



Seeds2B 

*MANUAL ON REGIONAL SEED
REGULATIONS IN THE SOUTHERN
AFRICAN DEVELOPMENT COMMUNITY
(SADC)*

This Manual is a tool developed by the New Markets Lab and Syngenta Foundation for Sustainable Agriculture under the Seeds2B program and is not an official publication of SADC. It is based on user experience with the SADC Harmonised Seed Regulatory System (SADC HSRS) and SADC Variety Catalogue. The Manual is designed to build understanding of the SADC Harmonised Seed Regulations and is part of an ongoing collaboration between the New Markets Lab and Syngenta Foundation for Sustainable Agriculture under the Seeds2B Initiative and Partnerships for Seed Technology Transfer in Africa (PASTTA). This manual is made possible by the generous support of the American people through the United States Agency for International Development (USAID) and the U.S. Feed the Future initiative. The contents are the responsibility of the New Markets Lab and Syngenta Foundation for Sustainable Agriculture under the Seeds2B program and do not necessarily reflect the views of USAID or the United States Government.



USAID
FROM THE AMERICAN PEOPLE

syngenta foundation
for sustainable
agriculture



February 2020

I. Executive Summary

This Manual on Regional Seed Regulations in the Southern African Development Community (SADC) is designed to increase awareness of the SADC Harmonised Seed Regulatory System (SADC HSRS), which was approved in 2009 and entered into force in 2013¹ upon the signature of two-thirds of the SADC Member States.² This Manual is part of a larger “Seeds2B Legal Toolkit” developed by the New Markets Lab (NML) in partnership with the Syngenta Foundation for Sustainable Agriculture (SFSA) through the Seeds2B Initiative and the Partnerships for Seed Technology Transfer in Africa (PASTTA), a Global Development Alliance (GDA) between the U.S. Agency for International Development (USAID), SFSA, African Agricultural Technology Foundation (AATF), and NML. In addition to this Manual, the Seeds2B Legal Toolkit includes a Manual on Regional Seed Regulations in the Common Market for Eastern and Southern Africa (COMESA) (https://www.syngentafoundation.org/sites/g/files/zhg576/f/manual_on_comesa_regional_seed_regulations_final_19_february_2019.pdf),³ Case Studies that evaluate the process for implementing regional seed regulatory rules at the national level, and Test Cases on regional harmonization that are designed to “stress test” regional regulatory systems and document implementation. The Seeds2B Legal Toolkit as a whole serves as a knowledge base for enterprises, farmers, and other stakeholders and contributes to the general understanding of how to improve farmers’ access to improved seed. This Manual was most recently updated to reflect information available as of December 2019.

The Manual covers several areas: (1) an overview of the SADC Harmonised Seed Regulations; (2) the practical steps involved in key regulatory processes like regional variety registration, seed certification and quality assurance, and quarantine and phytosanitary measures; (3) possible implementation issues; and (4) the SADC Regional Variety Catalogue.

Key aspects of the SADC Harmonised Seed Regulatory System (SADC HSRS) and implementation takeaways include:

- SADC’s system differs in several respects from other regionally harmonized seed systems. These differences both highlight the unique nature of the SADC system and the potential for SADC’s system to respond to the needs of farmers and farming communities.
 - Legally, the SADC HSRS is in the form of a Memorandum of Understanding (MoU)⁴ and is not itself legally binding on SADC Members. In addition, some SADC procedures are not mandatory, leaving discretion to the Member States. In order to become legally binding, the SADC HSRS must be incorporated into the domestic legislation of each country.⁵ In total, 12 out of 16 SADC members have signed the SADC HSRS MoU, and most of the SADC Members have made efforts to align their domestic legislation with the SADC HSRS.^{a6}

^a Madagascar, Mozambique, South Africa, Zambia, and Zimbabwe have fully aligned their national legislation with SADC HSRS. Angola, Botswana, the Democratic Republic of the Congo, eSwatini (formerly Swaziland), Lesotho, Malawi, Namibia, and Tanzania are in the process of aligning their domestic laws with SADC HSRS. Comoros and

- Substantively, SADC formally recognizes Quality Declared Seed (QDS) as a seed class,⁷ as aligned with the Organization for Economic Co-Operation and Development (OECD) Seed Schemes,⁸ which would allow farmers to regionally trade QDS seed. SADC is also the only REC that currently allows for the registration of landrace varieties in the SADC Variety Catalogue.⁹ Landrace varieties are local varieties produced by farmers, which typically do not perform as consistently when subject to testing for distinctness, stability, and uniformity (DUS).¹⁰ While this is notable, it is not clear how the provisions of the SADC HSRS, which notes that landraces will be registered based on a QDS standard,¹¹ will be designed and implemented.¹²
- Use of the SADC Variety Catalogue is increasing, due in part to clarification of the legal status of the SADC Seed Centre through the approval of the SADC Seed Charter in 2017:¹³
 - The number of varieties in the SADC Variety Catalogue doubled from 2017 to 2019. As of December, of 2019, fifty varieties have been registered in the SADC Variety Catalogue.¹⁴
 - While maize varieties still dominate the catalogue, the diversity of registered varieties has increased significantly (see Figure7). This suggests that the process for registering seed in the SADC Variety Catalogue is becoming more user-friendly.¹⁵
- In 2019, SADC's system showed some improvements in implementation. SADC seed labels were first successfully used in cross-border trade in 2019, marking a significant implementation achievement. However, companies have reported other issues with the implementation of the system. Most of the issues relate to lack of mutual recognition (re-testing is still common), differences in certificates and documentation required at the border, and the lack of standardized phytosanitary procedures and retesting requirements.¹⁶
- Companies will often prefer certain national systems and regions for commercialization of seed. Within SADC, the national systems of Zambia and Zimbabwe have been preferred and are reported to be fully aligned with the SADC HSRS. Zimbabwe has taken an additional step, as has Mozambique, of integrating the SADC Variety Catalogue into its national seed catalogue in order to facilitate the movement of seed.

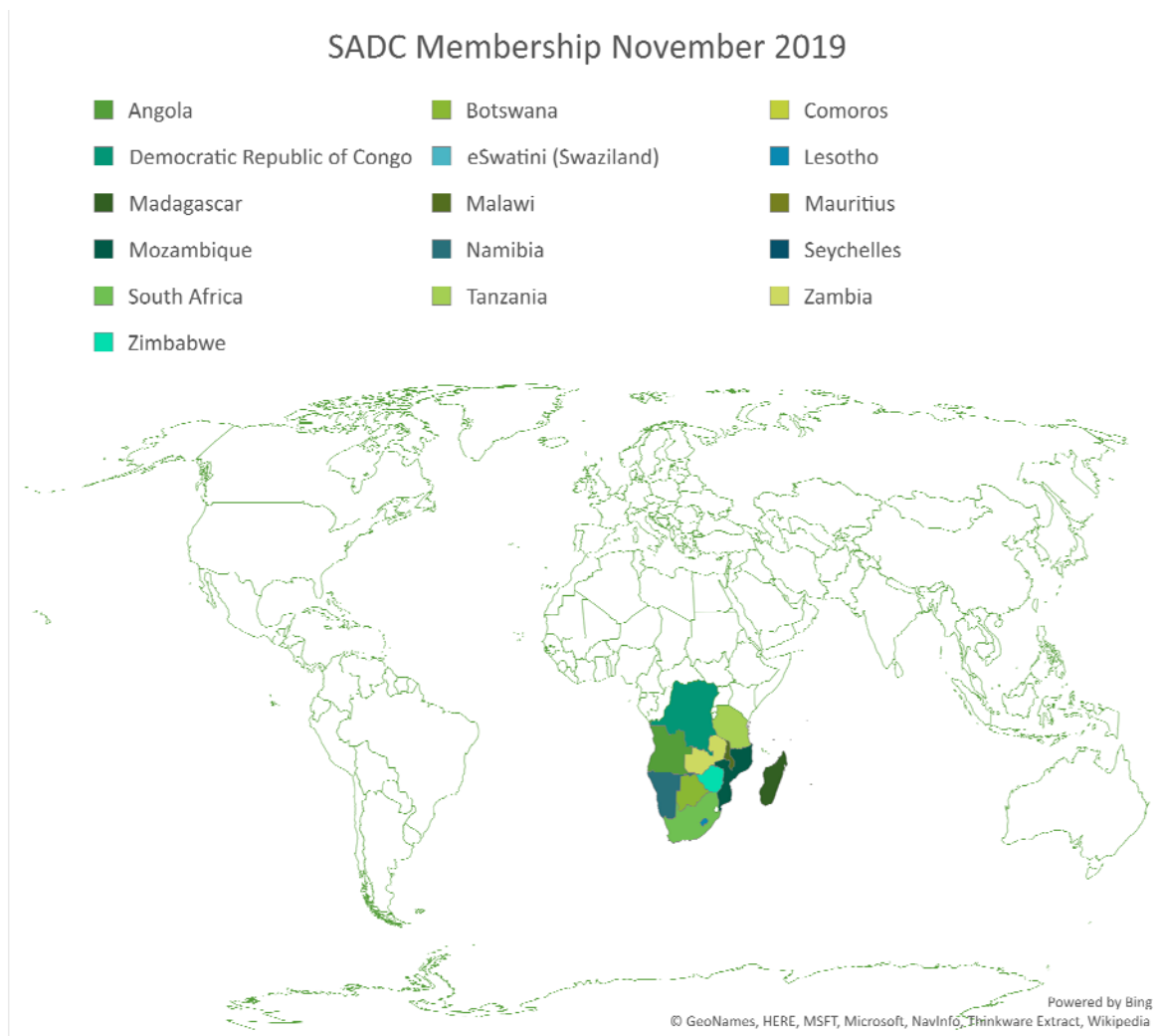
Seychelles are the only SADC Members that have not yet either signed the SADC HSRS MoU or aligned their national legislation with the SADC HSRS. Angola and Madagascar have not signed the SADC HSRS MoU but are both in the process of aligning their domestic legislation.

