by the multiplication of plant materials through several steps of generations for marketing purposes can only be ensured by natural or legal persons accredited by decree of the Minister for Agriculture (Decree No. 92-392, article 9).
Other:
Silent

Inclusion:
Silent
Democratic Rep. Of Congo (DRC)

Definitions
Semences: tout matériel végétal, vitroplants compris, destiné à la production sexuée ou asexuée, provenant d’une multiplication à l’identique de graines, de boutures, tubercules, bulbes, et des parties de plants d’une variété d’une espèce végétale donnée ; (Art. 3, Loi n° 11/022 portant principes fondamentaux relatifs à l’agriculture)

*Seeds: any plant material, including vitroplants, intended for sexually or asexually production, ensuring an identical multiplication of seeds, cuttings, tubers, bulbs, and parts of plants of a variety of a plant species;* (Article 3, Law No. 11/022 on Fundamental Principles relating to Agriculture)

Sale and exchange:
See registration of producers.

Registration of varieties
L’État, en concertation avec les provinces, les entités territoriales décentralisées et les professionnels de l’agriculture, élabore un catalogue national des semences et tient les livres généalogiques (Loi n° 11/022 art. 29)

*The State, in consultation with the provinces, decentralized territorial entities and professionals, develops a national seed catalogue and holds books* (Law No. 11/022, Article 29)

Certification
Silent

Registration of producers
Tout producteur, importateur ou distributeur des produits phytosanitaires, des végétaux, des produits végétaux, des semences et autres articles réglementés dispose d’un délai de six mois pour se conformer aux dispositions de la présente loi et de ses mesures d’exécution.

*Any producer, importer or distributor of plant protection products, entire plants, plant products, seeds and other regulated components shall have six months to comply with the provisions of this Law and its implementing measures* (Law No. 11/022, Article 83).

Other:
Silent

Inclusion:
Silent
**Ethiopia**

**Definitions:**
"approved seed" means domestically produced or improved seed certified as conforming to the Ethiopian seed standards; "prescribed seed" means any seed that fulfils the minimum seed standards or to which the necessary quality control is undertaken and supplied to market or determined by directive of the Ministry to be issued hereunder to be supplied to market; "certified seed" means a direct descent seed from basic seed or a seed found in first, second and third generation of basic seed; "quality declared seed" means seed produced by organized and registered small holder farmers, in conformity with the required quality standards; "restricted seed" means prohibited from being marketed in, imported into, or exported from Ethiopia by directive of the Ministry [Proclamation]; "breeder" means (a) a person who has discovered a new plant variety through breeding or developed the newly discovered variety [Regulations].

**Sale and exchange:**
This Proclamation may not be applicable to (a) the use of farm-saved seed by any person (b) the exchange or sale of farm-saved seed among smallholder farmers or agro-pastoralists (c) seed to be used for research purposes; and (d) forestry seed [Proclamation, Art. 3.2 Scope of Application] The provisions of this Regulations shall not apply to a seed produced by a farmer on his own field and sold directly to another farmer. However, these Regulations shall apply on any producer, processor and distributor who advertised his seed to participate on a sale of seeds [Regulations, Art. 3.2 Scope of Application (repealed regulations of ‘97)]

**Registration of varieties:**
The distinctness, uniformity and stability and value for cultivation and use characteristics of the candidate varieties shall be evaluated before their release [Regulations, Art. 3 Criteria for Release] Perform both DUS and NPT for a minimum of two seasons in at least three sites having similar agro-ecology [Regulations, Art. 13.3 Administration of Variety Release and Registration Process]

**Certification:**
In order to be eligible for certification of seed quality, the seed shall be 1/ of a registered variety 2/ produce by a producer who holds valid certificate of competence and 3/ obtained from a known source [Regulations, Art. 19 Eligibility for Certificate of Seed Quality]. QDS means seed produced by organized and registered smallholder farmers or registered small holder farmers, in conformity with the required quality standards [Proclamation, definitions]. The regional authorities shall have the responsibility for quality control and certification of regionally produced pre-basic, basic and certified seed to be released on the domestic market as 'Approved Seed' or 'Quality Declared Seed' [Regulations, Art. 18 Responsibilities for Seed Quality Control and Assurance]. Any person who intends to engage in commercial seed production shall have a certificate of competence. Any person engaged in commercial seed production shall establish an internal seed quality control system. Any seed producer holding a certificate of competence may, subject to any other applicable legislation, access breeder seeds, pre-basic seeds and basic seeds from registered varieties producing institution [Proclamation, Art. 6.1,2&3]
Seed Production. Any person in order to engage in commercial seed distribution shall have a certificate of competence [Proclamation, Art. 8 Distribution]. In case of an acute seed shortage in Ethiopia the Ministry shall have the power to announce officially a seed shortage emergency and to authorize the supply of emergency seed to affected areas [Proclamation, Art. 18 Supply of Emergency Seed]

**Registration producers:**
Any producer of released variety seed shall have the following obligation: 1. Hold a valid certificate of competence issued pursuant to Article 6(1) of the Proclamation; 2. Undertake production in accordance with the quality standard set for seed certification; 3. Participate in integrated seed production planning activities; and 4. Comply with the requirement specified in the directive issued by the Ministry to improve the quality or quantity of seed production [Regulations, Art. 14 Obligations of Producers]

**Other:**
None.

**Inclusion:**
No mention about the authority members not about the formulation of the legislation. The Ministry and regional authorities together with public and private stakeholders shall develop a strategy to enable production and distribution of registered seed varieties as provided under Article 7 of the Proclamation [Regulations, Art. 16.1 Seed Production and Planning Database]
Gabon

Definitions
Certification semencière : Système par lequel un organe officiel approuve que les semences ont été produites suivants les normes prévues par la réglementation' en vigueur.

*Seed certification: A system whereby an official body approves that the seed has been produced according to the standards laid down by the regulations in force (Order No. 004 / PR / 2009).*

Sale and exchange:
Ne peuvent être commercialisées au Gabon que les· semences de variétés végétales inscrites au catalogue officiel des espèces et variétés dans l'une des catégories visées à l'article 20 ci-dessus.
Les semences commercialisées doivent répondre aux normes générales de traitement chimique, de stockage, d'emballage et d'étiquetage fixées par arrêté conjoint des Ministres en charge de l'Agriculture et du Commerce. (Ordonnance n°004/PR/2009 du 16 juillet 2009 portant politique semencière dans le secteur agricole, art. 25)

*Only seed of plant varieties listed in the official catalogue of species and varieties in one of the categories referred to in Article 20 above may be marketed in Gabon.*

*The seed marketed must meet the general standards for chemical treatment, storage, packaging and labelling laid down by joint decree of the Ministers in charge of Agriculture and Trade. (Order No. 004 / PR / 2009 of 16 July 2009 on seed policy in the agricultural sector, Article 25)*

Registration of varieties:
Toute variété dont l'inscription est sollicitée sera soumise à des essais comparatifs en cultures portant sur la composition génétique, la stabilité, [l'homogénéité et la valeur culturale. Les essais relatifs à la valeur culturale sont obligatoirement effectués au Gabon (Ordonnance n°004/PR/2009).

*Any variety whose listing is sought shall be subjected to comparative crop testing for genetic composition, stability, homogeneity and cultural value. The cultural value tests are compulsorily take place in Gabon (Ordinance No. 004 / PR / 2009).*

Certification:
Les semences de base et les semences certifiées produites au Gabon font l'objet d'une certification par le Service National Semencier. Toute semence commercialisée au Gabon fait l'objet d'un contrôle de qualité par le Service National Semencier (Ordonnance n°004/PR/2009, art. 21).

*Basic seed and certified seed produced in Gabon are certified by the National Seed Service. Any seed marketed in Gabon is subject to quality control by the National Seed Service (Ordinance No. 004 / PR / 2009, article 21).*

Registration of producers
L'activité semencière s'exerce librement sur l’étendue du territoire national par toute personne physique ou morale dans le respect des lois et règlements. en vigueur, des exigences des normes techniques applicables en la matière ainsi que des engagements internationaux souscrits par le Gabon notamment la Convention Internationale sur la Biodiversité (Ordonnance n°004/PR/2009, art. 16).
Seed activity shall be exercised freely throughout the national territory by any natural or legal person in accordance with the laws and regulations in force, the requirements of the relevant technical standards and the international commitments entered into by in particular Gabon, the International Convention on Biodiversity (Ordinance No. 004 / PR / 2009, Article 16).

Other:
Silent

Inclusion:
Les semences de toutes catégories et de toutes espèces végétales cultivées ou commercialisées à l'exception des semences de ferme sont régies par la présente ordonnance (Ordonnance n°004/PR/2009, art. 3)

Seeds of all categories and plant varieties grown or marketed with the exception of farm seeds shall be governed by this Ordinance (Ordinance No. 004 / PR / 2009, Article 3)
Ghana

Definitions:
"certified seed" means a seed obtained from a basic seed which conforms to the minimum standards for that seed class or if approved for that species, from a first generation certified seed; “dealer” means a person who imports, grows, breeds, cleans or sells seed in commercial quantities; “emergency seed” means a class of non-certified seed to be used in case of acute seed shortage during and after natural or human disaster; "prescribed" means provided by Regulations; "plant breeder" means a person or organisation engaged in the breeding and maintenance of variety of crops [Regulations]; "seed producer" means a person who is specialised in the production of seeds and duly registered for inspection by the certifying authority [Regulations].

Sale and exchange:
Subject to the Exports and Imports Act 1995, (Act 503) a person shall not produce, condition or market any seed unless (a) the seed is of a registered variety (b) is of a standard prescribed by this Act or its Regulations (c) it is multiplied in a seed multiplication farm, conditioned in a seed conditioning plant or tested in a registered laboratory and (d) packaged and labelled as prescribed by this Act or its Regulations [Act, Art. 38.2 Seed production and marketing]

Registration of varieties:
The Committee shall not recommend the release of a crop variety under these Regulations, unless that crop variety satisfies the conditions of (a) distinctiveness, uniformity and stability; and (b) value for cultivation and use [Regulations, Art. 5.4 Procedures for release] Scientists and farmers will be encouraged and supported to test and release popular local landraces as official varieties [Policy, Art. 10.2.3 Policy Action]

Certification:
Where a seed does not require certification, the seed shall only be subject to sampling and laboratory test compliance with the relevant information on the label [Act, Art. 44.10 Seed quality control]. Ghana operates the Minimum Standards Certification and the crops covered are: Cereals such as maize, rice, sorghum, millet; legumes such as cowpea, groundnuts, bambara groundnuts, and soybean; vegetables such as garden egg, onion, tomato, pepper and okra; roots & tubers such as cassava, yam and sweet potato and cocoyam; and fruit & tree crops such as mango, citrus and pineapples. Ghana's seed certification has provisions for situations where the Quality Declared system can be applied [Policy, Art. 10.1.1 Principles and Challenges] Seed species and varieties multiplied and certified under this Act shall be classified into (a) parental material (b) pre-basic seed or breeder (c) basic seed or foundation and (d) certified seed [Act, Art. 44.1 Seed quality control]

