BUREAU OF INDIAN STANDARDS MINUTES

Name of the	No. of Meeting	Date	Time	Venue
Committee				
Foodgrains, Allied	24 th	23 June 2023	10 30 hrs	Hybrid
Products and Other		(Friday)		Venue - Manak
Agricultural Produce				Bhawan, New Delhi
Sectional Committee,				Online - Webex
FAD 16				

Attendance is placed at Annex I

CHAIRPERSON:

Dr. Nachiket Kotwaliwale

Director,

ICAR-Central Institute of Post-Harvest

Engineering & Technology,

Ludhiana

MEMBER SECRETARY:

Ms. Lavika Singh

Scientist-B

Food & Agriculture Department,

Bureau of Indian Standards,

New Delhi

Item 0 GENERAL

0.1 Welcome by Head, Food & Agriculture Department

Ms. Suneeti Toteja, Scientist-E and Head, Food & Agriculture Department extended a warm welcome to the Chairperson of FAD 16 and members to the 24th meeting of Foodgrains, Allied Products and Other Agricultural Produce Sectional Committee, FAD 16. Ms. Toteja apprised the committee about new reforms introduced by BIS in National Standardization and workshop conducted by BIS for sensitizing the chairpersons. Further, Ms. Toteja informed committee about diligent review of committee composition by Ministry of Consumer Affairs, Food & Public Distribution and thereby highlighted the need for review of composition on the basis of participation in meetings and contribution in national standardization.

Opening Remarks by the Chairperson, FAD 16

Dr. Nachiket Kotwaliwale, Chairperson, FAD 16 extended a warm welcome to the members of the Committee to its 24th meeting. Dr. Kotwaliwale requested all the members to have fruitful and amicable deliberations upon issues raised in Agenda.

ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 There being no comment, the committee confirmed the minutes of the 23rd meeting of Foodgrains, Allied Products and Other Agricultural Produce Sectional Committee, FAD 16 held on 09 February 2023 as circulated by the secretariat vide email dated 22 February 2023.

ITEM 2 NEW PROCESS REFORMS IN STANDARDIZATION

- **2.1** With the objective to inform the committee members regarding newly instituted process reforms in standardization, secretariat delivered a presentation on the subject. The committee The process reforms by BIS were highly appreciated process reforms introduced in national standardization by BIS.
- **2.2** The committee noted the annual action plan (AAP) for the year 2023-24 prepared by Member Secretary, FAD 16 attached at Annex II of Agenda and requested members to expedite the task allocated to them, for timely completion of projects specified in AAP.
- **2.3** The committee decided to hold 3 Committee Meetings in year 2023-24 as under:
 - i) First Meeting 23 June 2023 (current meeting)
 - ii) Second Meeting 20 November 2023
 - iii) Third Meeting 26 February 2023

Further, the committee directed panels under FAD 16 to hold panel meeting as and when required. In case of urgency, the committee will also hold its fourth meeting, if required.

- **2.4** The committee noted that BIS is encouraging Sectional Committees to take up R&D project either on standardization on new subject or for revision of existing standard on the basis of empirical data and scientific insights. Accordingly, the secretariat proposed following topics for R&D projects for consideration of committee:
 - i) Validation Study for testing and sampling of starches and products FAD 16 has allocated the task of revision of IS 4706 (Part 1): 1978 'Methods of test for edible starches and starch products: Part 1 physical methods' & IS 4706 (Part 2): 1978 'Methods of test for edible starches and starch products: Part 2 chemical methods' and IS 4662: 1977 'Methods for sampling of starches and starch products' to CTCRI for revision. However, CTCRI replied that they lack expertise to review the standard. Then the task was allocated to NIFTEM-T, however, reply is still awaited. Therefore, a R&D Project may be taken up for review of these important Indian Standard.
 - ii) A R&D project may be taken up by CIPHET to develop a new standard on Test Method for estimation of degree of milling of rice.

