Technical Agreements on Harmonization of Seed Regulations in the SADC Region

Seed Variety Release
Seed Certification and Quality Assurance
Quarantine and Phytosanitary Measures for Seed
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Harmonization of Seed Regulations
in the SADC Region

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### Acronyms

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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AD</td>
<td>Additional Declaration (in Plant Import Permit)</td>
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<tr>
<td>AEZ</td>
<td>Agro-Ecological Zone</td>
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<tr>
<td>CIMMYT</td>
<td>International Maize and Wheat Improvement Center</td>
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<td>DUS</td>
<td>distinct, uniform, stable</td>
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<tr>
<td>FANR</td>
<td>SADC Food, Agriculture and Natural Resources Directorate</td>
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<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>GMO</td>
<td>genetically modified organism</td>
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<td>GNP</td>
<td>gross national product</td>
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<td>GTZ</td>
<td>German Agency for Technical Cooperation</td>
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<td>ICM</td>
<td>Integrated Committee of Ministers</td>
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<td>ICRISAT</td>
<td>International Crops Research Institute for the Semi-Arid Tropics</td>
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<td>ISTA</td>
<td>International Seed Testing Association</td>
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<td>NARS</td>
<td>National Agricultural Research System</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NPPO</td>
<td>National Plant Protection Organization</td>
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<tr>
<td>NSAs</td>
<td>National Seeds Authorities&lt;sup&gt;1a&lt;/sup&gt;</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>PMU</td>
<td>Project Management Unit</td>
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<td>PVP</td>
<td>Plant Variety Protection</td>
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<td>QDS</td>
<td>quality declared seed</td>
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<td>SADC</td>
<td>Southern African Development Community</td>
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<td>SCOSA</td>
<td>Sustainable Commercialization of Seeds in Africa</td>
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<td>SSC</td>
<td>SADC Seed Committee</td>
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<td>SDC</td>
<td>Swiss Agency for Development and Cooperation</td>
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<td>SFP</td>
<td>seed focal point</td>
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<td>SPGRC</td>
<td>SADC Plant Genetic Resources Center</td>
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<td>SSSN</td>
<td>SADC Seed Security Network</td>
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<tr>
<td>UPOV</td>
<td>International Union for the Protection of New Varieties of Plants</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VCU</td>
<td>value for cultivation and use</td>
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<sup>1a</sup> In some countries, The National Seeds Authorities for variety testing and release and those for certification may be two different institutions.
Foreword

Seed\(^1\) is a key input for improving agricultural productivity and ensuring food security. It is a preferred tool for re-establishing the livelihoods of farmers affected by disasters and to return them to a life of dignity, independent of handouts. Access to quality seed also facilitates food resource diversification and prevention of genetic erosion in rural agriculture.

Seed trade is essential for both agricultural growth and regional seed security. As a result of various factors, and in particular owing to the diversity of national regulatory systems in the countries, farmers continue to be seed insecure. Seed markets are segregated, small, and difficult to access. In each country a new variety must go through lengthy variety testing and release procedures before seed can be marketed. Seed companies are compelled to select only a few countries for release. This denies or delays farmers’ access to new products. Variations in national standards for seed certification and quality control, and in quarantine and phytosanitary measures for seed, complicate the trading of seed between countries and cause difficulties for the efficient movement of emergency seed consignments. As a result of the above, new as well as existing seed entrepreneurs are discouraged from investing in the market. Furthermore, seed prices are not subject to efficient competition and farmers’ choices remain limited.

The primary objective of harmonization of seed regulations is to address these problems by integrating smaller and isolated national seed markets into one larger Southern African Development Community (SADC) market for seed. This, in turn, will promote the entry of new improved varieties in the region and ease the movement of quality seed from countries with surplus to countries in need of seed. Both national and regional seed suppliers will find SADC a more attractive market. Lower costs and simpler administration will further encourage local, small-scale seed producers and suppliers to expand their activities.

The overall benefits will be increased investments in the seed sector, increased seed production, access to more varieties, and increased competition. In the end, farmers will be offered access to a wider portfolio of quality seed products at more affordable prices. For the region, this will

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\(^1\) In this document the term “seed” refers to true botanical seed and vegetative planting materials. Tree seed is not included.
contribute to seed and food security, and thus support efforts to alleviate hunger and poverty.

Following extensive technical and policy consultations, three proposals concerning harmonization of seed regulations in SADC were developed by the SADC Secretariat through the Food, Agriculture and Natural Resources (FANR) Directorate and presented to a meeting of SADC Permanent Secretaries of Agriculture, held in Maputo, Mozambique, 7–8 December 2005. The three proposals were: (1) SADC Crop Variety Testing, Registration and Release System, (2) SADC Seed Certification and Quality Assurance System, and (3) SADC Quarantine and Phytosanitary Measures for Seed.

The Permanent Secretaries reaffirmed their support and commitment, and reiterated the need for and importance of harmonizing seed regulations as a precursor for food security and poverty alleviation in SADC. They noted that the efforts to harmonize seed regulations were in line with the Windhoek Declaration and Treaty of SADC, the Dar-es-Salaam Declaration on Food Security, and the SADC Regional Indicative Strategic Development Plan (RISDP).

They endorsed the approach suggested by the proposals and stressed the urgent need for implementation. The Permanent Secretaries stressed that the Secretariat, in consultation with Member States, should introduce more detail in the proposals – in particular concerning institutions, implementation, sustainability, and technical issues (such as procedures for submitting varieties for release, length of testing period, crops to be included and others) – for presentation at their next meeting.

The three proposals have been strengthened to take into account issues raised at the Maputo Meeting. In addition, a separate proposal concerning organization and funding has been developed. The four proposals are summarized below and presented in more detail in Sections 1–4 of this document.

The key feature of the revised proposals is that they are in harmony with existing national regulations and that national authorities maintain full control of the implementation of the harmonization systems (Agreements). The SADC Secretariat simply plays a coordinating and facilitating role. As the Harmonization Agreements (Systems) are being implemented, national authorities and institutions will contribute in the execution to the extent allowed by national capacity.
Two funding mechanisms are proposed to support the implementation of these agreements. Donor support is being sought to strengthen the capacity of the national regulatory seed authorities and seed provision activities (private or public) to assure the production of higher quality seed in congruence with the standards set forth by these agreements.

Initial support has been pledged by the Swiss Agency for Development and Cooperation (SDC) until 2008. A project proposal for a new phase of the SADC Seed Security Network (SSSN) has been requested to complete the process in 2012 after the current no cost extension.

The coordination of the system will be led by SSSN. After 2012, the system will mainly be financed through subscriptions paid for varieties placed on the regional catalogue and other related activities.

To secure the success of the harmonization processes, it is essential that Member States continue to provide strong political and technical support to the efforts.

From time to time, the Systems will be carefully reviewed to ensure that organization and procedures support effective implementation.

Gaborone
June 2008
Summary of Proposals

Organization and Funding of the Harmonization Systems

Formulation and introduction of the Southern African Development Community (SADC) Harmonization Systems for seed are being coordinated by the Project Management Unit (PMU) of the SADC Seed Security Network (SSSN) in consultation with national Seed Focal Points (SFPs) and other national and regional specialists. The work is being carried out under the overall supervision of the Food, Agriculture and Natural Resources (FANR) Directorate of the SADC Secretariat.

During 2004–2006 the SSSN has received financial support from the Swiss Agency for Development and Cooperation (SDC). Additional support for the formulation of these Agreements (Systems) has been derived from the United States Agency for International Development (USAID) through the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and from SDC through the International Maize and Wheat Improvement Center (CIMMYT).

The proposed Harmonization Systems do not replace current national seed systems. These simply create common national standards and regulatory procedures. The Systems make use of existing national facilities and are managed by National Seeds Authorities (NSAs). They are based on the philosophy that by accepting common SADC standards and procedures, a substantial amount of repetitive, national testing can be avoided. Movement of varieties and seed will therefore be easier, faster and cheaper.

During 2007–2012, the PMU, with technical support from a SADC Seed Committee (SSC), will coordinate the introduction and operation of the Systems. The Committee will have six members, four of which will be selected among the SADC SFPs and two will be selected from National Plant Protection Organizations (NPPOs). The six SSC members must always be from six different SADC Member States. Each year, three SSC members (two SFPs and one NPPO) will be replaced with representatives from countries not represented on the Committee.

During 2007–2010, the performance and the advantages of the Systems will be assessed. Seed companies will be encouraged to make use of the Systems and contribute ideas for improvement. Adjustments in rules and standards will take place. In these initial stages, no fees will be charged and donor funding will therefore need to be sourced to support activities.
Opportunities for future self-financing of the Systems will be studied and suggested.

During 2011–2012, when the Harmonization Systems have been tested and used by the seed industry for some time, a SADC Seed Centre will be developed. A fee scheme will be introduced with supplementary funding sourced from one or more donors. The design of the new Centre will be based on experiences gained so far and include appropriate representation of those stakeholders who use and fund the Systems.

The organization of the SADC Seed Centre will emphasize the important roles of FANR and NSAs. It should function as key advisor to SADC in all areas of seed policy and seed availability in the region and assist in capacity building. The Centre should eventually be able to provide important support to agencies engaged in the analysis of disasters and the delivery of emergency seed. It should also be able to facilitate a better coordination of the supply of basic seed in the region.

The Harmonization Agreements have been designed on the principle of subsidiarity. Implementation of these agreements is essentially a national function. It is envisaged that no additional funding should be required for their implementation. In fact, the existence of a common and transparent set of regional standards should reduce the costs of national seed regulation.

Successful implementation the SADC Harmonization Systems require (i) that Member States approve the proposed Systems no later than during the first part of 2007 and continue to provide strong political support and good will, (ii) that the necessary donor support can be mobilized during 2007–2012; (iii) that in support, Plant Variety Protection (PVP) is introduced in more SADC Member States, (iv) that plant breeders and seed companies will make increasing use of the Systems, and (v) that the use of and benefits from the Systems will eventually generate enough income to sustain the Systems some time after 2012.

For further details, see Section 1.

The SADC Variety Release System

The purpose of the SADC Variety Release System is to make it easier and cheaper for new and existing varieties to gain access to SADC countries. This in turn will stimulate availability of more varieties, encourage more
companies to invest in seed business in SADC countries, and thus increase farmers’ choice.

An important outcome of the System is the establishment and maintenance of the SADC Variety Catalogue and the SADC Variety Database. Seed of varieties listed in the Catalogue can be sold in all SADC Member States without restrictions related to variety.