Registration producers:
A person shall not import, export, produce, clean or sell any seed in commercial quantities unless that person is registered [Act, Art. 31.1 Registration of seed importers, exporters, growers and cleaners].
Other:
In order to strengthen the contribution of the informal sector, MOFA and its development partners will mobilize resources to support the informal sector in the following areas:
  o supporting extension service delivery
  o farmer training schemes
  o support to participatory strategies for on-farm management of plant genetic resources maintained by farmers through participatory plant breeding, protection of traditional knowledge, community seed banking, establishment of community seed fund and other community seed initiatives
  o support with pure starter seed stocks (local cultivars or adapted research releases)
  o support with seed quality assurance facilities
  o sourcing of emergency seed stocks
  o farmers’ rights legislation (at the appropriate time)
  o farmers’ participation in decision making at national level (e.g. National Seed Council, National Variety Release and Registration Committee) [P8.3 Policy Action]
MOFA and its development partners will support the promotion of formal-informal seed sector interactions to capture the multiple opportunities offered by their complementarities to develop a well-integrated seed sector. The formal seed sector can build on the informal sector farmers’ capacities and knowledge of local conditions, seed selection and traditional mechanisms of seed exchange to address more effectively seed demands of small-scale farmers. The informal system on the other hand can be significantly strengthened through the introduction into it of improved genetic materials and the adaptation of formal quality assurance into its practices [Policy, Art. 8.3]"

Inclusion:
The Council consists of (k) one representative of the national farmer’s association [Act, Art. 50 Composition of the Council] The Technical and Variety Release Committee consists of two representatives of farmers in the country [Act, Art. 57 Composition of the Technical and Variety Release Committee]. The National Seed Policy has been achieved through a participatory process. Stakeholders: Farmers [Policy, Art. 1.2 The Seed Policy Formulation Process]. Farmers’ participation in decision making at national level (e.g. National Seed Council, National Variety Release and Registration Committee) [Policy, Art. 8.3 Policy Action]
Kenya

Definitions:
"sell" includes barter, exchange, and offering or exposing for sale; “seed production” means all the operations leading up to and including final harvesting of the seed from the seed crop field; “standard seed” means seed that is marketed after standards have been relaxed on account of emergency or disaster so that such seed is subjected only to laboratory tests and post control observation; "commercialization" means the distribution, sale or offering a crop variety for sale to the public in any other manner and includes undertaking seed multiplication, conducting market research or seeking pre-market approval of a crop variety [Regulations NPT]; "licensed seed seller" means any person or institution licensed to sell Government tested and certified seed only [Regulations] "registered seed grower" means a person or institution officially recognized by the authorized officer and the seed allocation panel as suitable to grow seed crops [Regulations]; “registered seed merchant” means a person or firm or institution officially recognized by the Seed Committee as suitable to produce, process or sell seed [Regulations]; “seed industry” means the entire chain linked stages that start with breeding and crop improvement through seed multiplication, processing, certification and ends with seed distribution [Regulations]; “seed production” means all the operations leading up to and including final harvesting of the seed from the seed crop field [Regulations].

Sale and exchange:
No seed shall be offered for sale unless it has been certified or it has had its quality declared under regulation 16 [Regulations, Art. 17.1 Seed sale]. A person shall, prior to the commercialization of varieties of crops listed under the Second Schedule to the Act, ensure that the crops have undergone the performance trails in accordance with these Regulations [Regulations NPT, Art. 3.1 Application for performance trials].

Release of varieties:
"release" means a process whereby a plant variety listed under the Second Schedule has satisfactorily undergone trails and tests for distinctness, uniformity and stability, for yield or other special attributes, and is approved for release by the Release Committee [Regulations NPT definitions]. All varieties submitted for the performance trials shall undergo testing for at least two seasons [Regulations NPT, Art. 10.1] The principal object of the Bill is to amend the Seeds and Plant Varieties Act (Cap, 326) to facilitate the implementation of Article 11(3) (b) and 69 (1) of the Constitution. Both Articles require Parliament to enact legislation to recognize and protect the ownership of indigenous seeds and plant varieties, their genetic and diverse characteristics and their use by Kenyan communities and the protection of genetic resources and biodiversity for equitable sharing of the accruing benefits [Bill Amendment, p. 2311 Statement of objects and Reasons for the Bill]

Certification:
Only cultivars officially released by the Minister and advanced breeder's lines which have potential for release shall be eligible for certification [Regulations, Art. 10.1 Seed certification] Seed classes: breeder,
pre-basic, basic, Cer. 1st gen, Cer. 2nd gen, Cer. 3rd gen, Cer. 4th gen, standard seed [Regulations, Schedule 3]

Registration producers:
Successful applicants under regulation 7 shall be eligible for registration as seed growers on completing Form SR 1 in the Sixth Schedule and payment of the fee prescribed in the Fifth Schedule [Regulations, Art. 8.1 Registration of seed growers]. Every person who by way of trade or business produces, purchases, or otherwise acquires, sells, exposes, keeps, stores or advertises for sale any seeds purported to be government tested and certified shall apply to the secretary, Seed Regulation Committee for registration as a seed merchant in Form SR3 [Regulations, Art. 9.1 Registration of seed merchant]

Other:
None.

Inclusion:
The Minister, after consultation with representatives seeds of such organizations as he deems to have a substantial interest in the matter to be regulated and of such other interests as appear to him to be concerned, may make regulations for the regulation and control of the production, processing, testing, certification and marketing of seeds, and without prejudice to the generality of this power, the regulations may, in particular, be made for any or all of the following purposes [Act, Art. 3.1 Seeds Regulations]. There shall be a committee to be known as the Seed Regulation Committee, which shall consist of (g) the General Manager of the Kenya Farmers' Association (h) the Chief Executive, Kenya National Farmers' Union [Regulations, Art. 5.1 Seed Regulation Committee] There is established a National Variety Release Committee comprising of the following members (h) one representative of the consumer industry appointed by Agriculture Secretary [Regulations NPT, Art. 12].
Madagascar

Definition:
Les catégories de semences et plants prévues par la présente loi sont les suivantes : de souche, de pré-base, de base, certifiée, ordinaire (law 94-038, art. 4 of)
Semence ordinaire “ : toute autre semence qui n’est comprise dans une aucune des catégories qui precedent (Law 94-038, art. 3)

The classes of seeds and seedlings provided for in this Act are: stump, base, base, certified, ordinary (law 94-038, s.4 of) Ordinary seed "means any other seed that is not included in any of the preceding categories (Law 94-038, Clause 3)

Sale and exchange:
Seules sont commercialisées au niveau national les semences de variétés inscrites au CNEV (Decree 2010’1009 art. 56)

Only seeds of varieties registered at the CNEV are marketed nationally (Decree 2010, 1009, Article 56)

Registration of varieties:
Les semences et plants concernés (locaux ou introduits par le secteur public ou privé), les modalités d’inscription et de radiation de l’enregistrement au catalogue sont définis par le Comité Technique d’Admission au Catalogue, dont la composition et le fonctionnement sont fixés par arrêté du Ministre chargé de l’Agriculture, sur proposition du CONASEM. (Law 94-038, art 13)

The seeds and seedlings concerned (premises or introduced by the public or private sector), the procedures for the registration and cancellation of the registration in the catalogue are defined by the Technical Committee for Admission to the Catalogue, whose composition and functioning are Fixed by order of the Minister of Agriculture, on the proposal of CONASEM. (Law 94-038, art. 13)

Certification:
Seules peuvent être multipliées, en vue de la certification, les semences de variétés inscrites au CNEV et/ou aux Catalogues des communautés régionales dont Madagascar fait partie. (Decree 2010-1009, Art 11)
Toute semence végétale produite à des fins de commercialisation est certifiée conformément aux dispositions du présent décret, à l’exception des semences maraîchères dont la certification reste pour le moment facultative. (Decree 2010-1009, Art. 45)

Only seeds of CNEV varieties and / or Regional Community Catalogues of which Madagascar is a member can be multiplied for certification purposes. (Decree 2010-1009, Art 11)

Any vegetable seed produced for marketing purposes shall be certified in accordance with the provisions of this Decree, with the exception of vegetable seeds, the certification of which is for the time being optional. (Decree 2010-1009, Article 45)

Registration of Producers:
Sur le territoire national, la production et la commercialisation des semences et plants relèvent d’établissements semenciers soumis à l’agrément technique du Ministre de l’Agriculture. (Art. 15 law 94-038)

Est habilité à devenir établissement semencier toute personne physique ou morale ayant satisfait aux conditions techniques d’admission telles qu’arrêtées par le Ministre chargé de l’Agriculture, sur avis du CONASEM. (Law 94-038, Art. 16)

Other:
Silent

Inclusion:
Le Conseil National des Semences est composé de représentants :
• des départements ministériels chargés de l’Agriculture, des eaux et forêts et de l’élevage,
• de la recherche agricole,
• de la production semencière,
• de la distribution semencière,
• des agriculteurs. (Law 94-038, art. 8)

The National Seed Council is composed of representatives:
• Ministerial departments responsible for agriculture, water and forests and livestock,
• Agricultural research,
• Seed production,
• Seed distribution,
• Farmers. (Law 94-038, section 8)
Mali

Definitions
Semence certifiée: Toutes semences issues de semences de base dont la production est propre à assurer une conservation satisfaisante de la pureté et de l’identité génétique et qui sont jugées acceptables par l’organisme de certification (Law 10-032 art. 2).

Certified seed: Any seed derived from basic seed, the production of which is suitable for the satisfactory preservation of purity and genetic identity and which is considered acceptable by the certification department (Law 10-032, Article 2).

Sale and exchange:
Les personnes physiques ou morales qui désirent exercer des activités de production, d’importation, de distribution ou de commercialisation dans le domaine des semences doivent respecter la réglementation en vigueur (Law 10-032 art. 11).
La production, l’importation, l’exportation, la diffusion et la commercialisation de semences d’origine animale ou végétale sont assujetties à une autorisation et un contrôle rigoureux de qualité (Loi 95-52 art. 4).

Natural or legal persons wishing to carry out production, import, distribution or marketing activities in the field of seeds must comply with the regulations in force (Law 10-032, Article 11). The production, importation, exportation, distribution and marketing of seeds of animal or vegetable origin are subject to authorization and strict quality control (Law 95-52, Article 4).

Registration of varieties:
Seules les espèces, races animales ou variétés végétales inscrites aux Catalogues Officiels Nationaux peuvent donner lieu à une activité de production de semences certifiables sur l’étendue du territoire national. (Loi 95-52 art. 8)

Only species, animal breeds or plant varieties registered in the Official National Catalogues may give rise to a certifiable seed production activity throughout the national territory. (Law 95-52 Article 8)

Certification:
C’est le processus de contrôle de la qualité sanctionné par la loi et appliqué à la multiplication et à la production des semences. Elle est matérialisée par l’apposition d’un label ou certificat ( Law10-032 art. 2).

This is the process of quality control sanctioned by law and applied to seed multiplication and production. It is materialized by the affixing of a label or certificate (Law10-032 article 2).

Registration of producers:
Est reconnu producteur de semence, toute personne physique ou morale régulièrement enregistrée sur la liste des producteurs semenciers te nue par les services compétents des Ministères chargés de l’Agriculture, de l’Elevage et de l’Environnement (Loi 95 052 art. 2).

Any natural or legal person duly registered on the list of seed producers shall be recognized by the competent services of the Ministries responsible for Agriculture, Livestock and Environment (Law 95 052, Article 2).
Other:
La protection que confère le droit d’obtention végétale ne porte pas atteinte au droit des agriculteurs d’utiliser librement la variété à des fins de semis pour leur propre champ, ni au droit d’autres sélectionneurs d’utiliser la variété à des fins de recherche (Law 10-032, Article 16).

