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THE SEEDS ACT,
(CAP. 308)

—————
REGULATIONS
—————

(Made under section 26(4))

THE SEEDS (CONTROL OF QUALITY DECLARED SEEDS)
REGULATIONS, 2020

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THE SEEDS ACT,
(CAP. 308)

—————
REGULATIONS

(Made under section 26(4))

THE SEEDS (CONTROL OF QUALITY DECLARED SEEDS)
REGULATIONS, 2020

PART I
PRELIMINARY PROVISIONS

- Citation 1. These Regulations may be cited as the Seeds
(Control of Quality Declared Seeds) Regulations, 2020.
- Application 2. These Regulations shall apply to Quality Declared
Seeds growers, producers and dealers.
- Interpretation 3. In these Regulations, unless the context otherwise
requires—
- Cap. 308 “Act” means the Seeds Act;
- Cap. 287 “district” has the same meaning ascribed to it under the Local
Government (District Authorities) Act;
- “inspector” has the same meaning ascribed to it under the Act;
- “package” includes a sack, bag, barrel, case or any other
 container in which seed is placed or packed;
- “QDS” stands for Quality Declared Seeds;
- “Quality Declared Seed” has the same meaning ascribed to it
under the Act;
- “Quality Declared Seed dealer ” or “QDS dealer” means any
 small-scale farmer or group of small-scale farmers
 producing or processing seed for his or their own use
 or sale to the neighbouring farmers within the District
 where QDS is produced;
- “Quality Declared Seed producer or grower” means any small-
 scale farmer or group of small-scale farmers
 producing quality declared seed;

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“TOSCI” means the Tanzania Official Seeds Certification Institute established under the Act.

PART II
REGISTRATION OF QDS DEALERS

Condition for registration of QDS dealer

4.-(1) A person shall not produce, grow or deal in QDS unless that person is registered under these Regulations.

(2) A small scale farmer or group of small-scale farmers intending to become a QDS dealer shall apply for registration to the Chief Seed Certification Officer through village and district authorities where production will take place.

(3) The application for registration as QDS Dealer shall be in Form QDS I set out in the First Schedule and shall contain the following information-

- (a) name and address of the applicant;
- (b) location and size of farm where QDS is to be produced;
- (c) evidence of basic knowledge through training on aspects of seed;
- (d) recommendation from the village authority;
- (e) recommendation from the district authority;
- (f) evidence of availability of suitable land for QDS production; and
- (g) evidence of accessibility to appropriate facilities for seed conditioning and storage.

(4) An area intended for QDS production shall not exceed five acres for a small scale farmer and twelve acres for a group of small scale farmers.

(5) TOSCI shall, upon receiving the application, evaluate the application and upon being satisfied that the applicant has complied with all requirements, it shall register the applicant and issue a Certificate in Form QDS II as set out in the First Schedule.

(6) A Certificate of registration referred to under this regulation shall be issued upon the applicant’s payment of the prescribed fees and shall be valid for three years.

PART III
PROCEDURES FOR FIELD INSPECTION, SAMPLING AND TESTING OF
QUALITY DECLARED SEEDS

Notification for seed production

5.-(1) Every grower or producer of QDS or his agent shall, within thirty days after a seed crop is planted, notify TOSCI in Form QDS III set out in the First Schedule.

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(2) TOSCI shall not register any QDS field crop if notification is received after thirty days from the last date of planting.

(3) Upon receiving notification from a QDS grower or producer, TOSCI shall evaluate the particulars and notify the grower or producer whether or not his or her field crop is registered.

(4) TOSCI shall determine the number of registered fields to be inspected within a district, and in any case the number of fields to be inspected shall be at least ten percent of the registered fields.

Field
inspection

6.-(1) The standards for fields and procedures for crop inspection shall be as provided in the Second Schedule.

(2) An inspector shall conduct inspection of registered fields in accordance with QDS inspection procedures for each crop as provided for in the Second Schedule to these Regulations.

(3) In conducting field inspection, an inspector shall have powers of entry into any registered field, at any reasonable time, and shall not approve any seed crop if satisfied that it does not meet the prescribed quality control requirement and standards.

(4) The results of each inspection shall be issued in Form QDS IV set out in the First Schedule.

(5) Upon completion of the field inspection, the inspector shall fill an inspection report in Form QDS V set out in the First Schedule and the report shall be signed by the Chief Seed Certification Officer or any other officer acting on his behalf.

Procedure for
sampling and
testing
GN. NO. 37 of
2007

7. The procedure for sampling and testing of QDS shall be as provided under Part VII of the Seeds Regulations.

PART IV
SUPERVISION AND DECLARATION OF QUALITY DECLARED SEEDS
QUALITY

Responsibility
of QDS
producer or
grower

8.-(1) Every registered QDS producer or grower shall be responsible for quality control of his own seeds.

(2) The quality control measures to be taken by QDS

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producers or growers shall include-

- (a) ensuring that the seed production fields have satisfactory previous cropping histories for the proposed seed crops and the seed to be sown is eligible to produce Quality Declared Seeds;
- (b) ensuring that the seed crop is well grown;
- (c) arranging for remedial measures to be taken which includes rouging and other measures as may be necessary;
- (d) inspecting the seed fields according to the procedures outlined in the appropriate crop standards;
- (e) ensuring that the identity of the seed at harvest is maintained;
- (f) ensuring that seed conditioning is performed in such a way as to preserve the identity and varietal purity of the seed;
- (g) ensuring that appropriate samples are taken and submitted for testing in TOSCI laboratory or any other seed testing laboratory authorized by TOSCI; and
- (h) keeping records of all activities such as inspections, testing and sampling.

(3) For purposes of ensuring control of seed quality, TOSCI shall have the following duties-

- (a) registering QDS crop fields;
- (b) maintaining a list or a catalogue of registered varieties which shall be eligible for production of Quality Declared Seed;
- (c) maintaining register of QDS producers or growers;
- (d) ensuring that a minimum of ten percent field inspection of QDS is conducted;
- (e) ensuring general quality control;
- (f) training inspectors and QDS producers or growers;
- (g) supervising authorized inspectors;
- (h) initiating appropriate actions in case of any violation of seed legislation.

(4) A person shall not use the term "Quality Declared Seeds" in respect of seeds that are not grown or produced pursuant to the provisions of these Regulations.

Seed quality
declaration

9. Upon satisfactory field and laboratory results, a QDS producer, growers or dealer shall declare the quality of his seed by filing Form QDS VI (A) for true seed and Form QDS VI

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(B) for vegetatively propagated seeds set out in the First Schedule.

PART V
LABELING OF QUALITY DECLARED SEEDS

Marking and labeling

10.-(1) The Quality Declared Seeds offered for sale as true seed shall be packed in bags or containers safely closed and labeled with the following information-

- (a) name of the QDS dealer;
- (b) plant species;
- (c) name of the variety;
- (d) term "Quality Declared Seed";
- (e) net weight;
- (f) germination percentage;
- (g) physical purity;
- (h) date, month and year of germination test; and
- (i) district of production.

(2) Packing of Quality Declared Seeds offered for sale as vegetatively propagated seeds, shall be done in accordance with common practices and the label shall contain the following information-

- (a) name of the QDS dealer;
- (b) plant species;
- (c) name of the variety;
- (d) term "Quality Declared Seed";
- (e) year of production;
- (f) quantity (weight or number of pieces); and
- (g) district of production.

(3) Any label shall be attached in a manner that makes it impossible to be re-used once it has been removed.

(4) The information required under subregulations (1) and (2) on the label or outside of a package of seed shall be conspicuously, legibly and indelibly written or printed in Swahili and shall appear on one exposed face of the package or label and shall be of a size and colour that can be easily read.

(5) Whenever seed is treated with a poisonous material it shall be thoroughly stained with a conspicuous contrasting colour to show that the seed has been treated and the container of such seed shall be marked or attached with a label in a conspicuous part reading as follows-

"SUMU: MBEGU HIZI SIO KWA MATUMIZI YA CHAKULA CHA BINADAMU AU WANYAMA."