The System is being operated in close collaboration with designated NSAs. Before a variety can be entered in the Regional Catalogue it will need to be released in at least two SADC countries. Only thereafter may the Variety Holder apply for regional release which is done through the NSA in one of the two countries where national release was obtained. The application must be accompanied by a reference seed sample, proof of national clearances in the two countries, Distinct, Uniform, Stable (DUS) and Value for Cultivation and Use (VCU) test results, and other information as outlined in SADC procedures.

After clearance by the NSA, this Authority forwards the application to a Coordinating Unit, in this case, the PMU of the SSSN where the application and the accompanying data are verified and the decision taken concerning regional release. After the decision is taken, copy of the application is forwarded to the NSA in each SADC Member State. In the case of approval, the variety is entered in the Regional Catalogue and in the SADC Variety Database, and may now be sold in all Member States.

If the variety is not approved, it will be entered in the SADC Variety Database with information about the reasons for rejection. The same Database will also hold brief descriptions of landraces and local plant varieties.

A Member Country can apply for permission to prohibit the use of a given variety in its territory if the Country can document in line with procedures of the System that the variety is not suitable for its growing conditions. GMO varieties cannot be listed in the Regional Variety Catalogue until Member States have reached a common stand on GMO varieties.

For further details, see Section 2.
The SADC Seed Certification and Quality Assurance System

The purpose of the SADC Seed Certification and Quality Assurance System is to ensure that seed of varieties listed in the SADC Regional Variety Catalogue and traded among SADC Member States is of consistently high and known quality, and that movement of the seed is more efficient and thus less costly.

As the System is being adopted by stakeholders, it will:

• Lead to better seed quality as a result of improved facilities and skills;
• Save time and resources because importing countries no longer need to re-test the imported seed;
• Allow more efficient movement of seed in the region through the use of a common seed certification scheme, terminology, standards, procedures, seals and labels; and
• Facilitate better targeting of relief seed.

As a result of the above, farmers’ access to quality seed will be improved.

All Member States will participate in the System with their staff, facilities, and capacities. Designated NSAs will license/authorize samplers, field inspectors and accredit/register laboratories, and inform the PMU of the SSSN about their availability. Seed inspectors and seed samplers to be authorized under the System must have passed a prescribed seed technology course and participated in at least one season’s practical training under the mentorship of an already authorized specialist.

The NSA will also register seed fields and inspection reports issued in accordance with the System and provide formats for SADC seals and labels to companies that are producing seed under the System.

The System will have the following seed certification classes: Pre-basic seed, Basic Seed, Certified Seed (1st Generation), Certified Seed (2nd Generation), and Quality Declared Seed (QDS). Establishment and development of the SADC System does not imply that seed produced under other quality assurance systems cannot be traded in or between SADC countries. All samples shall be drawn from the seed lots by staff authorized under the System and in accordance with the Rules for Seed Testing of the International Seed Testing Association (ISTA).
Seed traded must meet the minimum laboratory standards as formulated under the System. To ascertain that the System operates satisfactorily, the NSAs will conduct post-control tests.

For further details, see Section 3.

**The SADC Quarantine and Phytosanitary Measures for Seed**

The purpose of the SADC harmonized Quarantine and Phytosanitary Measures for seed is to reduce costs related to seed trade, and encourage faster and safer movement of seed. This will be reached through (i) establishment of transparent and science-based common Standards and Procedures for seed movement in the SADC region, supported by documentation; and (ii) through the introduction of rationalized SADC pest lists for the movement of seed between Member States, and from outside countries into the SADC region.

The PMU of the SSN, with technical support from the SSC and NPPOs, will assist Member States with the documentation of current measures and their impacts on seed exchange; facilitate the organization of technical reviews to develop better standards and procedures, and to secure that new initiatives are in line with regional and international agreements; design and support efforts that will secure political support to rationalize and harmonize regulations; assist in the establishment of databases to record current national regulations and key documents, issuance of permits (including seed quantities involved), critical issues, and disputes; keep Member States informed via the SADC-FANR website and through other means; and assist in sourcing funding to support the above activities.

The PMU will seek close collaboration with the NPPOs and support the organization of regional meetings to address: the development and updating of phytosanitary guidelines and procedures for seed; identification and recommendation of better methodologies for utilization in the phytosanitary system(s) for seed; and development of methods to monitor and provide technical backstopping to the established system(s).

Two rationalized pest lists have been introduced: (i) a SADC list of pests which require control when seed is traded between SADC Member States, and (ii) a SADC list of pests which require control when seed is traded into a SADC country from outside the region. The lists only include pests that are of economic significance, are not common in the SADC region, and are seed borne.
For seed movement between SADC Member States the advantages of the rationalized list are as follows:

- Testing and quarantine measures for seed are only required for diseases which are not common in all SADC Member States, are seed borne, and are of economic importance;
- Since all SADC Member States are testing for the same diseases, re-testing of seed consignments on arrival in the importing country may be reduced and eventually no longer be necessary – except in cases where there are concrete reasons to assume that a new pest and/or disease may be introduced;
- The need for a country to test seed which is to be re-exported after a period in transit may be reduced; and
- Since fewer pests will need to be checked at entry points, clearance and entry of consignments will be faster.

In the case of seed movement from a country outside SADC to a SADC country, the advantage is that when it has been established by the importing SADC country that the consignment meets SADC requirements then the seed can be moved to any other SADC country without further testing.

For further details, see Section 4.
1. Organization and Funding of the Harmonization Systems

1.1 Introduction and background

Formulation and introduction of the SADC Harmonization Systems for seed is currently being coordinated by the PMU of the SSSN in consultation with National Seed Focal Points (SFPs) and other national and regional specialists. The work is being carried out under the overall supervision of the FANR Directorate of the SADC Secretariat.

In 2005, the formulation of the following three Harmonization Systems, together with procedures and schedules of standards required for operation of the Systems, were completed. The Systems are:

- The SADC Variety Release System
- The SADC Seed Certification and Quality Assurance System
- The SADC Quarantine and Phytosanitary Measures for Seed.

The Systems have been developed through extensive consultations that began immediately after the SSSN was established and which have involved public and private seed sector experts from SADC and from more advanced seed systems outside the region. Agreements/obligations that individual Member States have with international bodies (UPOV, OECD, etc.) will not be affected as all the proposals are in line with them. The completed SADC Systems have subsequently been reviewed by senior technical specialists and are being presented to Permanent Secretaries of Agriculture in SADC Member States. After approval by the Permanent Secretaries of Agriculture, they will then be presented to the Integrated Committee of Ministers (ICM).

1.2 Organization

The proposed Harmonization Systems do not replace current national systems but offer common and convenient regional seed trade procedures. The Systems make use of existing, national facilities and are managed by NSAs. They are based on the philosophy that by accepting common SADC standards and procedures, a substantial amount of repetitive, national testing can be avoided. Movement of varieties and seed will therefore be easier, faster and cheaper.
The Harmonization Systems will be implemented in the following phases:

1.2.1 Phase 1 (2006–2007) Approval of the Systems

The Harmonization Systems and related technical procedures and manuals are finalized and the Systems approved by Permanent Secretaries of Agriculture and by the Ministers of Agriculture in SADC Member States.

1.2.2 Phase 2 (2008–2010): Introduction and Implementation

During this phase the performance and the advantages of the Systems will be assessed for effectiveness and suitability and adapted as needed.

The following supplementary activities will be pursued:

- The introduction of PVP in more SADC countries is an important precondition for increased seed trade in the region and for achieving maximum benefit from the Regional Variety Release System. Countries will therefore be encouraged to introduce PVP and will be supported in this to the maximum extent possible;

- Private and public stakeholders will be encouraged to make use of the Systems and contribute with ideas concerning improvement. Adjustments in rules and standards will be made as appropriate;

- Training and strengthening of institutions will continue to be supported to the extent resources will be available; and

- Better strategies for interventions with seed in disaster situations will be designed.

It is suggested that introduction, implementation and operation for this initial period of about 3 years is coordinated by the PMU of the SSSN with technical support from the SSC which meets twice a year, following a regular schedule.

To balance the need for keeping meeting costs at a low level and at the same time facilitate representation, it is suggested that the SSC should have six members, four of whom will be selected among the SADC SFPs and two will be selected from NPPOs. The six SSC members must always be from six different Member States. After one year, three SSC members (two SFPs and one NPPO) will be replaced with representatives from
among the other eight countries. Through this procedure, specialists from all Member States will eventually get an opportunity to serve on the SSC. To operate the Harmonization Systems at the national levels, Member States will need to designate appropriate national authorities to collaborate with the PMU and the SSC.

During this period, no additional fees will be charged. Donor funding will need to be sourced to support activities. However, at the same time, opportunities for future self-financing of the Systems will be studied.

1.2.3 Phase 3 (2011–2012): Consolidation and revenue generation

During the following 2-year period, based on the assessment in Phase 2, it is suggested to introduce two new, important developments, i.e., fee schedule and organizational structure.

With the view to secure sustainability, a fee schedule will now be introduced. Furthermore, considering that the fees will mainly be paid by the seed companies that are using the Systems, a different organizational structure should be formulated. The detailed design of this structure must take into account experiences gained so far with the use of the Systems, appropriate representation of those stakeholders who use and fund the Systems, and the continued, important roles of NSAs. It must also address the need for FANR to provide guidance on relief seed operations, provide seed policy advice, and pursue other regional seed initiatives.

The above requirements will be achieved through the transformation of the SSSN PMU into an establishment during the early part of 2011−2012 of a SADC Seed Centre, supervised by an independent Regional Seed Committee with representatives from public and private seed sectors in SADC. The Regional Seed Committee would also employ staff to manage Centre activities.

1.3 Levels and sources of funding

It is expected that after 2012 the suggested SADC Seed Centre would be moving towards sustainability.

However, the introduction, organization and consolidation by 2012 of the SADC Harmonization Systems for seed cannot be arranged without donor support through 2012 and maybe beyond. Consultations with SDC to address this are being carried out.
During 2007–2012 an annual budget of US$350,000–450,000 will be required to support the introduction of the Harmonization Systems and other activities, and to establish the new institutional arrangements. Capacity building in SADC Member States may require additional funding.