Accordingly, the committee decided to seek interest of the member organizations through mail. Further, Chairperson, FAD 16 highlighted that small R&D projects may be undertaken as dissertation or thesis work leading to post-graduate or doctoral degrees. BIS can consider issuing a notification or communication to different universities and seeking proposals in competitive mode. The sectional committee can help in scrutinizing and recommending proposals for funding by BIS.

- **2.5** The committee noted the information mentioned at Item 2.4 of Agenda. For purpose of closer review and deliberation upon ISO ballots circulated by liaison ISO technical committees i.e., ISO/TC 34/SC 4 'Cereals and Pulses' and ISO/ TC 93 'Starch (including derivatives and byproducts)', the committee decided to constitute FAD 16/ Panel X. Composition of Panel is as under:
 - i) Dr. Manjubala, CIPHET, Ludhiana
 - ii) Dr. Punit Chandra, CIAE, Bhopal
 - iii) Dr. Krishnakumar, CTCRI
 - iv) Dr. V.R. Sinija, NIFTEM-T
 - v) Shri IC Chadda, In Personal Capacity

Further, secretariat informed committee regarding invitation received from Secretariat (Jamaica) of ISO/TC 93 'Starch (including derivatives and by-products)', to become P Member in ISO/TC 93. Following deliberations, the committee decided to actively participate and become P Member in ISO/TC 93.

- **2.6** The committee requested all the members to provide suggestive list of national and international events to be participated within a period of 30 days of circulation of minutes, which further will be finalized by Chairperson, FAD 16 in consultation with BIS secretariat.
- **2.7** The secretariat tabled the list of Scientific Journals and magazines already proposed for subscription and Chairperson, FAD 16 requested all the members to provide at least 3 scientific journals and periodicals to be subscribed for the undertaking standardization in the field of food grains and its storage, within a period of 30 days of circulation of minutes, which further will be finalized by Chairperson, FAD 16 in consultation with BIS secretariat.
- **2.8** The committee noted the information mentioned at 2.8 of Agenda. The secretariat tabled the list of 49 experts including experts who send comments on wide circulation drafts, member industries of participating industry associations, and individual experts who send co-option request through BIS portal. In order to enhance this pool of experts, the committee requested all members to provide an exhaustive list of expert organizations/ industry and individual experts along with their contact details within a period of 30 days of circulation of minutes to the secretariat.

ITEM 3 SCOPE, ACTIVITIES & COMPOSITION OF FAD 16

3.1 Scope & Activities of the Committee

3.1.1 The Committee noted the Scope and Programme of Work of FAD 16 enclosed at Annex IV of Agenda.

3.1.2 The Committee noted the List of Indian Standards published under FAD16 mentioned at Table 1 of Agenda appreciated the contribution of relevant experts as well as secretariat.

3.1.3 Rationalization of standardization and certification agencies in the food sector

The Committee noted the information mentioned at **3.1.3** of the agenda. As per the GoM decision and recommendation of FADC, the committee decided not to further develop any Indian Standards on food product specification till further information from BIS secretariat. Further, the committee reviewed the list of food product specification under FAD 16 and decided to archive these standard (except those under BIS certification) as and when they are due for review.

3.2 Composition of the Sectional Committee

- **3.2.1** The Committee noted the composition of FAD 16 enclosed at Annex V of Agenda and decided to withdraw following organizations due to their lack of participation and 0/3 attendance in last three meeting.
 - i) Consumer Research, Education, Action, Training and Empowerment, Tamil Nadu;
 - ii) Indian Grain Storage Management and Research Institute, Hapur; and
 - iii) National Institute of Food Technology Entrepreneurship and Management, Sonepat
- **3.2.2** The committee decided to co-opt Consumer Voice, New Delhi in FAD 16.

