

**BUREAU OF INDIAN STANDARDS****MINUTES**

<b>Name of the Committee</b>	<b>No. of Meeting</b>	<b>Date</b>	<b>Time</b>	<b>Venue</b>
Agriculture and Food Processing Equipment Sectional Committee, FAD 20	21st	<b>2 June 2023 (Friday)</b>	<b>09:30 AM</b>	Hybrid (Virtual + Physical) <b>Samvad (Green Room)</b> Bureau of Indian Standards, HQ, New Delhi

**CHAIRPERSON**

**Dr. S. N. Jha**  
(Chairperson, FAD 20)  
Deputy Director General  
(Agricultural Engineering),  
ICAR, New Delhi

**MEMBER SECRETARY**

**Pradeep Sharma**  
(Member Secretary, FAD 20)  
Scientist-B / Assistant Director  
Food & Agriculture Department,  
Bureau of Indian Standards, New  
Delhi

**ATTENDANCE SHEET** – Please see [Annex A \(Page 14\)](#)

**ITEM 0 GENERAL****0.1 Welcome**

Smt. Suneeti Toteja, Scientist - E and Head of the Food and Agriculture Department, BIS, cordially welcomed all the committee members to the 21st meeting of the Agriculture and Food Processing Equipment Sectional Committee, FAD 20.

**0.2 Opening Remarks by the Chairman**

Dr. S. N. Jha, Deputy Director General (Agricultural Engineering), ICAR, New Delhi, and Chairperson, FAD 20, extended a warm welcome to all the members. In his opening remarks, he requested all the committee members to attend the meeting in person to facilitate more productive and insightful discussions. Additionally, he emphasized the importance of reviewing the minutes and draft documents of each meeting and encouraged members to provide comments, if they had any.

**0.3 Presentation on ‘Process Reforms in Standardization Activity of BIS and Future Roadmap’ by the Member Secretary and Finalization of Annual Action Plan For 2023-24**

A detailed presentation was given by Pradeep Sharma, Scientist-B and Member Secretary of the committee, FAD20, covering initiatives that are being taken up by BIS (Bureau of Indian Standards) to strengthen and streamline the process of standardization at BIS.

During the presentation, Smt. Toteja highlighted the importance of BIS's participation in the International Organization for Standardization (ISO) and informed the committee that BIS is a participatory member (P-Member) of the technical committee ISO TC-326 'Machinery intended for use with food stuffs'. Since this committee is newly constituted, it presents a good opportunity for the committee to participate and propose new subjects for developing international standards.

At the end of the presentation, Dr. Jha commented on the provision at BIS regarding the allocation of research projects to members of the technical committee for the development and validation of standards. Dr. Jha emphasized that BIS should consider providing opportunity for undertaking research projects to all research organizations and not only to committee members.

In addition, Dr. Jha also suggested to the committee regarding the selection of research journals to be subscribed by BIS. The suggested name of the research journals are as follows.

- a). Agricultural Engineering Today (*Indian Society of Agricultural Engineering*)
- b). Journal of Agricultural Engineering (*Indian Society of Agricultural Engineering*)
- c). Journal of Food Science and Technology (*Association of Food Scientist and Technologist of India*)

## **ITEM 1 CONFIRMATION OF THE MINUTES OF THE TWENTITH MEETING**

**1.1** The committee confirmed the minutes of the last 20<sup>th</sup> meeting of Agriculture and Food Processing Equipment Sectional Committee, FAD 20 held on 27 January 2023 through hybrid mode (virtual + physical) as circulated to the members vide email dated 16 February 2023 without any modification.

## **ITEM 2 SCOPE, ACTIVITIES AND COMPOSITION OF THE SECTIONAL COMMITTEE**

### **2.1 Scope & Program of Work of The Committee**

The committee noted the scope and program of work of FAD 20 as given in Item 2.1 of the agenda.

### **2.2 Composition of the Sectional Committee**

**2.2.1** The committee noted the updated composition of FAD 20 as given in Annex 2 of the agenda.

#### **2.2.2 Review of Existing Panels under FAD 20**

The committee was informed that a total of eighteen panels have been established under the purview of FAD 20. These panels were constituted to focus on specific areas or subjects for the purpose of developing, reviewing, and revising Indian Standards. During the committee meeting, a comprehensive review of each panel was conducted, and the following decisions were made for each panel.