Inclusion:
Le comité national des semences d’origine végétale est composé comme suit:
Président : Le Représentant du Ministre chargé de l’Agricultrue
Membres :
  • ..............
  • Un représentant de l’association Semencière du Mali
  • Un représentant de la Coordination Nationale des Organisations Paysannes

Un représentant de l’Association des Organisations Professionnelles Paysannes. (Art.32 Law 10 428)

The protection afforded by the right of plant breeders shall not affect the right of farmers to freely use the variety for planting purposes for their own field or to the right of other breeders to use the variety for the purpose of Research (Law 10-032, Article 16).

The National Seed of Plant Origin Committee is composed as follows:
Chairman: The Representative of the Minister in charge of Agriculture
Members :
  • ..............
  • A representative of the Seed Association of Mali
  • A representative of the National Coordination of Peasant Organizations
  • A representative of the Association of Professional Farmers’ Organizations. (Art. 32 Law 10 428)
Mauritania

Definition
Au terme de cette loi on entend par semence ou plant, tout organe ou partie de plante susceptible de produire ou de reproduire une plante.
The term "seed or plant" means any organ or part of a plant capable of producing or reproducing a plant.

Sale and exchange
See registration of variétés

Registration of varieties
Le catalogue National porte la liste limitative des variétés ou types variétaux dont les semences et plants peuvent être diffusées ou commercialisés en Mauritanie sous forme de produits certifiés. (Art. 2 law 96-025 of July 1996)
The National catalogue contains the restrictive list of varieties or types of varieties whose seeds and seedlings can be disseminated or marketed in Mauritania in the form of certified products. (Article 2 law 96-025 of July 1996)

Certification
Pour être diffusées et mises sur le marché sous forme de semences et plants certifies, les productions de semences et plants doivent être revêtues d’un certificat délivré par l’administration chargée du contrôle et de la certification des semences et plants instituée à cet effet auprès du Ministre en charge de l’agriculture. (Art. 5 law 96-025)
In order to be disseminated and placed on the market in the form of certified seed and propagating material, seed and propagating material must be certified by the authority responsible for the control and certification of seeds and seedlings established for that purpose Of the Minister in charge of Agriculture. (Article 5 law 96-025)

Registration of producers
Nul ne peut créer ou exploiter un établissement de production de semences et plants destinés à être mis sur le marché s’il n’est spécialement agréé à cet effet par le Ministre chargé de l’agriculture. (Art. 2 law 96-025)
No person may establish or operate an establishment for the production of seeds and seedlings intended for placing on the market if it is not specifically approved for that purpose by the Minister for Agriculture. (Article 2 law 96-025)

Other
Silent

Inclusion
Silent
Malawi

Definitions:
"QDS" means any seed declared as such by an order made under section 33; "registered seed seller" means any seed seller registered under Part V; "seed producer" means any person who, either exclusively or in conjunction with any other trade or business, sells seed for sowing; "sell" includes to exchange or barter or to offer, advertise, keep, expose, transmit, convey, deliver [or prepare for sale or exchange or to dispose of for any consideration whatsoever or to transmit, convey or deliver] for or in pursuance of a sale, exchange or barter.

Definitions in draft Act: “farmer” means any person who cultivate crops, trees, shrubs and pastures either by cultivating the land himself or through any other person but does include any individual, company, trader or dealer who engages in the procurement and sale of seed on a commercial basis; “owner”, in relation to any seed, includes any person having for the time being the possession, custody or control thereof; “seed producer” means any person who, either exclusively or in conjunction with any other trade or business, produces seed for sale; “seed seller” means any person who, either exclusively or in conjunction with any other trade of business, sells seed for sowing; “sell” includes to exchange or barter or to offer, advertise, keep, expose, transmit, convey, or deliver or prepare for sale or exchange or to dispose of for any consideration whatsoever or to transmit, convey or deliver for or in pursuance of a sale, exchange or barter.

Sale and exchange:
Only varieties that have been approved for release and notified and included in the variety list may be sold [Act, Art. 5 Variety List] Save as provided by section 68, no person shall sell any prescribed seed for sowing unless the said seed has previously been tested as provided by this Act, and upon such test has been found of the standards of germination and purity prescribed for such seed [Act, Art. 56.4] The provisions of this Act shall not apply (i) to any sale of prescribed seed, which is not Malawi certified seed, which has been produced by a seed producer on his own land and is sold by him for sowing by the buyer and not for the purpose of resale (ii) to a seed cleaner in order that it may be cleaned before being sold for sowing (...) (iii) for use as food or as farm feed or for industrial purposes (b) to any sale of prescribed seed, which is not certified seed, by or to a person exempted from the provision of this Act by an order made by the Minister under section 69 [Act, Art. 67]

Sale and exchange in draft Act: The provisions of this Act shall not apply (i) to any sale of prescribed seed, which is not Malawi certified seed, which has been produced by a seed producer on his own land and is sold by him for sowing by the buyer and not for the purpose of resale (ii) to a seed cleaner in order that it may be cleaned before being sold for sowing (iii) for use as food or as farm feed or for industrial purposes [Act, Art. 64 When Act not applicable to sale of prescribed seed].

Registration of varieties:
A variety may be recognized if (a) it is by reason of any important characteristic clearly distinguishable from any other variety of the same kind the existence of which is a matter of common knowledge, whatever the origin, artificial or natural, of the initial variation from which it may be resulted (b) it is
sufficiently homogeneous having regard to the particular features of the reproduction or vegetative propagation thereof (c) it is stable with regards to the essential characteristics thereof and remains true to the description thereof after repeated reproduction or propagation or, where the breeder as defined a particular cycle of reproduction or multiplication, at the end of each cycle (d) it is identified by a denomination which complies with the provision of subsection (3) of this article [Act, Art. 8 Requirements for Recognition of Variety]. Any person may, within two months, lodge an objection with the Controller of Seeds, on payment of the prescribed fee, stating the reasons for objection [Act, Art. 8.4b]

Registration of varieties in draft Act: A new variety may enter into the national variety list when it has passed all the tests prescribed in the regulations in terms of Distinctness, Uniqueness and Stability, Value for Cultivation and Use and an appropriate denomination [Act, Art. 9.1 Recognition of varieties]. An official list of varieties shall be established to register varieties that can be marketed in Malawi following the national and regional variety release system. The landraces and local varieties will be registered with special provisions [Act, Art. 5.1 Official list of varieties].

Certification: Subject to the provisions of this Part, seed may be certified by the Controller of Seeds (a) in the case of a seed produced in Malawi, as "Malawi Certified Seed" [Act, Art. 43] No seed producer shall use for the production of Malawi Certified Seed any variety of seed which has not been approved for such purpose by the Controller of Seeds [Act, Art. 51] The Minister may from time to time, by order published in the Gazette, declare any seed to be a Quality Declared Seed, and for each kind specify minimum standards [Act, Art. 33]

Certification in draft Act: Upon it being shown to the satisfaction of the Controller of Seeds that a particular seed lot (a) is of a specified variety (b) is of known source (c) has been produced on the land designated in the register (d) has been sown, cultivated and produced as prescribed (e) has been inspected during cultivation as prescribed seed and (f) has been tested in accordance with the provisions of this Act and found to conform to the standards of moisture, content, purity, germination, and defects, the Controller of Seed may certify such seed as Malawi Certified seed [Act, Art. 20.1 Certification of seed]. The Minister from time to time, by order published in the Gazette, declare any seed to be a QDS and for each kind specify minimum standards [repealed Act '96, Art. 33 QDS].

Registration producers: No person or legal entity shall, himself or by any other person on his behalf, carry on the business of selling, keeping for sale, offering for sale, bartering or otherwise supplying any seed of any notified kind or variety unless (a) the premises from where the seed is sold is registered for the selling of seed (b) such seed is identified as to it kind or variety and is tested and conforms to the prescribed standards and requirements as defined in the Regulations (c) the container of such seed bears the label containing the correct particulars as described in the Regulations (d) the premises and the establishment conform to the requirements given in the Regulations (e) the seller complies with other requirements as may be prescribed from time to time by the designated authority referred to in subsection 1(a) of this article. The provisions of subsection (1) of this article shall not apply to the sale of seed (a) which is grown and cleaned by a bona fide farmer for his own use (b) which is sold to a bona fide cleaner of seed in order
that it may be cleaned, graded or treated before it is used as seed, if there appears on the container in
which the seed is sold or delivered or on a label attached thereto clearly and legibly the words
"uncleaned seed". The Minister may prescribe by notice in the gazette other classes of seeds or the
category of persons who shall be exempt from the provisions of subsection (1) of this article [Act, Art. 26
Registration of Seller of Seed] The validity of a contract for the sale of QDS, or the right to enforce such a
contract, shall not be affected by non-compliance with this section [Act, Art. 35.3] For the purposes of
this Part, the Controller of Seeds shall keep and maintain a register of seed producers which shall
contain (...) [Act, Art. 46]

Registration producers in draft Act: No person shall maintain a seed processing unit unless such unit is
registered by the Controller of Seeds under this Act [Act, Art. 38 Registration seed processors]. No
person or legal entity shall, himself or by any other person on his behalf, carry on the business of selling,
keeping for sale, offering for sale, bartering or otherwise supplying any seed of any notified kind or
variety unless (a) the premises from where the seed is sold is registered for the selling of seed (b) such
seed is identified as to it kind or variety and is tested and conforms to the prescribed standards and
requirements as defined in the Regulations (c) the container of such seed bears the label containing the
correct particulars as described in the Regulations (d) the premises and the establishment conform to
the requirements given in the Regulations (e) the seller complies with other requirements as may be
prescribed from time to time by the designated authority referred to in subsection 1(a) of this article.
The provisions of subsection (1) of this article shall not apply to the sale of seed (a) which is grown and
cleaned by a farmer or farmer community for their own use (b) which is sold to a processor of seed in
order that it may be cleaned, graded or treated before it is used as seed, if there appears on the
container in which the seed is sold or delivered or on a label attached thereto clearly and legibly the
words "uncleaned seed" [Act, Art. 39.1&2 Registration of seed sellers]. The Minister may, from time to
time, by order published in the Gazette, exempt any person or class of persons from the provisions [Act,
Art. 65 Exemptions from the provisions of this Act]

Other:
None.

Other in draft Act: None.

Inclusion:
None.

Inclusion in draft Act: The Composition of the National Variety Release Committee shall consist, as a
minimum of (f) a representative of a farmer organization [Act, Art. 8 Composition of the NVRC]. No
mention about the formulation of the legislation.
Mauritius

Definitions:
"breeder" means - (a) a person who has bred, or discovered and developed, a variety, his employer or the person who commissioned his work; "common knowledge' in relation to a variety, means a variety - (a) which is already in cultivation, has been exploited for commercial purposes, is held in a recognized reference collection of has a precise description in any publication, (b) which is or has been the subject of a Plant Breeder’s Right in any State, (c) which is or has been entered in a National Variety List in any State, or (d) in relation to which an application for a Plant Breeder’s Right or an entry in a National Variety List is under consideration in any State, provided the application is successful; "cultivate" means to grow the seed of any variety of any kind of plant with a view to the multiplication of the seed; "produce", in relation to any kind of plant, means to grow for the purpose of producing raw materials to be processed as seed; "seed dealer" means a person registered as such under section 12; "seed producer" means a person registered as such under section 22; "trade" in relation to the seed of any variety of any kind of plant, means to buy, sell and barter.