3.3 Review of the Composition of the Technical Committees

- **3.3.1** The committee noted the information given at Item **3.3.1** of Agenda regarding the list of tasks appearing on the dashboard of Hon'ble Minister, Ministry of Consumers Affairs, Food and Public Distribution, New Delhi, requiring action to be taken on part of BIS. Accordingly, the committee reviewed its composition and observed that Shri IC Chadda (In personal Capacity) and Shri DV Malhan (Roller Flour Millers Federation of India, New Delhi) has been serving FAD 16 from more than 5 years. Following deliberations, the committee decided to retain Shri IC Chadda in FAD 16, considering his years of experience in storage of foodgrains and immense contribution in national standardization. Further, the committee decide to retain Shri DV Malhan, on the basis of his active participation in the committee. However, the committee decided to seek nominations of alternate representative from Roller Flour Millers Federation of India.
- **3.4** The Committee noted the composition of the various Panels under FAD 16 as enclosed at Annex VII of Agenda. While reviewing, the committee directed FAD 16/Panel II to review its composition and hold an early meeting to expedite the tasks allocated. Further, the committee decided to dissolve FAD 16/P IX 'Formulate Indian Standards on Millet Based Products', in the view of decision taken at **3.1.3**.

ITEM 4 REVIEW OF INDIAN STANDARDS

4.1 The Committee noted the list of Indian Standards which are due for review in 2023-24, mentioned at item 4.2 of agenda and decided as under:

S. No.	IS No.	IS Title	Due Date	Decision of committee
1.	IS 7835 : 2013	Edible medium - Fat soya flour - Specification (First Revision)	August, 2023	Archive the standard
2.	IS 7837 : 2013	Edible full - Fat soya flour - Specification (First Revision)	August, 2023	Archive the standard
3.	IS 1005 : 1992	Edible maize starch (Corn Flour) - Specification (Third	August, 2023	Archive the standard
4.	IS 11816 (Part 3): 2018	Storage of cereals and pulses: Part 3 control of attack by pests (First Revision)	August, 2023	Reaffirm the standard'. Since, IS 11816 (Part 3): 2018 is an identical adoption of ISO 6322-3:1989 and harmonized with latest version of ISO 6322-2.
5.	IS 15470 : 2004/ISO 6645:1981	Wheat flour - Determination of dry gluten	August, 2023	To be withdrawn.
6.	IS 2813 : 2018	Terminology for Foodgrains (Third Revision)	July, 2023	Reaffirm the standard
7.	IS 6895 : 1973	Specification for barley malt	August, 2023	Archive the standard
8.	IS 7463 : 2004	Wheat flour for use in bakery industry - Specification (Second Revision)	August, 2023	Archive the standard

9.	IS 7836 : 2013	Edible low - Fat soya flour - Specification (First Revision)	August, 2023	Archive the standard
10.	IS 874 : 1992	Dextrose monohydrate - Specification (Third Revision)	April, 2023	Archive the standard
11.	IS 9215 : 1979	Specification for outdoor steel bins for foodgrain storage	August, 2023	Reaffirm and simultaneously taken up for revision.
12.	IS 9629 : 2004	Maize atta, maize maida and maize suji - Specification (First Revision)	August, 2023	Archive the standard
13.	IS 16520 : 2018	Barley - Specification	August, 2023	Archive the standard
14.	IS 16682 : 2018	Ragi - Specification	August, 2023	Archive the standard
15.	IS 16516 : 2018	Bajra - Specification	September, 2023	Archive the standard
16.	IS 16518 : 2018	Maize - Specification	September, 2023	Archive the standard
17.	IS 16892 : 2018	Sattu - Specification	September, 2023	Archive the standard
18.	IS 16489 : 2018	Soymilk (Non - Dairy Product) - Specification	November, 2023	Archive the standard
19.	IS 16519 : 2019	Jowar - Specification	March, 2024	Archive the standard