<b>Sl. No.</b>	<b>Name panel with scope &amp; composition</b>	<b>Decision Taken</b>	<b>Justification</b>
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1	<p><b>FAD 20/P1 : To Formulate New Indian Standard and Review Existing Standard on Primary Processing</b></p> <p>Dr. R. Vishwanathan (<i>Convenor</i>) Dr. A. Carolina Rathina Kumari Dr. V. H. KALBANDE Dr. S. Bhuvana</p>	Dissolved	<p>The committee conducted a thorough discussion and carefully considered the input provided by Dr. R. Vishwanathan, who expressed concerns that the scope of the panel was too general and suggested that it should be focused on a specific subject. Taking this into account, the committee made the decision to dissolve the panel in question, acknowledging the need for a more specific and targeted approach and new panel would be constituted as and when the need arises.</p>
2	<p><b>FAD 20/P2 : To Formulate New Indian Standard and Review Existing Standard on Secondary Processing</b></p> <p>Dr. R. Vishwanathan (<i>Convenor</i>) Shri S. D. Deshpande Shri NIMISH GOEL(Jindal Steel and Power Limited, New Delhi )</p>	Dissolved	<p>The committee observed that the scope of this panel is also too general, and no work is undergoing in this panel. Therefore, the committee formally dissolved the panel.</p>
3	<p><b>FAD 20/P3 : To Formulate New Indian Standard and Review Existing Standard on Byproduct Handling</b></p> <p>Shri NIMISH GOEL(Jindal Steel and Power Limited, New Delhi )</p>	Dissolved	<p>The committee engaged in thorough deliberation and took into account the statement raised by Shri Anand Zambre, Director of NCPAH (National Committee on Precision Agriculture and Horticulture). Mr. Zambre expressed his lack of awareness regarding his nomination for the panel. Additionally, he highlighted his considerable experience in the field of value addition of fruits and vegetables.</p> <p>Mr. Zambre requested the member secretary to provide information on the value addition-related standards available within the committee. In response to this, the committee requested Dr. Zambre to review these standards and provide input on whether there is a need for revising the existing standards or</p>
4	<p><b>FAD 20/P4 : To Formulate New Indian Standards and Review Existing Standards on Value Addition</b></p> <p>Shri Anand Zambre (<i>Convenor</i>)</p>	Not Dissolved	<p>The committee engaged in thorough deliberation and took into account the statement raised by Shri Anand Zambre, Director of NCPAH (National Committee on Precision Agriculture and Horticulture). Mr. Zambre expressed his lack of awareness regarding his nomination for the panel. Additionally, he highlighted his considerable experience in the field of value addition of fruits and vegetables.</p> <p>Mr. Zambre requested the member secretary to provide information on the value addition-related standards available within the committee. In response to this, the committee requested Dr. Zambre to review these standards and provide input on whether there is a need for revising the existing standards or</p>

			not. This request was made to ensure the standards align with current practices and advancements in the field.
5	<p><b>FAD20/P5 : To Formulate New Indian Standards and Review Existing Standards on Crop Residue Management</b></p> <p>Dr Pannal Lal Singh (<i>Convenor</i>) Dr Surendra Singh Dr Mukesh Singh</p>	Dissolved	The committee considered the point submitted by Dr. Surendra Singh that the subject of this panel is already under the purview of Agriculture Machinery and Equipment Sectional Committee, FAD 11. Therefore, the committee formally dissolved the panel.
6	<p><b>FAD20/P6 : To Formulate New Indian Standard and Review Existing Standard on Storage, Transport and Post-Harvest</b></p> <p>Dr Vinod H Kalbande</p>	Dissolved	The committee noted that the standards related to storage are already covered under Food Grains, Allied Products and Other Agriculture Produce Sectional Committee, FAD 16. Therefore, the committee formally dissolved the panel.
7	<p><b>FAD20/P7 : To Formulate New Indian Standard on Mobile Agro Processing Units - Safety Requirements</b></p> <p>Dr Pitam Chandra (<i>Convenor</i>) Dr Vinod H Kalbande Dr S Bhuvana</p>	Not Dissolved	The committee acknowledged that the work on the "Mobile Agro Processing Units - Safety Requirements Panel" is currently in progress, and a draft standard is being developed. In light of this ongoing work, the committee made the decision that the panel will be dissolved once the standard is published.
8	<p><b>FAD20/P8 : To Formulate New Indian Standard on Seed Processing Plant</b></p> <p>Dr R Vishwanathan (<i>Convenor</i>) Dr S. D. Deshpande Dr Sandeep Mann Dr Vinod H Kalbande</p>	Not Dissolved	The committee observed that the work is in process and yet to be completed. The committee recommended the name of Dr. J. P. Sinha, Principal Scientist, Indian Agriculture Research Institute, New Delhi for inclusion in panel as an expert.
9	<p><b>FAD20/P9 : To Formulate New Indian Standard on Carrot Washer</b></p> <p>Dr Ravindra Naik (<i>Convenor</i>) Dr Ravi Gupta Dr A. Carolina Rathina Kumari</p>	Not Dissolved	The committee noted that the draft is under development and not published yet. The committee decided the panel will be dissolved once the standard is published.