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or
“**IMEWEKWA SUMU YA.....**”(Name of
poisonous material or substance in bold letters in
Swahili).

(6) A label shall not contain any incorrect or misleading information, mark or brand name that might be construed as a variety name.

(7) A person, other than the ultimate user, shall not remove a label or seal or open a mechanically sewn or closed package of the seeds.

(8) A person shall not alter the name of a variety on the label of any seed package.

**PART VI
MISCELLANEOUS PROVISIONS**

Testing and re-testing

11.-(1) Any Quality Declared Seed offered for sale shall be tested every seven months from the date on which the last test was performed to determine the percentage of germination required to be shown on the label thereof.

(2) Notwithstanding subregulation (1), the Chief Seed Certification Officer may, prescribe longer or shorter periods for re-testing.

(3) A QDS dealer shall ensure that seed lots whose validity of germination test results has expired are re-tested.

Fees

12. The fees required to be paid under these Regulations shall be as prescribed in the Third Schedule.

Appeal against results of field inspection

13.-(1) A registered QDS grower or producer who disagrees with the results of any field inspection issued by the inspector may, within seven days from the date of the issuance of the results of the inspection, appeal to the Chief Seed Certification Officer.

(2) Where the Chief Seed Certification Officer is satisfied with the grounds of appeal, he shall direct a re-inspection to be conducted.

(3) Re-inspection shall be carried out by a team comprising of -

- (a) one senior inspector; and
- (b) an officer responsible for agriculture within the district.

(4) The QDS grower or producer or his duly appointed representative may be present during re-inspection.

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Appeals
against
decision of
Chief Seed
Certification
Officer

14. Any person who is aggrieved by a decision of the Chief Seed Certification Officer may, within fourteen days from the date of receiving notification of such decision, appeal to the Minister.

Offences and
penalties

15. Any person who contravenes the provisions of these Regulations commits an offence and shall, upon conviction, be liable to a fine of not less than one million shillings but not exceeding two million shillings or to imprisonment for a term not exceeding two years, or to both.

Training to
acquire
knowledge on
QDS

16.-(1) TOSCI shall be responsible for provision of training for purposes of registration of QDS dealers and may collaborate with any person in the provision of such training.

(2) TOSCI shall issue certificates to QDS dealers as evidence of attendance to the training.

Exercise of
powers and
functions
vested in
TOSCI

17. Powers and functions vested in TOSCI under these Regulations may be exercised and performed by any person authorised by TOSCI in writing.

Seeds (Control of Quality Declared Seeds)

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FIRST SCHEDULE

APPLICATION FOR REGISTRATION AS QDS DEALER

(Made under regulation 4(3))

S/N.....

Form QDS - I

To: Chief Seed Certification Officer:

(To be filled in Triplicate)

PART A: TO BE FILLED BY APPLICANT

1. Name _____
2. Postal Address _____ Physical address _____
3. Telephone Number _____ E-mail _____
4. Location of farm/ business premises:
Village _____ Ward: _____ District _____ Region: _____
5. Plant species to be produced _____
6. Mode of production you intend to use: own farm/ hired farm (*tick where appropriate*)
7. What are seed production facilities in possession _____, _____
8. Have you been involved in QDS production before? YES/NO. If "YES" when and where? _____
9. Have you attended any training in agricultural seed production? YES/NO. If "YES" when and where? _____
10. Which villages are you intending to sale your seeds? _____
11. Do you have enough storage facilities for seeds to be produced? YES/ NO. If "YES" state capacity and condition of the said storage facilities _____

Declaration :

I/We declare that all information provided herein above is true to the best of my/ our knowledge. I confirm that I will always adhere to the terms and conditions governing production and sale of

Seeds (Control of Quality Declared Seeds)

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Quality Declared Seeds.
Signed at.....this.....day of.....200.....
Signature:
PART B: TO BE FILLED BY THE VILLAGE AUTHORITY
We have examined the application by _____ and we hereby recommend that the applicant be registered as QDS dealer.
Name of the authorized village officer _____
Title _____
Postal Address _____
Telephone Number _____
E-mail _____
Signature and Stamp: _____
PART C: TO BE FILLED BY DISTRICT AUTHORITY
We have examined the application by _____, and hereby confirm that the
applicant has basic training in seed production and therefore recommend that the applicant be registered as QDS dealer.
Name of the authorized District Officer _____
Title _____
Postal Address _____
Telephone Number _____
E-mail _____
Signature and Stamp: _____

Seeds (Control of Quality Declared Seeds)

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FOR OFFICIAL USE ONLY

Application No: Date Received:

Fees Receipt No:
.....

If approved: Reg
No.....

If rejected, give reasons for
rejection.....

Dated:.....Signature of the responsible officer:.....

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CEERTIFICATE OF REGISTRATION AS QDS DEALER <i>(Made under regulation 4(5))</i>	
S/N.....	Form QDS – II
	Registration No.
This is to certify that..... of..... <i>(Name and address of Registrant)</i>	
has been registered as Quality Declared Seed dealer for the following crop(s)	
his farm /premises for business is located at <i>(village/ town/district/ region)</i>	
This registration shall be valid for the period offrom.....toand may be cancelled if the registrant fails to comply with terms and conditions for registration as set out in the Seed Regulations 2007 and the Regulations made there under.	
Issued atthis.....day of200.....	
Signature and stamp:..... <i>Chief Seed Certification Officer</i>	

Seeds (Control of Quality Declared Seeds)

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NOTIFICATION OF QUALITY DECLARED SEED PRODUCTION

(Made under regulation 5(1))

S/N.....

Form QDS - III

To: Tanzania Official Seed Certification Institute

(To be completed in triplicate)

Note:

- Separate form must be submitted for each crop and variety grown in the field and must be submitted within thirty (30) days after planting.
- A map giving clear instruction on how to reach the farm as well as the location of the field unit within the farm must be drawn overleaf.

1. Full name of Applicant: Address: Telephone:
2. Contact person in the field Address: Telephone:
3. Location of the field from the nearest town:
4. Location of the field within the village:
5. Details of seed crop grown (fill table below):

Plant species	Variety	QDS 1/QDS 2 (select as appropriate)	*Source of seed used (Supplier/Seller)	Lot No. of seed used	Area (Ha)	Planting date

*Note: Applicant to attach evidence of seed source.

6. Estimated flowering/Tasselling date:
7. Quantity of Seed Used: kg. No. of package(s): Weight of each package(s):kg.....
8. Estimated date of harvesting (approximate):
9. Previous crops and varieties grown in this field for the last two growing seasons

Declaration:

I..... hereby declare that all information provided here is true to the best of my knowledge and belief and I shall always observe all conditions governing seed production as provided for in the seed legislation.

Date:Signature of Applicant:

FOR OFFICIAL USE ONLY

Date received:.....Application No.....

Name of Inspector:.....

Application accepted/rejected: (Delete as appropriate)

Seeds (Control of Quality Declared Seeds)

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If rejected, reasons for rejection:.....

Field Registration No:

Application fees (Receipt No.).....

Date:Signature: Designation:.....

FIELD INSPECTION RESULTS <i>(Made under regulation 6(4))</i>					
S/N.....					
Form QDS –IV					
<i>(To be filled after every inspection)</i>					
Name of QDS Producer.....			Address.....		
Plant Species			Variety		
QDS 1/ QDS 2 (Tick whichever applicable)			Area (Acres):		
Does the crop have proper cultivar characteristics? No/Yes					
Field inspection results are as summarized below:					
Count	*Off - types	*Diseases	*Other features	*Objectionable weeds	*Other crop weeds
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
Total					
Average					
Percentage					
*Identity					
The isolation (distance/time): meters/days is adequate/inadequate and should be corrected (delete as appropriate).					
General conditions of crop e.g drought, crop husbandry, etc.....					
Further remarks.....					
Estimated yieldKg/acre					

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<p>Comments: This crop is approved/rejected.</p> <p>If rejected state reasons:.....</p> <p>Signature of QDS producer Date.....</p> <p>Name of Field Inspector: Signature.....Date.....</p> <p style="text-align: center;"><i>Field Inspector</i></p>

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FINAL FIELD INSPECTION REPORT

(Made under regulation 6(5))

S/N.....
Form QDS - V

(To be filled in Duplicate and copy to QDS Producer)

Producer name.....Address.....