3.2 Revision of Pre 2000 Indian Standards

3.2.1 The Committee noted the Aspect wise list of Pre 2000 Indian standards under FAD 16 along with their status. The committee decided to archive all Pre 2000 Indian standards related to specifications for food products. For the remaining Pre 2000 Standards the committee decided as under:

I. Code of Practice

S.No.	IS No.	IS Title	Status/Allocate to
1.	IS 5503 (Part	General requirements for silos for grain	FAD 16/Panel II
	1): 1969	storage: Part 1 constructional	
		requirements	
2.	IS 6151 (Part	Storage management code: Part 2	FAD 16/Panel II
	2): 1971	general care in handling and storage of	
2	IC 6151 (Dont	agricultural produce and inputs	FAD 16/Panel II
3.	IS 6151 (Part	Storage management code: Part 3 specific care in handling and storage of	FAD 16/Panel II
	3): 1976	agricultural produce and inputs	
4.	IS 7247 (Part	Code of practice for fumigation of	To be archived.
7.	1): 1974	agricultural produce: Part 1 methyl	Methyl bromide is an
	1).15/1	bromide	ozone depleting
			substance, was used
			extensively in the past as a
			fumigant for controlling a
			wide range of pests in
			post-harvest storage of
			commodities.Methyl
			bromide has to be replaced
			with other alternatives.
			However, it is still in the
			list of registered
			fumigants in India. Banning methyl bromide
			as fumigant is still under
			consideration by DPPQ.
			Therefore, instead of
			withdrawing IS 7247 (Part
			1), the committee decided
			to archive the standard till
			the decision of DPPQ.
5.	IS 7247 (Part	Code of practice for fumigation of	To be archived.
	4) :1975	agricultural produce: Part 4 ethylene	Carbon tetrachloride
		dichloride and carbon tetrachloride	causes ozone depletion
		mixture	and ethylene dichloride is
			known as a human
			carcinogen, therefore

			EDCT mixture is not used
			anywhere for fumigation.
			However, EDCT mixture
			(popular in the 60s) is still
			in the list of registered
			fumigants in India.
			Banning EDCT as
			fumigant is still under
			consideration by DPPQ.
			Therefore, instead of
			withdrawing IS 7247 (Part
			4), the committee decided
			to archive the standard till
			the decision of DPPQ.
6.	IS 7003 : 1973	Code for hygenic – conditions for sago	ARP done by BIS Officer
		(Saboodana) manufacturing units	(Review insufficient for
			revision)
			Reallocated to BIS Officer
7.	IS 8453 : 1977	Code of practice for construction of	FAD 16/Panel II
		polyethylene embedded earthen bins for	
		bulk storage of foodgrains	

II. Storage Specifications

S.No.	IS No.	IS Title	Status
4	IS 9215 : 1979	Specification for outdoor steel bins	ARP to be done by BIS
		for foodgrain storage	Officer
5	IS 631 : 1979	Specifications for outdoor aluminium	ARP to be done by BIS
		foodgrain storage bins	Officer
6	IS 5606 : 1970	Specification for steel bins for grain FAD 16/Panel II	
		storage	
7	IS 7147 (Part	Specification for steel bins for	FAD 16/Panel II
	1): 1973	domestic storage: Part 1 Gharelu	
		kothi	