- Many SADC Members are part of other Regional Economic Communities (RECs), so several sets of regional rules may apply in a country. This issue will become even more pressing as the Tripartite Free Trade Area (TFTA) ¹⁷ among SADC, COMESA, and the East African Community (EAC), and the African Continental Free Trade Area (AfCFTA) move forward.¹⁸

II. History and Background of the SADC Harmonized Seed Regulations

SADC, which has its headquarters in Gaborone, Botswana,¹⁹ emerged as a REC in 1992. It is the successor of the Southern African Development Co-ordination Conference (SADCC), which was established in 1980.²⁰ SADC currently has 16 Member States,²¹ as shown in the map below (*Figure 1*).

Figure 1 – SADC Membership December 2019



Source: New Markets Lab (2019)

Agriculture contributes to 17 percent of SADC's overall Gross Domestic Product (GDP),²² and 70 percent of SADC's population depends on agriculture for food, employment, and income.²³ As is true in COMESA, food security and poverty alleviation are also significant issues, which are compounded by a lack of availability of quality inputs such as seed.²⁴ The SADC Secretariat recognizes that the legal and regulatory framework surrounding agricultural inputs within the region will need to be strengthened in order to encourage investment in the agricultural sector and improve access to quality seed.²⁵ Difficulties accessing seed markets within SADC Member States persist due to variations across national regulatory systems for seed variety release and registration, standards, and sanitary and phytosanitary measures.²⁶

Regional harmonization will facilitate access to new and improved varieties, ease the movement of seed, improve distribution, simplify administrative procedures, encourage investment, and reduce costs.²⁷ Greater investment in the SADC region will, in turn, allow farmers to grow and access more varieties at more affordable prices,²⁸ which will eventually lead to greater food security and poverty alleviation.²⁹ The SADC HSRS also has the aim of integrating small and isolated seed markets in the region through (1) harmonization of the seed variety testing, certification, and registration procedures; (2) adoption of a certification and quality assurance system; and (3) the implementation of uniform quarantine and sanitary and phytosanitary measures for seeds.³⁰

SADC's efforts to advance the HSRS have been ongoing for the past two decades. Member States began discussing the harmonization of seed laws in 1988, and the MoU on implementing the HSRS was approved in 2009. Since then, over two-thirds of SADC Members have signed the SADC HSRS MoU and started the process of implementation. SADC has benefited from capacity building support from agencies such as the Swiss Agency for Development and Cooperation and USAID to develop and implement the system in some of SADC Members (See Appendix III, Figure 1).

In 2008, the Technical Agreements on Harmonization of Seed Regulations in the SADC Region were issued. These agreements set out the structure and functions of the SADC Seed Registration, Certification, and Quality and Phytosanitary assurance systems. The systems are supported by (i) the SADC Seed Centre, located in Lusaka, Zambia, which is in charge of the establishment and maintenance of the SADC Variety Catalogue;³¹ (ii) the SADC Seed Committee, which oversees the regional seed system and the SADC Seed Centre;³² (iii) National Seed Authorities (NSAs), housed within each Member State, to ensure implementation at the national level, carry out tests, and issue certificates;³³ and (iv) National Plant Protection Offices (NPPOs), also located within each Member State, to ensure proper observation of phytosanitary measures.³⁴

As mentioned above, SADC Member States are legally bound by SADC Protocols but not by SADC MoUs. MoUs are only binding on the Member States if they are domesticated, meaning that they must be incorporated into the national legislation of a Member State in order to go into effect.³⁵ Since most of the SADC HSRS instruments are in the form of MoUs, domestication is essential. This is a key difference between the SADC system and other RECs such as COMESA, which do not always require domestication to be legally binding (even though domestication is

still *de facto* necessary). While some SADC Member States have domesticated the SADC HSRS by incorporation into existing national legislation, others have chosen to align their systems with the SADC HSRS by reforming laws or putting in place new legislation. Table 1 below shows the status of domestication among the SADC Member States.

Table 1 – Domestication of the SADC Technical Agreements (2019)

	<i>Legislation in Place aligned with SADC HSRS</i>	<i>Legal Structure in Draft Form Awaiting Approval</i>	<i>Legal Structure in Draft Form</i>	<i>Basic Legal Structure</i>	<i>No Legislation</i>
Angola			✓		
Botswana		✓			
Comoros ³⁶	-	-	-	-	-
D.R. Congo			✓		
eSwatini		✓			
Lesotho			✓		
Madagascar		✓			
Malawi		✓			
Mauritius				✓	
Mozambique	✓				
Namibia		✓			
Seychelles					✓
South Africa	✓				
Tanzania		✓			
Zambia	✓				
Zimbabwe	✓				

Source: New Markets Lab (2019)

Despite efforts to domesticate the SADC HSRS, actual implementation of the rules requires additional measures and infrastructure and remains a challenge in most countries.³⁷ Projects such as the SADC Harmonised Seed Security Project and Feed the Future (FTF) have provided SADC Member States with financial and capacity building assistance to support the domestication process and support implementation.³⁸ FTF in particular has been focused on developing the necessary institutions (such as the SADC Seed Centre) for the implementation of the Technical Agreements.³⁹

II. Regional Variety Release, Certification and Quality Assurance and Quarantine and Phytosanitary Measures

The SADC HSRS includes the SADC Variety Release System, the SADC Seed Certification and Quality Assurance System, and the SADC Quarantine and Phytosanitary Measures for Seeds. The key processes of the three systems, described in the Technical Agreements on Harmonization of Seed Regulations in the SADC Region, are outlined below.

a. Regional Variety Release System

The process for variety registration and release in SADC is set forth in Annex II of the HSRS MoU.⁴⁰ New and existing seed varieties can be entered into the SADC Variety Catalogue provided that certain conditions have been met. Requirements fall within three tiers according to the SADC HSRS MoU on variety release and registration: (1) new varieties that have been released in two SADC Member States; (2) varieties that were registered and released in two SADC Member States prior to the launch of the SADC Variety Catalogue, and 3) landrace varieties. In the first two cases, varieties must show proof of satisfactory testing for:

1. **Distinctness, Uniformity, and Stability (DUS)**⁴¹ in accordance with the guidelines of the Union for the Protection of New Varieties (UPOV); and
2. **Value for Cultivation and Use (VCU)**⁴² which may also be referred to as National Performance Trials (NPTs)

To be registered, new varieties (Tier 1) shall have been released in two SADC Member States, including the country of application. Also, the varieties shall be accompanied by the results of one growing season of testing for DUS in the country of application and two growing seasons of testing for VCU, which can be simultaneous, in two SADC Member States, including the country of application.⁴³ The DUS test should be carried out by a competent authority or, if delegated by the NSA, testing could be done by a private organization that follows the UPOV Guidelines.⁴⁴ The VCU Test should be carried out according to crop-specific requirements, such as location, variety characteristics to be assessed, and number of trials, to ensure that they are representative of the relevant growing environments within SADC.⁴⁵ Testing can be performed by the variety holder under the supervision of the NSA or delegated to private or public agricultural organizations.

