

Government of Karnataka
Department of Agricultural Marketing

Office of the Director
of Agricultural Marketing
No.16, 2nd, Raj Bhavan Road,
Bengaluru- 560001

Subject: Quality parameters, grading, quality certification and other related matters for Maize sold in online markets – reg.

Preamble

It is necessary to specify quality parameters, grading, quality certification and other related matters for Maize sold in markets as specified under Rule 91-O (1) of the Karnataka Agricultural Produce Marketing (Regulation and Development) Rules, 1968 (“Rules”) and hence the following order is issued under Rule 91-O (2) of the Rules.

Order no. KruMaE/Niyavi/Avyava/315/13-14, dated:15/03/2016

1. Title

This order shall be called as **Quality parameters, Grading, Quality Certification and other related matters for Maize sold in the Unified Market Platform Order.**

2. Assaying parameters

The parameters which shall be assayed in respect of Maize brought to the markets specified under rule 91-O (1) of the Rules shall be as specified in Schedule 1 to this order.

3. Sampling procedure

- (1) The lot brought by the seller may be in packed form (in gunny bags) or may be in the form of a heap. Each lot shall be kept separated either as a stack or as a heap for sampling.
- (2) If the lot is brought in packed form, then a bulk sample is prepared by collecting a small quantity of the commodity from the top, middle and bottom of every bag in the lot and thoroughly mixing the quantity so collected.
- (3) If the lot is brought in heap form, then samples are taken from at least seven different parts of the heap, namely, front, back, sides, centre top, centre middle and centre bottom. The quantity so collected is mixed thoroughly to derive the bulk sample.
- (4) A composite sample is prepared by drawing about 1/2 Kg from the bulk sample.
- (5) The composite sample is then divided into five equal parts of about 100 grams by using a sample divider.
- (6) In case a sample divider is not available, the composite sample is emptied on a flat smooth surface in the form of a circle of thickness of about 12 mm to 25 mm. About 100 grams of sample is then scooped from different points namely, centre, sides, etc., taking care that no foreign matter is left over when scooping.
- (7) Each part is then placed in a separate plastic transparent bag and a sample identity slip as per Schedule 2 to this order shall be attached in each of the bag and the bag sealed. These samples will be distributed as under.

- One sample to Farmer/Trader for his reference;

- One sample to APMC for display for traders for inspection;
- One sample to APMC for dispute resolution;
- One sample to the assaying agency for analysis; and
- One sample for record with the assaying agency.

(8) Necessary particulars shall be entered in a register to have a record of the samples drawn. This register shall be in a format M1 for Maize and as indicated in Schedule 3 to this order.

4. Assaying procedure

- (1) The sample is first examined to detect the presence of any live infestation. If live infestation is detected in the lot, then the lot would be rejected. Thereafter, the sample is checked for fungus and/or other infestations.
- (2) The sample would then be subjected to physical analysis as detailed in Schedule 4 to this order.
- (3) The assaying agency shall issue a certificate specifying the quality parameters and the period for which the assaying certificate is valid. Thereafter, details of the quality of the lot shall be entered in the Unified Market Platform.

5. Other matters

The seller shall be responsible to comply with the provisions prescribed under the Food and Safety Standards Act, 2006 and other applicable provisions of law.

6. Disputes on assaying

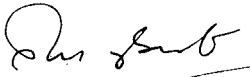
Any dispute in this regard shall be settled by the Disputes Committee for Online Markets set up by the respective market committee under Rule 91-P (1) of the Karnataka Agricultural Produce Marketing (Regulation and Development) Rules, 1968 and the guidelines issued by the Director of Agricultural Marketing under Rule 91-P (7) of the said Rules.

7. Disposal of samples

After the commodity is sold through the e tender process and delivered to the buyer, the requirement to preserve the samples taken would cease. Three lots of samples, namely, the sample maintained by the APMC for display for traders to inspect, the sample maintained by the APMC for dispute resolution and the one retained by the assaying agency for reference may be aggregated and disposed of by Rashtriya e-Market Services Private Limited any time after fifteen days of the delivery of the commodity to the buyer. The proceeds realised due to such disposal shall be credited to the account of the said company.

8. Removal of difficulties

Any difficulty in the implementation of this order shall be referred to the Director of Agricultural Marketing, who shall issue clarifications as deemed necessary.


(G.N. Shivamurthy)
Director

To,

1. The Managing Director, Rashtriya e-Market Services private limited, Bangalore.
2. Chairman/Secretary of APMCs in the State.
3. Office copy.

Schedule 1

Assaying Parameters for Maize

Maize shall be assayed for the following parameters –

- **Foreign Matter:** expressed in per cent: Foreign matter shall mean dust, dirt, stones and lumps of earth, chaff, stem, straw or any other impurity.
- **Admixture,** expressed in per cent: Admixture shall mean any grains other than the principle grains.

- **Damaged Grains**, expressed in per cent: Damaged grains shall mean quantity that is internally damaged or discoloured or broken in to pieces to such an extent that the damage or discolouration or broken materially affects the quality of the grains.
- **Weevilled Grains**, expressed in per cent: Weevilled grains mean those grains that are partially or wholly bored or eaten by weevil or other grain insects.
- **Moisture**, expressed in per cent:

Schedule 2

Format of Sample identity slip to be placed with the petro bulk seal

Sample identity slip	
Name of commodity	Maize
Market arrived Market/..... Sub market
Date of drawing of the sample	
Name of the farmer/seller	
Lot number	
Name of the Supervisor	
Signature of supervisor with date	
Signature of the Farmer/Seller	

Schedule 3

Format of register to be maintained

Form M1

Name of the commodity – Maize

APMC:

Sl. No.	Date	Quantity/No of bags	Lot number	Name of the farmer /trader	Contact number	Signature of the supervisor

Signature of APMC official

Name:

Date:

Schedule -4
Physical analysis of Maize

1. Analysis for Foreign Matter:

- a) Weigh the total sample and note down the weight (W_0).
- b) Pour the sample on a white enamel plate.
- c) Separate all foreign matter like dust, dirt, stones, lumps of earth, chaff, stem, straw or other impurities etc. by hand picking.
- d) Collect all dust, dirt, stones, lumps of earth, chaff, stem, straw or other impurities in a Petri dish and weigh it (W_1).
- e) The percent of foreign matter is $(W_1/W_0)*100$.

2. Analysis for Admixture

- a) Take the above sample
- b) Separate the grains other than the principal grain.
- c) Determine the weight of other food grains so separated (W_2).
- d) The percent of admixture is $(W_2/W_0)*100$.

3. Analysis for Damaged grains

- a) Take the above sample
- b) Separate the grains that are internally damaged or discoloured or broken to such an extent that the damage or discolouration materially affects the quality of the grains by hand picking.
- c) Weigh the damaged grains (W_3).
- d) The percent of damaged grains is $(W_3/W_0)*100$

4. Analysis for Weevilled grains

- a) Take the above sample
- b) Separate grains that are partially or wholly bored or eaten by weevil or other grain insects.
- c) Weigh the weevilled grains (W_4).

d) The percent of weevilled grains is $(W_4/W_0)*100$

5. Moisture:

(a) Weigh an appropriate amount of sample in a pre-weighed metal dish (W_0).

(b) Dry the sample in a hot air oven at 130°C - 133°C for about two hours.

(c) Cool the dish in desiccators and weigh the dish (W_5).

(d) The percent difference between the weights of the sample is as calculated as per IS 4333: 2002 as $W = \{(W_0 - W_5) / W_0\}$, which is the moisture content of the lot.