III. Test Method

S.No.	IS No.	IS Title	Status/Allocate to
1.	IS 10699 : 1983	Method for determination of specific heat of foodgrains	Dr. SK Giri, CIAE, Bhopal
2.	IS 10768 : 1984	Method of test for quality characteristics of pulses	IIPR, Kanpur
3.	IS 6663 : 1972	Method for determination of angle of repose of grains	Dr. SK Giri, CIAE, Bhopal
4.	IS 7716 :1975	Method of testing efficacy of fumigation for disinfestation of grains in domestic bins	ARP done by BIS Officer (Review insufficient for revision) Under Review by Shri IC Chadda
5.	IS 11454 : 1985	Method for measurement of carbon dioxide in the intergranular atmosphere	Dr. SK Giri, CIAE, Bhopal
6.	IS 6261 : 1971	Methods of analysis for detection of insect and rodent contamination in grains and milled products	Dr. Guru PN, CIPHET, Ludhiana
7.	IS 10698 : 1983	Method for determination of thermal diffusivity of foodgrains	Dr. SK Giri, CIAE, Bhopal
8.	IS 8972 : 1978	Determination of coefficient of friction of foodgrains	Dr. SK Giri, CIAE, Bhopal
9.	IS 9072 : 1978	Method for determination of thermal conductivity of foodgrains	Dr. SK Giri, CIAE, Bhopal
10.	IS 11396 : 1985	Test methods for determination of storability (Safe Storage Life) of foodgrains	FAD 16/Panel II
11.	IS 11261 (Part 1): 1985	Method for assessment of post - Harvest grain losses by rodents: Part 2 loss determination by population assessment and estimation procedures	FAD 16/Panel II
12.	IS 11261 (Part 2): 1985	Method for assessment of post - Harvest grain losses by rodents: Part 2 loss determination by population assessment and estimation procedures	FAD 16/Panel II
13.	IS 4662 : 1977	Methods for sampling of starches and starch products	NIFTEM-T, Thanjavur

14.	IS 4706 (Part 1)	Methods of test for edible starches and	NIFTEM-T, Thanjavur
	: 1978	starch products: Part 1 physical	
		methods (First Revision)	
15.	IS 4706 (Part 2)	Methods of test for edible starches and	NIFTEM-T, Thanjavur
	: 1978	starch products: Part 2 chemical	
		methods (First Revision)	
16.	IS 7715 : 1975	Method for testing suitability of bins	FAD 16/Panel II
		for safe storage of food grains	
17.	IS 4333 (Part 5)	Methods of analysis for foodgrains: CFTRI, Mysore	
	: 1970	Part 5 determination of uric acid	
18.	IS 8184 : 1976	Method for determination of ergot in CFTRI, Mysore	
		foodgrains	
19.	IS 12529 : 1988	Storage of foodgrains - Storage losses	FAD 16/Panel II
		by insects - Methods for estimation	

V. Terminology

S.No.	IS No.	IS Title	Status/Allocate to
1.	IS 9374 : 1979	Glossary of terms relating to flour	CIPHET, Ludhiana
		milling industry	

Item 5 DRAFT INDIAN STANDARDS FOR FINALIZATION

5.1 Draft revision of IS 1009: 1979 'Specification for Maida for General Purposes' [Doc No.: FAD 16 (17038)]

The committee reviewed draft revision of IS 1009: 1979 'Specification for Maida for General Purposes' [Doc No.: FAD 16 (17038)] attached at Annex IX of Agenda and the recommendations of FAD 16/Panel VI, whereby, the panel directed Shri DV Malhan to provide supporting data and justification, for specifying maximum limit of 14% in the draft revision of *Maida* (FSSAI limit-14.0%), since moisture below 14% is unachievable. Following deliberations, the committee decided to specify the limit of moisture content in *Maida* as 14%. Further, the committee decided to finalize the draft revision [Doc No.: FAD 16 (17038)] for publication, after incorporating the changes.

5.2 Draft revision of IS 1010: 1968 'Specification for suji or rava (Semolina)' [Doc No.: FAD 16 (17039)]

The committee reviewed draft revision of IS 1010: 1968 'Specification for suji or rava or Semolina' [Doc No.: FAD 16 (17039)] attached at Annex X of Agenda and endorsed the

recommendations made in 6th meeting of FAD 16/Panel VI. Accordingly, the committee decided to finalize the draft revision of IS 1010 [Doc No.: FAD 16 (17039)] for publication after incorporating the agreed changes.