The variety holder is required to present the application for registration to the NSA. The application form is available on the SADC Centre's website (see Annex I). Registration applications for new varieties shall also include the suggested variety name (or "denomination") and a reference sample provided to the relevant NSA, which is charged with storing the sample.⁴⁶ If an applicant is submitting business confidential information, this must be clearly marked for the authorities to treat it as such.⁴⁷

The applicant is required to have a registered business in the country of application.⁴⁸ Applicants are also required to pay an initial registration fee and an annual fee.⁴⁹ Assuming the annual payment of the fee, varieties may remain registered in the SADC Variety Catalogue for 20 years.⁵⁰ It should be noted that the fee is not specified in the Technical Agreements, nor is it available in the Seed Variety Application Process diagram on the SADC Seed Centre’s website.

Once an application is received, the NSA has 30 days to verify it and notify the SADC Seed Centre. If all the requirements are met, the SADC Seed Centre will include the variety in the SADC Variety Catalogue. The entry of a variety in the SADC Variety Catalogue should mean that the variety can be traded freely anywhere in the SADC Region;⁵¹ however, marketing varieties registered in the SADC Variety Catalogue has proven to be a challenge and remains a priority of effective implementation.

If a variety had already been registered and released in at least two SADC Member States (Tier 2) before the existence of the SADC Variety Catalogue, no additional testing is required, and an application can be made for immediate entry into the SADC Variety Catalogue, provided that the application contains the necessary DUS and VCU data.⁵² *Table 2* below provides a comparison of the Tier 1 and Tier 2 processes.

Table 2 – SADC Variety Release & Registration Process Requirements^b

New Varieties	Varieties Released in 2+ SADC Countries before SADC Variety Catalogue
<ul style="list-style-type: none"> • Application for entry in the SADC Variety Catalogue • Proof of release in two SADC Member States • One growing season of DUS testing in country of application • Two growing seasons of VCU testing in two SADC Member States • Variety holder has a registered business in the country of application • Suggested Variety Name • Reference sample provided to the NSA • Initial Registration Fee (being developed) • Annual Registration Fee (being developed) 	<ul style="list-style-type: none"> • Application for entry in the SADC Variety Catalogue • Submission of necessary DUS & VCU test data • Proof of registration and release in two SADC Member States • Initial Registration Fee (being developed) • Annual Registration Fee (being developed)

Source: New Markets Lab (2019), based on the SADC HSRS MoU, (2008)

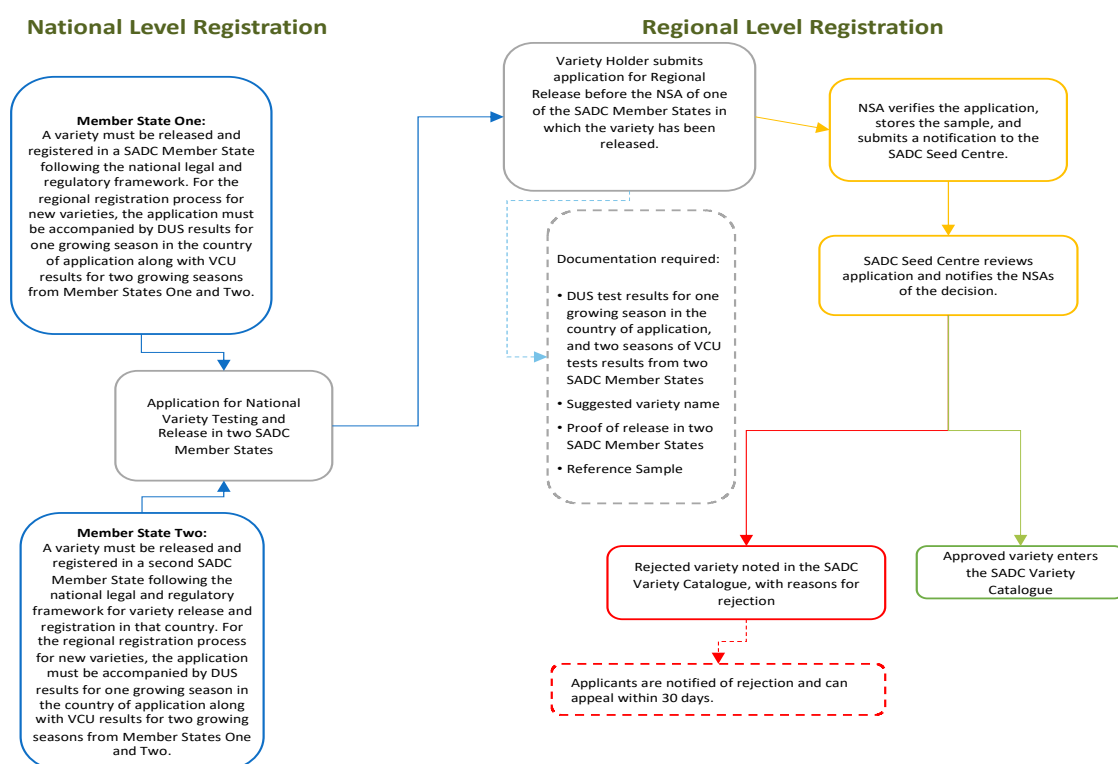
In both cases, if a variety is not approved, the SADC Seed Centre will notify the NSA and the applicant of the reasons for rejection.⁵³ Rejected varieties will also be shown in the SADC Variety Catalogue. Applicants can appeal a rejection decision within 30 days of notification.⁵⁴ Figure 2 below shows the application process for registration in the SADC Variety Catalogue.

^b Initial Registration and Annual Registration Fees are in the process of being established by the SADC Seed Centre, and no fees are yet being charge for registration and maintenance in the SADC Variety Catalogue.

The procedures and requirements for landrace registration (Tier 3) have not yet been developed. However, SADC is the only REC to have explicitly provided for the registration of these varieties in its regional catalogue.⁵⁵ The SADC MoU recognizes that that landraces and any other local variety for which sufficient documentation is available would be exempted from field tests, and, as mentioned above, would likely be registered applying a QDS standard.⁵⁶ When these procedures are developed, this could have a positive impact on farmers who have been unable to register their varieties due to challenges with testing (DUS testing is particularly challenging for landrace varieties) and lengthy and expensive regulatory processes.

While the Technical Agreements set out the procedures to access the Regional Variety Catalogue, some gaps have been identified in practice. For instance, South Africa only requires DSU testing and does not require VCU testing. Therefore, it is not clear how a breeder with a variety registered in South Africa could submit an application to enter such variety into the SADC Variety Catalogue.⁵⁷

Figure 2 – New Markets Lab Regulatory Systems Map of Application Process for Registration in the SADC Variety Catalogue



©2019 New Markets Lab from the Manual on Regional Seed Regulations in the Southern African Development Community (SADC) publication forthcoming, based on Memorandum of Understanding on the Harmonization of Seed Regulations in the Southern African Development Community.

b. Seed Certification and Quality Assurance System

The SADC Seed Certification and Quality Assurance System, which is contained in Annex II of the SADC HSRS MoU,⁵⁸ establishes the region’s approach to quality control.⁵⁹ Implementation of the system is not mandatory, and seeds that have not been certified under this system can still be traded among SADC Members,⁶⁰ provided that they comply with relevant national requirements.