Plant species.....Variety:

QDS 1/QDS 2Area (Ha)

Factor	1 st inspection	2 nd Inspection	3 rd Inspection	Total No.	or %
Off – types					
Diseases					
Weeds					
Other crops					
Other (specify)					

Remarks.....
.....
.....

This Crop is approved/rejected (delete as appropriate)

If rejected, state reasons:
.....
.....

Signature.....Date.....

...
Chief Seed Certification Officer

QUALITY DECLARATION FORM
(Made under regulation 9)

S/N.....
Form QDS - VI(A)

(To be filled in Triplicate)

- 1 Name and address of the seed
- 2 producer.....
- 3 Plant
- 4 species.....
- 5 Variety name
- 6 Seed lot number
- 7 Weight of seed lot
- Number and kind of containers
- A sample drawn from the lot was tested at(laboratory) on.....
(date)
- 8 Test results:
pure seed%
- (b) germination capacity%
- (c) moisture content.....%
- 9 The seed lot has been treated with:

I.....do hereby declare that the seed lot with the above seed lot number has been produced in accordance with the requirements for Quality Declared Seed and has been appropriately inspected and tested to meet the required QDS standards.

I further confirm that all information stated herein above is true to the best of my knowledge.

Signed at this..... day of20.....

Signature of QDS Producer:
.....

Copy:

Chief Seed Certification Officer
District Agricultural Officer

[R.1(1)]

QUALITY DECLARATION FORM

(Made under Regulation 7)

S/N.....

Form QDS VI B

(To be filled in Triplicate)

1. Name and address of the seed
2. producer.....
3. Plant
4. species.....
5. Variety name
- Field number
- Year of production
6. Field Inspection results:
 - (a) variety purity
 -%
 - (b) diseases
 -%
 - (c) insect pests.....
 -%

I.....do hereby declare that the seed field with the above field number has been produced in accordance with the requirements for Quality Declared Seed and has been appropriately inspected and meet the required QDS standards.

I further confirm that all information stated herein above is true to the best of my knowledge.

Signed atthis.....day of200.....

Signature of QDS Producer:

Copy:

Chief Seed Certification Officer
District Agricultural Officer

Seeds (Control of Quality Declared Seeds)

GN. No. 271 (contd.)

SECOND SCHEDULE

(Made under regulation 6(1))

PROCEDURE FOR QDS FIELD CROP INSPECTION AND FIELD STANDARDS

PART I

Applicable to:

MAIZE: Open – Pollinated
Zea mays L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, shelling, cleaning, treatment, storage, and bagging.
Land requirement	2. The maize seed crop shall not be grown on land on which the previous crop was maize unless it was of the same variety and was approved as superior class.
Isolation	3.- (1) The seed field shall be isolated from all sources of undesirable pollen by a distance of one hundred ninety meters . (2) Where isolation is by timing, isolation shall be achieved by thirty days difference in flowering time.
Variety purity	4. A minimum of 98% of the maize plants must conform to the characteristics of the variety.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6. The seed field shall be reasonably free from smut, if smut is found remedial action in the way of rouging shall be taken.
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8.- (1) Seed crop field shall be inspected at least twice; the first inspection at tasseling when varietal characteristics are best observed, second at maturity. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.- (1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings: - (a) location of the seed crop field; (b) variety to be inspected; (c) seed source; and

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- (d) the previous cropping history of the field.
 - (2) The inspector shall confirm that maize plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements.
 - (3) The inspector shall conduct an effective inspection to estimate the number of off-types, weeds and disease situation.
 - (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field. At the final inspection, examination of disease shall involve 500 plants taken at random, 100 at each of 5 places.
 - (5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
- Post harvest inspections 10. - (1) Upon harvest, the seed inspector may make at least one inspection to ensure varietal purity before shelling and during drying, bagging and seed storage.
- (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.
 - (3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.
- Seed quality standards 11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-
- (a) germination - 80% minimum
 - (b) purity - 98% minimum
 - (c) moisture content - 13% Maximum

PART II

Applicable to

SORGHUM: Open-Pollinated

Sorghum bicolor (L.) Moench

- Facilities 1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
- Land requirement 2. (1) The sorghum seed crop shall not be grown on land on which the previous crop was sorghum unless it was of the same variety and was approved as superior class.
- (2) The sorghum seed field shall be free from johnson grass (*Sorghum*

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halepense (L.) Pers.) and sudan grass (*Sorghum sudanensis*).

Isolation	3.- (1) The seed field shall be isolated from the contaminants by the following distances as shown below: (a) fields of other varieties of grain - 100 m (minimum) (b) fields of similar variety of inferior grade - 100 m (minimum) (c) forage sorghum - 400 m (minimum) (d) other sorghum species - 400 m (minimum)
Variety purity	4. A minimum of 98% of the sorghum plants shall conform to the characteristics of the variety.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6. (1) The seed field shall be reasonably free from kernel smut or grain smut (<i>Sphacelothecatorghi</i>) as well as head smut. (2) Seed fields should be thoroughly rouged to remove ear heads infected by sugary or ergot disease
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and timing	8. (1) Seed crop field shall be inspected at least twice, the first inspection before flowering and the second at maturity, prior to harvest. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings :- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source; and (d) the previous cropping history of the field. (2) The inspector shall confirm that sorghum plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall examine carefully 150 plants taken at random, 30 at each of 5 separate places in the field. At the final inspection examination of diseases shall involve 5,000 head taken at random 1,000 at each of 5 places. (5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	10.- (1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.

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(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

- (a) germination - 70% minimum
- (b) purity - 98% minimum
- (c) moisture Content - 12 % Maximum
- (d) restricted weeds - 4 seeds/kg (minimum)

PART III

Applicable to:

PEARL MILLET: Synthetics and Open-Pollinated

Pennisetum glaucum (L) R.Br. Emend Stuntz

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The pearl millet seed crop shall not be grown on land on which the previous crop was millet unless it was of the same variety and was approved as superior class.
Isolation	3.-(1) The seed field shall be isolated from all sources of undesirable pollen by a distance of one hundred meters. (2) Isolation from other crop species with similar seed size shall be by distance of three meters or by physical barrier such as ditch, hedges or fence for the purposes of preventing mechanical mixture.
Variety purity	4. A minimum of 98% of the pearl millet plants shall conform to the characteristics of the variety.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6. The seed field shall be reasonably free from the following seed borne diseases:- (a) Green ear - <i>Sclerosporagraminicola</i> (b) Ergot - <i>Claviceps microcephala</i> Green smut - <i>Tolyposporium penicillarias</i>
Other diseases	7. The seed crop must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.