After 2010 it is expected that some of the funding to operate the Harmonization Systems will begin to be generated in the form of various fees. Considering the features and potential benefits of the three Systems it may be expected that in particular the Variety Release System offers potential for income generation. The reason for this is that by releasing varieties through the Regional System, seed companies will get access to many more markets at substantially reduced costs.\(^1\)

Other activities coordinated by the suggested SADC Seed Centre and related to the management of the Harmonization Systems may in the future also generate revenue. These activities include support to relief seed operations, coordination of basic seed supply, project service fees, fees for training and conferences, advertising, and others.

From 2013, or soon thereafter, it is expected that the new SADC Seed Centre will be moving towards financial independency and that donor funding will only be mobilized as and when special project activities are added to the regular agenda of the Centre.

An overview of the implementation and organization of the Harmonization Systems is presented in Table 1.

### 1.4 Assumptions

The implementation and consolidation of the SADC Harmonization Systems for seed as outlined above are based on the following key assumptions:

- Member States approve the proposed Systems no later than during the first quarter of 2007 and continue to provide strong political support and good will;

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\(^1\) Information from the seed industry suggests that the current, average company costs arising from national release of a maize variety include government fees of about US$1,000 and additional company expenses of about US$3,500, total US$4,500, with considerable variation from country to country. Source: New Seed Initiative for Maize in Southern Africa, Annual Report 2005, CIMMYT, February 2006.
The necessary donor support can be mobilized during the years 2007–2012;

- Plant variety protection is introduced in more Member States;
- Plant breeders, seed companies, non-governmental organizations (NGOs), development agencies, and authorities in Member States will make increasing use of the Systems; and
- The use of and benefits from the Systems will allow the generation of sufficient revenue to support operation of the Systems after 2012.

### Table 1. Organization and funding: Summary of completed and scheduled activities, means of verification, and time frame

<table>
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<tr>
<th>Time frame</th>
<th>Activities</th>
<th>Means of verification</th>
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| 2001–2005        | SSSN and PMU, established after broad consultations, initiated the formulation of harmonization of seed regulations in SADC. Funding for the SSSN operations is provided by SDC. Additional funding for drafting the regional agreements were provided by the USAID through ICRISAT, SCOSA and further SDC support through CIMMYT. | • Reports from several national and regional, technical workshops;  
• Presentations at regional and international meetings;  
• PMU office established in the FANR-SADC Secretariat in Gaborone;  
• Operational SSSN databases; and  
• Draft harmonization proposals. |
| Dec 2005         | SADC Permanent Secretaries of Agriculture consider Harmonization Proposals at meeting in Maputo, Mozambique, and raise concerns | • Reports from Maputo Meeting. |
| Jan–Jun 2006     | Harmonization proposals reviewed to address concerns; formulation of implementation procedures continues. | • Revised draft harmonization proposals; and  
• Draft procedures manuals. |
Table 1. *Continued*

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<th>Time frame</th>
<th>Activities</th>
<th>Means of verification</th>
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| Jul 2006 − 2007 | Harmonization proposals resubmitted for approval by Permanent Secretaries, Ministers of Agriculture, and ICM; Proposal for continued donor support drafted and submitted; work on procedures manuals completed. Preparations for implementation and management begun. | • Records of Member States’ approval of harmonization proposals;  
• Confirmation of continued donor support; and  
• Completed procedures manuals. |
| 2008–2010    | Establishment of SSC; Designation of NSAs; PMU coordinates and promotes establishment of Harmonization Systems and Procedures through communication and lobbying; seed enterprises begin to use Systems free of charge; the Systems are improved as required; Regional Variety Catalogue and Variety Database developed; introduction of PVP encouraged and supported; assistance to interventions with relief seed is formulated. | • Records of SSC meetings;  
• No. of entries in regional variety catalogue;  
• No. of entries in Regional Database;  
• Records of SADC certified seed;  
• Records of rationalized pest list being used;  
• Revised Procedures Manuals;  
• No. of countries offering PVP; and  
• Reports on disasters requiring relief seed. |
| 2011         | Review of Harmonization Systems’ performance; consultations with stakeholders and donor concerning funding and set up of a SADC Seed Centre; consultations with donor(s) concerning future, supplementary support. | • Authoritative report concerning funding and potential for sustainability;  
• Approved fee scheme;  
• Approved organization chart and constitution for the new SADC Seed Centre;  
• Confirmation of continued donor support; and  
• Agreement concerning deposit and disbursement of revenues. |
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<th>Time frame</th>
<th>Activities</th>
<th>Means of verification</th>
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<tr>
<td>2012</td>
<td>The SADC Seed Centre is organized and operational; implementation, promotion, assessment and adjustment of fee scheme; continued high level promotion of Harmonization Systems; consultations concerning service/support to relief seed operations; exploration and mobilization of alternative sources of funding; The possibility for Member States’ financial support explored; formulation of exit procedures for collaboration with donor.</td>
<td>• SADC Seed Centre established and registered; • Records of recurrent consultations with Permanent Secretaries; • Authoritative report analyzing possible involvement in and contribution to relief seed operations; and • Reports of other income generating activities and the potential for repeat/expansion.</td>
</tr>
<tr>
<td>2013 and onwards</td>
<td>The SADC Seed Centre or Organization consolidated and moving towards self-sustainability; opportunities for service to new donor-funded seed projects being considered; sustainable avenues being explored for broader support to seed supply in the SADC region with particular focus on food security and poverty alleviation issues.</td>
<td></td>
</tr>
</tbody>
</table>
2. The SADC Variety Release System

2.1 Purpose

The purpose of the SADC Variety Release System is to make it more convenient and cheaper for new and existing varieties to gain access to SADC Member States. This in turn will:

• Stimulate availability of more varieties;

• Encourage more companies to invest in seed business in SADC Member States; and

• Increase choices available to farmers.

2.2 Organization

The SADC Regional Variety Release system will be coordinated by the PMU of the SSSN with technical support from the SSC and in consultation with NSAs (Figure 1).

The System will be implemented under the overall supervision of the FANR Directorate of the SADC Secretariat.

2.2.1 The role of the Project Management Unit of the SADC Seed Security Network

The PMU will in particular:

• Set up and maintain:
  • The SADC Variety Catalogue and
  • The SADC Variety Database

• Document, support and coordinate the work of designated NSA with regard to the SADC Variety Release System;

• Collaborate with the national institutions in the execution of the System;

• Assess the capacity of the national institutions and develop proposals for capacity strengthening as may be required; and

• Manage a system of variety registration fees to fund the operation of the System.
Figure 1. SADC Variety Release System: Overview of release procedure

The Variety Holder
Selects two SADC countries and applies for national variety testing and release in the two countries

In the country where application for regional release is filed, national release requirements must be met

In the second country of national release, national release requirements must be met. (testing in the two countries may be carried out during the same two seasons)

The variety is released at the national level in the country of application

The variety is released at the national level in the second country

The Variety Holder applies for SADC variety release through the NSA in the country of application. The application form is accompanied by:
- Results of DUS and VCU tests
- The suggested variety name
- Proof of national release in two countries
- Reference sample

The NSA verifies the application, stores the reference sample, and submits the application with attachments to PMU

PMU reviews the application, makes decision on regional release, and informs NSAs in all Member States with copy of the application

Application is rejected:
Decision is submitted to the Variety Holder with copy to the NSA in country of application

Application is approved:
Decision is submitted to all Member States

The Variety is entered in the SADC Variety Database, together with reasons for rejection

The Variety is entered in the SADC Variety Catalogue and can be marketed in all countries
As may be required, and within the limits of resources available, the PMU will:

- Deploy technical committees and/or specialists to assist with specific issues; and
- Support the capacity building and training at the national levels.

### 2.2.2 The role of the SADC Seed Committee

The SSC will provide technical support to the implementation and improvement of the System. The SSC will in particular assist with:

- Formulation of the necessary technical guidelines and procedures for the operation of the System, including crop-specific requirements; and
- Participate in regional consultations as required to support implementation of the System.

### 2.2.3 The role of designated NSAs

Each SADC Member State will designate an NSA, which will collaborate with PMU and SSC to implement and operate the System. The role of the NSA will be to facilitate implementation of the SADC Variety Release System in the respective Member State. The NSA will in particular:

- Advise breeders, seed companies and other stakeholders on procedures in the area of variety testing, registration and release;
- Organize testing, registration and release of varieties at the national level;
- Verify the quantity and quality of data available for a variety for which regional release is being applied;
- After verification submit the application for regional release to the PMU;
- Assess the merits of varieties that are being introduced for marketing in their countries under the SADC Variety Release System and take action as appropriate; and
- Assist PMU with documentation of the performance of the System and engage actively in communication concerning any critical issues at the national level.
2.2.4 The SADC Variety Catalogue

The PMU will develop and maintain a list of varieties that have been released for marketing in the region. The list will be called the SADC Variety Catalogue. New varieties will be included in the SADC Variety Catalogue if they meet the requirements set by the SSC (See Section 2.2.6).

The Catalogue will include varieties of crops for which DUS and VCU data, as required under the Regional Release System, are available.

For each variety, the information in the Catalogue will include:

- Botanical and common name of the species;
- Name of the variety and any synonyms;
- Indication of agro-ecological conditions for which the variety is suitable;
- Name and address of the holder of the variety or the Variety Holder’s agent;
- Date of entry of the variety in the catalogue;
- Name and address of the NSA that received the application; and
- Information about where the reference sample is being stored and managed.

2.2.5 The SADC Variety Database

PMU will develop and maintain a SADC Variety Database that will include all varieties in the region, i.e., varieties submitted for regional release, both accepted and rejected, varieties released at the national level and which have not been submitted for regional release, as well as landraces.

The SADC Variety Database will cover all varieties for which data are available and will be accessible to all Member States. The details to be included in the Database will be determined by the SSC and compiled by PMU. Reasons for rejection of a variety will also be included in the Database.
2.2.6 Variety tests

Testing for Distinctness, Uniformity and Stability (DUS)

The application for regional release of a variety must be accompanied by a variety descriptor giving information to verify the DUS of the candidate variety, and thereby providing the variety with a proper identity.

The DUS testing shall be done in the country of application for one year by a competent public or delegated private organization working in accordance with descriptor guidelines developed by the International Union for the Protection of New Plant Varieties (UPOV).

The SSC will develop guidelines as may be required for DUS testing of those crops for which such guidelines are currently not available.

Testing for Value for Cultivation and Use (VCU)

To inform farmers about the merits of a candidate variety (such as maturity period, yield, storability and resistance to diseases and pests, and others), the variety must be subject to tests for performance and adaptability during two years in the agro-ecological zone(s) for which it was developed.

