

## Policy Brief

# Where Do We Stand After Ten Years of Harmonized Seed Trade Regulations in COMESA? Case Studies from Egypt and Sudan



INITIATIVE ON

Fragility to Resilience in Central and West Asia and North Africa

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## 1. Background and context

Effective seed systems that provide farmers access to well-adapted and quality seeds are crucial for food system transformation and improving food security in Sub-Saharan Africa. However, seed systems across SSA are at early stages of development and only a fraction of farmers in this region have access to improved varieties and quality seeds (FAO, 1998, Cromwell, 1987, Rohrbach *et al.*, 2003, Hunga *et al.* 2023) particularly for food security crops. Lack of access to quality seeds of well adapted varieties thus remains a critical bottleneck to transforming Africa's food systems, in general, and the Common Market for East and Southern Africa (COMESA) region, in particular (Gaffney *et al.*, 2016).

An important historical precedence in the global varietal release and seed system development is that countries need not wait until local capabilities are developed to generate their own improved varieties. Historically, countries have benefited from sharing of imported improved high-yielding varieties developed through research and breeding programs elsewhere and facilitated by deliberate cross-border seed trade. A notable example is the cross-border trade of high-yielding rice and wheat varieties among the participants of the Green Revolution in Asia (Hazel, 2019). Besides facilitating the transfer of technologies, such cross-border seed trade allowed the introduction of diverse crops adapted to regions with unique environmental and agroclimatic conditions and enabled them to mitigate local challenges.

Cross-border seed trade is however unlikely to occur in a vacuum and involves a robust national and regional seed sector organized with coherent and transparent seed laws and regulations that facilitate trade (Rohrbach *et al.*, 2003; Hunga *et al.*, 2023). An efficient and transparent seed regulatory system is crucial to ensure that farmers have timely access to high quality seed at an affordable price (See e.g., Kuhlmann *et al.*, 2023). While cross-border seed trade and integration of regional markets can help resolve this challenge, lack of harmonized, lengthy, and bureaucratic varietal release and registration system, seed quality assurance and certification procedures, and inadequate phytosanitary and quarantine measures for seed import and export as well as non-transparent, and non-inclusive domestic seed regulations stand out as obstacles in this process (Daniel *et al.*, 2019; Hunga *et al.* 2023). Harmonizing varietal release and seed regulations is thus crucial for promoting regional seed trade and ensuring the safe movement of improved varieties and quality seeds across borders (Rohrbach *et al.*, 2003, Kuhlmann, 2015, Kuhlmann, 2023).

Regional organizations such as COMESA (The Common Market for Eastern and Southern Africa) have been aspiring to bridge cross-border trade through harmonized seed regulations across member states (Kuhlmann, 2015; Hunga *et al.*, 2023). A notable example is the strategic initiative of COMESA's specialized agency of the Alliance for Commodity Trade in East and Southern Africa (ACTESA) to harmonize seed trade regulations across the COMESA region. The initiative, which is known as the COMESA Seed Harmonization Implementation Plan (COMSHIP) was signed by all member states in 2014 (COMESA, 2014; Kuhlmann, 2015). The launching of COMESA's seed trade harmonization regulations is considered an important milestone for Sub-Saharan Africa's seed sector development<sup>1</sup>.

COMESA has collaborated with other regional organizations, including the Southern Africa Development Community (SADC) and the East African Community (EAC) to establish the COMESA-SADC-EAC Tripartite Free Trade Area, which includes harmonized seed trade regulations that aimed to streamline the marketing, and removal of barriers for variety release and registration as well as seed production, certification, and marketing (UNECA, 2012; Hunga *et al.*, 2023). The COMESA regulations aim primarily to harmonize variety release and registration procedures, seed quality assurance and certification schemes, and phytosanitary and quarantine measures in the region (Kuhlmann, 2015; Gaffney *et al.* 2016; Munyi, 2022). An important feature in this regulation is that a variety is released and registered in the COMESA catalogue

<sup>1</sup> Several other global and regional treaties shape seed laws in Africa. See Munyi (2022) for a deeper analysis of such treaties and their influence on the African seed sector.

only upon satisfying the DUS (distinctiveness, uniformity, and stability) and VCU (value for cultivation and use) testing conditions. This will be coupled with regional seed quality assurance and certification scheme using seed certification labels based on common field and seed standards. Clearly, by its very nature, the COMESA harmonized seed trade regulations prioritize trading seeds of improved varieties of major crops supplied by the formal sector- public or private. The scheme does not recognize trading with indigenous farmer varieties which are demanded by smallholders and part of local food security in Africa.