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Number and Timing	<p>8. (1) Seed crop field shall be inspected at least twice; the first inspection just before flowering when varietal characteristics are best observed, second at maturity.</p> <p>(2) Additional inspections, if any, may be conducted where a particular problem has been observed.</p>
Inspection procedures	<p>9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings :-</p> <ul style="list-style-type: none">(a) location of the seed crop field;(b) variety to be inspected;(c) seed source; and(d) the previous cropping history of the field. <p>(2) The inspector shall confirm that pearl millet plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements.</p> <p>(3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation.</p> <p>(4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field. At the final inspection examination of disease shall involve 5,000 heads taken at random, 1,000 at each of 5 places.</p> <p>(5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.</p>
Post harvest inspections	<p>10. - (1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and drying, bagging and seed storage.</p> <p>(2) Carryover seed shall be sampled and retested for viability after every seven-months period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.</p> <p>(3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.</p>
Seed quality standards	<p>11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-</p> <ul style="list-style-type: none">(a) germination - 70% minimum(b) purity - 98% minimum(c) moisture Content - 12% Maximum(d) restricted weeds - 4 seeds/kg (minimum)

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PART IV

Applicable to:

RICE

Oryza sativa L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, storage and bagging.
Land requirement	2. The land to be used for seed production shall be free from volunteer plants during the production period.
Isolation	3. - (1) The seed field shall be isolated from all sources of undesirable pollen by a distance of five meters. (2) Isolation from other crop species with similar seed size shall be by distance of three meters or by physical barrier such as ditch, hedges or fence for the purposes of preventing mechanical mixture.
Variety purity	4. A minimum of 98% of the rice plants shall conform to the characteristics of the variety.
Weeds	5. -(1) The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop. (2) The wild rice and red rice are strictly prohibited in any field of rice.
Seed-borne diseases	6. The seed field shall be reasonably free from the following seed borne diseases:- (a) Rice blast - <i>Pyriculariaoryzae</i> (b) White tip nematode - <i>Aphelenchoidesbesseyi</i> (c) Bacteria leaf blight - <i>Xanthomonasoryzae</i>
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. (1) Seed crop field shall be inspected at least twice, the first inspection at full heading and the second just before harvesting. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings :- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that rice plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number

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of off types, weeds and disease situation.

(4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 10 random areas of 1 x1 m. in the field and estimate the percentage of plants not conforming to the characteristics of the variety and the percentage of objectionable weeds. At the final seed inspection 5 places each 2000 heads shall be counted to estimate disease rates.

(5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

Post harvest inspections

10. - (1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.

(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and re-tested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

- (a) germination - 75% minimum
- (b) purity - 98% minimum
- (c) moisture Content - 13% Maximum
- (d) restricted weeds - 4 seeds/kg (minimum)
- (e) prohibited weed - None

PART V

Applicable to:

WHEAT

Triticumaestivum L. emend Fiori et Paol and *Triticum durum* Desf.

Facilities

1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.

Land requirement

2. The wheat seed crop shall not be grown on land on which the previous crop was wheat unless it was of the same variety and was approved as superior class.

Isolation

3.-(1) The seed field shall be isolated from all sources of undesirable pollen by a distance of five meters.

(2) A seed crop shall be isolated from a neighboring field infected with loose smut (*Ustilangotriciti*) at a level of 5% or more by a distance of one hundred fifty meters.

Purity

4.-(1) A minimum of 98% of the wheat plants shall conform to the characteristics of the variety.

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	(2) There shall be not more than 0.05% of other cereal species with similar seed size.
Weeds	5.-(1) The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop. (2) Field bindweed (<i>Convolvusarvenses</i>) shall be strictly prohibited in any field of wheat.
Seed-borne diseases	6. The seed field shall be reasonably free from loose smut (<i>Ustilangotriciti</i>).
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. (1) Seed crop field shall be inspected at least twice, the first inspection at full heading and the second just before harvesting. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source; and (d) the previous cropping history of the field. (2) The inspector shall confirm that wheat plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 10 random areas of 1 x1 m in the field and estimate the percentage of panicles not conforming to the characteristics of the variety the percentage of prohibited weeds, and other cereals with similar seed size will be counted separately. (5) If either the number of off types or number of other cereal species exceed the levels, the field shall be rejected. At the final field inspection 5 places each of 2000 heads shall be counted to estimate diseases rates. (6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.

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(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

- (a) Pure seed - 98% (minimum)
- (b) Moisture content - 12% (Maximum)
- (c) Weed seed content -
 - Prohibited - None
 - Restricted - 4 seed/kg
- (d) Germination - 80%

PART VI

Applicable to:

BEANS

Phaseolusspp.

Facilities

1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.

Land requirement

2. The beans seed crop shall not be grown on land on which the previous crop was bean unless it was of the same variety and was approved as superior class.

Isolation

3.- (1) The seed field shall be isolated from all sources of undesirable pollen by a distance of ten meters .

(2) A seed crop shall be isolated from other crop species with similar seed size by a distance of three meters to prevent mechanical admixture or a physical barrier such as ditch, hedge and fence.

Purity

4. -(1) A minimum of 98% of the bean plants shall conform to the characteristics of the variety.

(2) There shall be not more than one plant of other crop species with similar seed size in every 10,000 plants (0.01%).

Weeds

5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.

Seed-borne diseases

6.-(1) The seed field shall be reasonably free from the following seed-borne diseases:

- (a) Bacterial blight
- (b) Halo blight
- (c) Anthracnose
- (d) Bean mosaic

Other diseases

7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal

Seeds (Control of Quality Declared Seeds)

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	characteristics.
Number and Timing	8. (1) Seed crop field shall be inspected at least twice; the first inspection shall be done just before flowering, the second before harvesting. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings :- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that bean plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field. (5) At the final inspection examination of diseases shall involve 2,500 plants taken at random, 500 at each of 5 places. (6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	10. - (1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances. (3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.
Seed quality standards	11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:- (a) Germination: - 70% (minimum) (b) Pure seed: - 98% (minimum) (c) Other crop seeds per unit weight (Maximum): - None (d) Weed seeds per unit weight (Maximum): - None (e) Moisture content (Maximum): - 10%

PART VII

Applicable to:

COWPEA

Vigna unguiculata (L) walp.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The cowpea seed crop shall not be grown on land on which the previous crop was cowpeas unless it was of the same variety and was approved as superior class.
Isolation	3. The seed field shall be isolated from all sources of undesirable pollen by a distance of ten meters and from fields of crop species with similar seed size by three meters.
Purity	4.-(1) A minimum of 98% of the cowpeas plants shall conform to the characteristics of the variety. (2) There shall not be more than 0.1% of other crop species with similar seed size in the cowpea seed crop.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6.-(1) The seed fields shall be reasonably free from the following seed-borne diseases:- (a) Anthracnose (b) Halo blight (c) Cowpeas Mosaic Virus
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. (1) Seed crop field shall be inspected at least twice; the first inspection shall be done just before flowering, the second before harvesting. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings: - (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that cowpea plants generally conform to

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the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements.

(3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation.

(4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field.

(5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

Post harvest inspections

10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.

(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using the International Seed Testing Association Regulations and Procedures for seed testing:-

(a) Pure seed	98%
(b) Other crop seed	None
(c) Weed seed	None
(d) Moisture content	10%
(e) Germination	70%
(f) Weed/seeds per unit weight	None

PART VIII

Applicable to:

GREEN GRAM

(Phaseolus aureus (Roxb.))

Facilities

1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.

Land requirement

2. The Green gram seed crop shall not be grown on land on which the previous crop was Green gram unless it was of the same variety and was approved as superior class.

Isolation

3. - (1) The seed field shall be isolated from all sources of undesirable pollen by a distance of ten meters.

(2) A seed crop shall be isolated from a field of crop species with similar seed size by three meters to prevent mechanical mixture.

