No.8-4/2016-S&I Government of India Ministry of Consumer Affairs, Food & Public Distribution Department of Food & Public Distribution *****

Krishi Bhavan, New Delhi Dated: Mugust, 2016

To,

Sub: Uniform specifications of paddy, rice and coarse grains for Kharif Marketing Season 2016-17.

Sir,

I am directed to forward herewith the uniform specifications of paddy, rice and coarse grains for procurement under Central Pool during Kharif Marketing Season (KMS) 2016-17.

It is requested that wide publicity of the Uniform Specifications be made among the farmers in order to ensure that they get due price for their produce and rejection of the stocks is avoided. The procurement of paddy, rice and coarse grains during KMS 2016-17 may be ensured by all the States/Union Territories and Food Corporation of India strictly in accordance with the uniform specifications.

Further, standards of rice for issue to States/UTs for distribution under TPDS and Other Welfare Schemes based on the uniform specifications of rice for KMS 2016-17 are also enclosed.

Encl: as above.

Yours faithfully. (Vishwajeet Haldar Deputy Commissioner (S&R) Tele # 23383915

Copy to: -

- 1. The Chairman and Managing Director, Food Corporation of India (FCI), New Delhi.
- 2. Executive Director (Commercial)/Executive Director (QC), FCI HQ, New Delhi.
- 3. General Manager (QC)/GM (Marketing & Procurement), FCI, HQ, New Delhi.
- 4. All Executive Director (Zones), FCI.
- 5. Managing Director, CWC, New Delhi.
- 6. The Secretary, Department of Agri. & Coop, Krishi Bhawan, New Delhi.
- 7. Sr. PPS to Secretary (F&PD)/PPS to AS&FA/JS (P&FCI)/JS (Impex, SRA & EOP) / JS (Stg.)/JS (BP&PD).
- 8. Director (P)/Director (FCI)/Director (PD)/Director (Finance)/JC (S&R)/DC (S&R).
- 9. All QCC/IGMRI offices.
- 10. US (Py. I, II, III, IV)/US (FC A/c).
- 11. DD (S)/DD (QC)/AD (S)/AD (QC).
- 12. Director (Technical), NIC with the request to put the information in the Ministry's website.

(Neelam Kalra) Technical Officer(S&R)

UNIFORM SPECIFICATION OF ALL VARIETIES OF PADDY (KHARIF MARKETING SEASON 2016-2017)

Paddy shall be in sound merchantable condition, dry, clean, wholesome of good food value, uniform in colour and size of grains and free from moulds, weevils, obnoxious smell, *Argemone mexicana, Lathyrus sativus* (Khesari) and admixture of deleterious substances.

Paddy will be classified into Grade 'A' and 'Common' groups.

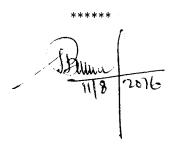
SCHEDULE OF SPECIFICATION

S. No	Refractions	Maximum Limit (%)
1.	Foreign matter	
	a) Inorganic	1.0
	b) Organic	1.0
2.	Damaged, discoloured, sprouted and weevilled grains	5.0*
3.	Immature, Shrunken and shrivelled grains	3.0
4.	Admixture of lower class	6.0
5.	Moisture content	17.0

* Damaged, sprouted and weevilled grains should not exceed 4%.

N. B.

- The definitions of the above refractions and method of analysis are to be followed as per BIS 'Method of analysis for foodgrains' Nos. IS: 4333 (Part -I): 1996, IS: 4333 (Part-II): 2002 and 'Terminology for foodgrains' IS: Nos.2813-1995, as amended from time to time.
- 2. The method of sampling is to be followed as per BIS method for sampling of Cereals and Pulses IS: 14818-2000 as amended from time to time.
- 3. Within the overall limit of 1.0% for organic foreign matter, poisonous seeds shall not exceed 0.5% of which Dhatura and Akra seeds (*Vicia* species) not to exceed 0.025% and 0.2% respectively.



<u>UNIFORM SPECIFICATION FOR GRADE 'A' & 'COMMON' RICE</u> (KHARIF MARKETING SEASON 2016-2017)

Rice shall be in sound merchantable condition, sweet, dry, clean, wholesome, of good food value, uniform in colour and size of grains and free from moulds, weevils, obnoxious smell, admixture of unwholesome poisonous substances, *Argemone mexicana* and *Lathyrus sativus* (Khesari) in any form, or colouring agents and all impurities except to the extent in the schedule below. It shall also conforming to prescribed norms under Food Safety & Standards Act,2006/Rules prescribed thereunder.