The inclusion of a variety in the SADC Variety Catalogue therefore requires that the application for release is accompanied by VCU information derived from field experiments conducted in at least two countries and over at least two seasons in each country and in similar agro-ecological conditions. One of these countries must be the country of application. Field experiments in the two countries may be conducted within the same two growing seasons. The VCU information will be accompanied by a statement specifying for which growing conditions the variety is considered to be adapted.

VCU testing will be done by the Applicant under the supervision of the NSA or by independent and competent agricultural organizations. These organizations may be public or private.

2.2.7 Crop-specific requirements

The SSC will develop crop-specific requirements for VCU data. These will define:

• Requirements of the locations and management of trials so that they are representative of relevant growing environments in SADC;
• Variety characteristics (yield and physical appearance) to be assessed and reported including the format of presentation;
• Number of trials in which those characteristics need to be measured; and
• Minimum performance in VCU.

2.2.8 The reference seed sample
The country of application for DUS testing is responsible for the safe storage of a reference sample of the candidate variety.

2.2.9 Naming of varieties
The SSC will institute a unique numbering system for all varieties, which will serve as the identification number of a variety in the SADC catalogue. This identification number will be linked to the variety name and synonyms where applicable.

2.2.10 Period of validity of SADC variety registration
Varieties that are entered in the SADC Variety Catalogue will remain registered in the catalogue for twenty years. Applications for renewal for a further period shall be submitted not later than one year before expiry of acceptance.

2.2.11 Sharing of variety information
In order to facilitate and promote transparency and efficiency of the System, the applicants for inclusion of varieties in the SADC Variety Catalogue will be required to present all required information. Information regarded as confidential by the breeder must clearly be marked as such, and will be treated by the concerned authorities as confidential business information.

2.2.12 System monitoring and evaluation
SADC/FANR will establish a procedure for auditing the System. This may include, but not necessarily be limited to, the fielding of teams of technical experts to examine:
• the way in which PMU maintains information on varieties;
• the performance of the designated NSAs in their collaboration with the System;
• the handling of complaints from stakeholders if any, and
• consider improvements as may be required in particular with respect to legal and regulatory issues.

2.2.13 Fees
After 2010, inclusion of varieties in the SADC Variety Catalogue will incur an initial application fee and, upon successful registration, an annual fee for as long as the variety remains on the list. Varieties for which fees are not paid within thirty (30) days are automatically eliminated from the Catalogue.

2.3 Participation in and implementation of the System
SADC/FANR will set up the SADC Seed Committee, after which the SSC and PMU will begin implementation of the System, including preparation for entering already released varieties that meet registration requirements into the SADC Variety Catalogue.

2.3.1 Participation
All SADC Member States will participate in the System using the staff and facilities that are at their disposal having the necessary qualifications and capacity.

2.3.2 Registration of existing varieties
Varieties already released in SADC Member States before the SADC Variety Catalogue is established will automatically be entered in the Catalogue provided that:

• An application is submitted with the necessary information, including DUS and VCU data as required for listing; and

• The variety is listed on the National Variety List in at least two Member States.

This approach will ensure that the SADC Variety Release System promotes and stabilizes continued production and distribution of seed of already released varieties, and at the same time facilitates entry and use of new varieties in Member States.
2.3.3 Procedure for submitting a new variety for listing

For a new variety to be eligible to enter the Regional System it must first be released in at least two SADC countries. The Variety Holder decides in which countries to apply for national release and which of those countries should be the country of application for regional release. The Variety Holder must have a registered business address in the country of application.

Following national release in two countries, the Variety Holder must submit signed copies of the application for regional release to the designated national authority in the country of application. A draft application form is shown in Figure 2. There must be one copy of the application for the PMU and one copy for each NSA in SADC. To each application will be attached the following:

- Results of DUS and VCU tests;
- The suggested variety name;
- Proof of national release in two countries; and
- A reference seed sample for the NSA.

2.3.4 Verification of applications

After receipt of the application and the attached information, the NSA in the country of application verifies the application and forwards, within 30 days, all the copies of the application to the PMU for action.

The PMU validates the application and forwards a copy to the NSAs in all Member States with information about its decision concerning registration. If PMU finds that the application is not adequate or that DUS and/or VCU information is lacking, it may request re-testing the variety.

2.3.5 Registration and release

When all the requirements have been fulfilled, the PMU files the application and advises all the designated national authorities, the applicant and others concerned about the date on which the variety will be entered in the SADC Variety Catalogue.

The PMU then enters the variety in the SADC Variety Catalogue. From the date a variety is entered in the SADC Catalogue, it is considered released and can be sold in all SADC countries.
APPLICATION FOR VARIETY REGISTRATION AND RELEASE

Application #  ........................................  Date of Submission:  ........................................

National Seeds Authority where submitted:  ........................................

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:  ........................................................................

2. Particulars of the Variety

2.1 Common Name of Kind:  ........................................................................

2.2 Botanical Name:  ........................................................................

2.3 Sub-group:  ........................................................................

2.4 Proposed Variety Name:  ........................................................................

2.5 Breeder’s Reference:  ........................................................................

2.6 Has the variety been submitted for variety listing in another SADC State? Yes/No.

If yes, complete the table below

<table>
<thead>
<tr>
<th>Variety Code (if applicable)</th>
<th>Synonym</th>
<th>Country</th>
<th>Released? Yes/No/Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. **The applicant obtained the variety by means of:**

- [ ] Contract  
- [ ] Succession  
- [ ] Own breeding/discovery  
- [ ] Other (specify):

  Country where the variety was bred or discovered:

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 a typical plant of the variety using SADC Guidelines for DUS Testing  
- [ ] VCU Data using the SADC Guidelines for VCU Testing  
- [ ] Authorization from the owner of the variety to apply for listing  
- [ ] Application and examination fees, payable in terms of the Authority and SADC  
- [ ] Reference seed sample (see 6. below)

6. **Particulars of reference seed sample:**

   - Identifying mark on sample container:
   - Place where cultivated:  
     - Grower:  
     - Year of cultivation:  
     - Seed treatment:

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

☐ Variety approved for National Listing

☐ Variety rejected for National Listing on grounds of:

Signature: Date:

9. Fees Paid

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

10. Remarks by PMU

☐ Variety approved for listing in SADC Variety Catalogue

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

11. Other comments / Additional information:

..........................................................................................................................................................

..........................................................................................................................................................

..........................................................................................................................................................

Signature: Date:
2.3.6 Access to prohibit marketing

A Member State can apply for permission to prohibit the use of a given variety in its territory if: (i) the variety is not suitable for cultivation in any part of its territory or is not acceptable to farmers because of specific, well-known variety characteristics; or (ii) the applicant has valid reasons to believe that the variety presents a risk to the health of other varieties or species, humans or the environment, in which case applications are accepted after verification by independent experts.

2.3.7 Registration of landraces or and other local varieties

Landraces and other local plant varieties will be registered in the SADC Variety Database upon making available the description of the variety in terms of performance, farmer experiences during cultivation, its name(s) as well as the merits of the variety.

SSC will develop a procedure for registration of landraces and other local varieties. The Procedure will outline characteristics that are essential for registration and will take into consideration difficulties that may be associated with the provision of DUS and VCU information for such varieties.

A brief description of the variety will be based on field tests conducted by the NSA which also submits the data to PMU. Landraces and other local varieties for which sufficient documentation is already available will be exempted from field tests.

2.3.8 Registration of genetically modified varieties

Until SADC countries have agreed to a common position on acceptance of Genetically Modified (GM) varieties, such varieties will not be eligible for inclusion in the SADC Variety Catalogue. In the meantime, GM varieties can still be released at the national level in countries allowing for this.

2.3.9 Withdrawal of varieties

Varieties may be withdrawn from the Catalogue if:

- Any information submitted to the NSA in connection with an application for registration was incorrect, and the application would not have been processed if the NSA had known that the information was incorrect; or
• Information has come to light which, if discovered earlier, would have resulted in the refusal of such application; or

• Applicable fees are not paid in time; or

• Seed of such variety capable of reproducing the variety in such a manner that the characteristics thereof correspond to the original cannot readily be obtained; or

• The variety no longer conforms to the DUS requirements; or

• The maintainer of the variety cannot provide a reference sample when requested by the National Seeds Authority; or

• The 20-year period expires without an application submitted for renewal.

The maintainer/applicant of the variety or a NSA may request the withdrawal of a variety based on one or more of the reasons stipulated above.

In the case of a dispute, the SSC, in consultation with the maintainer/applicant of the variety, will make a decision to settle the dispute.

2.4 Management of fees

National Seeds Authorities will charge their regular fee for national release and management of reference samples. If an application is made for regional release an additional fee will be charged in order to cover verification of data and mailing of copies of the application to the PMU.

The PMU will also charge a separate fee for regional release. The purpose of this fee is to contribute to support operation of the System including verification of variety data, communication with Variety Holders, NSA and other stakeholders, development and maintenance of databases, meetings, etc. The fee to PMU will be non-refundable and must accompany the application. There will also be an annual fee for each year the variety remains listed in the Catalogue.

2.5 Appeals

The PMU will prepare procedures for appeals taking into account the SADC Trade Protocol.
3 The SADC Seed Certification and Quality Assurance System

3.1 Purpose

The purpose of the SADC Seed Certification and Quality Assurance System is to ensure that seed of varieties listed in the SADC Regional Variety Catalogue and traded among SADC countries is of consistently high and known quality. The System will in particular:

• Improve seed quality as a result of improved facilities and skills;
• Save time and resources because importing countries will no longer need to re-test the imported seed;
• Allow more efficient movement of seed in the region through the use of common terminology, standards, procedures, seals and labels; and
• Facilitate better targeting of relief seed.

As a result of the above, farmers’ access to quality seed will be improved which in turn will lead to enhancement of food security in the region.

3.2 Organization

The SADC Seed Certification and Quality Assurance System will be coordinated by the PMU of the SSSN with technical support from the SSC and the NSAs in Member States.

The System will be implemented under the overall supervision of the FANR Directorate of the SADC Secretariat

3.2.1 The role of the Project Management Unit of the SADC Seed Security Network

The PMU will in particular:

• Maintain records of field inspectors, seed samplers, seed testing laboratories, and others who in the Member States have been designated to operate under the System;
• Assist in monitoring and technical backstopping of the established System;
• Assist in solving technical problems arising from the System; and
• Provide suggestions and guidelines to future improvements of the System

As may be required and within the limits of its resources the PMU in consultation with the SSC will:
• Deploy technical committees and/or specialists to assist with specific issues; and
• Support the capacity building and training at the national levels.