Almost ten years into its signing, adoption and implementation of the agreement vary widely between member states and sub-regions. While some have gone long way domesticating it into their national regulatory systems, others are still familiarizing themselves with it and hence are at an early stage of adapting it to local contexts where they are plagued with multifaceted challenges in implementation. A 2018 high-level consultation panel that brought key seed stakeholders in the COMESA region to assess the implementation status of COMSHIP concluded that implementation significantly varied across member states (COMESA, 2018). It is noted that implementation in some countries and sub-regions was lagging due to lack of broader awareness of the COMSHIP and lack of transparency of variety release systems between member states, as well as the limited resources committed to implement it (European Seed, 2018). Structural challenges, including inadequate capacity to execute variety release and registration, seed quality assurance and certification, and phytosanitary and quarantine measures for seed import and export also contributed to the problem. Several efforts were made to address these broader COMESA-wide challenges and reinvigorate implementation, including the development of a regional strategic plan (2021 – 2031) by ACTESA in 2020 (COMESA, 2020).

Despite the renewed efforts, progress in actual implementation remains far below expectations. As of December 2022, only eight<sup>2</sup> of the 21 COMESA member states had completely aligned and domesticated their seed system regulations, five<sup>3</sup> others were either ready to gazette their laws or had a draft COMESA-aligned regulations, and the rest eight<sup>4</sup> were yet to start the process of developing and aligning their seed regulations to the COMSHIP (AGRA, 2023; Hunga *et al.* 2023). The constraints limiting implementation and the contexts are likely unique to each member state as well as to groups of member states that have the potential to spur seed trade in the region. Clearly, the details of why some countries have progressed well and others remained far behind, therefore, remain unclear, calling for further studies to understand the specific nature of the domestic as well as regional seed system regulatory and other challenges hindering implementation. Most importantly, ratifying the agreement and undertaking paper reforms *per se* may not bring about the required changes in practice unless the country's incentives and capabilities are aligned with objectives of the regulation. This brief summarizes two-country case studies, namely, Sudan and Egypt, documenting progress and challenges faced in the implementation of the regulation. The case studies used secondary data sources, focus group discussions, and key informant interviews to understand the nuances of challenges constraining implementation summarized in this brief.

The remainder of this brief is organized as follows: the following section provides an outline and brief discussion of the main questions addressed in this brief. In section 3, we provide background information to the seed sector development in both countries and document key challenges faced in the implementation of the plan in both countries. We then give a summary of the lessons learned in section 4. Section 5 concludes and provides key issues on the way forward.

<sup>2</sup> Namely Burundi, Kenya, Malawi, Rwanda, Uganda, Zambia, Zimbabwe, and Egypt

<sup>3</sup> Ethiopia, Democratic Republic of Congo, Eswatini, Djibouti, and Eritrea.

<sup>4</sup> Comoros, Sudan, Madagascar, Seychelles, Mauritius, Tunisia, Libya, and Somalia

## 2. Questions addressed

This brief addresses the following key questions in the context of Egypt and Sudan which are thought to have high potential for seed trade due to their social, economic, biophysical, and environmental similarities and their ethno-political ties:

1. To what extent has the COMESA regional seed trade harmonization been implemented in Sudan and Egypt?
2. What are the challenges of implementing the COMESA seed trade harmonization regulations in and between Egypt and Sudan?

What lessons can be drawn from both cases for the COMESA region at large?

## 3. Implementation of COMESA seed trade harmonization regulations in Sudan and Egypt

### 3.1 Sudan

Sudan is among the COMESA member states that participated in the development and launch of the COMSHIP initiative in 2014. As part of Sudan's commitment to the initiative, a high-level delegation, including from the General Seed Administration (GSA), National Plant Protection Inspectorate (NPPI) and Sudan Seed Trade Association (SSTA) representing the private seed sector, took part in the drafting and validation of the final COMSHIP document. In the same year, the COMSHIP was officially launched under the auspices of the Ministry of Agriculture and the attendance of several seed sector stakeholders in Sudan. The occasion raised high expectations of strong support from COMSHIP for the seed system development in Sudan. Informants pointed out that the move ended up being short lived as follow-up deliberations between the COMSHIP and Sudan failed to materialize in subsequent years. An important factor often mentioned was the lack of political will to commit sufficient domestic resources, making the implementation donor dependent, which remained scarce for Sudan, given donor preferential treatments among countries within the region<sup>5</sup>. Our key informant stated that Sudan is among COMESA member states that received limited funding for this purpose, which contributed to the delay in the domestication of the COMSHIP.