Sale and exchange:
No person shall cultivate, for commercial purposes, the seed of any variety of any kind of plant unless that variety is registered with NPVSO [Act, Art. 7 Cultivation of seed]. No person shall trade the seed of any variety of any kind of plant unless- (a) that variety is a listed variety; (b) the seed is sold under the variety name entered in the National Variety List; (c) a qualifying term or reference is added to or used in connection with the variety name referred to in paragraph (b); (d) the seed has been tested under section 15 or is considered to have been tested under section 27, and found to comply with such standards of germination, varietal and physical purity and seed health, and such other requirements at NPVSO may determine; and (e) packed and labelled according to the Act [Act, Art. 29 Trade of Seed]. Any person who, having produced or acquired any seed which has not been tested pursuant to this Part or under section 28, intends to sell the seed for the purposes of cultivation, shall cause a sample of the seed to be delivered to NPVSO for testing [Act, Art. 15.1 Testing of seed]

Registration of varieties:
No variety of any kind of plant shall be registered (a) unless the variety is clearly distinguishable in one or more important characteristics capable of precise recognition and definition from any other variety of the same kind of plant of which the existence is a matter of common knowledge at the time of the filing of an application for registration (b) unless it is, subject to the variation that may be expected from the particular features of the propagation of the variety, sufficiently uniform with regards to its characteristics (c) unless the variety remains unchanged after repeated propagation or multiplication or, in the case of a particular cycle of propagation or multiplication, at the end of each such cycle (d) unless the variety is identified by a variety name which complies with such requirements as NPVSO may determine (e) unless it is of satisfactory value for cultivation and use and (f) where the variety or it progeny may be detrimental to human or animal health and safety or the environment when grown and used as intended [Act, Art. 8.1 Application to register variety]
**Certification:**
No seed shall be used to produce another seed which is true to such type (a) unless the seed is certified by NPVSO and (b) it is done by a seed producer [Act, Art. 21 Use of seed to produce another seed]. No person shall trade the seed of any variety of any kind of plant unless (a) that variety is a listed variety (b) the seed is sold under the variety name entered in the National Variety List (c) a qualifying term of reference is added to is used in connection with the variety name referred to in paragraph (b) (d) the seed has been tested under section 15 or is considered to have been tested under section 27, and found to comply with such standards of germination, varietal and physical purity and seed health, and such other requirements as NPVSO may determine and (e) in the case of ...[Act, Art. 29.1 Trade of seed]. NPVSO may, on good cause shown in writing and subject to the approval of the Seeds Committee, exempt, in writing, any person from compliance with the requirements referred to in subsection (1), subject to such conditions as it may determine [Act, Art. 29.3]. The Minister may, on recommendation of the Seeds Committee, exempt, by way of regulations any seed from this Act [Act, Art. 3.2 Application of Act] For the purposes of this Act, different schemes may be set up for seed of same or different kinds of plant, and the requirement for different kinds and varieties of seed in a scheme may differ [Act, Art. 24.2a Certification of seed].

**Registration producers:**
Subject to section 34, a person who trades in, exports or imports any seed shall make an application to NPVSO to be registered as a seed dealer [Act, Art. 12 Seed dealer]. An application for registration as a seed producer shall be made in such a manner as may be prescribed and shall be accompanied by the prescribed fee [Act, Art. 22 seed producer].

**Other:**
None.

**Inclusion:**
The Seed Committee shall, subject to paragraph (b) consist of (ix) representative of an association of planters other than sugar cane planters, to be appointed by the Minister (x) 3 representatives from the seed industry, to be appointed by the Minister [Act, Art. 4.3 National Plant Varieties and Seeds Office]. No mention about the formulation of the legislation.
Definitions:
“Semente garantida melhorada”: Semente de origem exclusivamente nacional, que pode ser produzida a partir de qualquer uma das classes acima referidas, que tenha sido sujeita a controlo de campo pelo menos uma vez e que tenha garantia de poder germinativo, pureza física e humidade. Inclui também toda a semente certificada que não atinja os padrões para certificação numa determinada classe, mas que cumpra com os padrões mínimos da semente garantida.

“Improved guaranteed seed” (= “Quality Declared Seed”): Seed of exclusive national origin, that can be produces from all of above mentioned seed classes, that have been subject to field inspection for at least once and that has the required germination rate, physical purity and humidity. Also included is all certified seed that is not reaching the standards for certification in a particular class, but does meet the minimal standards for quality declared seed.

“Produtores Formais”: São produtores de semente registados na ANS, que fazem a produção de semente para efeitos de comercialização no mercado nacional, regional ou internacional.

“Formal producers”: Seed producers registered with the national seed authority, that are producing seed for marketing in the national, regional or international markets.

“Produtor de sementes ou mudas”: Todo o indivíduo ou instituição devidamente autorizado, que se dedique à produção de semente ou muda certificada, com a finalidade específica de sementeira.

“Seed or plantlet producers”: All individuals or organizations, that are duly authorized, that are dedicated to certified seed or plantlet production, for the specific objective of sowing/planting.

“Lista de Variedades Recomendadas”: Lista que integra variedades que tenham passado a ambos os testes de DUS, (Distinção, Uniformidade e Estabilidade) e VCU, (valor cultural e de uso?) e cuja utilização na agricultura seja devidamente comprovada.

“List of recommended varieties”: List that contains varieties that have both passed the DUS (Distinction, Uniformity and Stability) and VCU (cultural value and use) and for which use in agriculture has been duly approved.

“Lista Nacional de Variedades”: Lista que integra todas as variedades que pelo menos tenham passado o teste de DUS.

“National list of varieties”: List that contains all varieties that have at least passed the DUS test.

Sale and exchange:
O presente Regulamento aplica-se aos produtores formais, processadores, distribuidores e retalhistas, quer de produção nacional, quer importada [Act, Art. 2.2 Objecto e âmbito de aplicação].

The current regulation can be applied to formal producers, processors, distributors and retail shops, for local production, or imported [Act, Art. 2.2 Scope of the application].

Variety release:
O registo deve ser feito de acordo com os requisitos fixados no presente regulamento, obedecendo as seguintes etapas: c) Condução de ensaios de DUS e VCU pela ANS e proponente respectivamente, no mínimo por duas campanhas agrícolas [Act, Art. 13 Procedimentos para o registo de variedades].
Registration has to be made in agreement with the fixed requirements of the current regulation, following the next steps: c) Conducting DUS and VCU trials, respectively by the National Seed Authority and variety proposing organization, for at least due agricultural seasons [Act, Art. 13: Variety registration Procedure]

Quality assurance:
Só é permitida a comercialização de variedades constantes da Lista Oficial de Variedades a ser publicada anualmente no Boletim da República (BR) [A11 Novas Variedades de Plantas]. A semente a que se refere o presente Regulamento, classifica-se nas seguintes categorias: a) Semente Pré-básica; b) Semente Básica; c) Semente certificada de 1.ª geração; d) Semente certificada de 2.ª geração; e) Semente garantida melhorada; f) Planta básica; g) Planta matriz; h) Muda certificada.[Act, Art. 4 Semente].

It is only permitted to market varieties that are in the official variety list and that are published in the 'Boletim da Republica (BR)' [A11: New plant varieties]. The seed that is referred to in the current regulation, is classified into the following categories: a) Pre-basic seed; b) Basic seed; c) 1st generation certified seed; d) 2nd generation certified seed; e) Improved guaranteed seed; f) basic plants; g) mother plants; h) Certified plantlets [Act, Art. 4 Seed].

Registration chain:
As entidades que pretendam ser consideradas produtoras ou processadoras de sementes, devem requerer à ANS o seu registo, mediante o pagamento de despesas decorrentes da inspecção necessária para verificação dos requisitos exigidos para o exercício da actividade As empresas de sementes são obrigadas a dispon do um controlo e registo sobre a semente armazenada e vendida, incluindo a importada ou exportada, o qual deve ser mantido por um período mínimo de 3 anos [Act, Art. 16 Registo de Procutores e Processadores de Sementes].

Entities that pretend to be considered as seed producers or processors, need to register with the ANS (National Seed Authority), through the payment for costs related to the required inspection in order to verify the requirements needed for this activity. The seed businesses are obliged to allow a control and registration of the stored and sold seed, including the imported and exported seed, which needs to be maintained for a period of three years [Act, Art. 16 Registration of seed producers and processors]

Other:
None.

Inclusion:
São membros do Comité Nacional de Sementes: m) Um representante das Empresas produtoras de sementes em Moçambique; n) Um representante das Associações dos produtores de sementes; o) Um representante da União Nacional de Camponeses [Act, Art. 7 Competências da ANS] São membros do SCRLV: i) Um representante das empresas de sementes; j) Um representante das Associações de Produtores de Sementes; k) Um representante da União Nacional de Camponeses [Act, Art. 9 Subcomité de registo e libertação de variedades].

The members of the National Seed Committee are: m) A representative of seed companies in Mozambique; n) a representative of seed producer associations; o) a representative of the National
Farmers’ Union [Act, Art. 7 ANS Competencies]; Members of the SCRLV (Subcommittee for the Registration and Release of Varieties); i) A representative of seed j) A representative of seed producer associations; k) A representative of the National Farmers Union [Act, Art. 9 Subcommittee for the Registration and Release of Varieties].
Niger

Definitions
Semence mère originale ou de pré-base, matériel de départ ou semence M0 : c’est la souche obtenue à partir de l’amélioration génétique, croisement hybridation par le sélectionneur et à partir de laquelle sont produites les semences de base. (Art. 2 (1) Decree 90-55/PRN/MAG/EL of Feb. 1990)

Original or pre-basic, mother seed, or M0 seed: this is the seed obtained from the genetic improvement, crossover hybridization by the breeder and from which are produced the basic seed. (Article 2 (1) Decree 90-55 / PRN / MAG / EL of Feb. 1990)

Sale and exchange:
Ce système reconnaîtra le droit aux agriculteurs d’utiliser librement toute variété à des fins de semis de leurs propres champs ainsi que le droit des sélectionneurs d’utiliser librement la variété à des fins de recherche. Il reconnaîtra en outre le droit aux agriculteurs d’utiliser, d’échanger, de partager ou de vendre la production de leur ferme issue de toutes variétés sans qu’ils soient soumis aux conditions de protection des obtentions végétales.

This system will recognize the right of farmers to freely use any variety for the purpose of planting their own fields, as well as the right of breeders to freely use the variety for research purposes. It will also recognize the right of farmers to use, exchange, share or sell the production of their farms of all varieties without their being subject to the conditions for the protection of plant varieties.