### 3.2.2 The Role of the SADC Seed Committee

• The SSC will provide technical support to the implementation and improvement of the System. The Committee will in close consultation with NSA:
  • Develop crop specific requirements; and
  • Consider and authorize changes and improvements in the Rules, Directions, and Standards of the System;
• Provide auditing guidelines;
• Formulate penalties and act as appeal board in the case of disputes; and
• Consider, in due time, the formulation of an appropriate fee scheme.

### 3.2.3 The role of the National Seeds Authorities

Each SADC Member State will designate an NSA which will collaborate with PMU and SSC to implement and operate the System. The role of the NSA will be to facilitate implementation of the SADC Seed Certification and Quality Assurance System in the respective Member State. The NSA will in particular:
• Ensure that the Rules, Directions and Standards of the System are observed;
• License, authorize, accredit and/or register field inspectors, samplers, analysts, and laboratories, issue qualified seed inspectors and samplers with a certificate and an identity card, and inform PMU accordingly;
• Inform PMU when personnel or laboratories in the country are no longer qualified to perform under the System;
• Register fields and keep record of inspection reports issued in accordance with the System;

• Provide SADC seals and labels, or formats thereof to companies that are producing seed in accordance with the System;

• Issue certificates for each seed lot that has been certified in accordance with the System and conduct post-control tests to ascertain that the System operates satisfactorily; and

• Submit information annually about seed activities and the performance of the System to the PMU.

3.3 Participation in and implementation of the System

3.3.1 Participation

All SADC Member States will participate in the System using the staff and facilities that are at their disposal having the necessary qualifications and capacity.

3.3.2 Seed classes

The SADC System includes only varieties of species listed in the SADC Variety Catalogue. The System will have the seed certification classes indicated in Table 2.

<table>
<thead>
<tr>
<th>Seed Class</th>
<th>Code</th>
<th>Produced from</th>
<th>Label Colours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-basic Seed</td>
<td>A</td>
<td>Breeder’s Seed</td>
<td>Violet band on white</td>
</tr>
<tr>
<td>Basic Seed</td>
<td>B</td>
<td>Pre-Basic or Breeder’s Seed</td>
<td>White</td>
</tr>
<tr>
<td>Certified Seed (1st Generation)</td>
<td>C1</td>
<td>Basic or higher seed classes</td>
<td>Blue</td>
</tr>
<tr>
<td>Certified Seed (2nd Generation)</td>
<td>C2</td>
<td>C1 or higher classes of seed</td>
<td>Red</td>
</tr>
<tr>
<td>Quality Declared Seed</td>
<td>QDS</td>
<td>Complies with special</td>
<td>Green</td>
</tr>
<tr>
<td></td>
<td></td>
<td>requirements</td>
<td></td>
</tr>
</tbody>
</table>
All certified seed must relate directly to authentic basic seed of the variety.

Production of QDS will be based on the following three principles: (i) Only varieties included in the SADC Variety Catalogue will be eligible for seed production; (ii) seed producers are required to register with the NSA; and (iii) the NSA will check 10% of the seed crops.

Vegetable seeds, including vegetatively propagated material and other crops not covered by the SADC Variety Catalogue, will be traded outside the System until such time as SADC Standards have been developed.

### 3.3.3 Rules and directions

Establishment and development of the SADC System does not imply that seed produced under other quality assurance systems cannot be traded in or between SADC countries. Other international certification schemes may also be recognized.

To ascertain that the System operates satisfactorily, the NSAs will conduct post-control tests. The PMU may in certain cases need to organize its own post-control testing of seed traded under the System. Such testing will be sub-contracted.

All samples shall be drawn from the seed lots by staff licensed/authorized under the System and in accordance with the Rules for Seed Testing of the ISTA. Seed traded must meet the required laboratory standards listed in Table 3. The SSC, in consultation with NSAs, may introduce standards for other species than those listed in the table and may decide to change existing standards.

The seed containers shall be fastened and sealed at the time of sampling and the contents of each container indicated by a SADC label. Labels will include information such as seed class, name of species and variety, lot and certificate number, date of testing, net weight and others. A possible layout of a SADC label is suggested in Figure 3.

NSAs will issue certificates for all seed lots certified according to the System. Certificates will include name of authority issuing the certificate, lot number, name of species, kind of variety (open-pollinated/cross/inbred line), variety name or code number, statement of re-labelling (if required), number of containers, declared weight of seed lot, and seed class. A possible layout of a SADC certificate is suggested in Figure 4.
Table 3. SADC Seed Certification and Quality Assurance System: Minimum SADC Seed Certification Standards

<table>
<thead>
<tr>
<th>CROP</th>
<th>FIELD STANDARDS</th>
<th>LABORATORY STANDARDS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum isolation distance (m)</td>
<td>Maximum % of off-types (based on 1000 plants)</td>
</tr>
<tr>
<td></td>
<td>BS (B)</td>
<td>CS (C)</td>
</tr>
<tr>
<td>Arachis hypogaea L.</td>
<td>Groundnut</td>
<td>10</td>
</tr>
<tr>
<td>Cajanus cajan L.</td>
<td>Pigeon pea</td>
<td>400</td>
</tr>
<tr>
<td>Glycine max L. Merrill</td>
<td>Soybean</td>
<td>10</td>
</tr>
<tr>
<td>Gossypium hirsutum L.</td>
<td>Cotton (H)</td>
<td>500</td>
</tr>
<tr>
<td>Gossypium hirsutum L.</td>
<td>Cotton (OP)</td>
<td>100</td>
</tr>
<tr>
<td>Helianthus annuus L.</td>
<td>Sunflower (OP)</td>
<td>1000</td>
</tr>
<tr>
<td>Helianthus annuus L.</td>
<td>Sunflower (H)</td>
<td>3000</td>
</tr>
<tr>
<td>Nicotiana tabacum L.</td>
<td>Tobacco</td>
<td>800</td>
</tr>
<tr>
<td>Oryza sativa L.</td>
<td>Rice</td>
<td>5</td>
</tr>
<tr>
<td>Pennisetum glaucum L.</td>
<td>Pearl millet</td>
<td>400</td>
</tr>
<tr>
<td>Phaseolus vulgaris L.</td>
<td>Beans</td>
<td>10</td>
</tr>
<tr>
<td>Sorghum bicolor L. Moench</td>
<td>Sorghum (OP)</td>
<td>400</td>
</tr>
<tr>
<td>Sorghum bicolor L. Moench</td>
<td>Sorghum (H)</td>
<td>750</td>
</tr>
<tr>
<td>Triticum aestivum L. emend.</td>
<td>Wheat</td>
<td>10</td>
</tr>
<tr>
<td>Fiori et Paol.</td>
<td>Cowpea</td>
<td>10</td>
</tr>
<tr>
<td>Vigna unguiculata L. Walpers</td>
<td>Maize (OP)</td>
<td>400</td>
</tr>
<tr>
<td>Zea mays L.</td>
<td>Maize (H)</td>
<td>400</td>
</tr>
</tbody>
</table>
Figure 3. SADC Seed Certification and Quality Assurance System: Information to be indicated on SADC labels

---

**Colour of label:**

Green for Quality Declared Seed
Blue for Certified Seed,
White for Basic Seed, and
White with a violet band for Pre-Basic Seed

---

**Back of label:**

SADC logo and National logo
Name and address of certifying authority/agency
Seed class (certified, basic or pre-basic seed)
SADC certified seed declaration

---

**Front of label**

Species:
Variety:
Lot number:
Certificate No:
Date of test:
Net Weight/Number:
Figure 4. SADC Seed Certification and Quality Assurance System: Example of seed certificate

<table>
<thead>
<tr>
<th>Seed certificates must contain all the information outlined below, but the exact arrangement of the text is at the discretion of the NSA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of authority issuing the certificate:</td>
</tr>
<tr>
<td>Lot Number:</td>
</tr>
<tr>
<td>Species:</td>
</tr>
<tr>
<td>Kind of variety: open-pollinated/cross/inbred line$^1$</td>
</tr>
<tr>
<td>Variety name or code number:</td>
</tr>
<tr>
<td>Statement of re-labelling, if required:</td>
</tr>
<tr>
<td>Number of containers and declared weight of lot:</td>
</tr>
</tbody>
</table>

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 as$^1$

- Quality Declared Seed (Label colour: Green)
- Certified Seed, $2^{nd}$. Generation (Label colour: Red)
- Certified Seed, $1^{st}$. Generation (Label colour: Blue)
- Basic Seed (Label colour: White)
- Pre-Basic Seed (Label colour: Violet band on white)

Signature ........................................ Place and Date

$^1$ Delete as necessary.
Re-labelling and re-fastening of a particular seed lot that has been produced in another country shall only be done after arrangement with the NSA.

### 3.3.4 Accreditation

The NSAs will be responsible for licensing/authorization and accreditation/registration. The PMU in consultation with the SSC will formulate minimum training requirements for seed inspectors, seed samplers, and seed analysts to be authorized under the System. These requirements will include, but not necessarily be limited to:

- Passing a prescribed seed technology course;
- At least one season’s practical training under the mentorship of an already authorized specialist; and
- Successful completion of a practical evaluation by the mentor.

The NSA will issue qualified field inspectors and samplers with a certificate and an identity card. Information on the card will include a unique code provided by the NSA, in collaboration with PMU, and this will be recognizable in all SADC countries.

The NSA/SSC will ensure that:

- Authorized staff adhere to a code of ethics;
- A field inspector only be authorized to conduct inspections of specific crops; and
- Those countries that have no authorized inspectors may use inspectors from other countries.

Public and private seed testing laboratories participating in the System need to comply with standards before registration/accreditation. At the time of application, the NSA of the Member State concerned will advise the PMU whether the applicant laboratory has the necessary capability. One or two seed testing laboratories in SADC may be responsible for coordinating the proficiency-testing every year, applying ISTA procedures. Proficiency testing and auditing will include the following elements:

- Competency list of species;
- Implementation of a quality assurance system;
- Participation in the referee testing program; and
- Auditing of the laboratory.
Registration requirements and guidelines for proficiency testing and other auditing activities will be prepared.

The PMU will establish and maintain a database of all authorized staff and accredited laboratories in the region. Information in the database will be made available to stakeholders.