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Purity	<p>4.-(1) A minimum of 98% of the green gram plants shall conform to the characteristics of the variety.</p> <p>(2) There shall be not more than 2% of other crop species with similar seed size.</p>										
Weeds	<p>5. - (1) The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.</p>										
Diseases	<p>6. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.</p>										
Number and Timing	<p>7. (1) Seed crop field shall be inspected at least twice; the first inspection shall be done just before flowering, the second before harvesting.</p> <p>(2) Additional inspections, if any, may be conducted where a particular problem has been observed.</p>										
Inspection procedures	<p>8. (1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:-</p> <ul style="list-style-type: none">(a) location of the seed crop field;(b) variety to be inspected;(c) seed source; and(d) the previous cropping history of the field. <p>(2) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation.</p> <p>(3) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field.</p> <p>(4) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.</p> <p>(5) Decision to reject green gram seed from the crop due to presence of any of the diseases, shall be made upon the recommendations from field inspection and laboratory test results.</p>										
Post harvest inspections	<p>9.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.</p> <p>(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.</p>										
Seed quality standards	<p>10. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-</p> <table><tr><td>(a) Pure seed</td><td>98%</td></tr><tr><td>(b) Other crop seed</td><td>None</td></tr><tr><td>(c) Weed seed</td><td>None</td></tr><tr><td>(d) Germination</td><td>70%</td></tr><tr><td>(e) Moisture content</td><td>10%</td></tr></table>	(a) Pure seed	98%	(b) Other crop seed	None	(c) Weed seed	None	(d) Germination	70%	(e) Moisture content	10%
(a) Pure seed	98%										
(b) Other crop seed	None										
(c) Weed seed	None										
(d) Germination	70%										
(e) Moisture content	10%										

Seeds (Control of Quality Declared Seeds)

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PART IX

Applicable to:

PIGEON PEA

Cajanuscajan L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The pigeon pea seed crop shall not be grown on land on which the previous crop was pigeon peas unless it was of the same variety and was approved as superior class.
Isolation	3. The seed field shall be isolated from all sources of undesirable pollen by a distance of ten meters and from fields of crop species with similar seed size by three meters .
Purity	4.-(1) A minimum of 98% of the pigeon pea plants shall conform to the characteristics of the variety. (2) There shall not be more than 0.1% of other crop species with similar seed size in the pigeon pea seed crop.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6.-(1) The seed field shall be reasonably free from Anthracnose.
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. (1) Seed crop field shall be inspected at least twice; the first inspection shall be done at vegetative stage just before flowering, the second at maturity stage. (2) Additional inspections if any may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that pigeon pea plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field.

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	(5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances. (3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.
Seed quality standards	11. The seed must conform to the following standards as assessed using the International Seed Testing Association Regulations and Procedures for seed testing:- (a) Pure seed 98% (b) Other crop seed None (c) Weed seed None (d) Moisture content 10% (e) Germination 70% (f) Weed/seeds per unit weight None (g) Moisture content 10%

PART X

Applicable to:

GROUNDNUT
Arachishypogaea L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The groundnut seed crop shall not be grown on land on which the previous crop was groundnut unless it was of the same variety and was approved as superior class.
Isolation	3. The seed field shall be isolated from all sources of undesirable pollen and from other crop species of similar seed size by a distance of three meters to prevent mechanical mixture.
Purity	4.-(1) At least 98% of the groundnuts plants must conform to the characteristics of the variety. (2) There shall be not more than 2% of other legume species with similar seed size.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6. The seed crop must be reasonably free from seed borne diseases.
Other diseases	7. The seed field must be reasonably free from other diseases such that the

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	severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and timing for inspection	8.-(1) The seed field shall be inspected twice; the first just before flowering, second at maturity. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source; and (d) the previous cropping history of the field. (2) The inspector shall confirm that groundnut plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of the five separate places in the field. The number of plants not conforming to the characteristics of the variety and the number of plants of other crop species with similar seed size will be counted separately. (5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	10. - (1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances. (3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.
Seed quality standards	11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:- (a) Germination (minimum) - 70% (b) Purity (minimum) - 98% (c) Other crop seeds per unit weight (Maximum) - None (d) Weed seed per unit weight (Maximum) - None (e) Moisture content (Maximum) - 10%

Seeds (Control of Quality Declared Seeds)

GN. No. 271 (contd.)

PART XI

Applicable to:

SESAME

(Sesamum indicum L.)

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The sesame crop shall not be grown on land on which the previous crop was sesame unless it was of same variety and was approved as superior class.
Isolation	3.- (1) The seed field shall be isolated from all sources of undesirable pollen and from other crop species of similar seed size by a distance of three meters to prevent mechanical mixture
Purity	4. (1) At least 98% of the sesame plants must conform to the characteristics of the variety. (2) There shall be not more than 2% of other crop species with similar seed size.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6.-(1) The seed field shall be reasonably free from sesame leaf spot - <i>Cercospora sesame</i> . (2) The decision to reject the seed crop showing presence of seed borne disease specified herein shall be made after laboratory test results.
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and timing for inspection	8. (1) The seed field shall be inspected twice; the first just before flowering, second at maturity. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source; and (d) the previous cropping history of the field. (2) The inspector shall confirm that sesame plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation.

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(4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of the five separate places in the field. The number of plants not conforming to the characteristics of the variety and the number of plants of other crop species with similar seed size will be counted separately.

(5) At the final inspection examination of disease shall involve 2,500 plants taken at random 500 plants at each of 5 places.

(6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

Post harvest inspections

10. - (1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.

(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

(a) Germination (minimum)	-	70%
(b) Purity (minimum)	-	98%
(c) Other crop seeds per unit weight (Maximum)	-	None
(d) Weed seed per unit weight (Maximum)	-	None
(e) Moisture content (Maximum)	-	10%

PART XII

Applicable to:

SUNFLOWER: Open-Pollinated

Helianthus annuusL.

Facilities

1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.

Land requirement

2. The sunflower seed crop shall not be grown on land on which the previous crop was sunflower unless it was of the same variety and was approved as superior class.

Isolation

3.-(1) The seed field shall be isolated from all sources of undesirable pollen by a distance of two hundred meters.

(2) The seed field shall also be isolated from other crop species of similar

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	seed size by a distance of 3m to prevent mechanical mixture.
Purity	4. At least 98% of the sunflower plants must conform to the characteristics of the variety.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Diseases	6. The seed crop must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	7. (1) The seed field shall be inspected three times, the first before flowering, second at flowering and the third, before harvesting. (2) Additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	8.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that sunflower plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random at each of 5 separate places in the field. At final inspection the count of off-types shall include plants with multiple heads and total of off-types shall not exceed 3%. (5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	9.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity during threshing and during drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances. (3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.
Seed quality standards	10. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:- (a) Germination - 70% (minimum)

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(b) Purity (minimum)	-	98%
(c) Other crop seeds per unit weight (Maximum)	-	None
(d) Weed seed per unit weight (Maximum)	-	None
(e) Moisture content (Maximum)	-	10%

PART XIII

Applicable to:

AFRICAN CABBAGE

Brassica carinata L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The land to be used for seed production must be free from volunteer plants including those of other Brassica species.
Isolation	3. The seed field shall be isolated from all other flowering crops of African cabbage and other Brassica species that freely cross with African cabbage by a minimum distance of one thousand meters.
Purity	4.-(1) At least 98% of the African cabbage plants must conform to the characteristics of the variety. (2) There shall not be more than 0.5% of other crop species with similar seed size.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6.- The seed crop shall be reasonably free from the following seed-borne diseases:- (a) Black rot (b) Leaf spots - <i>Alternariabrassicae</i> - <i>Alternariabrassicicola</i>
Other diseases	7. The seed crop must be reasonably free from other diseases such that the severity of the disease shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. - (1) The seed field shall be inspected at least twice, once at the vegetative stage when varietal characteristic are best observed and a second time at early flowering. (2) An additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the following:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and

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(d) the previous cropping history of the field.

(2) The inspector shall confirm that African cabbage plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements.

(3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation.

(4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random 30 at each of 5 separate places in the field. The number of plants not conforming to the characteristics of the variety and the number of plants of other varieties of brassica crop species with similar seed size shall be counted separately.

(5) When inspecting for seed-borne diseases, the inspector shall carefully examine 2500 plants per hectare taken at random 500 plants at each of 5 places.

(6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

Post harvest inspections

10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.