10	<b>FAD 20/P10 : To Formulate New Indian Standard on Paddy and Rice Processing, Paddy Cleaning</b>  Dr Pitam Chandra ( <i>Convenor</i> ) Dr Nachiket Kotwaliwale Shri Nimish Goel Dr S. Bhuvana	Not Dissolved	After due deliberation and discussion, it was found that the standards pertaining to this panel are under development for revision.
11	<b>FAD 20/P11 : To Formulate New Indian Standard on Electrical Moisture Meters Part 1 Food Grains</b>  Dr. Dilip Dhondiram Shivagan (CSIR - National Physical Laboratory, New Delhi) <i>(Convenor)</i> Dr Sandeep Mann Dr Vinod H Kalbande	Dissolved	The committee noted that the standard on Electric Moisture Meter IS 8824 (Part 1) : 2022 has been developed and published. Therefore, the committee decided to dissolve the panel.
12	<b>FAD20/P12 : To Formulate New Indian Standard on Stainless Steel for Drier Unit, Parboiling System and SemiP Rice</b>  Dr Nachiket Kotwaliwale <i>(Convenor)</i> Dr R Vishwanathan Dr Surendra Singh Dr Pitam Chandra Shri Nimish Goel	Not Dissolved	The committee reviewed the scope & composition of the panel and felt the need of standardization on stainless steel used in drier. The committee recommended the name of Dr Ravindra Naik for inclusion on panel and removed the name of Dr Surendra Singh as he requested.
13	<b>FAD20/P13 : To Formulate New Indian Standard on Food Grain ATM</b>  Dr. K. Alagusundaram ( <i>Convenor</i> ) Shri Mayank Shekhar (Shekharson Technologies LLP - Packaging Machinery Manufacturer, Faridabad, Haryana ) Dr R Vishwanathan Shri Ankit Sood (World Food Program (WFP), New Delhi )	Not Dissolved	The committee took note that the draft standard on Food Grain ATM is still under development. After careful consideration, the committee concluded that if this machine is used in the country then there is indeed a need to prepare an Indian Standard for Food Grain ATM, regardless of whether it is imported or manufactured within India.