A national follow-up committee was later formed to serve as the focal entity to address these challenges and domesticate the initiative. However, in the absence of resources committed for implementation and lack of clear guidelines from the national institutions spearheading this process, COMSHIP's implementation in Sudan was continuing to slow down. As such, the ratification of COMSHIP harmonized national regulations and publication on Sudanese national gazette, an important implementation milestone, was still pending (AGRA, 2023). This was later further complicated by the ongoing instability in Sudan.

Overall, this study identified five key challenges (besides the recent instability) that were deterring the implementation of the COMSHIP in Sudan, which require immediate attention by implementers.

1. Despite the enormous potential, the Sudanese seed sector is characterized by fragmentation, poorly organized, and underdeveloped markets. Most improved varieties are open pollinated making it difficult to enforce property rights. These challenges are compounded by the limited technical and institutional capabilities to create an efficient and effective seed system.
2. Limited resources and lack of political will limit the domestication of the COMSHIP and its harmonization with national seed regulations. Sudan's institutional and infrastructural capacities (e.g., seed testing and certification centers and expertise to facilitate seed trade) are far below the required levels to implement the COMSHIP, further complicating the domestication process.

<sup>5</sup> In fact, differences in access to donor resources stand out as a key reason behind the variations in the implementation stages of COMESA member states. However, such a desire to depend on donations reflects on the underlying main cause which is lack of political will to make the needed resources available.

3. Compulsory DUS and VCU requirements by the COMESA seed trade regulation cataloguing in the absence of the facilities required for this means that there is limited or reduced opportunity for Sudan to engage in seed trade with other countries regardless of the official ratification of the agreement. According to key informants, smallholders in Sudan continued to access some seed from neighboring countries even in the absence of basic regulatory instruments and guidance.
4. Limited involvement of local stakeholders and regional authorities within Sudan in the process limits Sudan's progress in harmonizing its seed regulations to the COMSHIP. Clearly, the success of COMSHIP depends on the effective participation and harmonized contributions of local stakeholders and authorities within Sudan, and as such all constitute as building blocks of a solid regional seed certification system. Lack of coherent and transparent approach within Sudan complicates the proper alignment of national seed policies and laws to the COMESA regulation.
5. Harmonization efforts were not satisfactorily inclusive of the private sector and farmers for which they failed to exploit associated opportunities. The COMESA seed trade regulation harmonization process was intended to create a regional seed market and be demand-led and attractive to private sector for increased investments benefitting smallholder farmers. As such, the private sector needs to play a leading role and farmers need to be key stakeholders in the process, which was largely missing in the Sudanese context.

In more recent years, implementation of the COMSHIP in the Sudan was further adversely affected largely by domestic conflicts and an ongoing violence in the country.

### 3.2 Egypt

Egypt is among the eight COMESA member states that fully domesticated the COMESA seed laws and regulations, as manifested by the formal publication of its harmonized regulations in its Gazette in 2019 (COMESA, 2019). Following the harmonization in 2019, an Egyptian seed company has registered six maize and two sorghum varieties in the COMESA variety catalogue (COMESA, 2019). Heineken, a multinational brewing company, has also registered a variety of barley in the COMESA variety catalogue, and has successfully requested for barley to be one of the harmonized crops under the COMESA variety release system.

Egypt's seed registration procedures are well aligned with that of COMESA regulations in terms of DUS and VCU tests and membership in the UPOV (International Union for the Protection of New Varieties of Plants) for protection intellectual property rights as it become relevant in the future. Compared to neighboring member states such as Sudan, Egypt has a relatively advanced private seed sector and institutional and technical capacities to adopt and validate COMESA-aligned national seed laws. The Egyptian Laws and Ministerial Decrees are well articulated to cover all important aspects of variety testing and release, seed production, seed business and seed trade, and seed quality assurance for different crops (Thijssen *et al.* 2023). Guidance related to import and export procedures and phytosanitary standards, and issuing of phytosanitary certificates is provided by the Central Administration of Plant Quarantine (CAPQ, 2023). Egypt is a member of the International Plant Protection Convention (IPPC, 2023) which aims at preventing and controlling the introduction and spread of harmful pests of quarantine significance. Nevertheless, several obstacles stand on the way of fully implementing the agreement including institutional and capacity gaps.