S. No	Refractions		Maximum Limit (%)	
			Grade 'A'	Common
1.	Brokens*	Raw	25.0	25.0
		Parboiled/single parboiled rice	16.0	16.0
2.	Foreign Matter**	Raw / Parboiled / single parboiled rice	0.5	0.5
3.	Damaged # / Slightly	Raw	3.0	3.0
	Damaged Grains	Parboiled/ single parboiled rice	4.0	4.0
4.	Discoloured Grains	Raw	3.0	3.0
		Parboiled/ single parboiled rice	5.0	5.0
5.	Chalky Grains	Raw	5.0	5.0
6.	Red Grains	Raw/Parboiled/Single parboiled.rice	3.0	3.0
7.	Admixture of lower class	Raw/Parboiled/Single parboiled rice	6.0	-
8.	Dehusked Grains	Raw/Parboiled/Single parboiled rice	13.0	13.0
9.	Moisture content @	Raw/Parboiled/Single parboiled rice	14.0	14.0

SCHEDULE OF SPECIFICATION

- * Not more than 1% by weight shall be small broken.
- ** Not more than 0.25% by weight shall be mineral matter and not more than 0.10% by weight shall be impurities of animal origin.
- # Including pin point damaged grains.
- @ Rice (both Raw & Parboiled/Single Parboiled) can be procured with moisture content upto a maximum limit of 15% with value cut. There will be no value cut upto 14%. Between 14% to 15% moisture, value cut will be applicable at the rate of full value.

J. Hume 11/08/2016

NOTES APPLICABLE TO THE SPECIFICATION OF GRADE 'A' AND COMMON VARIETIES OF RICE.

1. The definition of the above refractions and method of analysis are to be followed as given in Bureau of Indian Standard "Method of analysis for Foodgrains" No's IS: 4333 (Part-I):1996 and IS: 4333 (Part-II): 2002 "Terminology for Foodgrains" IS: 2813-1995 as amended from time to time. Dehusked grains are rice kernels whole or broken which have more than ¹/₄th of the surface area of the kernel covered with the bran and determined as follows:-

ANALYSIS PROCEDURE: Take 5 grams of rice (sound head rice and brokens) in a petri dish (80X70 mm). Dip the grains in about 20 ml. of Methylene Blue solution (0.05% by weight in distilled water) and allow to stand for about one minute. Decant the Methylene Blue solution. Give a swirl wash with about 20 ml. of dilute hydrochloric acid (5% solution by volume in distilled water). Give a swirl wash with water and pour about 20 ml. of Metanil Yellow solution (0.05% by weight in distilled water) on the blue stained grains and allow to stand for about one minute. Decant the effluent and wash with fresh water twice. Keep the stained grains under fresh water and count the dehusked grains. Count the total number of grains in 5 grams of sample under analysis. Three brokens are counted as one whole grain.

CALCULATIONS:

Percentage of Dehusked grains = $\frac{N \times 100}{W}$

Where N = Number of dehusked grains in 5 grams of sample

W= Total grains in 5 grams of sample.

- 2. The Method of sampling is to be followed as given in Bureau of Indian Standard "Method of sampling of Cereals and Pulses" No IS: 14818-2000 as amended from time to time.
- 3. Brokens less than 1/8th of the size of full kernels will be treated as organic foreign matter. . For determination of the size of the brokens average length of the principal class of rice should be taken into account.
- 4. Inorganic foreign matter shall not exceed 0.25% in any lot, if it is more, the stocks should be cleaned and brought within the limit. Kernels or pieces of kernels having mud sticking on surface of rice, shall be treated as Inorganic foreign matter.
- 5. In case of rice prepared by pressure parboiling technique, it will be ensured that correct process of parboiling is adopted i.e. pressure applied, the time for which pressure is applied, proper gelatinisation, aeration and drying before milling are adequate so that the colour and cooking time of parboiled rice are good and free from encrustation of the grains.

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STANDARDS OF RICE FOR ISSUE TO STATE GOVERNMENTS/ UT ADMINISTRATIONS FOR DISTRIBUTION UNDER TPDS AND OTHER WELFARE SCHEMES.

Guidelines for issue/disposal of wheat and rice have been issued vide Department letter No 8-2/98-DRIII dated 27.01.1998 and 13.111998. Gist of standards of rice for issue to States/UTs for distribution under TPDS and OWSs alongwith updated illustrations for KMS 2016-17 is as under:

1. Ready issuable stocks are fit for human consumption which should conform the standards of Food Safety and Standards Act and Rules framed there under.

2. Rice stocks falling within A, B & C categories (categorization is based on damaged and discolored grains) conforming to food safety norms and free from insect infestation are ready stocks. Ready stocks may be issued under TPDS and OWSs provided the refractions in respect of broken grains, chalky grains, red grains and dehusked grains are upto 20% in excess of the uniform specifications.