14	<p><b>FAD20/P14 : Panel for Development of Standard on Extruder and Blender for Manufacturing FRK/FR</b></p> <p>Dr H. N. Mishra (IIT, Kharagpur) <i>(Convenor)</i> Shri Brijesh Gupta (Bihariji Agro Foods Private Limited (BAFPL), New Delhi ) Shri Gautam Kumar (Food Corporation of India (FCI), New Delhi ) Shri Vivek Arora (Food Fortification Resource Centre, New Delhi ) Dr Mridula Devi (ICAR - Central Institute of Post-Harvest Engineering &amp; Technology, Ludhiana) Shri Vivek Lodha (JVS Foods Private Limited, Jaipur ) Shri Sakshi Jain (Nutrition International India, New Delhi ) Ms. Rohini Saran (Program for Appropriate Technology in Health (PATH), New Delhi ) Dr S. Ganapathy(Tamil Nadu Agricultural University, Coimbtore) Dr Shariqua Yunus Khan (World Food Program (WFP), New Delhi )</p>	Dissolved	The committee noted that the standards pertaining to this panel have already been developed and published. Therefore, the committee formally dissolved the panel.
15	<p><b>FAD 20/ P15 : Vegetable Cutting Machine - Safety and Hygeine Requirements</b></p> <p>Dr R Vishwanathan <i>(Convenor)</i> Dr. G. Senthil Kumaran (Indian Institute of Horticultural Research, Bengaluru )</p>	Dissolved	The committee noted that the standards pertaining to this panel have already been developed and published. Therefore, the committee formally dissolved the panel.
16	<p><b>FAD 20/P16 : To Formulate New Standards on Millet Processing</b></p> <p>Dr Ravidra Naik <i>(Convenor)</i> Dr Ravi Gupta Dr R K Vishwakarma Dr P Sudha Dr R Vishwanathan Dr Debandya Mohapatra Dr V Palanimuthu (UAS, Bangaluru) Dr Uday Kumar Nidoni (University of Agricultural Science, Raichur) Dr B Dayakar Rao</p>	Not Dissolved	The committee observed and noted the scope, composition and progress of the work under this panel and acknowledged that the several draft standards have already been prepared by the panel. Accordingly, the committee decided to not to dissolve the panel.

17	<b>FAD20/P17 : To update raw material specification of rice milling equipment</b>  Dr R Vishwanathan ( <i>Convenor</i> ) Dr Ravindra Naik Dr Vinod H Kalbande Shri Rohit Kumar (Indian Stainless Steel Development Association, India)	Not Dissolved	The committee noted that the standards pertaining to this panel are under revision and revised drafts have been prepared by the panel. Accordingly, the committee decided to not to dissolve the panel.
18	<b>FAD 20/P18 : Food Serving Utensils Made from Agri By-Products — Specification</b>  Dr R Vishwanathan Dr Dr. Thingujam Bidyalakshmi Devi Dr Nachiket Kotwaliwale Dr Vinod H Kalbande Dr Pitam Chandra	Dissolved	The committee noted that the standards pertaining to this panel have already been developed and published. Therefore, the committee formally dissolved the panel.

**2.2.3** The committee noted that there is no representation from any FPO (Farmer Producer Organization) in the committee. Accordingly, the committee requested Dr Vikram Parasharam Kad, Mahatma Phule Krishi Vidya Peeth, Rahuri to provide the detail of an FPO relevant to the scope of the committee.

The committee suggested the member secretary to write to Dr. Nachiket Kotwaliwale, Director, CIPHET, Ludhiana for seeking nomination from rice milling equipment manufacturers association.

### ITEM 3 FINALISATION OF DRAFT INDIAN STANDARDS

#### **3.1 Doc. FAD 20 (21781) C Draft Amendment No. 1 to IS 15561 : 2005 Sugarcane Crushers – Safety Requirements**

The committee noted that no comments were received during the wide circulation of this draft Amendment. Consequently, the committee after due deliberation finalized the draft and decided to send it for publication.

#### **3.2 Doc. FAD 20 (20726) C Draft Indian Standard Power Operated Maize Sheller – Specification and Test Code**

The committee reviewed the revised draft received from Dr Surendra Singh and found that the draft is prepared after suitable incorporation of specification and test methods of maize sheller and the same was confirmed by Dr R Viswanathan. Consequently, the committee after due deliberation finalized the draft and decided to send it for publication.

#### **3.3 Doc. FAD 20 (20600) C Draft Indian Standard Dehusker Sheller for Maize – Specification and Test Code**

The committee noted that the merged draft incorporating specification & test methods was prepared by Dr Surendra Singh and circulated into wide circulation for a period of 60 days. However, no comments were received during the wide circulation. Accordingly, the committee finalized the draft and decided to send it for publication.

#### **ITEM 4 APPROVAL OF DRAFT STANDARDS FOR WIDE CIRCULATION**

##### **4.1 Doc. FAD 20 (21454) IS 7898 Manually Operated Chaff Cutter – Specification, Test Code and Safety (revision of IS 7899 and superseding IS 7897, IS 1511 and IS 15542)**

The committee reviewed the draft submitted by Dr Surendra Singh and found that as per the decision taken in the last meeting of FAD 20, specification, test methods and safety requirements for manually operated chaff cutter are suitably incorporated and merged into this draft. Consequently, the committee decided to send this revised draft into wide circulation for a period of 60 days for seeking comments.