Registration of varieties:
La variété ou le cultivar (race du pays) si sélectionné, une fois retenue (e) pour la vulgarisation doit faire l’objet d’une inscription au catalogue variétal. Des droits peuvent être requis selon les cas pour l’institution ou pour l’Etat. (Decree 90-55/PRN/MAG/EL of Feb. 1990, Art. 9)

The variety or cultivar [breed of country] if selected, once selected for extension, must be registered in the variety catalogue. Rights may be required, as appropriate, for the institution or for the State. (Decree 90-55 / PRN / MAG / EL of Feb. 1990, Art 9)

Certification:
Sont soumises à certification les catégories de semences suivantes : de base, enregistrées et certifiées (Decree 90-55/PRN/MAG/EL of Feb. 1990, Art. 19)

The following seed categories are certified: basic, registered and certified (Decree 90-55 / PRN / MAG / EL of Feb. 1990, Article 19)

Registration of producers:
Producteur de semences : toute personne physique ou morale dûment enregistrée qui se consacre à la multiplication, au conditionnement et/ou au maintien de semences d’une façon directe ou sous sa responsabilité. (Decree 90-55/PRN/MAG/EL of Feb. 1990 Art. 5 (c))

Seed producer: means any natural or legal person duly registered who is engaged in the propagation, packaging and / or maintenance of seed directly or under his responsibility. (Decree 90-55 / PRN / MAG / EL of Feb. 1990 Art.5 (c))
Other:

Les producteurs et leurs organisations, ou les communautés villageoises seront récompensés à hauteur de leur contribution aux obtentions végétales et à l’inscription de celles-ci au catalogue national (National seed policy, p11)

En ce qui concerne spécifiquement les variétés dites « traditionnelles » (ou écotypes locaux) qui représentent un réservoir de gènes d’importance économique certaine, il est admis que celles-ci appartiennent aux communautés dont les membres peuvent s’en servir selon leurs besoins sans remplir les critères pour l’octroi du droit à la protection. Toutefois, l’État est tenu de prendre les mesures nécessaires pour les inventorier, les caractériser et leur donner ensuite la place de choix qu’elles méritent dans les ressources phytogénétiques nationales. (National seed policy, p 11)

Producers and their organizations, or village communities, will be rewarded for their contribution to plant varieties and their inclusion in the national catalogue (National Seed Policy, p11)

As regards specifically the so-called ‘traditional’ varieties (or local ecotypes) which represent a reservoir of genes of certain economic importance, it is accepted that these belong to communities whose members can use them according to their needs without meeting the criteria for granting the right to protection. However, the State is obliged to take the necessary steps to inventory, characterize and then give them the place of choice they deserve in national plant genetic resources. (National seed policy, p 11)

Inclusion:

Au niveau national, il faut prendre en considération l’importance considérable des pratiques traditionnelles au Niger (National seed policy, p35)

At the national level, the considerable importance of traditional practices in Niger must be taken into account (National seed policy, p35)
Nigeria

**Definitions:**
"seed producer" means the person who either exclusively or in conjunction with any other trade or business, produces seeds for sale; "seed seller" means any person who, either exclusively or on conjunction with any other person, trade or business, sells seeds for growing to Nigerian farmers; "sell" includes to exchange or to offer, advertise, keep, expose, transmit, convey or deliver in pursuance of a sale, exchange or barter.

**Sale and exchange:**
Nothing in this Decree shall apply to any seed of any notified kind or variety grown by a person and delivered by him on his own premises direct to another person without any monetary consideration for being used by that person for the purpose of sowing or planting [Act, Art. 30 Exemption] The provisions of this section shall not apply to a person growing and delivering seeds of any variety direct to another person without monetary consideration for use by that other person for sowing on the later's own farm [Decree, Art. 22.2 Prohibition on processing etc. of seeds for commercial purposes]. A crop kind variety intended to be registered under this section may be required to undergo a minimum of 2 years of tests to determine its adaptability to a particular geographical area [Decree, Art. 7.2 Crop Varieties Registration and Release Committee].

**Certification:**
The following categories of seeds of released varieties shall be subject to seed certification, namely breeder seed, foundation seed/inbred lines and certified [Decree, Art. 14.2 Genetic Identity]. Any person who sells, keeps for sale, offers to sell, barters or otherwise supplies any seed of any notified kind or variety shall apply to the Unit for the grant of a certification for the purpose [Decree, Art. 12.1 Seed certification].

**Registration producers:**
There shall be maintained a register of persons and organizations licensed to engage in seed production and marketing under the following classification, namely (a) seed production company (b) seed enterprises production on contract for seed company (c) breeder seed production agency (research institutes and private) (d) foundation seed grower (research and private) (e) enterprise seed processor (f) seed dealer whether as wholesaler or not [Decree, Art. 21 Classification of persons engaged in seed production]. Subject to subsection (2) of this section, no person other than a registered person shall produce or be engaged in the production, processing and marketing of seeds for commercial purposes [Decree, Art. 22.1 Prohibition on processing etc. of seeds for commercial purposes]. This provision shall not apply to a person growing and delivering seeds of any variety direct to another person without monetary consideration for use by that other person for sowing on the later’s own farm [Decree, Art. 22.2].

**Other:**
None.
Inclusion:
The Council shall consist of (f) one person to represent co-operatives societies [Decree, Art. 2 Membership of the Council].
Rwanda

Definitions:
None.

Sale and exchange:
Commercial seeds should have been subjected to quality control according to standards required for quality seeds [Regulations Commercialisation (...), Art. 2 Procedures to be followed in marketing quality seeds] Commercial seeds shall be processed according to the Ministerial Order setting standards for the processing of quality seeds [Regulations Commercialisation (...), Art. 5 Nature of commercial seeds]

Variety release:
The Committee shall be responsible for supervising tests for DUS and VCU for new varieties and the NPT for varieties released in other countries to be registered on the National Plant Variety List [Regulations Comite (...) Art. 2 Responsibilities of the Committee].

Certification:
Only the seeds of a variety registered on the list of approved varieties in Rwanda may be marketed as quality seeds [Regulations Commercialisation (...), Art. 3 Quality seeds accepted to be marketed].

Registration producers:
Individuals or enterprises authorized to market quality seeds shall fulfil all the requirements of this Order and be listed in the register of quality seed dealers kept at the Ministry in charge of agriculture [Regulations Commercialisation (...), Art 6 Conditions required for marketing quality seeds].

Other:
None

Inclusion:
The Committee members shall be divided up into six (6) domains as follows: (6) two representatives of small farmers' organizations, one for the low and middle altitude crops and the other for high altitudes crops [Regulations Comite (...) Art. 3 Members of the Committee].
Senegal

Definitions
La dénomination “semences ou plants” est réservée à aux végétaux ou parties de végétaux de toute nature destinée à la production ou à la multiplication. (Law 94-81 of Dec. 1994, Art. 2)

*The name "seed or seedlings" shall be reserved for plants or parts of plants of any kind intended for production or propagation. (Law 94-81 of Dec. 1994, Art. 2)*

Sale and exchange
Pour être commercialisées les semences ou plants doivent être certifiés selon les conditions prévues par les articles 3 ou 6 de la présente loi.


*In order to be marketed, seeds or plants must be certified in accordance with the conditions laid down in Articles 3 or 6 of this Law.*

*The exercise of trade in seeds or seedlings is subject to prior declaration to the Minister of Agriculture. (Law 94-81 of Dec. 1994, Art. 9)*

Registration of varieties

Pour être inscrites sur le catalogue, les variétés actuellement diffusées sur le territoire national feront l’objet d’un recensement par le Ministère chargé de l’Agriculture.

L’inscription de toute variété nouvelle suppose que cette expérimentation ait montré que la variété est adaptée aux conditions pédoclimatiques du Sénégal, qu’elle est supérieure aux variétés les plus cultivées et qu’elle est distincte, homogène et stable. (Law 94-81 of Dec. 1994, Art. 3)

*To be included in the catalogue, the varieties currently distributed on the national territory will be the subject of a census by the Ministry of Agriculture.*

*The inclusion of any new variety implies that this experiment has shown that the variety is adapted to the pedoclimatic conditions of Senegal, that it is superior to the most cultivated varieties and that it is distinct, homogeneous and stable. (Law 94-81 of Dec. 1994, Art. 3)*

Certification
La certification est l’aboutissement d’un processus de contrôle au champ et/ou laboratoire, permettant de s’assurer que les semences et plants présentés sont conformes de pureté variétale et spécifique, de germination et d’humidité précisées dans le règlement technique pris par décret. (Law 94-81 of Dec. 1994, Art. 6)

*Certification is the culmination of a field and / or laboratory monitoring process to ensure that the seeds and seedlings presented comply with varietal and specific purity, germination and moisture as specified in the Technical Regulation By decree. (Law 94-81 of Dec. 1994, Art. 6)*

Registration of producers

See sale and exchange.

Registration of producers
See sale and exchange.
Il est créé un Comité national consultatif des Semences et des Plants. (Decree n° 97-603 of June 1997, Art. 1)

Sont membres
Le Ministre d’Etat, Ministre de l’Agriculture ou son représentant, Président ;
Le Directeur de l’Agriculture, Secrétaire ;
………..
Le Président du Comité national de Concertation des Ruraux ; • Le Président de l’Union nationale interprofessionnelle des Semences (UNIS) ; • Le Président de l’union nationale des Coopératives agricoles du Sénégal (UNCAS) • Le Président du comité national interprofessionnel de l’Arachide (CNIA) (Decree n° 97-603 of June 1997, Art. 3.)

A National Advisory Committee on Seeds and Plants is established. (Decree No. 97-603 of June 1997, Article 1)

Are members
The Minister of State, Minister of Agriculture or his representative, President;
The Director of Agriculture, Secretary;
………..
The Chairman of the National Committee for the Concertation of Rural Areas;
• The President of the National Inter professional Seed Union (UNIS);
• The President of the National Union of Agricultural Cooperatives of Senegal (UNCAS)
• The Chairman of the National Inter-Professional Groundnut Committee (CNIA) (Decree No. 97-603 of June 1997, Art.)
South Africa

Definitions:
"Business" means the business of (a) the sale of plants (Aa) the cultivation of plants for sale (b) the cleansing of propagating material for sale (c) the prepacking of propagating material for sale (d) the sale of propagating material (e) the running of a test laboratory. "sell" includes agree to sell, or to offer, advertise, prepare, keep, expose, transmit, send, convey or deliver for sale, or to exchange or to dispose of in any manner for a consideration and 'sold' and 'sale' have corresponding meanings.

Definition in draft Bill: “breeder”, in relation to a variety contemplated in section 28 [Application for national listing], means— (a) the person who bred, or discovered and developed, the variety; (b) the employer of the person contemplated in paragraph (a), if that person is an employee whose duties are such that the variety was bred, or discovered and developed, in the performance of those duties; or (c) the successor in title of the person contemplated in paragraph (a) or the successor of the employer contemplated in paragraph (b); “business” means the business contemplated in section 9 [Types of business that may be conducted]; “sell” includes—(a) agree to sell or to offer, keep, expose, send, convey or deliver for sale; and (b) to exchange or to otherwise dispose of to any person in any manner.

Sale and exchange:
Plants and propagating material shall only be sold for purpose of purposes of cultivation (a) if the plants and propagating material are of a variety which entered in the varietal list (b) under the denomination entered in respect thereof in the varietal list (c) if no qualifying term or reference is added to or used in connection with the denomination referred to in paragraph (b) (d) if the plant or propagating material, as the case may be, complies with the requirements prescribed in respect thereof, and (e) if, in the case of - (i) propagating material, the material is prepacked or is packed in containers which comply with the prescribed requirements and are sealed and branded, marked or labelled in the prescribed manner with the prescribed information or (ii) a plant, the prescribed information appears on a label affixed to the plant or on the container in which the plant grows or is packed [Act, Art. 13 Requirements relating to sale of plants and propagating material].