### 3.4 Information

Once a year each NSA operating under the System must submit information to the PMU about seed activities carried out under the System. Based on the NSA reports, the PMU will prepare a consolidated document, which will report on the operation of the System, record the quantities of seed that have been handled, and analyze other important aspects of System performance.

### 3.5 Fees

NSA will charge their regular fees for national certification – this also applies for seed intended for certification under the SADC System.

### 3.6 Appeals

The PMU, in consultation with the SSC and NSAs, will prepare procedures for appeals, taking into account the SADC Trade Protocol.
4 SADC Quarantine and Phytosanitary Measures for Seeds

4.1 Purpose
The purpose of the SADC harmonized Quarantine and Phytosanitary Measures for seeds is to enhance safer and faster movement of seed through establishment of common Quarantine and Phytosanitary Measures for seed in the SADC region, based on science.

The measures will in particular lead to:

- Reduction of direct and indirect costs related to seeds trade and at the same time encourage safe movement and dissemination of seeds.
- Introduction of rationalized SADC pest lists for the movement of seeds between Member States, and between SADC and outside countries; and
- Procedures that are carried out in a transparent manner and supported by appropriate documentation.

4.2 Organization
Introduction of the harmonized Quarantine and Phytosanitary Measures for seeds will be facilitated by the PMU of the SSSN with technical support from the SSC and SADC Plant Protection Sub-committee.

The Measures will be implemented under the overall supervision of the FANR Directorate of the SADC Secretariat.

4.2.1 The role of the Project Management Unit of the SADC Seed Security Network
The PMU will assist Member States as required with the development and introduction of a common and more efficient Quarantine and Phytosanitary Measures for seeds and in particular:

- Document current phytosanitary measures and their impacts on interregional seeds exchange and on exchange of seeds between SADC and countries beyond the region;
- Facilitate the organization of technical reviews and consultations with the view to develop better standards and procedures, and to ensure that
new initiatives are in line with regional and international agreements concerning plant protection and trade;

- Design and support efforts that will secure political support to rationalize and harmonize regulations;

- Establish and maintain databases to record current national regulations and key documents, issuance of permits and the seed quantities involved, critical issues, and disputes;

- Keep Member States informed via the SADC-FANR website and through other means; and

- Source funding to support the above activities.

As may be required, and within the limits of resources available, PMU will:

- Deploy technical committees and/or specialists to assist with specific issues; and

- Support the capacity building and training at the national levels.

4.2.2 The role of the SADC Plant Protection Sub-committee

The SADC Plant Protection Sub-committee will seek close consultation and collaboration with the NPPOs on seed issues. At the same time it is expected that the NPPOs will be able to contribute with technical information and advice.

4.2.3 The Role of the SADC Seed Committee

The SSC under supervision of the FANR Directorate and in close consultation with concerned NPPOs will provide support as may be required.

4.3 Communication and consultations

The PMU will monitor regional and international developments concerning quarantine and phytosanitary measures of relevance to seeds and convey information to national authorities as required.

PMU will consult with NPPOs and other concerned national authorities with the purpose to collect information, maintain an overview over national seeds issues and suggest action plans that will further the harmonization processes for quarantine and phytosanitary measures for seeds.
The PMU, as instructed by the SSC and in consultation with NPPOs and others, will contribute to the organization of regional meetings and consultations to address specific issues such as:

- Development and updating of phytosanitary guidelines and procedures for seeds;
- Identification and recommendation of better methodologies for use in the phytosanitary measures(s) for seeds;
- Reviewing monitoring methods and providing technical backstopping to the established Measures(s);
- Resolving technical problems and disputes;
- Development of proposals for future improvements of the SADC Quarantine and Phytosanitary Measures for seeds; and
- Determining need for undertaking audits

4.4 Pest lists

Under the SADC Quarantine and Phytosanitary Measures for Seeds, two rationalized pest lists have been introduced:

1. A SADC list of pests which require control when seeds is traded between SADC Member States (Table 4); and
2. A SADC list of pests that require control when seeds are traded into a SADC country from outside the region (Table 5).

The list only includes pests that are of economic significance, not known to occur in the SADC region, and which are seed borne.

Adherence to the two lists will provide the following advantages:

For movement of seeds between SADC countries:

- Testing and quarantine measures for seeds are only required for pests which are not common to all SADC countries;
- Re-testing of seed consignments on arrival in the importing country may be reduced and eventually no longer necessary except in cases where there are justifiable reasons to assume that a new pest may be introduced.
- The need for a country to test seeds which is to be re-exported after a period in transit may be reduced; and
• Fewer pests will need to be checked for at entry points; clearance and entry of consignments will therefore be faster.

For movement of seeds from a country outside SADC to a SADC country:
• When it has been established by the importing SADC country that the consignment meets SADC requirements then the seeds can be moved to any other SADC country without further testing.

In view of the above advantages it is considered that implementation of the rationalized SADC pest lists will result in considerable cost savings for the seed trade.

Table 4. SADC Quarantine and Phytosanitary Measures for Seeds: Harmonized list of pests that require control when seeds of important crops are traded among SADC countries.

<table>
<thead>
<tr>
<th>CROP</th>
<th>PEST/PATHOGEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zea mays L. (maize)</td>
<td>Peronosclerospora phillipensis</td>
</tr>
<tr>
<td></td>
<td>Cochliobolus heterostrophus</td>
</tr>
<tr>
<td>Brassica (cabbage)</td>
<td>Tobacco rattle virus</td>
</tr>
<tr>
<td>Triticum spp. (wheat)</td>
<td>Tilletia indica</td>
</tr>
<tr>
<td>Allium spp. (onion)</td>
<td>Tomato black ring virus</td>
</tr>
<tr>
<td></td>
<td>Ditylenchus dipsaci</td>
</tr>
<tr>
<td></td>
<td>Tobacco rattle virus</td>
</tr>
<tr>
<td>Phaseolus spp. (bean)</td>
<td>Bean mosaic virus</td>
</tr>
<tr>
<td></td>
<td>Tomato black ring virus</td>
</tr>
<tr>
<td></td>
<td>Ditylenchus dipsaci</td>
</tr>
<tr>
<td>Vigna spp. (cowpea)</td>
<td>Peanut stripe virus</td>
</tr>
<tr>
<td>Helianthus spp. (sunflower)</td>
<td>Tobacco ringspot virus</td>
</tr>
<tr>
<td>Capsicum spp. (pepper)</td>
<td>Pepper mild mottle virus</td>
</tr>
<tr>
<td>Lycopersicum esculentum (tomato)</td>
<td>Tobacco ringspot virus</td>
</tr>
<tr>
<td></td>
<td>Tomato black ring virus</td>
</tr>
<tr>
<td>Nicotiana spp. (tobacco)</td>
<td>Tobacco ringspot virus</td>
</tr>
<tr>
<td></td>
<td>Ralstonia solanacearum</td>
</tr>
<tr>
<td>Pisum spp. (pea)</td>
<td>Pea seed borne mosaic virus</td>
</tr>
<tr>
<td></td>
<td>Ditylenchus dipsaci</td>
</tr>
<tr>
<td></td>
<td>Phoma pinodella</td>
</tr>
</tbody>
</table>

Continued.
Table 4. Continued.