##### **4.2 Doc FAD 20 (21455) IS 11459 Power Operated Chaff Cutter – Specification, Test Code and Safety (revision of IS 11459 and superseding IS 7897, IS 1511 and IS 15542 )**

The committee reviewed the draft submitted by Dr Surendra Singh and found that as per the decision taken in the last meeting of FAD 20, specification, test methods and safety requirements for power operated chaff cutter are suitably incorporated and merged into this draft. Consequently, the committee decided to send this revised draft into wide circulation for a period of 60 days for seeking comments.

##### **4.3 Doc. No. FAD 20 (20567) Draft Indian Standard Spiral Grader – Test Code**

The committee noted that the draft as completed the P-draft stage and no comments have been received while circulated as a preliminary draft among committee members for 21 days. Accordingly, the committee approved the draft for sending into wide circulation for a period of 60 days to seek comments.

#### **4.4 Revision of Indian Standards on seed processing plants**

- a) **IS 5718: 2000 Agricultural produce processing equipment – Seed cleaners – Test Code**
- b) **IS 12576: 1989 Seed processing machinery – Indented cylinder grader – Test Code**
- c) **IS 14460: 1997 – Seed Processing Equipment – Gravity Separator**

The committee noted that the above standards pertain to the scope of panel FAD20/P8 and also noted the comments received from Dr R. Vishwanathan on above standards. Accordingly, it was decided to prepare the revised drafts of above standards and to suitably include the comments received. The committee recommended the name of Dr. J. P. Sinha, Principal Scientist, IARI, New Delhi for inclusion in panel FAD20/P8. Further, the committee requested Dr Sandeep Mann and Dr. J. P. Sinha to prepare and provide the revised drafts of the above Indian Standards.



#### 4.5 Revision of Indian standards on Agricultural Produce Milling Machinery

- a) **IS 10520: 1989 Agricultural Produce Milling Machinery - Emery Stones for Burr Flour Mills**
- b) **IS 10892: 1984 Recommendations for aperture size of sieves for seed cleaners**
- c) **IS 11041: 1984 Air-Screen Seed Cleaner**
- d) **IS 12833: 1989 Agricultural Produce Milling Machinery-Roller Flour Mills – Flow Diagram.**
- e) **IS 13793: 1993 Agricultural produce milling Machinery-Milling of pulses – Flow Diagram**

The committee noted the the points in the matter of above standards as mentioned in the agenda which were suggested in the meeting of working group held on 29 April 2023 where Dr Vinod H. Kalbande and Dr. Ravindra Naik participated as expert. Further, the committee constituted a formal panel (FAD20/P19) including Dr Ravindra Naik (as a Convenor), Dr Vinod H Kalbande, Dr Sandeep Mann, Dr R. K. Vishwakarma and Dr Prasoon Verma, Indian Institute of Pulse Research, Kanpur. The committee requested the panel to submit the revised drafts of above five Indian Standards before 31 July, 2023.

The committee also noted that the application for all india first license has been received against the **IS 11041**, therefore the committee advised the panel to take up the revision of this standard on priority and the same has been included in the Annual Action Plan of the committee.

#### 4.6 Doc. No. FAD 20 (17388) P Draft Indian Standard – Seeds and Grain Processing and Storage Engineering - Terminology

The committee observed the working draft and found there is need of inclusion of more terminology related to seeds and Grain Processing and Storage Engineering. Therefore, the committee decided to circulate this draft among all the committee member for seeking more terminologies. The requested to suitably include atleast ten terminologies in the draft submit the same before 30 June 2023.

#### 4.7 Doc. No. FAD 20 (17385) C Draft Indian Standard – Grader — Citrus — Size Based (first revision of IS 15831)

The committee reviewed the above draft and recommended to change the title from the existing to “Size Based Mechanical Citrus Grader – Specification and Test Code”. The committee felt a need of preparing the test methods and to be include in this draft. And for preparing the revised draft the following experts were nominated.

- a). Dr Nachiket Kotwaliwale, CIPHET Ludhiana.
- b). Dr Sandhya Singh, PAU Ludhiana.
- c). Dr V. Eyarkai Nambi, NIFTEM, Thanjavur.