The SADC Seed Certification and Quality Assurance System establishes rules for testing, as well as the information to be included on seed labels and the certificates.⁶¹ SADC establishes five different seed classes: Pre-Basic Seed, Basic Seed, Certified Seed (1st Generation), Certified Seed (2nd Generation), and Quality Declared Seed (QDS). Labels for each type of seed are color-coded to allow for easy recognition (white with violet band, white, blue (for both generations of certified seeds) and green, respectively – see Figure 3 below).⁶² In addition to seed classification type, SADC labels must also indicate pertinent information such as the SADC logo, certifying authority information, seed class, species, variety, lot number, certificate number, date of test, and net weight.⁶³

Figure 3 – SADC Seed Classification and Label

Label Color	Back of the Label	Front of the Label
Pre-Basic Seed (Violet band on white)	SADC logo and National logo	Species
Basic Seed (White)	Name and address of certifying authority/agency	Varieties
Certified Seed 1st Generation (Blue)	Seed class (certified, basic or pre-basic)	Lot number
Certified Seed 2nd Generation (Blue)	SADC certified seed declaration	Certificate No.
Quality Declared Seed (QDS) (Green)		Date of test
		Net Weight/Number

Source: New Markets Lab (2019) based on the Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat (2008).

Notably, the SADC seed labels were tested in 2019, with seed successfully traded across borders using the labels.

Seeds varieties must be accompanied by a certificate, issued by the NSA, including the information of the issuing authority, species and variety information, and colored label according to the seed class.⁶⁴ The SADC Technical Agreements set out the required information, but the precise format can be determined by the NSA.

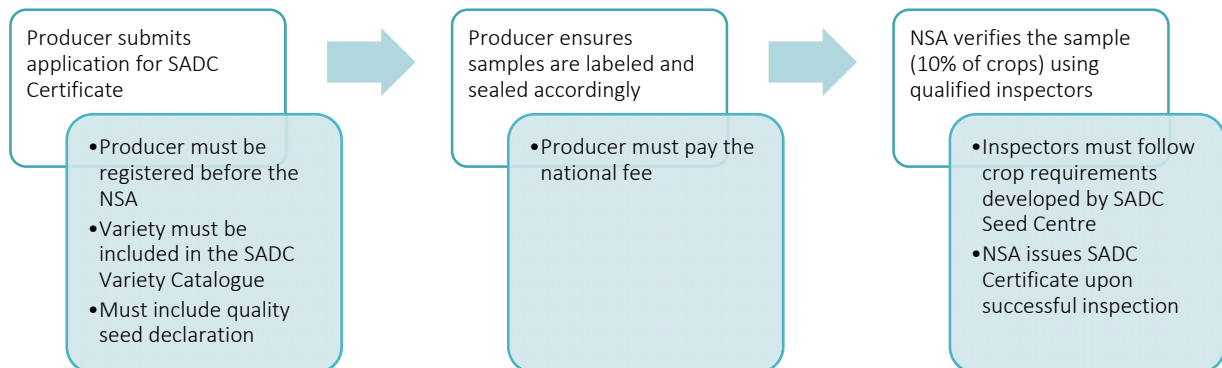
Figure 4 – SADC Seed Certificate

Seed certificates must contain all the information outlined below, but the exact arrangement of the text is at the discretion of the NSA.	
(Logos of SADC and NSA)	
Name of authority issuing the certificate:
Lot Number:
Species:
Kind of variety:	open-pollinated/cross/inbred line ¹
Variety name or code number:
Statement of re-labelling, if required:
Number of containers and declared weight of lot:
<p>The seed lot bearing this Reference Number has been produced in accordance with the SADC Seed Certification and Quality Assurance System and is approved/ provisionally approved as¹</p> <p>Quality Declared Seed (Label colour: Green)</p> <p>Certified Seed, 2nd. Generation (Label colour: Red)</p> <p>Certified Seed, 1st. Generation (Label colour: Blue)</p> <p>Basic Seed (Label colour: White)</p> <p>Pre-Basic Seed (Label colour: Violet band on white)</p>	
Signature	Place and Date
¹ Delete as necessary.	

Source: Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 32-33

NSAs oversee the Seed Certification and Quality Assurance System; therefore, besides issuing certificates, NSAs are also the competent authority to authorize field inspectors, laboratories, and analysts.⁶⁵ To obtain a SADC Certificate, the variety must be included in the SADC Variety Catalogue, the seed producer must be registered by the NSA of the country, and the NSA must verify 10 percent of the seed crop.⁶⁶ The producer must also present a quality seed declaration, along with samples labeled and sealed accordingly, and pay the national seed certification fee. The NSA verifies the samples, through qualified seed inspectors, seed samplers, and seed analysts,⁶⁷ according to the crop-specific requirements developed by the SADC Seed Centre.⁶⁸ After a seed has been verified, the NSA issues the SADC Certificate.

Figure 5 – Application Process for SADC Seed Certification



Source: New Markets Lab (2019) based on the Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat (2008)

c. Quarantine and Phytosanitary Measures for Seeds

The Quarantine and Phytosanitary Measures for Seeds seek to provide common regulatory standards to promote safer and faster movement of seeds in the SADC Region. The rules and directions are set forth in Annex II of the SADC HSRs MoU.⁶⁹ The SADC HSRs MoU incorporates two lists of pests: (i) a list of pests that require control when the seed is traded among SADC Members⁷⁰ and (ii) a list of pests that require control when the seed is imported to a SADC Member from a territory outside of the SADC Region.⁷¹ Both lists include pests that are of economic significance, seed-borne illnesses/pests, and those that are not known to exist in the SADC Region.⁷²

Typically, seed lots destined for import and export within SADC and imported from other Member States must be accompanied by two forms.⁷³ The plant import permit, issued by the importing Member State, must be presented at entry and exit points and must include information related to the importer and exporter as well as the result of testing for pests.⁷⁴ The phytosanitary certificate, issued by the exporting Member State, must also be presented at the entry and exit points and must include the description of the consignment and the disinfestation/disinfection treatments applied to it.⁷⁵ Occasionally, the lot must also be accompanied by a Re-export Phytosanitary Certificate. This form is required when the lot has been stored or repacked in the territory of the importing country under circumstances that might have resulted in the infection or infestation of the lot, or when the lot was in transit for a longer period than established by the regulations.⁷⁶ When the lot does not comply with the conditions set by the Import Permit or when a pest has been detected, the importing country will issue a Non-compliance Notification to the exporting country.⁷⁷ Figure 6 below lists the required documents for movement of seed within SADC.

Figure 6 – Documentation for Movement of Seeds in the SADC Region

<i>Plant Import Permit</i>	<ul style="list-style-type: none"> • Issued by importing Member State • Presented at import and export points • Contains information on importer, exporter and pest testing results
<i>Phytosanitary Certificate</i>	<ul style="list-style-type: none"> • Issued by the exporting Member State • Presented at import and export points • Contains a description of the consignments and treatments applied
<i>Re-export Phytosanitary Certificate</i>	<ul style="list-style-type: none"> • Necessary when lot has been repacked, exposed to pests, or been in transit for longer than expected.