The main ones include:

1. Limited inter-country seed trade taking advantage of harmonized regulations despite past experiences between the two countries.
2. Despite the registration of maize and sorghum varieties in COMESA variety catalogue by the private sector, no visible regional seed trade activity was reported from the region

3. Limited number or absence of well adapted varieties that are suitable for local farmers and farmers in the region available, may be due to limited interest in COMESA crops, which are mostly OPVs and dominated by the public sector, which is also less market oriented (e.g. wheat).
4. Restrictive variety testing requirements and financial resources means that small and medium domestic seed companies would have limited access to regional seed markets using their own proprietary varieties.
5. Poor recognition and hence poor enforcement of property rights which discourages the development and dissemination of seeds, especially among the private sector. In other words, in the absence of proper laws to protect plant variety full implementation of the harmonized laws faced challenges locally.
6. Strengthening the human and physical facilities for seed quality assurance (CASC) and phytosanitary and quarantine measure (CAPQ) for effective implementation of COMESA seed trade harmonization regulation
7. Uncertainties in the foreign exchange market because, risks associated with it can slow down seed trade.

### 3.3 Seed trade between Sudan and Egypt

Seed trade between Sudan and Egypt started with the onset of the formal seed system along with the introduction of cotton germplasm at the turn of the 19<sup>th</sup> century. Wheat varieties bred in Egyptian research centers were widely adopted in Sudan in the sixties and seventies. Several hybrid sorghum varieties of Egyptian origin are also now on the Sudanese national list of varieties. Egyptian vegetable varieties are also widely adopted by Sudanese farmers.

The COMESA seed trade regulation harmonization has the potential to benefit the two countries given the agroclimatic similarities between the two countries. More specifically, Egypt and Sudan have in common nine out of the twelve crops listed by COMESA, making it conducive for cooperation and seed exchange between them. Groundnuts and millet are of high importance in Sudan but of less importance in Egypt. Moreover, crops like maize, cotton, wheat, sunflower, sorghum, soybean, and Irish potato are of high potential for future seed trade between Egypt and Sudan.

Even though COMESA's Catalogue offers seed businesses a wider range of markets, implementation is facing low pace in both countries. Beyond the regionally harmonized laws, seed trade is often shadowed by prevailing bilateral trade and other relationships. For example, since 2018, seed imports from Egypt are subjected to some bureaucratic obstacles in Sudan. For example, no exports are reported between the two countries for the period 2018-2022, which is a retreat from earlier exchanges experiences. According to key informants from the Sudanese General Seed Authority (GSA), even variety testing materials are not allowed into Sudan, following the ban put in place in 2017 on agricultural imports, including due to claims of health threats. While this ban was lifted later in 2019, it left a legacy of depriving Egyptian seed industry from commercializing varieties in Sudan despite these varieties being registered in the COMESA Catalogue. This also prevents Sudanese seed industry from being a platform for exporting these varieties after locally producing them, under owner companies' permission, as licensees. As a way forward, an alternative fast track approach can be through bilateral recognition of seed systems, standards, and official certification documents as a practical start. Bilateral cooperation can pave the road for future seed trade under COMESA harmonization regulations.

Overall, COMSHIP envisaged prospects were expected to strengthen the seed industries in the two countries and bring them to a level that will ease and facilitate smooth movement of varieties and seeds across the common borders. However, this does not seem to have occurred yet. It requires bilateral efforts to rectify the situation. It also calls for a more active involvement of the private seed sector in promotion, marketing, and distribution of seeds. Since the regulations are trade-based, the role of the private sector is crucial as the main driving entity. Care must also be taken not to limit the traditional seed trade that existed between the two countries before the COMESA certified seed trade started to take off.

## 4. Lessons learned and recommendations on the way forward

Several challenges stand on the way of implementing the COMESA seed regulation harmonization in Egypt and Sudan from which lessons can be drawn for improvement in the entire COMESA region. An important lesson perhaps revolves around the fact that seed trade does not occur in a vacuum and as in any other market, an effectively harmonized regional seed trade requires, at the bare minimum, the existence of the potential for trade. While most of the seed used by farmers in Africa is that of staple crops, the focus in the COMESA seed trade harmonization remains to be private sector-driven commercial crops. As a result, despite the concerted efforts to reform policies, the performance of the seed sector and hence regional seed trade remains poor. Policy harmonization is thus a necessary but not sufficient condition for an effective and increased volume of regional seed trade. Thus, first, access to and availability of seed locally may be critical – an underdeveloped national seed sector is likely to create limited regional seed market for foreign companies and that it is important that conditions are ripe for a win-win seed trade harmonization to generate any useful positive externalities. For countries which have high seed export potential, expanding national public and private investments may be needed to improve seed sector development within and between national boundaries. On the other hand, countries which do not have that potential can still benefit by importing seed from other member countries which may have better capacity to develop their seed systems. Absence of these capabilities and the overall dependence by all or most member countries on donor funding means that ten years after the signing of the agreement, the expected benefits are far below expectations.