Sale and exchange in draft Bill: This Act does not apply to (d) non-commercial varieties of the kinds of plants regulated by this Act. For the purposes of subsection (1)(d), "non-commercial variety" (a) means an unprotected variety of any kind of plant regulated by this Act that is available for cultivation and sale on such non-commercial scale as may be prescribed; and (b) in the case of any kind of plant of which seeds are regulated by tis Act, means any open-pollinated variety of that kind of plant [Bill, Art. 23.1d&2 Exemptions regarding certain plants and propagating material]. A person may in writing apply to the Registrar, with the furnishing of reasons, for exemption from compliance with one or more of the requirements set out in subsection (1) [Bill, Art. 22.3 Requirements relating to sale of plants and propagating material]

Variety release:
A variety may be recognized if (a) it is clearly distinguishable from any other variety of the same kind of plant of which the existence is a matter of common knowledge at the time of filing of the application (b) it is, subject to the variation that may be expected from the particular features of the propagation of the
variety, sufficiently uniform with regard to the characteristics thereof (c) it is stable in that the characteristics of the variety remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle and (d) it is identified by a denomination which complies with the provisions of subsection (3) and (4) [Act, Art. 17 Requirements for recognition of variety] The Minister may, if he or she deems it necessary, evaluate the usefulness of a variety for agricultural or industrial purposes [Act, Art. 22 Evaluation of variety].

Variety release in draft Bill: A variety must be listed if it is (a) clearly distinguishable from any other variety of the same kind of plant which has been included in the national variety list (b) sufficiently uniform with regard to the characteristics thereof, subject to the variation that may be expected from the particular features of the propagation of that variety (c) stable in that the characteristics of the variety remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle and (d) identified by a denomination which complies with the provisions of section 33 [Bill, Art. 27 Varieties eligible for national listing]. The Registar may, in cases where the value for cultivation and use of a variety is doubtful, evaluate that variety in the prescribed manner in order to determine its value [Bill, Art. 38.1 Evaluation of variety for value, cultivation and use]

Certification:
Different schemes may be established for plants and propagating material of different kinds of plants, and the requirements for different kinds and varieties of plants and propagating material in a scheme may differ [Act, Art. 23.2 Establishment of certification schemes] Subject to the provisions of regulation 24, seed of a kind of plant specified in column 1 of Table 4, which has not been certified or prepacked, may be sold without an authority referred to in section 13 of the Act of (a) the percentages of other matter, other seed and weed seed in such seed do not exceed the percentages specified in columns 3, 4 and 5 of the said Table opposite the name of the kind concerned, respectively (b) the percentage germination or viability, where applicable, of such seed is equal to or more than that specified in column 6 or 7, where applicable, of the said Table opposite the name of the kind concerned (c) such seed is true to variety (d) no prohibited weed seed is present in such seed (e) such seed is homogenous [Regulations, Art. 22 Requirements for seed which is not certified]

Certification in draft Bill: Plants and propagating material sold for purposes of cultivation must (a) be of varieties of the kinds of plants contemplated in section 24 (c) comply with the requirements prescribed in respect of the plant and propagating material in question [Bill, Art. 22.1 Requirements relating to sale of plants and propagating material]. A person may in writing apply to the Registrar, with the furnishing of reasons, for exemption from compliance with one or more of the requirements set out in subsection (1) [Bill, Art. 22.3A]

Registration producers:
Business shall only be conducted on premises which have been registered in term of this Act or which are exempt from the provisions of this section in terms of section 10 [Act, Art. 6 Prohibition of conducting business on unregistered premises].

Registration producers in draft Bill: Any person who desires to conduct one or more of the following types of business relating to plants or propagating material for cultivation and sale, must be registered in terms of this Act and must comply with the prescribed requirements, unless
exempted in terms of section 19: (a) the cleaning and conditioning of seed; (b) the pre-packing of seed; (c) the selling of seed; (d) the running of a nursery or any other type of multiplication facility; (e) the running of a laboratory; (f) the importation of plants or propagating material; (g) or the export of plants or propagating material. [Bill, Art. 9.1 Types of business that may be conducted] Premises on or from which a type of business referred to in section 9(1) may be conducted, must (a) be registered in terms of this Act and must comply with the prescribed requirements [Bill, Art. 10.1 Premises on or from which business may be conducted] The Minister may, by notice in the Gazette and on such conditions as he or she may specify in the notice, exempt any type of business from the provisions of section 9 and any premises from the provisions of section 10. Any person seeking exemption from section 9 or section 10, or both, must submit an application with the Registrar in the prescribed manner [Bill, Art. 19.1&2 Exemption from registration]

Other:
None.
Other in draft Bill: None.

Inclusion:
None.
Inclusion in draft Bill: The Minister must appoint as members of the Advisory Committee: (b) two persons who are appropriate to represent farmers (e) 1 representative of indigenous interests in respect of plant varieties and the source, use and impacts of plant varieties [Bill, Art. 49.1 Appointment of members of Advisory Committee and termination of membership] A formal consultation workshop was held on 23 May 2013 in Pretoria with representatives from Civil Society Organizations [Bill Memorandum, Art. 3.4 Consultation]
South Sudan

Definitions:
"Commercial Seed": (1) seed or planting material which is offered for sale, sold, advertised, or entered into marketing channels; (2) non-Certified seed so offered; "Formal Seed Sector": legal or physical entities engaged in any aspect of the production, handling, distribution and marketing of seed as a business. All formal seed sector and operations shall be subject to the provisions of this Law, and shall be eligible for all guidance and support provided by the Government of South Sudan; "Informal Seed Sector": farmers or any group of farmers who produce seed for their own use or for use by their neighbours or others in their immediate area. Such seed and operations shall be exempt from Government controls on seed but shall be eligible for all Government guidance and support, so as to improve the quality of their seed and operations. Notwithstanding, if (1) such seed are advertised and promoted for sale in a manner which indicates that the informal operation has become a commercial activity; or (2) as otherwise provided by Regulations hereunder, the Informal status no longer applies, and the operation has entered the Formal Seed Sector. Provided, that village seed production and supply groups shall be classified as the Informal Sector, so long as the above descriptions apply; "Introduction Into Sale or Into Market Channels": offering, making available, supplying, handling, storage, delivery and/or shipment of seed for sale, as well as for barter or any other type of delivery or offer to deliver which makes the seed available for use; "Sale": any act of advertising, promoting, selling, or offering for sale, any seed or planting material covered under this Law; "Seed Producer": the person or entity producing crops for use as planting seed.

Sale and exchange:
See Definition Informal Seed Sector.
To ensure maximum benefits to farmers, all seed offered for sale shall comply with all applicable quality requirements, and all seed operations and activities shall seek to provide seed of maximum quality [Policy, Art. 3 Quality orientation]. To ensure that superior materials as new varieties and hybrids are offered to farmers, they must be tested under farmer conditions. Such testing is a public-service and shall be conducted by MAFCRD, in accordance with specified procedures adequate to ensure identification of superior varieties. This, however, in no way limits the testing activities of private-sector agencies [Policy, Art. 14.1 Variety Development, Testing and Release] varieties/hybrids developed by the private sector may be included but are not required to be included, in MAFCRD trials, and shall be considered solely on their merits. Varieties and hybrids which qualify shall be included on recommended or officially-notified lists of varieties, and shall be eligible for Certification. As improved varieties benefit farmers, a private-sector breeder shall not be charged for including a specified number of materials in test trials [Policy, Art. 14.2]

Certification:
Seed Categories: in generation of seed, in terms of its descent from Breeder seed. These shall be the same as used in international usage: Breeder, Foundation, Basic, Certified, Quality Declared and Non-Certified [Policy, Definitions nr. 36]. To help develop a quality-orientated seed industry and achieve high seed quality, seed Certification shall be developed, and seed suppliers encouraged to participate.
Certification standards, procedures, and methodology shall comply with international usage. While Certification of seed is recommended, it shall not be compulsory. Seed which complies with Seed Law requirements may be sold without Certification [Policy, Art. 20.1&2 Certification]

Registration producers:
To ensure high seed quality and operating cost-efficiency, quality control of both seed fields and seed lots is necessary. Standards for different categories of seed production fields and seed lots shall be established, achieving a balance between the needs of farmers for high quality vs. realistic production capabilities, and can be improved as technological, operational, and infrastructural developments permit [Policy, Art. 17.2 Seed and Seed Field Quality Control].

Other:
MAFCRD recognizes that there is an essential role for both the formal and informal seed sector. MAFCRD activities, controls, and support shall be tailored to the needs of the sector to which they apply, help the sector operate efficiently and best serve the needs of farmers while ensuring maximum seed quality which is economically feasible [Policy, Art. 4 Formal and Informal Seed Sector Roles]. To educate farmers in use of improved varieties and seed, Extension shall maintain special programs to promote and encourage farmer use of improved seed, guide and assist the informal seed sector, and assist and encourage the formal seed sector [Policy, Art. 23 Seed Extension and Promotion]. MAFCRD, through relevant institutions, shall promote crop production credit for farmers, including credit for purchase of improved seed. Such credit shall permit farmers to select the supplier of their seeds [Policy, Art. 24 Credit]. MAFCRD shall not subsidize the selling or purchase price of seed; these shall be determined by market factors. All MAFCRD actions shall be in support of developing and maintaining a market-driven seed industry. However, in special cases such as ensuring provision of improved seed to low-income groups, MAFCRD may assist on a short-term or long-term basis in such a manner that the MAFCRD-provided subsidy is clearly indicated and is applied so that it will not interfere with normal business practices in pricing and/or selling seed, or with the development of a seed industry which serves the ROSS interest [Policy, Art. 26 Subsidies on Seed].

Inclusion:
The committee shall be composed by proposed representatives of the following areas/sectors: a representative from the farmers' organization [Policy, Art. 33.2 South Sudan Seed Committee (SSSC)].
**Swaziland**

**Definitions:**
“business” means the business of — (a) cleaning, grading, prepacking and distribution of seed carried out in a registered establishment in terms of this Act; (b) the retail sale of seed.

**Sale and exchange:**
Only varieties of plants that are listed in the variety list may be sold [Act, Art. 15.2 Provisions for the recognition of a variety]. A prescribed variety shall not be sold for the purpose of cultivation unless it (a) is of a variety which is entered in the variety list, (b) complies with relevant requirements (c) has been tested for germination within a period of 6 months before it is intended to be sold, pack and labelled in prescribed manner [Act, Art. 14 Requirements relating to the sale of seed].

**Registration variety:**
A variety may be recognized if — (a) it is, by reason of any important characteristic, clearly distinguishable from any other variety of the same kind of plant of which the existence is a matter of common knowledge; (b) it is sufficiently homogeneous having regard to the particular features of sexual reproduction or vegetative propagation; (c) it is stable with regard to its essential characteristics and remains true to the description thereof after repeated reproduction or propagation, or where the breeder has defined a particular cycle of reproduction or multiplication, at the end of each such cycle; (d) it is identified by a denomination which complies with the provisions of subsection (3); and (e) it has sufficient merit in at least one agronomic character. [Act, Art. 17.1 Requirements for the recognition of a variety]. The committee shall in order to determine whether such a variety may be recognised — (a) undertake such tests as it may deem necessary; or (b) designate other persons or institutions to carry out such tests [Act, Art. 18.3 Consideration and examination of applications].

**Certification:**
The Minister may, by notice in the Gazette, establish a scheme for the certification of seeds with the object of maintaining the quality of the seeds and of ensuring the usefulness for agricultural or industrial purposes of the products derived therefrom. (2) Different schemes may be established for seeds of different kinds of plants and the requirements, for different kinds and varieties of plants, may differ. [Act, Art. 22.1&2 Establishment of certification schemes].