Source: New Markets Lab (2019) based on SADC HSRS MoU (2008)

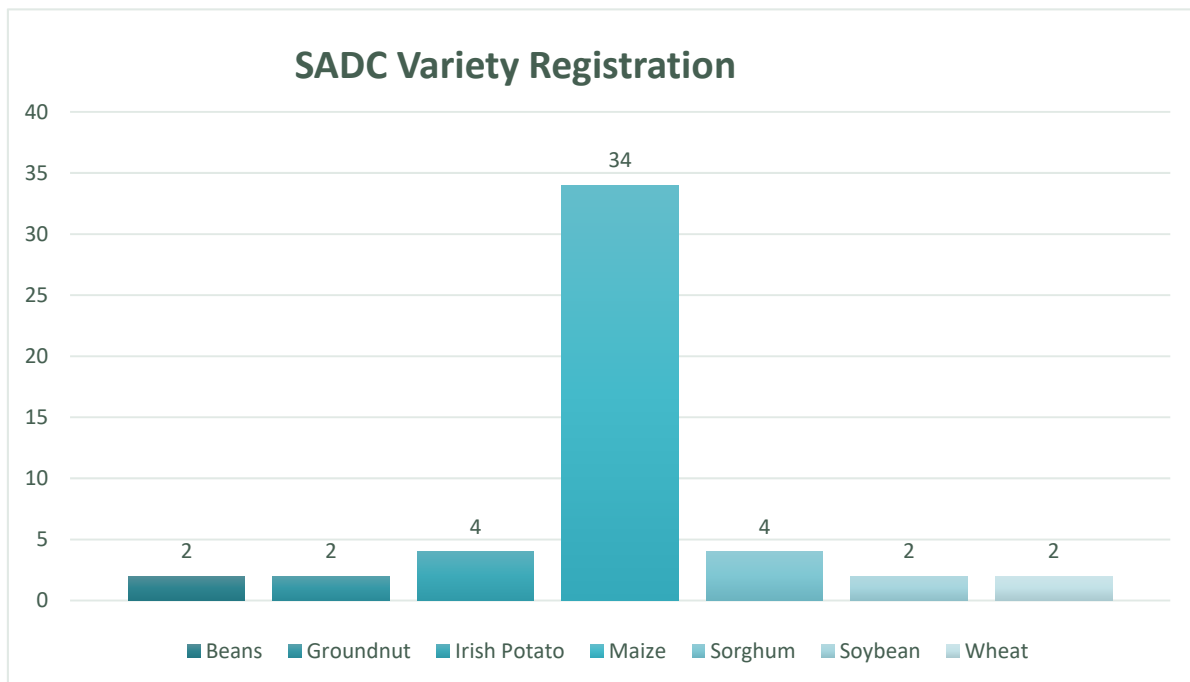
Adherence to the pests list is not mandatory for SADC Member States, and the SADC HSRS MoU recognizes the adoption of alternative methods for quarantine pest control by Member States.⁷⁸ Member States that have not adopted the SADC Pest List must declare the alternative adopted method, which must be technically and economically feasible and provide the same level of protection as the SADC Pests List. While this acknowledgement of mutual recognition is promising, adherence to the lists will likely reduce the re-testing of imported seeds and should also reduce the time for clearance and movement of the seeds at entry points.⁷⁹ Countries like Zimbabwe are in the process of adapting their national legislation to the SADC Quarantine and Phytosanitary measures for seeds,⁸⁰ while countries like Zambia still need to incorporate the SADC Pests list into their national legislation.⁸¹

III. SADC Variety Catalogue

In 2017, the SADC Seed Centre obtained legal status through the approval of the Seed Charter and now has the formal standing to coordinate the Seed Variety Registration Process.⁸² Figure 7 below charts the total number of varieties currently registered in the SADC Variety Catalogue as of December 2019. As shown in the chart, registration of maize varieties has far exceeded registration of other crop varieties.

It should be noted that although the SADC HSRS MoU requires the inclusion of the date of entry of the variety in the catalogue,⁸³ this information is not available in the online version of the SADC Variety Catalogue. This makes it extremely difficult to identify the number of registrations per year, so the information above is based on NML and SFSA’s ongoing Test Cases and monitoring of the regional seed catalogues.⁸⁴ Also, two versions of the SADC Variety Catalogue can be found online (one from the initial launch of the SADC Seed Centre and another current version maintained by the SADC Seed Centre), with the outdated version sometimes appearing first in a search.⁸⁵

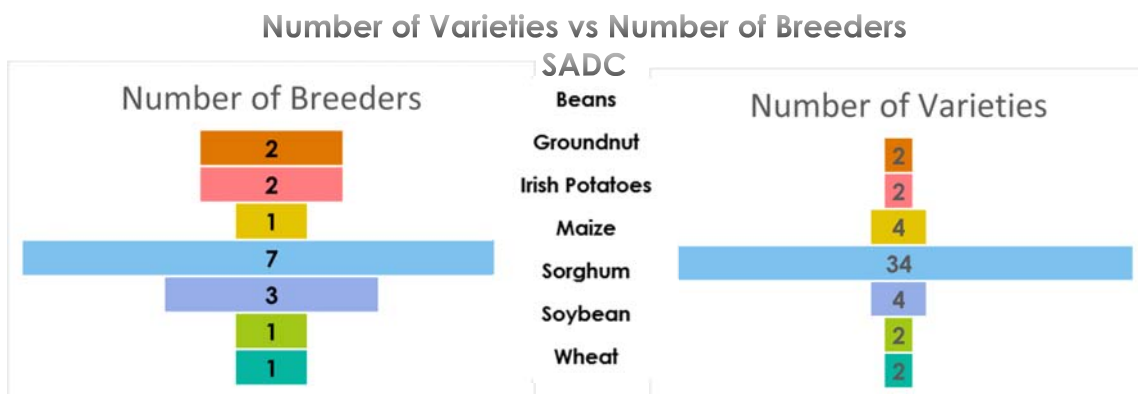
Figure 7- SADC Variety Registration as of December 2019



Source: New Markets Lab (2019)

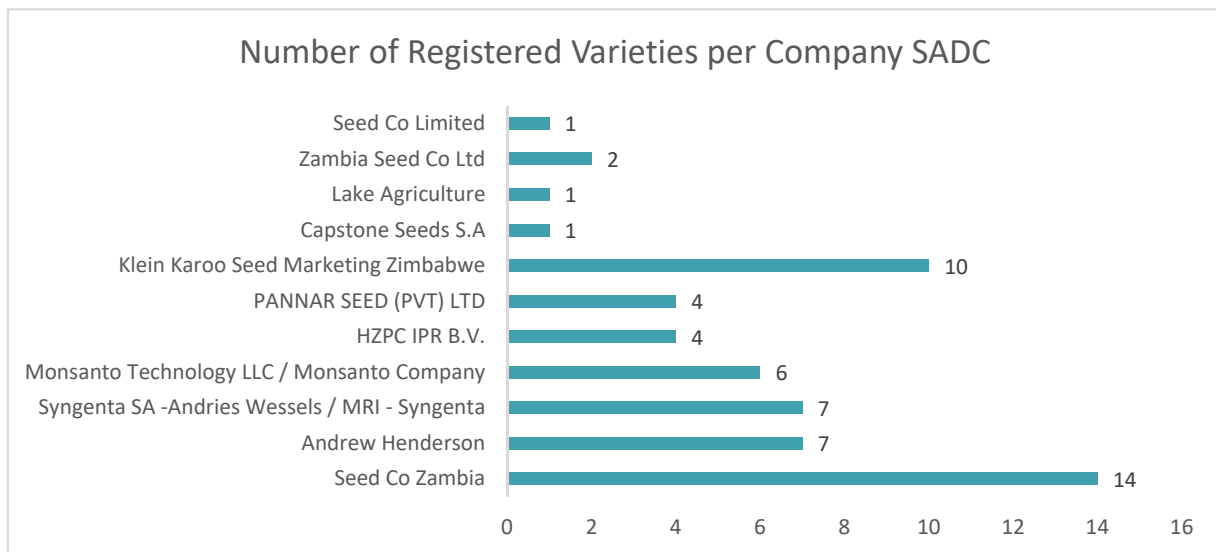
Currently, SADC has registered varieties for beans, groundnut, Irish potato, maize, sorghum, soybean and wheat. While it is evident that there has been an increase in the varieties and the number of breeders for each variety in the SADC Variety Catalogue, the total number of breeders participating in the system remains relatively low. Only ten companies have registered varieties in the SADC Variety Catalogue (See Figures 8 and 9 below).