#### 4.8 Revision of Indian standards on cotton processing

- a) **IS 15855: 2010 – Cotton Seed Delinting Machinery-Surge Bin Machine - Specification**
- b) **IS 15856: 2010 – Cotton Seed Delinting Machinery-Pre-Heating Machine – Specification**

The committee reviewed the comments received from Dr. Vinod H. Kalbande and Dr. V. G. Arude. The committee also requested Dr. Pitam Chandra to examine the comments and incorporate them suitably into the standards to provide revised drafts. Once the drafts are received from Dr. Chandra, the committee decided to send the revised draft for wide circulation for a period of 60 days.

## ITEM 5 NEW STANDARDS FOR STANDARDIZATION

### 5.1 Doc. No. FAD20 (21766) Draft Indian Standard – Single Screw Extruder – Specification

The committee noted and briefly reviewed the draft of the single screw extruder. Since the draft had already been circulated among the committee members for 21 days, with the last date for comments being February 2, 2023, comments were received from Dr. R Vishwanathan. The committee advised to suitably include those comments in the draft.

Furthermore, the committee approved the draft for wide circulation for a period of 60 days. Additionally, the committee suggested sending a copy of this draft to the "Twin Screw Manufacturer, Kolkata, West Bengal" to seek their technical comments during the wide circulation.

During the meeting, it was also decided to develop an Indian Standard on the twin screw extruder and proposed it as a new work item for the next committee meeting.

### 5.2 Doc. No. FAD20 (21688) Draft Indian Standard – Carrot Washer – Specification

The committee noted that the P-draft (Preliminary Draft) was circulated among the committee members for 21 days, and the last date for comments was January 24, 2023. The committee reviewed the comments received from Dr. R Vishwanathan, and approved the same to be included suitably in the draft and also recommended to change the title of the standard to "Carrot and Radish Washer – Test Code". Furthermore, the committee approved the draft for wide circulation for a period of 60 days.

### 5.3 Mobile Agro Processing Units – Safety Requirements

The committee noted that the draft is under development, and after due deliberation and discussion, it was decided to continue working on this subject. Consequently, the committee requested Dr. Pitam Chandra to prepare a revised draft and decided to write to Dr. Mohammed Shafiq Alam, PAU, Ludhiana, Dr. Palani V. Muthu, UAS, Bangalore, and Dr. V. K. Sehgal to seek their comments on the above matter.

### 5.5 Food Grain ATM – Specification

The committee observed that the draft for the food grain ATM is under development and advised the member secretary to write to the manufacturers of this equipment and include them in the development of this standard by considering their views and technical inputs.

## ITEM 6 REVIEW OF INDIAN STANDARDS

**6.1** The committee noted that the following seven Indian Standards had to undergo a five-year review and were due for review in April 2023. Therefore, during the meeting, the committee conducted a brief review of these Indian Standards and decided to reaffirm all seven of them. In the process of reaffirmation, the committee also made the decision to initiate the revision of these standards, and the following decisions were taken for each standard.

Sl No.	IS No.	IS Title	Decision Taken
1	IS 14442 : 1997	Agricultural Produce Milling Machinery - Burr Mill - Test Code	The committee allocated these two standards to Dr R Vishwanathan for reviewing and preparing a revised drafts.
2	IS 14460 : 1997	Seed Processing Equipment - Gravity Separator - Specification	
3	IS 15858 : 2013	Cotton Seed Delinting Machinery - Delinting Machine with Electrical Heating and Hydraulic System - Specification	The committee noted that these five standards fall under the common subject of seed delinting and cotton processing. After thorough discussion, the committee recommended the BIS secretariat to communicate with Dr. Sujit Kumar Shukla, Director of CIRCOT, regarding the revision of these standards.
4	IS 15859 : 2013	Cotton Seed Delinting Machinery - Buffing Machine With Air Jet and Nylon Brush - Specification	
5	IS 15860 : 2013	Cotton Seed Delinting Machinery - Ammonia Cotton Seed Neutralizer Machine With Ammonia Vaporizer - Specification	
6	IS 15861 : 2013	Cotton Seed Delinting Machinery - Pollution Control System with Scrubber, Cyclone, Chimney, Hoods and Ducting - Specification	
7	IS 15862 : 2013	Cotton Seed Delinting Machinery - HCL Gas Generation Unit - Specification	

**The committee may kindly decide.**

## **6.2 Research projects to be taken up for inclusion of empirical data and insights**

A due discussion took place among all the committee members regarding the proposal for such research project and it was found that now there is no subject to be proposed for getting approved as a research project.