**Registration producer:**
Registration of Seed Cleaner, Sellers, Importers and Exporters [Act, Part 2]. The Minister may provide for the manner in which and the control subject to which seed intended for certification under a scheme shall be produced and treated [Act, Art. 23f Provision of a scheme]

**Other:**
Government shall encourage and expand institutionalised agricultural credit as a means of enhancing farmer usage of improved seeds and other inputs. On the issue of seed prices, the use of subsidies shall not be discouraged [Policy, Art. 10 Agricultural Credit and Seed Prices].
**Inclusion:**
The NSC shall comprise members who shall represent: (x) farmers [Policy, Art. 11A National Oversight Arrangements].
Definitions:
'Quality Declared Seed' means 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 this Act; "standard seed" means emergency seed authorized for use by the Minister; "seed dealer" include importers, exporters, processors, producers, sellers and distributors of seeds and owners of seed testing laboratories or any other person dealing with seed under this Act; "sell" includes sell, offer for sell expose for sell, have in possession for sale, and distribution or give away; "breeder" shall have a meaning ascribed to it under the Plant Breeders' Rights Act [Regulations]; "release" means discharge for commercial multiplication, production or sale of seed or plant varieties [Regulations]; "seed production" means operations leading up to and including harvesting of the seeds from the seeds field [Regulations].

Sale and exchange:
No seed shall be offered for sale unless it is certified in accordance to these Regulations or rules made under regulation 26(4) [Regulations, Art. 32.1 Seed for sale]. Notwithstanding subsection (1), nothing in this Act shall, be construed as preventing the sale of quality declared seeds as such to a neighbour fanner, whereby such seeds are grown by a smallholder fanner for use as seeds in his own farm [Act, Art. 19.2 Prohibition]

Variety registration:
"Any person who intends to release a variety shall be required to submit to the Tanzania Official Seed Certification Institute an application for DUS test and NPT, on Form SR III A and SR IIIB respectively, as set out in the Fifth Schedule to these Regulations. An application for DUS test shall be made one season prior to the application for NPT. An application for DUS test shall be made one season prior to the application for NPT and shall be supported by the following: -d) on-farm trial and farmers’ assessment data. The application for NPT test shall be supported with the following: (a) a minimum of two recent previous seasons advanced yield trial data from not less than three recognized testing sites in Tanzania. TOSCI shall conduct NPT for a minimum of one season in at least three sites as set out in the Seventh Schedule to these Regulations, and shall conduct second DUS test and submit the report to NPT-TC for review [Regulations, Art. 7.1&2&3&4 Application for variety release and procedure for conduction NPT]

Certification:
See Definition Quality Declared Seed.
No seed shall be certified unless, it has been produced, inspected, sampled, tested, and complied with the standards set out in the First Schedule to these Regulations. (2) Varieties released in Tanzania pursuant to regulation 4 shall be eligible for certification [Regulations, Art. 26.1& 2 Restrictions on uncertified seed] Seed classes: Pre-basic, basic, Cert. 1st gen, Cert 2nd gen [Regulations, Second Schedule]. Minister may make rules and procedures for certification and control of QDS and tree seed [Regulations, Art. 26.4 Restrictions on uncertified seed]. The Minister shall for the purpose of this Act, prescribe the plant varieties and standards of the seeds for importation, exportation, production,
processing and distribution [Act, Art. 11.3]. Minister may prescribe classes of seeds which shall be exempted from the requirements of subsection (1) [Act, Art. 14.2 Restrictions on sale, importation or exportation of seeds].

Registration producers:
Any seed importer, exporter, producer, processor, distributor or seller shall, before operating, register with the Director or any other person appointed by him in that behalf. Any owner or operator of a seed processing factory or seed testing laboratory shall be required to obtain registration of his factory or laboratory from the Director [Act, Art. 15.1&2 Registration of seed dealer].

Other:
None.

Inclusion:
The Minister shall appoint the following to be members of the National Seeds Committee: (c) a representative from a seeds consumers' association [Act, Art. 4.2 Committee Membership]. The National Variety Release Committee shall be composed of the following members: (n) a representative from farmers' association to be appointed by the Permanent Secretary upon recommendation by the respective association [Regulations, Art. 6.1 Composition and meetings of the NVCR and NPT-TC], NPT Committee does not include farmers [R6].
**Tunisia**

**Definitions**
New plant varieties” means new plant varieties created or discovered and resulting from a particular genetic process or a particular composition of hereditary processes and different from all other plant groups and which constitute a unit from the standpoint of their suitability for multiplication. (Law 99-42 of May 1999, Art. 2 (4))

**Sale and exchange**
Only those seed and seedlings of plant varieties entered in the official catalogue in one of the categories referred to in Article 3 of this Law may be marketed. (Art.9 Law 99-42)

**Registration of varieties:**
There is created an official catalogue in which shall be entered plant varieties that are distinct, stable, uniform and have considerable agricultural value. The competent authority shall keep the official catalogue.
Entry in the catalogue shall be made on a request submitted by the person concerned to the competent authority, accompanied by a detailed description of the variety and a sample of its seed or seedlings.
The form of the catalogue and the procedure for entry shall be laid down by decree. (Law 99-42, Art.4)

**Certification:**
Produced seed and seedlings shall be subject to inspection by the competent authority to ensure their quality and their genetic status.
To that end, and in addition to the measures laid down by the legislation on the protection of plants, the competent authority shall inspect the nurseries and fields and shall carry out laboratory tests to check compliance with the standards for each category of seed and seedlings. Those standards and the inspection procedures shall be laid down by decree.(Art. 13 law 99-42)

**Registration of producers:**
Anyone can produce seeds and seedlings and multiply them directly or through a third person in compliance with the rules approved by decree (Law 99-42, Art.7)

**Other:**
The Minister responsible for agriculture may, during exceptional circumstances, authorize the marketing of seed and seedlings meeting special conditions laid down following the opinion of the Technical Committee for Seed, Seedlings and New Plant Varieties.
Entry in that list shall be made under conditions laid down by decree. (Art.10 Law 99-42)

Notwithstanding the provisions of Articles 21 and 22 of this Law, certain new plant varieties of extreme importance for the life of man or animals may be subject to a compulsory
authorization to exploit. A compulsory authorization to exploit shall be given by an order of the Minister responsible for agriculture. As from publication of the order concerned, the competent authority may allocate exploitation of the new plant variety that is the subject matter of the certificate to specialized public establishments or to organisms or to private persons having the necessary technical and professional capabilities in that field. The holder of the breeder’s right shall be awarded equitable compensation for the exploitation of the variety concerned or the transfer of revenue received from private persons in that same respect. (Law 99-42, Art. 24)

Inclusion
Silent.
Uganda

**Definitions**
"seed dealer" means a person trading in seed and who is licensed to do so; "seed grower" means an individual or body that grows a crop intended to produce seed; "seed merchant" means a person or organisation engaged in the business of seed production, conditioning and marketing and who is licensed to do so; "standard seed" means any seed which is not grown under a certification program but which may enter the market in case of certified seed shortage and which meets the same laboratory seed testing standards as certified seed.

**Sale and exchange:**
A person shall not sell any prescribed seed for sowing if - (a) that prescribed seed does not conform to the standards of germination and purity prescribed for that seed (b) it is reported in the test report by a national seed testing laboratory or an accredited seed testing laboratory that the prescribed seed does not conform to the standards [Act, Art. 19.1 Sale of prescribed seed under a different name]. Farmers will be allowed to save, use, exchange and share farm produce of all protected varieties [Policy, Principe 4: Plant breeders' rights will be protected to foster innovation in the seed sector].

**Variety release:**
All imported and domestic varieties shall undergo testing in variety performance trails for at least two main growing seasons before their release [Act, Art. 9.1 Variety testing, release and registration]. The functions of the Technical Committee are (f) carrying out distinctness, uniformity and stability tests for candidate varieties [Act, Art. 7.1 Functions of the Technical Committee] Supporting the mapping and creation of variety registers within communities and at national level [Policy, Art. 3.2 objective 2 To promote the conservation of local varieties, indigenous knowledge and practices] Breeders include both public and private breeding institutes and farmers and may register their varieties for protection. Laws covering variety development and plant variety protection shall protect the rights of Plant Breeders and the local communities’ traditional breeding [Policy, Principle 4: Plant breeders' rights will be protected to foster innovation in the seed sector]

**Certification:**
Under this policy, the seed classes and their description shall be as follows: breeder seed, basic seed, certified seed, QDS and standard seed. QDS is a seed class created by FAO. Is seed produced from: a) Basic, Certified or Maintainer seed, or b) from a QDS seed that have been officially controlled. QDS requires a register of seed producers and a listed variety as part of its regulatory mechanism. Producers of QDA will be identified and encouraged by the NSCS to abide by the Seed and Plant Act and regulations. Regulations will incorporate these players’ needs by providing adapted seed classes as Quality Declared Seed and specific National List requirements for traditional and participatory bred varieties. NSCS will also provide adequate training and licensing in seed quality control so that local farming communities can formally access quality controlled seed from neighbouring licensed seed merchants. Currently QDS is not recognized in Uganda but under this policy provides for its recognition
and regulation. [Policy, Art. 1.3.3 Seed Classes in Uganda] Putting in place new classes of seed such as Quality Declared Seed, with accompanying regulations on standards and procedures and with its own label [Policy, Art. 3.3 objective 2 To increase the availability of and access to quality seed of preferred varieties not sufficiently served by the formal system] The Minister may, in consultation with the Board, make regulations for the control of a prescribed or non-prescribed seed which is not Uganda certified seed and is produced by a seed producer on his or her own land, and is sold by him or her for sowing by a buyer for the purposes of re-sale [Act, Art. 28.2 Regulations]

Registration producers:
See definitions. All seed merchants and dealers shall be licensed on application to the certification service and shall pay a prescribed annual fee [Act, Art. 10.2 Multiplication and licensing] All plant breeders of public or private institutions and importers of varieties for seed production in Uganda shall be registered with the certification service on payment of the prescribed fee [Act, Art. 9.10 Variety testing, release and registration] A licensed seed conditional shall condition only seed lots which have been certified by the certification service [Act, Art. 11.3 Seed conditioner and conditioning. The informal seed system is strategically positioned to conserve biodiversity of land races and neglected varieties through communities’ preservation systems for food security requirements and food safety. However, the informal seed system is not regulated, seed source is unknown and standards are not adhered to. When ready to transform through registration of their businesses/associations and listing of varieties they are dealing in, these producers will be formally recognize and brought under appropriate regulatory mechanisms to enhance commercialisation of the agricultural sector and food security through availability of high quality seed and protection of biodiversity [Policy, Principle 3] Objective: To increase the availability of and access to quality seed of preferred varieties not sufficiently served by the formal system. Strategy: Promoting and building capacity of farmer and community groups to produce and market quality seed with the focus on crops and varieties that have a high food security value [Policy, Art. 3.3 Objective 2: To increase the availability of and access to quality seed of preferred varieties not sufficiently served by the formal seed system]

Other:
Smallholder farmers, characterized by a low input-low output production system dominate Uganda’s agricultural production [Policy, Forward]. Uganda aims at transforming the 68% subsistence agriculture households to commercial agriculture [Policy, Intro] The functions of the Board are: (b) ‘to advise the Minister on the informal seed sector and vegetatively propagated materials’ [Act, Art. 4 Functions of the Board]

Inclusion:
The Board shall consist of the following persons appointed by the Minster responsible for agriculture (v) a representative of the farmers [A3 The Board]. The Committee does not include farmers [Act, Art. 6 Technical Committee]. The seed policy has been developed through a consultative and participatory process, with key stakeholders including Civil Society and farmers [Policy, Forward] Provide a platform for involvement of stakeholders in seed strategy development, review of seed acts and regulations and other institutions [Policy, Art. 4.6.1 Seed and Plant Act and Regulations]
**Zambia**

**Definitions:**
"owner", in relation to any seeds, includes any person having for the time being the possession thereof; "restricted seed" means any seed to which a regulation made under section thirty-nine applies; "seed producer" means any person who, either exclusively or in conjunction with any other trade or business, produces seed for sale; "seed seller" means any person who, either exclusively or in conjunction with any other trade or business, sells seed for sowing; "sell" includes to exchange or barter or to offer, advertise, keep, expose, transmit, convey or deliver for or in pursuance of a sale, exchange or barter, and cognate words shall be construed accordingly.