Figure 8 – Number of Varieties vs Number of Breeders as of December 2019



Source: New Markets Lab (2018) based on data from SADC Variety Catalogue

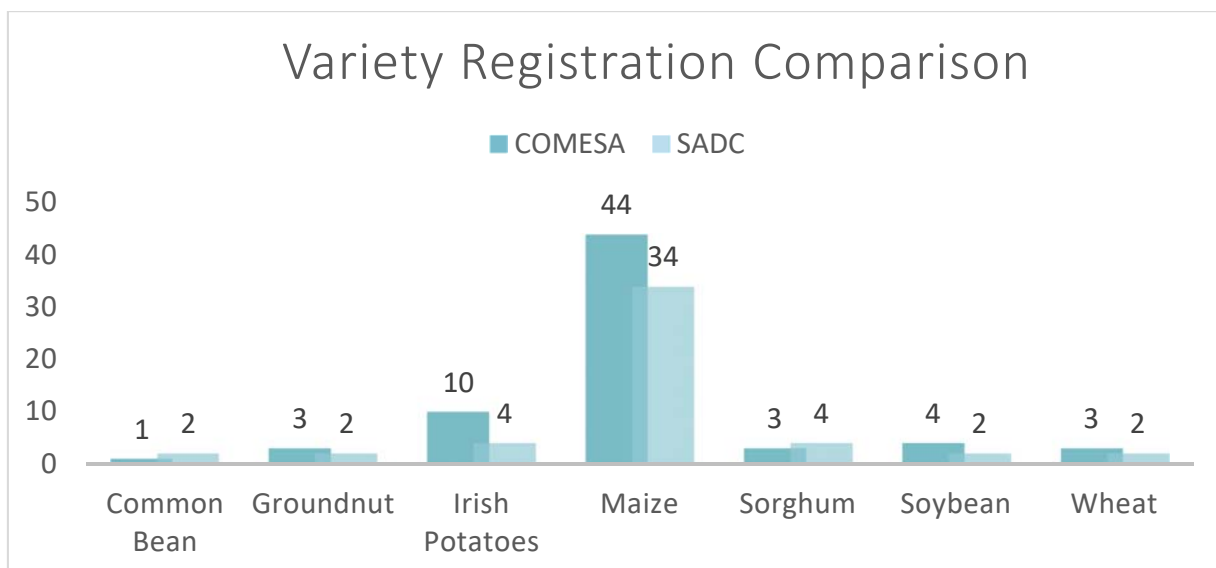
Figure 9 – Number of Registered Varieties per Company SADC



Source: New Markets Lab (2019) based on data from SADC Variety Catalogue

To date most companies have chosen to register in either the SADC Variety Catalogue or the COMESA Variety Catalogue.⁸⁶ Only five breeders have concurrently registered the same crops (Irish potatoes and maize) in both regional catalogues. Moreover, the main companies using the SADC Variety Catalogue have rarely registered varieties in the COMESA Variety Catalogue, and vice versa (See Figure 10). In addition, with few exceptions, public breeding institutions have not used the catalogues thus far.

Figure 10 – Registered Varieties SADC vs COMESA



Source: New Markets Lab (2018) based on data from SADC Variety Catalogue and COMESA Plant Variety Catalogue

Test Cases and consultations with stakeholders conducted by NML and SFSA provide insight into the way the SADC Harmonised Seed Regulations are being implemented by SADC Member States, along with some of the challenges and gaps companies have encountered when registering seed varieties. Key takeaways include:⁸⁷

- Most stakeholders have reported little knowledge of the SADC Variety Catalogue and the registration process. However, many have expressed interest in using the system and believe that it could be useful to facilitate trade within the region.
- Overall, the SADC Variety Release System has become more user-friendly, although the registration process has historically been slower than COMESA's system.
- The national systems of Zambia and Zimbabwe have been preferred and are reported to be fully aligned with the SADC HSRS. Zimbabwe has taken an additional step, as has Mozambique, of integrating the SADC Variety Catalogue into its national seed catalogue in order to facilitate the movement of seed.
- The overlap across RECs is a concern to many stakeholders. Since not all countries are members of the same RECs, compliance with the diverse requirements of each REC can be a challenge, especially due to the differences in national regulatory regimes.
- Many of the SADC Member States re-test varieties that have already gone through testing in other Member States even when test results are made available, which presents a significant challenge.
- Lack of trust among SADC Member States' institutions, delays in trials and sharing results of tests conducted by governments, weak national regulatory systems, and lack of capacity have also been identified as challenges to the regional harmonization process.

Appendix I – SADC Variety Testing, Registration, and Release Form

SADC Form/VR/06/1



**SOUTHERN AFRICAN DEVELOPMENT COMMUNITY
CROP VARIETY TESTING, REGISTRATION AND RELEASE SYSTEM**

APPLICATION FOR VARIETY REGISTRATION AND RELEASE

FOR OFFICIAL USE ONLY

Application # _____ Date of Submission: _____

National Seeds Authority where submitted: _____

To be completed by applicant

1. Particulars of Applicant

1.1 Name of Applicant: _____

Address: _____

Phone #: _____ Fax #: _____

E-Mail Address: _____

1.2 Name of Employer: _____

Address: _____

Phone #: _____ Fax #: _____

E-Mail Address: _____

1.3 Name of Owner of the Variety: _____

1.4 Maintainer of the variety: _____

2. Particulars of the Variety

2.1 Botanical Name: _____

2.2 Common Name of Kind: _____

2.3 Sub-group: _____

- 2.4 Proposed Variety Name: _____
- 2.5 Breeder's Reference/Code: _____
- 2.6 Has the variety been submitted for variety listing in another SADC State? Yes/No
If yes, complete the table below

Variety Code (if applicable)	Synonym	Country	Released? Yes/No/Pending

Variety denomination: _____ Page 2

3. The applicant obtained the variety by means of:

- Contract Succession Own breeding
- Other (specify): _____

Country where the variety was bred: _____

4. The variety originated by means of:

- Conventional breeding Induced mutation
- Selection from existing variety or species Genetic manipulation (non-conventional)
- Spontaneous mutation Other (provide details below)
- _____

5. The following forms and documents are attached:

- Description of the variety using SADC Guidelines for DUS Testing from two countries
- VCU Data using the SADC Guidelines for VCU Testing from two countries
- Authorization from the owner of the variety to apply for listing

Application and examination fees which are payable in terms of the Authority and SADC

Reference seed sample (see 6. below)

Proof of registration in two countries

6. Particulars of reference seed sample (Label content):

Denomination of the variety:

Sample Id:

Germination %:

Moisture content:

Weight of sample:

Year of cultivation:

Seed Treatment (Specify):

7. I, the undersigned:

(a) declare that, to the best of my knowledge, the information furnished in this application and the attached forms and documents is correct, and that no information has been omitted; and

(b) declare that the reference seed sample submitted herewith or as arranged, is a representative sample of the variety.

Signed at (place)

On this (date) _____ Day of (month) _____ of (year) _____

Signature _____ of _____
applicant/agent:

Variety denomination:

Page 3

FOR OFFICIAL USE ONLY

8. Remarks by National Seeds Authority of (country): _____

Confirmation for National Listing in two countries

Signature: _____ Date: _____

9. Remarks by SSSN

Variety approved for listing in SADC Variety Catalogue

Variety rejected for listing in SADC Variety Catalogue on grounds of:

Signature: _____ Date: _____

10. Fees Paid

Type	Amount

Total	

11. Other comments:

.....

.....

.....