<table>
<thead>
<tr>
<th>CROP</th>
<th>PEST/PATHOGEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Manihot esculenta</em> (cassava)</td>
<td><em>Mononychellus tanajoa</em></td>
</tr>
<tr>
<td></td>
<td>East African cassava mosaic virus</td>
</tr>
<tr>
<td></td>
<td>Cassava brown streak virus</td>
</tr>
<tr>
<td></td>
<td>African cassava mosaic virus</td>
</tr>
<tr>
<td></td>
<td><em>Ralstonia solanacearum</em> race 3 biovar 4</td>
</tr>
<tr>
<td></td>
<td>Sweet potato mild mottle virus</td>
</tr>
<tr>
<td></td>
<td>Sweet potato feathery mottle virus</td>
</tr>
<tr>
<td></td>
<td><em>Aphelenchoides besseyi</em></td>
</tr>
<tr>
<td></td>
<td><em>Aphelenchoides ritzemabosi</em></td>
</tr>
<tr>
<td></td>
<td><em>Ditylenchus destructor</em></td>
</tr>
<tr>
<td></td>
<td><em>Radopholus similis</em></td>
</tr>
<tr>
<td><em>Oryzae sativa</em> (rice)</td>
<td><em>Aphelenchoides besseyi</em></td>
</tr>
<tr>
<td></td>
<td><em>Balansia oryzea-sativae</em></td>
</tr>
<tr>
<td></td>
<td>Sclerophtora macrospora</td>
</tr>
<tr>
<td></td>
<td><em>Tilletia barclayana</em></td>
</tr>
<tr>
<td></td>
<td><em>Xanthomonas campestris</em> pv. oryzae</td>
</tr>
<tr>
<td></td>
<td><em>Xanthomonas oryzae</em> pv. oryzae</td>
</tr>
<tr>
<td></td>
<td><em>Xanthomonas campestris</em> pv. oryzicola</td>
</tr>
<tr>
<td><em>Solanum tuberosum</em> (potato)</td>
<td>Potato spindle tuber viroid</td>
</tr>
<tr>
<td></td>
<td>Andean potato latent virus</td>
</tr>
<tr>
<td></td>
<td>Andean potato mottle virus</td>
</tr>
<tr>
<td></td>
<td><em>Globodera rostochiensis</em></td>
</tr>
<tr>
<td></td>
<td><em>Ralstonia solanacearum</em></td>
</tr>
<tr>
<td></td>
<td><em>Clavibacter michiganensis</em> subsp. michiganensis</td>
</tr>
<tr>
<td></td>
<td><em>Globodera rostochiensis</em></td>
</tr>
<tr>
<td></td>
<td><em>Synchytrium endobioticum</em></td>
</tr>
<tr>
<td><em>Arachis</em> spp. (groundnut)</td>
<td>None</td>
</tr>
<tr>
<td><em>Glycine</em> spp. (soybean)</td>
<td>None</td>
</tr>
<tr>
<td><em>Gossypium</em> spp. (cotton)</td>
<td>None</td>
</tr>
<tr>
<td><em>Sorghum</em> spp. (sorghum)</td>
<td>None</td>
</tr>
<tr>
<td>CROP</td>
<td>PEST/PATHOGEN</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td><em>Zea mays</em> L. (maize)</td>
<td><em>Cephalosporium maydis</em></td>
</tr>
<tr>
<td></td>
<td><em>Peronosclerospora philipensis</em></td>
</tr>
<tr>
<td></td>
<td><em>Erwinia stewartii</em></td>
</tr>
<tr>
<td></td>
<td><em>Cochliobolus heterostrophus</em></td>
</tr>
<tr>
<td>Brassica (cabbage)</td>
<td>Tobacco rattle virus</td>
</tr>
<tr>
<td><em>Triticum</em> spp. (wheat)</td>
<td><em>Tilletia indica</em></td>
</tr>
<tr>
<td></td>
<td><em>Tilletia controversa</em></td>
</tr>
<tr>
<td></td>
<td><em>Anguina tritici</em></td>
</tr>
<tr>
<td><em>Allium</em> spp. (onion)</td>
<td>Tomato black ring virus</td>
</tr>
<tr>
<td></td>
<td><em>Ditylenchus dipsaci</em></td>
</tr>
<tr>
<td><em>Phaseolus</em> spp. (bean)</td>
<td><em>Curtobacterium flaccumfaciens</em> f.sp.</td>
</tr>
<tr>
<td></td>
<td>Bean mosaic virus</td>
</tr>
<tr>
<td></td>
<td>Pea early browning virus</td>
</tr>
<tr>
<td></td>
<td><em>Ditylenchus dipsaci</em></td>
</tr>
<tr>
<td></td>
<td>Tomato black ring virus</td>
</tr>
<tr>
<td></td>
<td>Cowpea severe mosaic virus</td>
</tr>
<tr>
<td><em>Arachis</em> spp. (groundnut)</td>
<td><em>Aphelenchoides arachidis</em></td>
</tr>
<tr>
<td></td>
<td>Peanut clump virus</td>
</tr>
<tr>
<td></td>
<td>Peanut mottle virus</td>
</tr>
<tr>
<td><em>Vigna</em> spp. (cowpea)</td>
<td>Southern bean mosaic virus (Sobemo virus)</td>
</tr>
<tr>
<td></td>
<td><em>Curtobacterium flaccumfaciens</em> f.sp.</td>
</tr>
<tr>
<td></td>
<td>Urd Bean leaf crinkle virus</td>
</tr>
<tr>
<td></td>
<td>Peanut stripe potyvirus</td>
</tr>
<tr>
<td><em>Helianthus</em> spp. (sunflower)</td>
<td>Tobacco ringspot virus</td>
</tr>
<tr>
<td></td>
<td><em>Diaporthe helianthi</em> (Phomopsis)</td>
</tr>
<tr>
<td><em>Capsicum</em> spp. (pepper)</td>
<td>Tomato bushy stunt virus</td>
</tr>
<tr>
<td></td>
<td>Tomato ringspot virus</td>
</tr>
<tr>
<td></td>
<td>Pepper mild mottle virus</td>
</tr>
<tr>
<td><em>Lycopersicum esculentum</em> (tomato)</td>
<td><em>Fusarium oxysporum</em> f.sp. Licopersici race 3</td>
</tr>
<tr>
<td></td>
<td>Tomato ringspot virus</td>
</tr>
<tr>
<td></td>
<td>Potato spindle tuber viroid</td>
</tr>
<tr>
<td></td>
<td>Tobacco ringspot virus</td>
</tr>
<tr>
<td></td>
<td>Tomato black ring virus</td>
</tr>
<tr>
<td><em>Lolium</em> spp. (ryegrass)</td>
<td><em>Tilletia controversa</em></td>
</tr>
<tr>
<td><em>Nicotiana</em> spp. (tobacco)</td>
<td><em>Peronospora hyoscyami</em> f. sp. Tabacina</td>
</tr>
<tr>
<td></td>
<td>Tobacco ringspot virus</td>
</tr>
<tr>
<td></td>
<td><em>Ralstonia solanacearum</em></td>
</tr>
<tr>
<td></td>
<td>Tomato ringspot virus</td>
</tr>
</tbody>
</table>
4.5 Equivalency

Member States are encouraged to recognize that an alternative level of protection or risk reduction may be obtained by applying alternative methods to control quarantine pests. The method used must be declared and must be technically and economically feasible for use as long as it provides the same level of protection against pests. To promote trade and speedy movement of seeds within SADC, the use of mutually recognized alternative measures should be encouraged and in line with the provisions of the SPS Agreement.

4.6 Phytosanitary documentation and procedures

Seed lots moving in the region and in international trade must be accompanied by appropriate documentation which certifies that the seed lot complies with phytosanitary requirements. Key documents include the following:

- **Plant Import Permit**: Must be issued by the importing country authorizing the import of seeds in accordance with specified phytosanitary requirements. The Permit must accompany the seed lot and be presented to inspectors at exit and entry points.

- **Phytosanitary Certificate**: Is issued by the exporting country and serves to certify that requirements specified on the Import Permit have been met. The Phytosanitary Certificate must therefore also be presented to the inspectors at exit and entry points.

- **Non-compliance Notification**: Is issued by the importing country and forwarded to the NPPO of the exporting country in the case where consignments of seeds, and/or the accompanying Phytosanitary Certificates, do not comply with the conditions set in the Plant Import Permit, and/or where a quarantine pest has been intercepted.

- **Re-export Phytosanitary Certificate**: The need for this document occurs when a consignment of seeds, arriving from the export country, is being stored and/or repacked by the importing country under circumstances which may expose the consignment to infestation or infection before re-export to a third country – or if the consignment stayed longer in the transit country than determined by the NPPO. The Certificate is issued by the country where the seeds were in transit and is attached to the Phytosanitary Certificate issued by the exporting country.
4.7 Format for permits and certificates

To further streamline the trade of seeds in SADC and to facilitate documentation and essential analysis, Member States will adopt common formats for the various certificates and other documents and ensure that the certificates provide the necessary information. The Plant Import Permit, Phytosanitary Certificate, and the Re-Export Phytosanitary Certificate, which are designed in line with such requirements, are depicted in Figures 5–7.

Where these forms are not yet being used, the PMU will assist as required with their introduction.
<table>
<thead>
<tr>
<th><strong>Figure 5. SADC Quarantine and Phytosanitary Measures for Seeds: Plant Import Permit</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINISTRY OF AGRICULTURE OF (Country)</strong></td>
</tr>
<tr>
<td><strong>PLANT IMPORT PERMIT</strong></td>
</tr>
<tr>
<td><strong>Act e.g. Plant Pests and Disease Act (Import) Regulations, 2006</strong></td>
</tr>
<tr>
<td><strong>PERMIT AUTHORIZING THE IMPORTATION OF SEEDS</strong></td>
</tr>
<tr>
<td>Permission is granted to (Name of importing person/ company)</td>
</tr>
<tr>
<td>Of (Address of importer in importing country) to import in one consignment, within six months of the date of this permit</td>
</tr>
<tr>
<td>One consignment, within six months of the date of this permit, From (Name of exporting person/company) Of (Address of exporter in exporting country) Through (Entry point: border/ railway station/ airport/ seaport) the following: (Agricultural produce and products to be imported)</td>
</tr>
<tr>
<td><strong>Subject to the following conditions:</strong></td>
</tr>
<tr>
<td><strong>e.g. notification of new pests to member states</strong></td>
</tr>
<tr>
<td><strong>Additional Declaration on Phytosanitary Certificate: AD1 – AD6</strong></td>
</tr>
<tr>
<td><strong>AD:</strong> an additional declaration on the Phytosanitary Certificate</td>
</tr>
<tr>
<td><strong>AD1:</strong> the organism does not occur in the AREA of Production</td>
</tr>
<tr>
<td><strong>AD2:</strong> the PARENT PLANTS were INSPECTED during ACTIVE GROWTH and found free from the organism</td>
</tr>
<tr>
<td><strong>AD3:</strong> the CONSIGNMENT was TESTED and found Free from the organism</td>
</tr>
<tr>
<td><strong>AD4:</strong> the CONSIGNMENT was INSPECTED and found Free from the organism</td>
</tr>
<tr>
<td><strong>AD5:</strong> the CONSIGNMENT was treated with an appropriate fumigant not more than 14 days PRIOR to export; especially against the organism</td>
</tr>
<tr>
<td><strong>Date:</strong> ..........................</td>
</tr>
<tr>
<td><strong>Signature:</strong> ..........................</td>
</tr>
</tbody>
</table>
Figure 6. SADC Quarantine and Phytosanitary Measures for Seeds: Phytosanitary Certificate

(COUNTRY LOGO)
MINISTRY OF AGRICULTURE OF (Country)
PHYTOSANITARY CERTIFICATE

Number __________________________

Plant Protection Organization ________________________________________________

To Plant Protection Organization of ____________________________________________

<table>
<thead>
<tr>
<th>I. Description of Consignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of exporter</td>
</tr>
<tr>
<td>Declared Name and Address of consignee</td>
</tr>
<tr>
<td>Number and description of packages</td>
</tr>
</tbody>
</table>

| Distinguishing marks | ____________________________________________ |
| Place of origin | ____________________________________________ |
| Declared means of conveyance | ____________________________________________ |
| Declared point of entry | ____________________________________________ |
| Name of produce and quantity declared | ____________________________________________ |
| Botanical name of plants | ____________________________________________ |

This is to certify that the plants, plant products or other regulated description herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing party, including those for regulated non-quarantine pests. They are deemed to be practically free from other pests.

<table>
<thead>
<tr>
<th>II. Additional Declaration</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>III. Disinfestation and/or Disinfection Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
</tr>
<tr>
<td>Chemical (active ingredient)</td>
</tr>
<tr>
<td>Duration of exposure</td>
</tr>
<tr>
<td>Additional information</td>
</tr>
</tbody>
</table>

Place of issue ____________________________

Name of authorizing officer ____________________________

Date ____________________________ Signature ____________________________

No financial liability with respect to this certificate shall attach to

or to any of its officers or representatives. (Name of Plant Protection Organization)
<table>
<thead>
<tr>
<th><strong>I. Description of Consignment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name and address of exporter</strong></td>
</tr>
<tr>
<td><strong>Declared Name and Address of consignee</strong></td>
</tr>
<tr>
<td><strong>Number and description of packages</strong></td>
</tr>
<tr>
<td><strong>Distinguishing marks</strong></td>
</tr>
<tr>
<td><strong>Place of origin</strong></td>
</tr>
<tr>
<td><strong>Declared means of conveyance</strong></td>
</tr>
<tr>
<td><strong>Declared point of entry</strong></td>
</tr>
<tr>
<td><strong>Name of produce and quantity declared</strong></td>
</tr>
<tr>
<td><strong>Botanical name of plants</strong></td>
</tr>
</tbody>
</table>

This is to certify that the plants, plant products OR other regulated articles described above were imported into __________________________ (country of re-export) from __________________________ (country of origin) covered by Phytosanitary Certificate Number __________________________ of which the original □ certified true copy □ is attached to this certificate; that they are packed □ repacked □ in original □ new □ containers, and based on the original phytosanitary certificate □ an additional inspection □; that they are considered to Conform with the current phytosanitary requirements of the importing country, and that during storage in __________________________ (country of re-export), the consignment has not been subjected to the risk of infestation or infection. Insert tick in the appropriate box.