S.No	Refra	ction	Maximum limit (%) as per uniform specifications for Grade 'A' &	Maximum permissible limit (%) for Grade 'A' & Common
		D	Common	5
1	Damaged/Slightly	Raw	3	
	Damaged/Pin-	Parboiled/Single	4	5
	point Damaged	Parboiled Rice		
	Grains			
2	Discolored Grains	Raw	3	7
		Parboiled/Single	5	7
		Parboiled Rice		
3	Broken	Raw	25	30
		Parboiled/Single	16	19
		Parboiled Rice		
4	Chalky Grains	Raw	5	6
5	Red Grains	Raw/Parboiled/Sing	3	4
		le Parboiled Rice		
6	Dehusked Grains	Raw/Parboiled/Sing	13	16
		le Parboiled Rice		
7	Foreign Matter	Raw/Parboiled/Sing	0.5	1.0
		le Parboiled Rice		

Illustration of maximum permissible parameters of ready to issue stocks of rice based on uniform specifications for KMS 2016-17 is as under:

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UNIFORM SPECIFICATION FOR JOWAR (KHARIF MARKETING SEASON 2016-2017)

The Jowar shall be dried and matured grains of *Sorghum vulgare*. It shall have uniform size and shape. It shall be in sound merchantable condition and also conforming to prescribed norms under Food Safety & Standards Act,2006/Rules prescribed thereunder.

Jowar shall be sweet, hard, clean, wholesome and free from *Argemone mexicana* and *Lathyrus sativus* (khesari) in any form, colouring matter, moulds, weevils, obnoxious smell, admixture of deleterious substances and all other impurities except to the extent indicated in the schedule below:

Refractions	Maximum Limit (%)
Foreign matter *	1.0
Other foodgrains	3.0
Damaged grains	1.5
Slightly damaged & discoloured grains	1.0
Shrivelled & Immature grains	4.0
Weevilled grains	1.0
Moisture content	14.0
	Foreign matter * Other foodgrains Damaged grains Slightly damaged & discoloured grains Shrivelled & Immature grains Weevilled grains

SCHEDULE OF SPECIFICATION

* Not more than 0.25% by weight shall be mineral matter and not more than 0.10% by weight shall be impurities of animal origin.

N. B.

- The definition of the above refractions and method of analysis are to be followed as given in Bureau of Indian Standard 'Method of Analysis for foodgrains' Nos. IS: 4333 (Part-I): 1996 and IS: 4333(Part-II): 2002 and 'Terminology for foodgrains' IS: 2813-1995 as amended from time to time.
- 2. The method of sampling is to be followed as given in Bureau of Indian Standard 'Method of sampling of Cereals and Pulses' No. IS: 14818-2000 as amended from time to time.
- 3. Within the overall limit of 1.0% for foreign matter the poisonous seeds shall not exceed 0.5% of which Dhatura and Akra seeds (*Vicia* species) not to exceed 0.025% and 0.2% respectively.
- 4. Kernels with glumes will not be treated as unsound grains. During physical analysis the glumes will be removed and treated as organic foreign matter.



UNIFORM SPECIFICATION FOR BAJRA (KHARIF MARKETING SEASON 2016-2017)

The Bajra shall be the dried and matured grains of *Pennisetum typhoides*. It shall have uniform size and shape. It shall be in sound merchantable condition and also conforming to prescribed norms under Food Safety & Standards Act,2006/Rules prescribed thereunder.

Bajra shall be sweet, hard, clean, wholesome and free from *Argemone mexicana* and *Lathyrus sativus* (khesari) in any form, colouring matter, moulds, weevils, obnoxious smell, admixture of deleterious substances and all other impurities except to the extent indicated in the schedule below:

S. No	Refractions	Maximum Limits (%)
1.	Foreign matter*	1.0
2.	Other foodgrains	3.0
3.	Damaged grains	1.5
4.	Slightly damaged & discoloured grains **	4.5
5.	Shrivelled & Immature grains	4.0
6.	Weevilled grains	1.0
7.	Moisture content	14.0

SCHEDULE OF SPECIFICATION

- * Not more than 0.25% by weight shall be mineral matter and not more than 0.10% by weight shall be impurities of animal origin.
- ** Bajra grains which are dull in appearance having changed the colour due to deteriorative changes are to be considered as decoloured grains and bajra grains having natural lustre and sound in condition, even of different colour due to genetic/varietal characteristic may be treated as sound kernels.

N.B.