Signature: Date:

Appendix II – SADC Variety Catalogue as of December 2019

Variety	Sub group	Type	Crop species	Breeder	Potential yield [Ton/ha]	Days to maturity	
DKC80-53	White	Hybrid	Maize	Monsanto Technology LLC	7	130	View
SY455	White	Hybrid	Maize	Syngenta SA			View
DKC90-89	White	Hybrid	Maize	Monsanto Technology LLC			View
DKC80-33	White	Hybrid	Maize	Monsanto Technology LLC	7	120	View
DKC80-73	White	Hybrid	Maize	Monsanto Technology LLC	7	140	View
DK8031	White	Hybrid	Maize	Monsanto Technology LLC	6	120	View
SY514	White	Hybrid	Maize	Syngenta SA	10	125	View
SY614	White	Hybrid	Maize	Syngenta SA	10	130-135	View
SY624	White	Hybrid	Maize	Syngenta SA	11	135	View
SY634	White	Hybrid	Maize	Syngenta SA	11	135	View
SY 724	White	Hybrid	Maize	Syngenta SA			View
SY 734	White	Hybrid	Maize	Syngenta SA			View
SC303	White	Hybrid	Maize	Seed Co Zambia		< 120	View
SC 608	Yellow	Hybrid	Maize	Seed Co Zambia			View
PAN 3M-01	White	Hybrid	Maize	PANNAR SEED (PVT) LTD		110-125	View
PAN 4M-21	White	Hybrid	Maize	PANNAR SEED (PVT) LTD			View
PAN 7M-81	White	Hybrid	Maize	PANNAR SEED (PVT) LTD			View
PAN 4M-23	White	Hybrid	Maize	PANNAR SEED (PVT) LTD			View
DKC90-53	White	Hybrid	Maize	Monsanto Technology LLC			View
SC 529	White	Hybrid	Maize	Seed Co Zambia			View

SC 719	White	Hybrid	Maize	Seed Co Zambia			View
SC 727	White	Hybrid	Maize	Seed Co Zambia			View
SC 637	White	Hybrid	Maize	Seed Co Zambia			View
SC Shine	White	OPV	Wheat	Seed Co Zambia			View
SC Shaku		OPV	Sorghum	Seed Co Zambia			View
Lake 601	White	Hybrid	Maize	Lake Agriculture			View
Panamera		OPV	Irish potato	HZPC IPR B.V.			View
Taurus		OPV	Irish potato	HZPC IPR B.V.			View
Sifra		OPV	Irish potato	HZPC IPR B.V.			View
Kware		OPV	Beans	Klein Karoo Seed Marketing Zimbabwe		99- 113	View
KKS 507	White	Hybrid	Maize	Klein Karoo Seed Marketing Zimbabwe			View
Vumba		OPV	Sorghum	Klein Karoo Seed Marketing Zimbabwe		114	View
Shirikure		OPV	Sorghum	Klein Karoo Seed Marketing Zimbabwe		116	View
Shinje		OPV	Groundnut	Klein Karoo Seed Marketing Zimbabwe		130	View
Lundi		OPV	Soybean	Klein Karoo Seed Marketing Zimbabwe		131	View
Rakodzi		Hybrid	Sorghum	Klein Karoo Seed Marketing Zimbabwe		110	View
SC 633	White	Hybrid	Maize	Seed Co Zambia			View
SC 403	White	Hybrid	Maize	Seed Co Zambia	5	119-127	View
KKS 501	White	Hybrid	Maize	Klein Karoo Seed Marketing Zimbabwe			View

KKS 603	White	Hybrid	Maize	Klein Karoo Seed Marketing Zimbabwe			View
SC Orion		OPV	Groundnut	Seed Co Zambia		158	View
SC Nduna		OPV	Wheat	Seed Co Zambia		117	View
Mwenezi		OPV	Soybean	Klein Karoo Seed Marketing Zimbabwe		116	View
SC Bounty		OPV	Beans	Seed Co Zambia			View
SC 513	White	Hybrid	Maize	Seed Co Zambia	10	137	View
CAP9001	White	Hybrid	Maize	Capstone Seeds S.A			View
Sagitta		OPV	Irish potato	HZPC IPRB.V			View
SC 537	White	Hybrid	Maize	Seed Co Limited			View
ZMS 402	White	Hybrid	Maize	Zambia Seed Co Ltd	7 tons/ha	100 - 110 days	View
ZMS 606	White	Hybrid	Maize	Zambia Seed Co Ltd	10 Tons/Ha	110 -125 days(medium)	View
Variey	Sub group	Type	Crop species	Breeder	Potential yield [Ton/ha]	Days to maturity	

Showing 1 to 50 of 50 entries

Previous **1** Next

Appendix III – SADC Seed Harmonization Timeline

Year	Development
1987	<ul style="list-style-type: none"> • Discussion of harmonised seed policies began. • The Southern African Development Coordination Conference (SADCC), SADC's predecessor, commissions study of seed systems in members that recommend harmonization.
1988	<ul style="list-style-type: none"> • SADCC technical experts propose harmonization of seed laws within the region.
1993-2000	<ul style="list-style-type: none"> • Ongoing technical workshops discussing harmonization of seed laws and: <ul style="list-style-type: none"> ○ Improved on-farm seed production; ○ Promotion of regional networks and seed security; ○ Protection of sui generis plant varieties under TRIPS; and ○ Stakeholder concerns.
2001	<ul style="list-style-type: none"> • Swiss Agency for Development and Cooperation (SDC) commits funding to establish of SADC Seed Security Network.
2002	<ul style="list-style-type: none"> • Strategic Planning Workshop for the SADC Seed Sub-Committee.
2007	<ul style="list-style-type: none"> • SADC Council of Ministers approves Harmonised Seed Regulatory System (HSRS).
2008	<ul style="list-style-type: none"> • SADC issues the Technical Agreements on Harmonization of Seed Regulations in the SADC Region.
2009	<ul style="list-style-type: none"> • MoU on implementing the Harmonised Seed Regulatory System rules is approved.
2010	<ul style="list-style-type: none"> • Five SADC Ministers of Agriculture signed MoU to implement Regional Seed Rules. • Harmonised Seed Security Project (HaSSP) begins a pilot project for SADC-wide domestication in Malawi, Swaziland, Zambia, and Zimbabwe.
2011	<ul style="list-style-type: none"> • SADC Seed Centre appointed as secretariat of HSRS.
2013	<ul style="list-style-type: none"> • HaSSP comes to an end. • Two-thirds of SADC Member States sign onto SADC HSRS. • MoU enters into force; countries begin domestication.
2014	<ul style="list-style-type: none"> • First varieties were listed in the SADC Variety Catalogue, pending review by the SADC Seed Committee.
2015	<ul style="list-style-type: none"> • Feed the Future Southern Africa Seed Trade Project begins (USAID), with the purpose of implementing the Technical Agreements in Malawi, Mozambique, Zambia and Zimbabwe.⁸⁸
2016	<ul style="list-style-type: none"> • The SADC Seed Committee is established and approves 25 seed varieties for inclusion in the SADC Variety Catalogue and trade within the region.⁸⁹
2017	<ul style="list-style-type: none"> • Approval of the Seed Charter. • The SADC Seed Centre obtains legal status.⁹⁰

Source: New Markets Lab (2019)

¹ Timeline SADC Harmonized Seed Regulations, <http://sadcseedcentre.com/about/16-timeline-sadc-harmonized-seed-regulations>, last visited April 25, 2019.

² Memorandum of Understanding on the Harmonization of Seed Regulations in the Southern African Development Community (MoU), 2008, Art. 12.

³ Manual on Regional Seed Regulations in the Common Market for Eastern and Southern Africa (COMESA Manual), available at https://www.syngentafoundation.org/sites/g/files/zhg576/f/manual_on_comesa_regional_seed_regulations_final_19_february_2019.pdf.

⁴ MoU, 2008.

⁵ Katrin Kuhlmann, "Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment," Working Draft, September 2015, 37.

⁶ Overview of SADC Member States, <http://sadcseedcentre.com/about/12-overview-of-sadc-member-states>, last visited April 25, 2019; Lewis, Linzi & Masinjila, Sabrina, "Status report on the SADC, COMESA and EAC harmonised seed trade regulations: where does this leave the regions' smallholder farmers?", 2018; NML, Regional Variety Release Test Cases: 2018 Findings, 2018; Access to Seeds, Madagascar Country Profile, <https://www.accesstoseeds.org/index/eastern-southern-africa/country-profile/madagascar/>, last visited April 25, 2019; Mozambique Brief 2017 – The African Seed Access Index, December 2017, 4-5; Katrin Kuhlmann, Yuan Zhou and Shannon Keating, "Seed Policy Harmonization in COMESA and SADC: The Case of Zambia," *Syngenta Foundation for Sustainable Agriculture and New Markets Lab*, September 2018, 9-17; Katrin Kuhlmann and Yuan Zhou, "Seed Policy Harmonization in SADC and COMESA: The Case of Zimbabwe", 2015, 4-15; NML, Regional Variety Release Test Cases: 2018 Findings, 2018; New Markets Lab, A Legal Guide to Strengthen Tanzania's Seed and Input Market, 2015; NML, Legal and Regulatory Requirements for New Variety Performance in Malawi - Draft, April 2019, 11-14; NML, Legal and Regulatory Requirements for New Variety Performance in South Africa, Draft, April 2019, 8-12; NML, Legal and Regulatory Requirements for New Variety Performance in Tanzania - Draft, April 2019, 11-14.