<table>
<thead>
<tr>
<th><strong>II. Additional Declaration</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(see AD1-AD6)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>III. Disinfestation and/or Disinfection Treatment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment</strong></td>
</tr>
<tr>
<td><strong>Chemical (active ingredient)</strong></td>
</tr>
<tr>
<td><strong>Duration of exposure</strong></td>
</tr>
<tr>
<td><strong>Additional information</strong></td>
</tr>
</tbody>
</table>

**Place of issue** ___________________________________________ STAMP OF ORGANIZATION

**Name of authorizing officer** ___________________________________________ **Date** ___________________________________________ **Signature** ___________________________________________

No financial liability with respect to this certificate shall attach to: __________________________________________________________________________
or to any of its officers or representatives. __________________________ (Name of Plant Protection Organization)
4.8 Terminology

To assist that correct terminology is being used, a glossary of phytosanitary terms and definitions is reproduced in Table 6.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional declaration</td>
<td>A statement that is required by an importing country to be entered on a phytosanitary certificate and which provides specific additional information pertinent to the phytosanitary conditions of a consignment [FAO, 1990]</td>
</tr>
<tr>
<td>Authority</td>
<td>The national Plant Protection Organization, or other entity or person official of the government, to deal with matters arising from the responsibility set forth [ISPM Pub. No.3 1996]</td>
</tr>
<tr>
<td>Certificate</td>
<td>An official document which attests to the phytosanitary status of any consignment affected by phytosanitary regulations [FAO, 1990]</td>
</tr>
<tr>
<td>Consignment</td>
<td>A quantity of plants, plant products and/or other regulated articles being moved from one country to another and covered by a single phytosanitary certificate (a consignment may be composed of one or more lots) [FAO, 1990; revised ISPM, Pub. No.3 1996]</td>
</tr>
<tr>
<td>Country of re-export</td>
<td>Country through a consignment of plants passed and was split up, store or had its packaging changed.</td>
</tr>
<tr>
<td>Country of transit</td>
<td>Country through which a consignment of plants passed without being exposed to contamination by pests in that country.</td>
</tr>
<tr>
<td>Detention</td>
<td>Keeping a consignment in official custody or confinement for phytosanitary quarantine [FAO, 1990; revised FAO, 1995; CEPM, 1999].</td>
</tr>
<tr>
<td>Entry of a consignment</td>
<td>Movement through a point of entry into an area [FAO, 1995].</td>
</tr>
</tbody>
</table>

Continued.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry (of a pest)</td>
<td>Movement of a pest into an area where it is not yet present or present but not widely distributed and being officially controlled [FAO, 1990].</td>
</tr>
<tr>
<td>Equivalency</td>
<td>The situation of phytosanitary measures that are not identical but have the same effect [FAO, 1995; revised CEPM, 1999; based on WTO Agreement on Application of Sanitary and Phytosanitary Measures].</td>
</tr>
<tr>
<td>Harmonization</td>
<td>The establishment, recognition and application by different countries of phytosanitary measures based on the common standards [FAO, 1995; revised CEPM, 1999; based on WTO Agreement on Application of Sanitary and Phytosanitary Measures].</td>
</tr>
<tr>
<td>Import Permit</td>
<td>Official document authorizing importation of a commodity in accordance with specified phytosanitary requirements [FAO, 1990; revised FAO, 1995].</td>
</tr>
<tr>
<td>International Standard for Phytosanitary Measures</td>
<td>An international standard adopted by the Conference of FAO, the Interim Commission on Phytosanitary Measures or the Commission on Phytosanitary Measures, under the IPPC [CEPM, 1996; revised CEPM, 1999].</td>
</tr>
<tr>
<td>International Standards</td>
<td>International standards established in accordance with Article X paragraph 1 [IPPC, 1997].</td>
</tr>
<tr>
<td>IPPC</td>
<td>International Plant Protection Convention, as deposited in 1951 with FAO subsequently amended [FAO, 1990; revised ICPM, 2001].</td>
</tr>
<tr>
<td>ISPM</td>
<td>International Standard for Phytosanitary Measures [CEPM, 1996; revised].</td>
</tr>
<tr>
<td>Legislation</td>
<td>Any act, law, regulation, guideline or other administrative order promulgated [ISPM Pub. No. 3l 1996].</td>
</tr>
</tbody>
</table>

*Continued.*
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Monitoring</strong></td>
<td>An official ongoing process to verify phytosanitary situations [CEPM, 1996].</td>
</tr>
<tr>
<td><strong>National Plant Protection Organization (NPPO)</strong></td>
<td>Official service established by a government to discharge the functions specified by the IPPC [FAO, 1990; formerly Plant Protection Organization (National)].</td>
</tr>
<tr>
<td><strong>Pest</strong></td>
<td>Any species, strain or biotype of plant animal or pathogenic agent, injurious to plants or plant products [FAO, 1990; revised FAO, 1995; IPPC, 1997].</td>
</tr>
<tr>
<td><strong>Pest-free area</strong></td>
<td>An area in which a specific pest does not occur as demonstrated by scientific evidence and in which, where appropriate, this condition is being officially maintained [FAO, 1990].</td>
</tr>
<tr>
<td><strong>Pest Risk Analysis</strong></td>
<td>The process of evaluating biological or other scientific and economic evidence to determine whether a pest should be regulated and the strength of any phytosanitary measure to be taken against it [FAO, 1995; revised IPPC, 1997].</td>
</tr>
<tr>
<td><strong>Pest Risk Assessment (for a quarantine pest)</strong></td>
<td>Evaluation of the probability of the introduction and spread of a pest and of the potential economic consequences [FAO, 1995; revised ISPM Pub. No. 11,200].</td>
</tr>
<tr>
<td><strong>Pest Risk Management (for a quarantine pest)</strong></td>
<td>Evaluation and selection of options to reduce the risk of introduction and spread of a pest [FAO, 1990; revised ISPM Pub. No. 11. 2001].</td>
</tr>
<tr>
<td><strong>Phytosanitary Certificate</strong></td>
<td>Certificate patterned after the model certificates of the IPPC [FAO, 1990].</td>
</tr>
<tr>
<td><strong>Phytosanitary measure</strong></td>
<td>Any legislation, regulation or official procedure having the purpose to prevent the introduction and/or spread of quarantine pests, or to limit the economy in regulated non-quarantine pests [FAO, 1995; revised IPPC, 1997; ISC, 2000. The agreed interpretation of the term phytosanitary measure accounts for the phytosanitary measures to regulated non-quarantine pests. This relationship is reflected in the definition found in Article II of IPPC (1997)].</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Plant quarantine</strong></td>
<td>All activities designed to prevent the introduction and/or spread of quarantine pests or to ensure their official control [FAO, 1990; revised FAO, 1995].</td>
</tr>
<tr>
<td><strong>Point of entry</strong></td>
<td>Airport, seaport, or land border point officially designed for the importation of consignments, and/or entrance of passengers [FAO, 1990].</td>
</tr>
<tr>
<td><strong>Post-entry quarantine</strong></td>
<td>Quarantine applied to a consignment after entry [FAO, 1995].</td>
</tr>
<tr>
<td><strong>PRA</strong></td>
<td>Pest Risk Analysis [FAO, 1995, revised ICPM, 2001].</td>
</tr>
<tr>
<td><strong>Quarantine</strong></td>
<td>Official confinement of regulated articles for observation and research or for further inspection, testing and/or treatment [FAO, 1990; revised FAO, 1995; CEPM, 2001].</td>
</tr>
<tr>
<td><strong>Quarantine pest</strong></td>
<td>A pest of potential economic importance to the area endangered thereby and not yet present there or present but not widely distributed and being officially controlled [FAO 1990; revised FAO, 1995; IPPC, 1997].</td>
</tr>
<tr>
<td><strong>Re-exported consignment</strong></td>
<td>Consignment that has been imported into a country from which it is then exported; consignment may be stored, split up, combined with other consignments or has changed (formerly country of re-export) [FAO, 1990; revised CEPM, 1996; C ICPM, 2001; ICPM, 2002].</td>
</tr>
<tr>
<td><strong>Region</strong></td>
<td>The combined territories of the member countries of a Regional Plant Protection Organization [FAO, 1990].</td>
</tr>
<tr>
<td><strong>Seeds</strong></td>
<td>A commodity class for seeds for planting or intended for planting and not for consumption or processing [FAO, 1990; revised ICPM, 2001].</td>
</tr>
<tr>
<td><strong>Spread</strong></td>
<td>Expansion of the geographical distribution of a pest within an area [FAO, 199].</td>
</tr>
<tr>
<td><strong>Technically justified</strong></td>
<td>Justified on the basis of conclusions reached by using an appropriate pest risk analysis where applicable, another comparable examination and evaluation of available information [IPPC, 1997].</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Transparency</td>
<td>The principle of making available, at the international level, phytosanitary measures and their rationale [FAO, 1995; revised CEPM, 1999; based on WTO Agreement on Application of Sanitary and Phytosanitary Measures].</td>
</tr>
<tr>
<td>Treatment</td>
<td>Officially authorized procedure for the killing, removal or rendering infertile of pests [FAO, 1990; revised FAO, 1995; ISPM Pub.No.15, 2002].</td>
</tr>
</tbody>
</table>
Technical Agreements on Harmonization of Seed Regulations in the SADC Region

Seed Variety Release
Seed Certification and Quality Assurance
Quarantine and Phytosanitary Measures for Seed

About ICRISAT

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that does innovative agricultural research and capacity building for sustainable development with a wide array of partners across the globe. ICRISAT’s mission is to help empower 600 million poor people to overcome hunger, poverty and a degraded environment in the dry tropics through better agriculture. ICRISAT belongs to the Alliance of Centers of the Consultative Group on International Agricultural Research (CGIAR).

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