5.3 Draft revision of IS 13678:1993 'Isabgol – Specification' [Doc No.: FAD 16 (21733)]

The committee reviewed draft revision of IS 13678:1993 'Isabgol – Specification' [Doc No.: FAD 16 (21733)] attached at Annex XI of Agenda and endorsed the recommendations made in 6th meeting of FAD 16/Panel VI attached at Annex VIII of Agenda. Accordingly, the committee decided to finalize the draft revision of IS 13678 [Doc No.: FAD 16 (21733)] for publication after incorporating the agreed changes.

5.4 Draft revision of IS 1157:1957 'Specification for Barley Powder' [Doc No.: FAD 16 (21741)]

The committee reviewed draft revision of IS 1157:1957 'Specification for Barley Powder' [Doc No.: FAD 16 (21741)] attached at Annex XI of Agenda. There being no comments on draft revision, the committee decided to finalize the draft revision of IS 1157 [Doc No.: FAD 16 (21741)] for publication.

5.5 Draft revision of 1156:1957 'Specification for Pearl Barley' [Doc No.: FAD 16 (21742)]

The committee reviewed draft revision of 1156:1957 'Specification for Pearl Barley' [Doc No.: FAD 16 (21742)] attached at Annex XIII of Agenda and endorsed the recommendations made in 6th meeting of FAD 16/Panel VI attached at Annex VIII of Agenda. Accordingly, the committee decided to finalize the draft revision of IS 1156 [Doc No.: FAD 16 (21742)] for publication after incorporating the agreed changes.

6 DRAFT STANDARDS / REVISION UNDER DEVELOPMENT

6.1 Revision of Indian Standards on Code of Practice for Storage of Foodgrains

The committee noted the information mentioned at Item 6.1 of Agenda, regarding development of draft revision of 3 Indian Standards on code for Practice for Storage of Foodgrains i.e. IS 5503 (Part 1): 1969, IS 6151 (Part 2): 1971, IS 6151 (Part 3): 1976 by FAD 16/Panel II. The committee decided that draft revision will be circulated to committee for a period of 7 days, if no comments received, the draft revisions will be issued into wide circulation for a period of 60 days with due approval of Chairperson, FAD 16.

6.2 Formulation of Indian Standard on degree of milling of rice

The Committee once again requested CIPHET to provide the test method for analysis degree of milling. Further, the committee suggested CIPHET to review, if a R&D project is required to standardize the test method.

6.3 Formulation of Indian Standard on specification of sealed silos

The committee noted the information mentioned at Item 6.3 of Agenda and requested Shri IC Chadda, to expeditiously develop the draft specifications for sealed silos for storage of foodgrains.

6.4 Adoption of ISO 6646: 2011 'Rice — Determination of the potential milling yield from paddy and from husked rice' as an Indian Standard

The committee noted the information mentioned at Item 6.4 of Agenda regarding adoption of ISO 6646-2011 'Rice — Determination of the potential milling yield from paddy and from husked rice as an Indian Standard and review ISO 6646 attached at Annex XIV of Agneda. The committee decided to identically adopt ISO 6646: 2011 'Rice — Determination of the potential milling yield from paddy and from husked rice' as an Indian Standard and issue the draft standard into wide circulation for a period of 60 days for eliciting public comments.

7 INTERNATIONAL ACTIVITIES

While informing the Committee regarding its liaison with ISO/TC 34/SC 4 'Cereals and Pulses' as Participating Member and ISO/TC 93 Starches (including derivatives and by-products) as Observing Members., the secretariat requested the Committee to actively participate and review the concerned ISO ballots.

Item 8 INITIATIVES TAKEN BY BIS IN STANDARDS DEVELOPMENT ACTIVITY

8.1 Funding Travel and Stay Expenses of BIS Technical Committee Members

The Committee noted the information given at item 9.1 of Agenda.

8.2 Recognition of Contributions of Technical Committees and its Members

The Committee noted the information given at item 9.2 of Agenda.