(2) Carryover seeds shall be sampled and retested for viability after every seven-month period. Such seeds may be sampled and retested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

(a) Germination (minimum)	-	70%
(b) Purity (minimum)	-	98%
(c) Other crop seeds per unit weight (Maximum)	-	None
(d) Weed seed per unit weight (Maximum)	-	None
(e) Moisture content (Maximum)	-	10%

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PART XIV

Applicable to:

AFRICAN EGGPLANT
Solanummarcrocarpum L.
Solanumaethiopicum L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, extraction, drying, cleaning, treatment, storage and bagging.
Land requirement	2. The land to be used for seed production must be free from volunteer plants.
Isolation	3. The seed field shall be isolated from all other flowering crops of African eggplant by a minimum distance of one hundred meters.
Purity	4. At least 98% of the African Eggplants must conform to the characteristics of the variety.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6. The seed crop shall be reasonably free from the following seed-borne diseases:- (a) Bacterial spot (b) Verticillium wilt
Other diseases	7. The seed crop must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. (1) The seed field shall be inspected at least twice, once at the vegetative stage when varietal characteristic are best observed and a second time at early flowering. (2) An additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on - (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that African Eggplant generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 2500 plants per hectare, taken at random of 500 plants at each of 5 places. (5) After inspection, the inspector shall complete inspection report and

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make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

Post harvest inspections

10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before extraction and during drying, bagging and seed storage.

(2) Carryover seeds shall be sampled and retested for viability after every seven-month period. Such seeds may be sampled and retested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.

Seed quality standards

11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

(a) Germination	-	70%
(b) Purity	-	98%
(c) Weed per unit weight (Maximum)	-	None
(d) Other crop seeds per unit weight (Maximum)	-	None
(e) Moisture content	-	10%

PART XV

Applicable to:

AMARANTHS

Amaranthus spp.

Facilities

1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, storage and bagging.

Land requirement

2. The land to be used for seed production shall be free from volunteer plants including those of wild species of Amaranthus.

Isolation

3. -The seed field shall be isolated from all other fields of Amaranths by a minimum distance of two hundred meters and a field of similar variety and grade by fifty meters.

Purity

4. At least 95% of the Amaranths plants must conform to the characteristic of the variety.

Weeds

5. The seed field shall be reasonably free from weeds and wild Amaranthus species such that the weed growth does not prevent a valid inspection of the Amaranths crop.

Other diseases

6. The seed crop must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.

Number and Timing

7.-(1) The seed field shall be inspected at least twice; first at the vegetative stage when varietal characteristic are best observed and a second time at early

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	flowering.
	(2) An additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	8.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on: - (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that Amaranths plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field. The number of plants not conforming to the characteristics of the variety and the number of plant of other species of amaranths with similar seed size will be counted separately. (5) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	9.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances. (3) The inspector may conduct an additional post harvest inspections, where there is a need to undertake such inspection.
Seed quality standards	10. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:- (a) Germination - 70% (b) Purity - 95% (c) Moisture contents - 9% (d) Weed per unit weight (Maximum) - 8 seed/ kg (e) Other species of amaranths: seeds per unit weight (Maximum) - 8 seed/ kg

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PART XVI

Applicable to:

NIGHTSHADE: Open pollinated
Solanum spp.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, extraction, drying, cleaning, treatment, storage and bagging.
Land requirement	2. The land to be used for seed production shall be free from volunteer plants including those of wild species of Nightshade.
Isolation	3. The seed field shall be isolated from all other fields of Nightshade by a minimum distance of one hundred meters.
Purity	4. At least 98% of the Nightshade plants must conform to the characteristic of the variety.
Weeds	5. The seed field shall be reasonably free from weeds such that the weed growth does not prevent a valid inspection of the Nightshade crop.
Other diseases	6. The seed crop must be reasonably free from other diseases such that the severity of the disease shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	7. (1) The seed field shall be inspected at least twice, first at the vegetative stage when varietal characteristics are best observed and a second time at early flowering. (2) An additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	8.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that Nightshade plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random, 30 at each of 5 separate places in the field. The number of plants not conforming to the characteristics of the variety and the number of plant of other Nightshade species with similar seed size will be counted separately. (5) When inspecting for seed-borne diseases, the inspector shall carefully examine 2500 plants per hectare taken at random 500 plants at each of 5 places. (6) After inspection, the inspector shall complete inspection report and make

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a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

Post harvest inspections

9.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure variety purity before extraction and during drying, bagging and seed storage.

(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.

(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.

Seed quality standards

10. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-

(a) Germination	-	60%
(b) Purity	-	98%
(c) Moisture contents	-	10%
(d) Weed seed per unit weight (Maximum)	-	None
(e) Other crop seeds per unit weight (Maximum)	-	None

PART XVII

Applicable to:

OKRA

Abelmoschus esculentus L.

Facilities

1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.

Land requirement

2. The land to be used for seed production must be free from volunteer plants.

Isolation

3. The seed field shall be isolated from all other flowering crops of Okra by a minimum distance of two hundred meters.

Purity

4. At least 99% of the Okra must conform to the characteristics of the variety.

Weeds

5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.

Seed-borne diseases

6. The seed crop shall be reasonably free from the following seed-borne diseases:-

- (a) Verticillium wilt
- (b) Fusarium wilt (*Fusarium semitectum*)

Other diseases

7. The seed crop must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.

Number and Timing

8.-(1) The seed field shall be inspected at least twice, first at the vegetative stage when varietal characteristic are best observed and a second time at early flowering.

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	(2) An additional inspections, if any, may be conducted where a particular problem has been observed.															
Inspection procedures	<p>9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:-</p> <ul style="list-style-type: none">(a) location of the seed crop field;(b) variety to be inspected;(c) seed source and(d) the previous cropping history of the field. <p>(2) The inspector shall confirm that Okra generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements.</p> <p>(3) The inspector shall conduct an effective inspection to estimate the number of off-types, weeds and disease situation.</p> <p>(4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random 30 at each of 5 separate places in the field.</p> <p>(5) When inspecting for seed-borne diseases, the inspector shall carefully examine 2500 plants per hectare taken at random 500 plants at each of 5 places.</p> <p>(6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.</p>															
Post harvest inspections	<p>10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.</p> <p>(2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.</p> <p>(3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.</p>															
Seed quality standards	<p>11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-</p> <table border="0" style="margin-left: 40px;"><tr><td>(a) Germination</td><td style="text-align: center;">-</td><td style="text-align: right;">70%</td></tr><tr><td>(b) Purity</td><td style="text-align: center;">-</td><td style="text-align: right;">98%</td></tr><tr><td>(c) Weed per unit weight (Maximum)</td><td style="text-align: center;">-</td><td style="text-align: right;">None</td></tr><tr><td>(d) Other crop seeds per unit weight (Maximum)</td><td style="text-align: center;">-</td><td style="text-align: right;">None</td></tr><tr><td>(e) Moisture content</td><td style="text-align: center;">-</td><td style="text-align: right;">10%</td></tr></table>	(a) Germination	-	70%	(b) Purity	-	98%	(c) Weed per unit weight (Maximum)	-	None	(d) Other crop seeds per unit weight (Maximum)	-	None	(e) Moisture content	-	10%
(a) Germination	-	70%														
(b) Purity	-	98%														
(c) Weed per unit weight (Maximum)	-	None														
(d) Other crop seeds per unit weight (Maximum)	-	None														
(e) Moisture content	-	10%														

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PART XVIII

Applicable to:

ONION: Open pollinated

Allium cepa L.