Second, as it appears the case between Egypt and Sudan, strategic priorities may vary between member states – some may aspire for national seed security while others may aspire to benefit from a regionally harmonized free seed trade. Thus, harmonization should be seen as part of an overall strategic collaboration and economic cooperation from which each member states benefits in a win-win setting. Allowing the private sector to navigate the potential for cross-border seed systems development and creating a conducive environment to operate beyond borders may serve this win-win purpose. Third, inclusive and resilient seed systems in Africa cannot be achieved without the participation of smallholders in seed production and marketing. Regional efforts to harmonize seed trade laws and regulations need to recognize the diversity of seed systems, including formal and informal channels, and emphasize the need for the coexistence of the diverse sources of seed. Thus, all stakeholders including farm households need to be consulted and participate in the drafting, ratification, and domestication of harmonized regional seed regulations. Enabling smallholders to take part in the process of seed trade regulation harmonization is consistent with the broader calls for building flexible and inclusive regulatory policies to achieve integrated seed system development in low- and middle-income countries.

## 5. Concluding remarks

Launched in 2014, the COMESA seed trade regulation harmonization aim to standardize seed trade regulations across member countries to promote regional agricultural development, enhance trade, and enhance the availability of improved varieties and quality seed to meet farmers' choices. Ten years since the signing of the regulation harmonization, the evidence on where member states stand in terms of implementing the harmonization process and learned lessons from member states with potential for trade remains limited. We assess qualitative evidence from Egypt (which fully domesticated the COMESA seed harmonization agreement) and Sudan (not yet) – two countries with important potentials to benefit from such trade. We relied on key informant interviews and review of implementation processes and progress of the COMESA seed trade regulations harmonization between the two countries. The study was embarked on with the hope of shading light on the intricacies of the seed law and seed trade regulation harmonization efforts after ten years of implementation and understanding why harmonization and seed trade development is slow.

Cognizant of the variation in state of seed sector development in COMESA member countries, strengthening the human resources capacity and physical facilities and bringing them to certain functional level of the national designated authorities for implementing the harmonized seed trade regulations such as the national



seed offices for release and registration, seed certification and phytosanitary and quarantine remains critical for domestication and implementation.

Successful implementation of regional initiatives like the COMESA Seed Trade Harmonization Regulation depends on political will and commitment of member states. Moreover, lack of awareness about the benefits of regional cooperation may constrain adoption and implementation.

Concerted efforts are required to create awareness and understanding among broader seed sector stakeholders and create an incentive mechanism for private sector to engage in regional seed trade.

As a regional organization, COMESA seems to lack an effective interlocutor and coordination body to streamline its activities, for example in Sudan, mainly due to limited resources. As a result, it seems that many of the officially ratified agreements in Sudan do not find their way to the top priority list of the government. As a result, COMSHIP's activities at the national level are scattered between different national authorities, including the ministries of finance and economic development; trade; foreign affairs; justice; agriculture and forests; health, etc., with no sense of coordination between actors whatsoever. This makes it difficult to trace crucial decisions through the bureaucratic channels. COMESA activities seem to be better coordinated and relatively well resourced in Egypt. However, the success of regional trade between the countries is limited by the context in Sudan, lately including due to the conflict and political instability in Sudan.

Overall, addressing these challenges requires concerted efforts from COMESA members states, regulatory bodies, and relevant stakeholders to foster a conducive environment for the successful implementation of seed trade regulation harmonization in the region. If harmonization is to be fully adopted, domesticated, and implemented by all member countries, the harmonization effort should be based on a business model that maximizes the total benefit from seed trade between any two countries in a Pareto Optimal setting where such harmonization will at best benefit both countries and at least benefit one without hurting the other. To make the regulation fully operational, a regional level concerted effort is needed from governments, regional organizations, private sector players, and development partners to address these challenges, enhance coordination, and build the necessary infrastructure and capacity across the region.

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