⁷ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 3.3.3 Figure 3.

⁸ COMESA Manual, 2019, 2; Katrin Kuhlmann, Yuan Zhou, and Shannon Keating, "Seed Policy Harmonization in COMESA and SADC: The Case of Zambia," *Syngenta Foundation for Sustainable Agriculture and New Markets Lab*, September 2018, 7-8.

⁹ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 25.

¹⁰ *Ibid.*

¹¹ Lewis, Linzi & Masinjila, Sabrina, "Status Report on the SADC, COMESA and EAC Harmonized Seed Trade Regulations: Where Does this Leave the Regions' Smallholder Farmers?", 2018, 18.

¹² *Ibid.*, at 7.

¹³ NML, Regional Variety Release Test Cases: 2018 Findings, 2018.

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ Katrin Kuhlmann and Yuan Zhou, "Seed Policy Harmonization in SADC and COMESA: The Case of Zimbabwe", 2015, 20-22; Katrin Kuhlmann, Yuan Zhou & Shannon Keating, "Seed Policy Harmonization in COMESA and SADC: The Case of Zambia", 2018, 31-33; NML, Regional Variety Release Test Cases: 2018 Findings, 2018; NML Test Cases and 2019 stakeholder consultations.

¹⁷ Agreement Establishing a Tripartite Free Trade Area Among the Common Market for Eastern and Southern Africa, the East African Community and the Southern African Development Community, June 2015.

¹⁸ COMESA Manual, 2019, 1.

¹⁹ Southern Africa Development Community, History and Treaty, <https://www.sadc.int/about-sadc/overview/history-and-treaty/>, last visited April 25, 2019.

²⁰ *Ibid.*

²¹ *Ibid.*

²² Southern Africa Development Community, Facts and Figures, <https://www.sadc.int/about-sadc/overview/history-and-treaty/>, last visited April 25, 2019.

²³ Agriculture & Food Security, <https://www.sadc.int/themes/agriculture-food-security/>, last visited April 25, 2019.

²⁴ COMESA Manual, 2019, 4.

²⁵ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, vi.

²⁶ *Ibid.*

-
- ²⁷ SADC Seed Centre, About Seed Harmonisation, <http://sadcseedcentre.com/about/7-about-seed-harmonisation>, last visited April 25, 2019.
- ²⁸ *Ibid.*
- ²⁹ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, vii.
- ³⁰ *Ibid.*
- ³¹ MoU, 2008, Annex I, Arts. 2.
- ³² *Ibid.*
- ³³ *Ibid.*, at Annex I, Art. 3.
- ³⁴ *Ibid.*, at Annex I, Art. 4.
- ³⁵ Katrin Kuhlmann, “Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment,” Working Draft, September 2015, 37.
- ³⁶ Comoros became a member of SADC in August 2018. Information related to its harmonization efforts is not yet available.
- ³⁷ Lewis, Linzi & Masinjila, Sabrina, “Status Report on the SADC, COMESA and EAC Harmonised Seed Trade Regulations: Where Does this Leave the Regions' Smallholder Farmers?”, 2018, 16.
- ³⁸ *Ibid.*
- ³⁹ *Ibid.*, at 17.
- ⁴⁰ MoU, 2008, Annex II, Art. 1-15.
- ⁴¹ *Ibid.*, at Annex II, Art. 11.
- ⁴² *Ibid.*, at Annex II, Art. 13.
- ⁴³ *Ibid.*, at Annex II, Art. 11 and 13.
- ⁴⁴ *Ibid.*, at Annex II, Art. 11.
- ⁴⁵ The SADC VAR Registration Manual includes tables summarizing VCU requirements for each type of seed, <http://sadcseedcentre.com/library/sadc-seed-centre-documentation-background-information>, last visited April 25, 2019.
- ⁴⁶ MoU, 2008, Annex II, Art. 1.
- ⁴⁷ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 2.2.11.
- ⁴⁸ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 2.3.2.
- ⁴⁹ *Ibid.*, at 2.2.13.
- ⁵⁰ MoU, 2008, Annex II, Arts. 6.6.
- ⁵¹ MoU, 2008, Annex II, Art. 3.4.
- ⁵² *Ibid.*, at Annex II, Art. 15.
- ⁵³ *Ibid.*, at Annex II, Art. 3.
- ⁵⁴ *Ibid.*
- ⁵⁵ Lewis, Linzi & Masinjila, Sabrina, “Status Report on the SADC, COMESA and EAC Harmonised Seed Trade Regulations: Where Does This Leave the Regions' Smallholder Farmers?”, 2018, 7.
- ⁵⁶ *Ibid.*
- ⁵⁷ NML Test Cases and 2019 stakeholder consultations.
- ⁵⁸ MoU, 2008, Annex II, Art. 16-21.
- ⁵⁹ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 3.1.
- ⁶⁰ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 3.3.3.
- ⁶¹ *Ibid.*, at Figure 3.
- ⁶² *Ibid.*
- ⁶³ *Ibid.*
- ⁶⁴ *Ibid.*, at Figure 4.
- ⁶⁵ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 3.2.3.
- ⁶⁶ *Ibid.*, at 3.3.3.
- ⁶⁷ *Ibid.*, at 3.3.4.

-
- ⁶⁸ *Ibid*, at 3.2.2.
- ⁶⁹ MoU, 2008, Annex II, Art.22-26.
- ⁷⁰ *Ibid*, at Annex IX.
- ⁷¹ *Ibid*, at Annex X.
- ⁷² *Ibid*, at Annex II, Art.23.
- ⁷³ *Ibid*, at Annex II, Art.26.
- ⁷⁴ Technical Agreements on Harmonization of Seed Regulations in the SADC Region, the SADC Secretariat, 2008, 44.
- ⁷⁵ *Ibid*, at 45.
- ⁷⁶ MoU, 2008, Annex II, Art.26.
- ⁷⁷ *Ibid*.
- ⁷⁸ *Ibid*, at Annex II, Art.25.
- ⁷⁹ The SADC Quarantine and Phytosanitary Measures for Seed, SADC Seed Centre, <http://sadcseedcentre.com/about/10-the-sadc-quarantine-and-phytosanitary-measures-for-seed>, last visited April 25, 2019.
- ⁸⁰ Katrin Kuhlmann and Yuan Zhou, “Seed Policy Harmonization in SADC and COMESA: The Case of Zimbabwe”, 2015, 19.
- ⁸¹ Katrin Kuhlmann, Yuan Zhou & Shannon Keating, “Seed Policy Harmonization in COMESA and SADC: The Case of Zambia”, 2018, 30.
- ⁸² Timeline SADC Harmonized Seed Regulations, <http://sadcseedcentre.com/about/16-timeline-sadc-harmonized-seed-regulations>, last visited April 25, 2019.
- ⁸³ MoU, 2008, Annex II, Art. 6.
- ⁸⁴ NML, Regional Variety Release Test Cases: 2018 Findings, 2018.
- ⁸⁵ The SADC Variety Catalogue can be found at: <http://sadcseedcentre.com/variety-catalog>.
- ⁸⁶ SADC Variety Catalogue, <http://sadcseedcentre.com/variety-catalog>, last visited April 25, 2019; COMESA Variety Catalogue, <https://varietycatalogue.comesa.int/web/varietycatalogue>, last visited April 25, 2019.
- ⁸⁷ NML Test Cases and stakeholder consultations, 2019.
- ⁸⁸ Lewis, Linzi & Masinjila, Sabrina, “Status Report on the SADC, COMESA and EAC Harmonised Seed Trade Regulations: Where Does This Leave the Regions' Smallholder Farmers?”, 2018, 16.
- ⁸⁹ *Ibid*, at 17.
- ⁹⁰ *Ibid*, at 6.