Facilities	1. QDS dealer shall be required to have appropriate facilities for seed harvesting, drying, threshing, cleaning, treatment, storage and bagging.
Land requirement	2. The land to be used for seed production must be free from volunteer plants.
Isolation	3. The seed field shall be isolated from all other flowering crops of Onion by a minimum distance of one thousand meters between different varieties and five hundred meters between similar varieties.
Purity	4. At least 98% of the Onion must conform to the characteristics of the variety.
Weeds	5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
Seed-borne diseases	6. The seed crop shall be reasonably free from the following seed-borne diseases:- (a) <i>Stemphyllium spp.</i> (b) Purple blotch (c) Neck rot - <i>Botrytis cinerea</i>
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8. -(1) The seed crop field shall be inspected at least thrice, first bulbs crop inspection, second at the time of flowering and the third before harvesting (2) An additional inspections, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that Onion generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random 30 at each of 5 separate places in the field.

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- (5) When inspecting for seed borne diseases, the inspector shall carefully examine 2500 plants per hectare taken at random 500 plants at each of 5 places.
- (6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
- Post harvest inspections
- 10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before threshing and during drying, bagging and seed storage.
- (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances.
- (3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.
- Seed quality standards
11. The QDS shall conform to the following standards as assessed using International Seed Testing Association Regulations and Procedures for seed testing:-
- | | |
|---|---------------|
| (a) Germination | 60% |
| (b) Pure seed | 98% (minimum) |
| (c) Weed/seed per unit weight (Maximum) | None |
| (d) Other crop seeds per unit weight | None |
| (e) Moisture content | 10% |

PART XIX

Applicable to:

TOMATO

Lycopersiconlycopersicum Mill.

-
- Facilities
1. QDS dealer shall be required to have appropriate facilities for seed harvesting, extraction, drying, cleaning, treatment, storage and bagging.
- Land requirement
2. The seed crop shall not be grown on land which the previous crop was tomato or any other species of solanaceae within the previous two year.
- Isolation
3. The seed field shall be isolated from all other flowering crops of tomato by a minimum distance of twenty five meters.
- Purity
4. At least 99% of the tomato must conform to the characteristics of the variety.
- Weeds
5. The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.

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Seed-borne diseases	6. The seed crop shall be reasonably free from the following seed-borne diseases:- (a) Bacteria canker (b) Tomato Mosaic Virus (c) Bacteria spot (d) Fusarium wilt - <i>Fusariumlycopersici</i> (e) Early blight
Other diseases	7. The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
Number and Timing	8.-(1) The seed field shall be inspected at least twice, first at the vegetative stage when varietal characteristic are best observed and a second time at ripening of the first fruits. (2) Additional inspection, if any, may be conducted where a particular problem has been observed.
Inspection procedures	9.-(1) Before entering the field, an inspector shall confirm with the seed grower or producer on the followings:- (a) location of the seed crop field; (b) variety to be inspected; (c) seed source and (d) the previous cropping history of the field. (2) The inspector shall confirm that tomato plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. (3) The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. (4) For the purposes of conducting an effective inspection, the inspector shall carefully examine 150 plants taken at random 30 at each of 5 separate places in the field. (5) When inspecting for seed borne diseases, the inspector shall carefully examine 2500 plants per hectare taken at random 500 plants at each of 5 places. (6) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.
Post harvest inspections	10.-(1) Upon harvest, the seed inspector shall make at least one inspection to ensure varietal purity before extraction and during drying, bagging and seed storage. (2) Carryover seed shall be sampled and retested for viability after every seven-month period. Such seed may be sampled and retested at shorter intervals depending on the prevailing circumstances. (3) The inspector may conduct an additional post harvest inspection, where there is a need to undertake such inspection.
Seed quality standards	11. The QDS shall conform to the following standards as assessed using

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International Seed Testing Association Regulations and Procedures for seed testing:-

(a) Germination	70%	
(b) Pure seed (minimum)	98%	
(c) Weed/seed per unit weight (Maximum)	None	
(d) Other crop seeds per unit weight	None	
(e) Moisture content	10%	

PART XX

CASSAVA

Manihotesculentum

- 1. Facilities** QDS dealer shall be required to have appropriate facilities for stem cutting, cleaning, storage and packaging.
- 2. Land requirement** The site should appear free from volunteer plant, visible insect pests and diseases which may infect the current cassava crop.
- 3. Field standards**
 - 3.1 Isolation A QDS crop shall be isolated from other varieties of known clean source by a distance of three meters to prevent mechanical admixture or a physical barrier such as ditch, hedge and fence. Isolation from other crop of unclean source of cassava crop species and variety shall be at least fifty meters from the QDS crop.
 - 3.2 Variety Purity A minimum of 99% of the cassava plants shall conform to the characteristics of the variety.
 - 3.3 Weeds The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
- 4. Seed-borne diseases** The seed field must be within the standards for seed-borne diseases as named and specified below:
 - a. Cassava mosaic disease –Maximum incidence: 10%
 - b. Cassava bacterial blight – Maximum mean severity: 3.5(scale of 1-5)
 - c. Cassava brown streak disease-Maximum incidence:10%
- 5. Other diseases** The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
- 6. Pests** The seed field must be within the standards for insect pests as named and specified below:
 - a. Cassava mealybug –Maximum incidence: 8%
 - b. Cassava green mite - Maximum mean severity: 3.5 (scale of 1-5)
 - c. Scale insects – Maximum incidence: 8%
- 7. Field inspection**
 - 7.1 Number and Seed crop field shall be inspected at least twice; the first

Timing inspection shall be done two to three months after sprouting while the second inspection shall be done eight to twelve months depending on type of variety. Additional inspections, if any, may be conducted where necessary.

7.2 Inspection procedures

7.2.1. Undertaking first field inspection

An inspector will ask the seed multiplier a land history of the field to ascertain if land requirement was adhered. Will also ask a labels which were enclosed with a seed used for planting. If the above two criteria are met continue with inspection, but if one or both of them are not met reject the field. Now continue with inspection, go around the perimeter of the field to verify the isolation distance and acreage. If the isolation is OK continue with inspection of variety purity, CMD, CBSD, and CGM.

7.2.1.1. Assessment of CMD, Variety Purity (VP) and CGM

For these quality attributes the inspector will sample 5 counts per ha at random each sampling unit consisting of 40 plants. Each plant is scored for the presence of CMD and CBSD; it is also assessed for VP at the same time using its morphological description obtained earlier during DUS test.

All scores are recorded in the field inspection report for each count (40 plants). The presence of CGM is also scored. Note that the assessment for CMD, VP, CBSD and CGM is done simultaneously. However for CBSD root symptoms, an inspector is required to uproot every tenth plant for checking CBSD coloration. CBSD coloration in roots is assessed by cutting every root by a sharp knife; infected roots per plant are scored. Hence a total of 20 plants will be uprooted per ha to check for CBSD root infection. At the end of inspection the inspector will calculate the percentage of VP, CMD, CGM and CBSD. The results are compared with prescribed field standards. Only cassava seed fields which have met the minimum cassava seed standards (except for CGM) will be accepted for seed production purposes. However fields that have not met the minimum standards will be rejected. An inspector fills inspection form report in triplicate and one copy is left to the applicant while another copy is sent to the seed certification institute. If the field is rejected, the reasons for rejection should be explained to the grower and discussed amicably.

7.2.2. Undertaking final field inspection

All inspection activities done during the first inspection are also carried out at final inspection except for land requirements and verification of seed source which were earlier verified.

PART XXI

IRISH POTATO

*Solanumtuberosum*L

1. **Facilities** QDS dealer shall be required to have appropriate facilities for seed harvesting, cleaning, storage and bagging.
2. **Land requirement** The round potato seed crop shall not be grown on land on which the previous three crops were round potato and the land shall be free of bacterial wilt for at least three seasons. The site should

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appear free from visible pests and diseases which may infect the current round potato crop.

3. Field standards

- 3.1 Isolation A seed crop shall be isolated from other crop species with similar characteristics by a distance of three meters to prevent mechanical admixture or a physical barrier such as ditch, hedge and fence. The multiplication site should be at least five meters from other round potato plots.
- 3.2 Variety Purity A minimum of 98% of the round potato plants shall conform to the characteristics of the variety.
- 3.3 Weeds The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.