- 1. The definitions of the above refractions and method of analysis are to be followed as given in Bureau of Indian Standard 'Method of analysis for Foodgrains' Nos IS: 4333 (Part-I): 1996 and IS: 4333 (Part II) 2002 and "Terminology for foodgrains" IS: 2813-1995 as amended from time to time.
- 2. The method of sampling is to be followed as given in Bureau of Indian Standard 'Method of Sampling of Cereals and Pulses' No IS: 14818-2000 as amended from time to time.
- 3. Within the overall limit of 1.0% for Foreign Matter, the poisonous seeds shall not exceed 0.5% of which Dhatura & Akra seeds (*Vicia* species) not to exceed 0.025% & 0.2% respectively.
- 4. Kernels with glumes will not be treated as unsound grain. During physical analysis the glumes will be removed and treated as organic foreign matter.
- 5. Within overall limit of 1.5% for damaged grains the Ergoty kernels shall not exceed 0.05%.



UNIFORM SPECIFICATION FOR MAIZE (KHARIF MARKETING SEASON 2016-2017)

The maize shall be the dried and matured grain of *Zea mays*. It shall have uniform shape and colour. It shall be in sound merchantable condition and also conforming to prescribed norms under Food Safety & Standards Act,2006/Rules prescribed thereunder.

Maize shall be sweet, hard, clean, wholesome and free from *Argemone mexicana* and *Lathyrus sativus* (khesari) in any form, colouring matter, moulds weevils, obnoxious smell, admixture of deleterious substances and all other impurities except to the extent indicated in the schedule below:

S. No.	Refractions	Maximum Limits (%)
1.	Foreign matter*	1.0
2.	Other foodgrains	2.0
3.	Damaged grains	1.5
4.	Slightly damaged, discoloured and touched grains	4.5
5.	Shrivelled & Immature grains	3.0
6.	Weevilled grains	1.0
7.	Moisture content	14.0

SCHEDULE OF SPECIFICATION

* Not more than 0.25% by weight shall be mineral matter and not more than 0.10% by weight shall be impurities of animal origin.

N.B.

- 1. The definition of the above refractions and method of analysis are to be followed as given in Bureau of Indian Standard 'Method of Analysis for Foodgrains' Nos. IS: 4333 (Part-I): 1996 and IS: 4333 (Part-II): 2002 and 'Terminology for foodgrains' IS: 2813- 1995 as amended from time to time.
- 2. The method of sampling is to be followed as given in Bureau of Indian Standard 'Method of sampling of cereals and pulses' No. IS: 14818-2000 as amended from time to time.
- 3. Within the overall limit of 1.0% for foreign matter, the poisonous seeds shall not exceed 0.5% of which Dhatura and Akra Seeds (*Vicia* species) not to exceed 0.025% and 0.2% respectively.
- 4. The small sized maize grains, if the same are otherwise fully developed, should not be treated as shrivelled and immature grains.

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UNIFORM SPECIFICATION FOR RAGI (KHARIF MARKETING SEASON 2016-2017)

The Ragi shall be dried and matured grains of *Eleusine coracana*. It shall have uniform size and shape. It shall be in sound merchantable condition and also conforming to prescribed norms under Food Safety & Standards Act,2006/Rules prescribed thereunder.

Ragi shall be sweet, hard, clean, wholesome and free from moulds, weevils, obnoxious smell, *Argemone mexicana* and *Lathyrus sativus* (khesari) in any form, colouring matter, admixture of deleterious substances and all other impurities except to the extent indicated in the schedule below:

S. No	Refractions	Maximum Limits (%)
1.	Foreign matter*	1.0
2.	Other foodgrains	1.0
3.	Damaged grains	1.0
4.	Slightly damaged grains	2.0
5.	Moisture content	12.0

SCHEDULE OF SPECIFICATION

* Not more than 0.25% by weight shall be mineral matter and not more than 0.10% by weight shall be impurities of animal origin.

N. B.

- 1. The definition of the above refractions and method of analysis are to be followed as given in Bureau of Indian Standard 'Method of analysis for foodgrains' Nos. IS: 4333 (Part-I): 1996 and IS: 4333 (Part-II): 2002 and 'Terminology for foodgrains' IS: 2813-1995 as amended from time to time.
- 2. The method of sampling is to be followed as given in Bureau of Indian Standard 'Method of sampling of cereals and pulses' No. IS: 14818-2000 as amended from time to time.
- 3. Within the overall limit of 1.0% for foreign matter, the poisonous seeds shall not exceed 0.5% of which Dhatura and Akara seeds (*Vicia* species) not to exceed 0.025% and 0.2% respectively.
- 4. Kernels with husk will not be treated as unsound grains. During physical analysis the husk will be removed and treated as organic foreign matter.