Item 9 ANY OTHER BUSINESS

- **9.1** The secretariat highlighted the recommendation of FAD 16/Panel VI, to undertake a study for generating data for establishing limit of ash content and pH of aqueous extract in draft revision of IS 1318 'Edible Tapioca Flour' [Doc. No. FAD 16 (21859)]. Dr. Krishna Kumar, CTCRI, mentioned that CTCRI has generated the data for physico-chemical properties of Edible Tapioca Flour and the same may be shared with FAD 16. Chairperson, FAD 16, requested ICAR-CTCRI to generate more number of concrete data points and share with FAD 16/Panel VI.
- **9.2** There being no other business, the Committee ended with a vote of thanks to the Chair and members.

ANNEX-I

ATTENDENCE SHEET

Foodgrains, Allied products, and other agricultural produce Sectional Committee, FAD 16

Date: 23 June, 2023 Mode: Hybrid meeting

Sl	Organization	Representative	E-Mail
No.			
1.	ICAR - Central Institute of	Dr. Nachiket	nachiket.kotwaliwale@icar.gov.in
	Post-Harvest Engineering	Kotwaliwale	
	& Technology, Ludhiana		
2.	Confederation of Indian	Shri Kannan B	kannan.B@itc.in
	Food Trade and Industry,		
	New Delhi		
3.	Consumer Guidance	Dr Sitaram Dixit	sitaram.dixit@gmail.com
	Society of India, Mumbai		
4.	Central Warehousing	Dr.Anurag Tripathi	anurag.cwc@cewacor.nic.in
	Corporation, New Delhi		
5.	Defence Food Research	Ms Sakshi Sharma	aikshac2@gmail.com
	Laboratory, Mysore		
6.	Directorate of Marketing	Shri Brajesh Kumar	jtama-dmi@gov.in
	and Inspection, Faridabad	Tiwari	
		Shri Shiv Nandan	shivdmiro@gmail.com
7.	Directorate OF Plant	Dr. T. Sonai Rajan	sonai.rajan@gov.in
	Protection Quarantine and		
	Storage, Faridabad		
8.	Food Corporation of India	Shri Hukam Singh	gmqc.fci@gov.in
	(FCI), New Delhi		
9.	G B Pant University of	Dr. Sweta Rai	swetafoodtec@gmail.com
	Agriculture and		
	Technology, Pantnagar		
10.	ICAR - Central Institute of	Shri Punit Chandra	chandra.punit@gmail.com
	Agricultural Engineering,		
	Bhopal	Shri S K Giri	giri.saroj@gmail.com

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11.	ICAR - Central Institute of	Ms Deepika	deepika.goswami@icar.gov
	Post-Harvest Engineering	Goswami	
	and Technology, Ludhiana		
12.	ICAR - Central Tuber Crop	Dr.T. Krishnakumar	krishnakumarmeag@gmail.com
	Research Institute,		
	Thiruvananthpuram		
13.	National Institute of Food	Shri M. Loganathan	yogeswari@iifpt.edu.in
	Technology,		iifpt@iifpt.edu.in
	Entrepreneurship and		
	Management, Thanjavur		
14.	National Sugar Institute,	Dr Ananthalakshmi	ananthuknocks@gmail.com
	Kanpur	Ranganathan	
15.	Roller Flour Millers	Shri Dharam Vir	dvmalhan@rfmfoi.org
	Federation of Inda, New	Malhan	
	Delhi		
16.	Vasantdada Sugar Institute,	Dr Santosh Devkar	santosh25484@gmail.com
	Pune		
17.	Warehousing Development	Shri Mukesh Sinha	mukeshsinha@hotmail.com
	and Regulatory Authority,		
	New Delhi		
18.	In Personal Capacity	Shri I.C.Chadda	icchadda@gmail.com
19.	In Personal Capacity	Dr. S C. Khurana	khurana183@gmail.com
20.	Food & Agriculture	Ms. Lavika Singh	Fad16@bis.gov.in
	Department		