4. Seed-borne diseases

The seed field must be within the standards for seed-borne diseases as named and specified below:

- a. Bacterial wilt:0%
- b. Ring rot:0%
- c. Blackleg:0%
- d. Potato tuber spindle:0%
- e. Potato cyst nematodes: 0%
- f. Mycoplasma (Maximum.) plants: 1:1000
- g. Virus symptoms (Maximum): 13:1000
- h. Potato leaf roll virus (Maximum.) plants: 3:1000
- i. Spindle mottle virus (Maximum.) plants: 15:1000
- j. Fusarium wilt (Maximum.) plants: 3:1000
- k. Verticilium wilt (Maximum.) plants: 4:1000

5. Other diseases

The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.

6. Insect Pests

The seed field must be reasonably free from insect pests.

7. Field inspection

- 7.1 Number and Timing Seed crop field shall be inspected at least twice; the first inspection shall be done at flowering stage while the second inspection shall be done at maturity stage. Additional inspections, if any, may be conducted where a particular problem has been observed.

7.2 Inspection procedures

Before entering the field: The inspector will confirm with the grower the seed source, the variety said to be, previous cropping season and the exact location of the field.

In the field: The inspector first of all examines the boundaries of the field to confirm that the isolation distance is satisfied. This is followed by a general view of the crop, followed by a detailed inspection of the crop. A suitable working pattern to Maximize field coverage is useful to ensure thorough examination of the field. Plant counts are taken randomly to determine disease infection and varietal mixtures in the field. In this case sampling

unit is an area of 100 M² in which all the plants in the area is observed. The number of the counts depends on the size of the field area. For a field of an area up to 2 ha, five counts shall be used, but for each addition of two hectares up to 5ha, one more count will be needed.

8. Post-harvest standards

Grading, storage, packing and transportation of potatoes shall be carefully managed to ensure that the seed maintain its quality. The seed inspector shall make at least two inspections to check the effectiveness of the operations. The potato tubers must conform to the following post-harvest standards:

8.1 Pure Tubers(Min.): 98%

8.2 Diseases:

- a. Soft rot % by wt (Maximum.) in 25Kg: 2%
- b. Dry rot (Fusarium wilt) % by wt (Maximum.) in 25Kg: 2%
- c. Common scab % by wt (Maximum.) in 25kg: 5%
 - Individual tuber surface cover %: 5%
- d. Black scurf (Rhizoctonia) % by wt (Maximum.) in 25kg: 6%
 - Individual tuber surface cover %: 10%
- e. Severe tuber moth damage % by wt (Maximum) in 25kg bag: 5%
- f. External defects % by wt (Maximum) in 25kg bag (shriveled, misshaped, excessively dehydrated): 5%

8.3 Tuber size requirement:

Out of 25kg ;

- a. 5 kg should be between 28-35 mm
- b. 10 kg should be between 36-45mm:
- c. 10 kg should be between 46-60mm:

PART XXII

SWEETPOTATO

***Ipomoea batatas*spp.**

1. Facilities QDS dealer shall be required to have appropriate facilities for seed harvesting, cleaning, storage and bagging.
2. Land requirement The sweetpotato seed crop shall not be grown on land on which the previous one crop was sweetpotato. The site should appear free from visible pests and diseases which may infect the current sweetpotato crop.
3. **Field Standards**
 - 3.1. Isolation A QDS crop shall be isolated from other varieties of known clean source by a distance of three meters to prevent mechanical admixture or a physical barrier such as ditch, hedge and fence. Isolation from other crop of unclean source of sweet potato crop species and variety shall be at least twenty meters from the QDS crop.

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3.2.	Variety Purity	A minimum of 98% of the sweetpotato plants shall conform to the characteristics of the variety.
3.3.	Weeds	The seed field must be reasonably free from weeds such that weed growth shall not prevent a valid inspection of the seed crop.
4. Diseases		
4.1	Viral diseases	The seed field shall be reasonably free from the following virus symptoms: (e) Mosaic and stunting (f) Leaf curl (g) Purpling
4.2	Seed-borne diseases	Seed field must be within the standards for seed-borne diseases as named and specified below: a. Mosaic and stunting : 5% b. Leaf curl : 5% c. Other (purpling, chlorosis, vein clearing) :10% d. Alternaria blight :5% e. Black rot (Maximum):0.5% f. Wilt (bacterial) (Maximum):0.5% g. Scurf (Maximum) 0.5 % h. SSR-Pox (Maximum):10%
5.	Other diseases	The seed field must be reasonably free from other diseases such that the severity of the diseases shall not prevent a valid assessment of the varietal characteristics.
6.	Insect Pests	The seed field must be within the standards for insect pests as named and specified below: a. Sweetpotato weevil (<i>Cylaspuncticollis</i>) (Maximum): 10% b. Wire worm (Maximum): 10% c. Root knot nematodes (Maximum): 3% d. Mites/Thrips (Maximum): 5% e. Caterpillars (Maximum): 10% f. Aphids & whiteflies (Maximum): 5%
7. Field inspection		
7.1	Number and Timing	a. Seed crop field shall be inspected at least twice; the first inspection shall be done six weeks after planting and the second two weeks before harvesting. b. Additional inspections, if any, may be conducted where a particular problem has been observed.
7.2	Inspection procedures	7.2.1 Before entering the field, an inspector shall confirm with the seed grower or producer on the followings :- a. Location of the seed crop field; b. Variety to be inspected; c. Seed source d. Previous cropping history of the field 7.2.2. The inspector shall confirm that sweetpotato plants generally conform to the characteristics of the variety and shall examine the boundaries of the field to confirm the isolation requirements. 7.2.3. The inspector shall conduct an effective inspection to estimate the number of off types, weeds and disease situation. 7.2.4. For the purposes of conducting an effective inspection, the inspector shall:

On standard beds:

- i. Determine the number of standard (1.2 m x 6 m) beds for the variety being assessed. For every 10 beds select 3 beds at random, for example every other bed.
- ii. The following procedure should be carried out for each of the 3 selected beds for each variety:
 - a. Each bed should have 5 rows. Do not consider the two outer rows. Of the three inner rows, do not consider the middle row. There are now two rows to base the assessment on.
 - b. Calculate the plant population for each row.

On non-standard beds:

Pace the area for each variety in the multiplier's multiplication plot. For every 100m² of each variety select 3 samples of 0.4m x 1.5m. Start in the middle of the farmer's multiplication plot as the first sample. Peg out an area of 0.4m x 1.5 m using string and stakes. Choose a random direction and take three strides and peg out the second area in the same way. Repeat for the third sample. The areas pegged out will be the equivalent of the 2 selected rows from 3 standard beds in multiplication plots. Count all the plants in the marked area.

iii) Once the observations for all diseases and pests have been calculated for the 2 selected rows in each of the 3 selected beds, the percentages of affected plants can be calculated. This should be done as follows:

The denominator is the total sample i.e. the total number of plants in the 6 selected rows from the 3 sampled beds (or the 3 pegged areas in the non-standard multiplication plot). The total number of affected plants for each parameter is divided by the denominator and then multiplied by 100 to give the percentage.

iv) After inspection, the inspector shall complete inspection report and make a decision either to accept or reject the field or to recommend further remedial action before a final decision is taken.

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THIRD SCHEDULE

FEEES FOR SERVICES

(Made under regulation 12)

PARTICULARS OF FEES	AMOUNT IN TSHS.
A: Inspection fees Field Inspection per acre	30,000
B: Fees for seed testing and re-testing for germination, purity and moisture:	
(1) one kg (field crops)	50
(2) 100 gm (vegetable crops)	100
C: Seed health testing and re-testing (optional):	
(1) fees per seed sample	10,000
(2) re-testing fees	5,000
D: Training fees per person	50,000

Dodoma
17th December, 2019

JAPHET N. HASUNGA,
Minister for Agriculture