**Sale and exchange:**
No seed shall be offered for sale unless it has been certified or it has had its quality declared under regulation 7 [Regulations, Art. 5.1 Sale of Seed]. The provisions of this Act shall not apply (a) to any sale of prescribed seed (which is not Zambia certified seed), which has been produced by a seed producer on his own land, and is sold by him (i) for sowing by the buyer, and not for purposes of re-sale, (ii) or for use as food or farm feed (iii) to a registered seed cleaner in order that it may be cleaned before being sold for sowing (b) to any sale of prescribed seed (which is not certified seed) by or to a person who is a member of a class exempted from the provisions of this Act by an order made by the Minister under section 79 [Act, Art. 78 When Act not applicable to sale of prescribed seed]

**Variety registration:**
Silent on variety release

**Certification:**
No seed shall be certified unless it has been produced, inspected, sampled, tested and complies with the standards set out in the Fourth Schedule [Regulations, Art. 6.1 Certification of seed]. Only cultivars which have been approved by certifying authority shall be eligible for certification [Regulations, Art. 6.3]. Seed certification scheme: parent (pre-basic), basic, certified C1, C2, C3, Certified seed D, Emergency class [Regulations, Art. 3 Schedule]. Upon its being shown to the satisfaction of the Minister that particular prescribed seed: (a) is of a specified variety, (b) is of known derivation, (c) has been produced by a registered seed producer,(d) has been produced on the land designated in the register, (e) sown cultivated and produced as prescribed, (f) has been inspected during cultivation as prescribed (g) has been tested in the manner prescribed and found to conform to the standards of germination and purity prescribed for seed of that specified variety the Minister may certify such seed as Zambia certified seed [Act, Art. 59 Power of Minister to certify seed as Zambia certified seed] Where, because of non-compliance with any of the provisions of section fifty-nine, the Minister refuses to certify as quality declared seed any seed of a specified variety which was produced by a registered seed producer for the purposes of such certification, and it is shown that, upon the test prescribed, the said seed conforms to the standards of germination and purity prescribed for such variety, the registered seed producer shall...
not, by reason of such non-certification, be precluded from selling the said seed as quality declared seed, subject to the provisions of this Act applicable to such sale. [Act, Art. 66 When seed failing to meet certification standards may be sold as quality declared seed]

Registration producers:
Zambia certified seed means any prescribed seed of a specified variety which is produced in Zambia by a registered seed producer under and in accordance with the provisions of this Part, and certified by the Minister under this Part as Zambia certified seed [Act, Art. 50] The Certifying Authority shall cause to be kept (b) a Register of Seed Cleaners which shall contain- [Act, Art. 4] A license under this Part shall entitle the licensee to sell, for sowing, prescribed seed, within the terms of the license, which shall be known as a seed seller's license [Act, Art. 29(1) Seed seller's license], Upon its being shown to the satisfaction of the Minister that particular prescribed seed- (c) has been produced by a registered seed producer; and (d) has been produced on the land designated in the register [Act, Art. 59d Power of Minister to certify seed as Zambia certified seed] Government will encourage the participation of farmers in local germplasm conservation and utilization [Policy, Strategy: 5.5 Plant Genetic Resources Conservation] Government will promote the development of the informal sector by providing on cost recovery basis breeders/basic seed to those may have no capacity to develop this [Policy, Strategy: 5.9 Public Research] Government will encourage establishment of small seed enterprise [Policy, Strategy: 5.33 Promotion of small scale seed Entrepreneurship]

Other:
To promote an integrated seed industry involving both the formal and informal system [Policy, Objective: 4.3]. Government will continue its involvement in crop research focusing more on strategic and long-term research which takes care of the traditional and minor crops that are important for household food security amongst small scale farmers and vulnerable communities including research not attractive to the private sector [Policy, Strategy: 5.7] Government will promote an integrated approach in the development of the seed industry. In this regard it will put in place measures to monitor the informal systems in which NCOs involvement plays an important role. Government will therefore establish a forum for the co-ordination of the NGO operating in the informal seed system so that their activities aim at capacity building and creation of a sustainable cottage (rural) seed industry [Policy, Strategy: 5.34]

Crops that require registration:
The Minister may from time to time by regulation prescribe any seed, including seed potatoes, to be seed to which this Act shall apply, and may from time to time by regulation revoke any such regulation [Act, Art. 35 Power of Minister to declare seed to be prescribed seed]

Other:
Zimbabwe

Definitions:
"sell" includes to offer, advertise, keep, expose, transmit, convey, deliver or prepare for sale or exchange or to dispose of for any consideration whatsoever or to transmit, convey or deliver in pursuance of a sale, exchange or disposal as aforesaid.

Sale and exchange:
The Act shall not apply to the sale of seed (a) which is intended only for use as food or stock feed or for industrial purposes (b) which is sold to a bona fide cleaner of seed in order that it may be cleaned, graded or treated before it is used as seed [Act, Art. 11a Savings as to the sale of seed] Subject to subsection (2), no person shall (a) sell seed unless he is registered as a seller of seed Subsection (1) shall not apply to the sale of seed which is grown by any farmer and sold by him to a person for use as seed by such person [Act, Art. 8.1&2 Unregistered person or laboratory may not sell or test seed]

Variety release:
Silent on variety release

Registration producers:
Every application for registration as a seller of seed or as a seed testing laboratory shall be submitted to the registering officer in the prescribed form and shall be accompanied by the prescribed registration fee [Act, Art. 4 Registration of sellers of seed and seed testing laboratories]. Subject to subsection (2), no person shall (a) sell seed unless he is registered as a seller of seed Subsection (1) shall not apply to the sale of seed which is grown by any farmer and sold by him to a person for use as seed by such person [Act, Art. 8.1&2 Unregistered person or laboratory may not sell or test seed]

Other:
None.

Inclusion:
Silent

Crops that require regulation:
“seed” means any seed, including seed potatoes, which the Minister has, by statutory instrument, declared to be seed for the purposes of this Act [Act, Definitions]
Annex 2 List of seed legislation (policies, laws and regulation) of African countries acquired during this study

Algéria
Loi n°87-17, 1er Août 1987
Décret exécutif n°92-133, 28 mars 1992
Loi 05-03, 06 Février 2005

Angola:
Lei n. 7/05
Decreto n. 15/95
Decreto executivo conjunto n5/95

Bénin
Décret N°87-302, 28 Septembre 1987
Catalogue béninois des espèces et variétés végétales (CaBEV), Septembre 2011

Botswana:
The Seeds Certification Act, 1976

Burkina Faso
Loi n°010-2006/AN, 31 mars 2006

Burundi
Loi n°1/07, 19 Mai 2009
Décret-Loi n°1/033, 30 Juin 1993
Loi 1/08, 23 Avril 2012

Cote d’Ivoire
Decree N°92-32 of July 1, 1992

Cameroun
Loi n° 2001/014, 23 Juillet 2001
DECRET N° 2005/153, 4 Mai 2005

DRC
Avant-projet de loi sur l’activité semencière mit à jour, 27 Décembre 2015
Loi n° 11/022, 24 décembre 2011

Ethiopia:
Seed Proclamation No. 782/2013
Council of Ministers Seed Regulations No. 375/2016
Ethiopian Seed Council of Ministers Regulations No. 16/1997

Gabon
Ordonnance n°004/PR/2009 du 16 juillet 2009
Décret n°0294/PR/MAEPDR du 30 juin 2010

Ghana:
National Seed Policy, 2013
Plant and Fertilizer Act, 2010
Seeds (certification and standards) Regulations Arrangement of Regulations, 2014

Kenya:
The Seeds and Plant Varieties (Amendment) Bill, 2015
The Seeds and Plant Varieties (Amendment) Act, 2011
The Seeds and Plant Varieties Act, 1975
The Seeds and Plant Varieties (Seeds) Regulations, 1991
The Seeds and Plant Varieties (National Performance Trials) Regulations, 2009

Malawi
Seed Act, 2013 (draft)
Seed Act, 1996

Mauritius
Seeds Act, 2013

Madagascar
Loi n° 94-038, 28 Décembre 1994
Décret N°2010-0958, 30 Novembre 2010
Décret N°2010-1010, 14 Décembre 2010
Décret N° 2010-1009, 14 Décembre 2010

Mali
Loi n°95-052, 05 Mai 1995
Décret n°10-428/P-RM, 09 Août 2010
Politique semencière du Mali, 2010

Mauritanie
Loi n° 96-025, 08 Juillet 1996

**Maroc**
Arrêté n° 863-75, 22 Septembre 1977
Arrêté n° 864-76, 22 Septembre 1977
Décret n° 1-96-255, 21 Janvier 1977

**Niger**
Décret n° 90-55/PRN/MAG/EL, 1er Février 1990
Politique semencière nationale, Décembre 2012

**Nigeria**
National Agricultural Seeds Decree, 1992

**Rwanda**
Draft Law governing seeds and plant varieties in Rwanda, 2016
Ministerial order No001/11.30 of 18/08/2010 appointing the Variety Release Committee
Ministerial order No003/11.30 of 18/08/2010 setting forth condition required for marketing quality seeds
Ministerial order No002/11.30 of 18/08/2010 determining regulations on quality seeds production and control of seeds produced and marketed

**Sénégal**
Loi n° 94.81, 23 Décembre 1994
Décret n° 97-602, 17 Juin 1997
Décret n° 97-616, 17 Juin 1997
Décret n° 97.603, 17 Juin 1997

**South Africa**
Plant Improvement Bill (draft), 2015
Plant Improvement Act No. 53 of 1976
Regulation relating to establishments, varieties, plants and propagating material

**South Sudan**
The Republic of South Sudan Seed Policy, 2013 (draft)

**Swaziland**
National Seed Policy Swaziland
The Seeds and Plant Varieties Act, 2000
**Tanzania**
The Seeds Act, 2003
The Seeds Regulations, 2006
The Seeds Regulations, 1976

**Tunisie**
Loi n° 99-42, 10 Mai 1999
Loi n° 2000-66, 03 Juillet 2000 modifiant Loi n° 99-42, 10 Mai 1999
Décret n° 2000-102, 18 Janvier 2000
Décret n° 2000-101, 18 Janvier 2000

**Tchad**

**Uganda**
National Seed Policy, 2014 (draft)
Seeds and Plant Act, 2006

**Zambia**
National Seed Industry Policy of Zambia, 1999
The Plant Variety and Seeds Act (as amended by Act No.21 of 1995)
Agriculture (Seeds) Act, 1968
Plant Variety and Seeds Regulations, 1997

**Zimbabwe**
The Seeds Act [Chapter 19:13], 1971