## **6.3 Provision for archiving of Indian Standards**

The committee conducted a comprehensive review of the list of standards included in the committee's program of work and concluded that there are no standards that need to be archived at this time.

## **6.4 Revision of Pre-2000 Indian Standards Related to Rice Milling Equipment**

Sl No.	IS No.	Title	Decision Taken
1	IS 12792	Agricultural Produce Milling Machinery – Mini Rice Mill – Specification	The committee was informed about the meeting of panel FAD20/P17 held on March 17, 2023. During the meeting, the material specifications were revised and submitted by Dr. R. Vishwanathan. However, it was noted that no inputs were received from Shri Rohit Kumar of the Indian Stainless Steel Development Authority (ISSDA), New Delhi. Consequently, it was decided to remove his name and write to ISSDA to nominate another expert. The committee also recommended the name of Dr Sadananda Patel, Indira Gandhi Krishi Vishwa Vidyalaya, Raipur to include as a member in the panel.  The material specifications mentioned in IS 12792 were thoroughly discussed component-wise, and updates were made by incorporating inputs from committee members, after reaching a consensus.  The committee recommended updating the remaining six standards accordingly and incorporating the same materials for same component as discussed and updated in IS 12792.  Furthermore, the committee advised specifying the material specifications component-wise in all the standards.
2	IS 9555 : 1999	Rice Polisher – Specification	
3	IS 10048: 1999	Rice Grader – Specification	
4	10507: 1998	Paddy Separator – Specification	
5	IS 11787: 1986	Paddy Dehusker Rubber Roller Type – Specification	
6	12411: 1988	Paddy Dehusker, Centrifugal Type – Specification	
7	IS 12396: 1988	Paddy Cleaners – Specification	

The committee approved all seven drafts mentioned above for wide circulation, with a period of 60 days, after incorporating all the suggested points. Additionally, the committee recommended organizing a webinar/seminar to invite rice milling equipment manufacturers and gather their perspectives on the material specifications mentioned in the standards for all rice milling equipment.

#### **ITEM 7 STANDARDIZATION IN THE FIELD OF MILLET PROCESSING EQUIPMENT**

The committee reviewed the composition of the panel FAD20/P16, which was constituted for developing standards on millet processing equipment. It was informed that two meetings of this panel were held on 29 March 2023 and 8 May 2023. Based on the decisions taken in those meetings, a total of six subjects were finalized for developing the Indian Standards related to millets.

Furthermore, the committee noted that four working drafts have been prepared by the panel, as listed below:

- a) Millet Dehusker, Centrifugal Type — Specification
- b) Destoner for Millets - Specification and Test Code

- c) Cleaner Cum Grader for Millets with Pre-Cleaner - Specification and Test Code
- d) Symbols and Flow Diagram for Primary Processing of Millets

After reviewing the prepared working drafts, the committee decided to circulate these four drafts as P-drafts among committee members for a period of 21 days to seek their inputs.

#### **ITEM 8 ANY OTHER BUSINESS**

The committee noticed that the ISO TC- 326 Machinery intended for use with food stuffs is newly formed committee, and no standard is published under this committee. As Agriculture and Food Processing Equipment Sectional Committee, FAD 20 is in liaison with ISO TC-326.

Therefore, the committee recommended to propose the new work item proposal for millet processing equipment at ISO in next plenary meeting of TC – 326 for developing the International Standards thereon.

#### **ITEM 9 TIME AND PLACE FOR THE NEXT MEETING**

After having a discussion among all the committee members, it was decided to schedule the next meeting in the first week of September at Manak Bhawan, BIS in physical mode.

**ANNEX-I****ATTENDANCE FOR****21<sup>st</sup> Meeting of Agriculture and Food Processing Equipment Sectional Committee, FAD 20****Date: 2<sup>nd</sup> June 2023  
Delhi****Venue: Samvaad (Green room), BIS, New****Meeting type: Hybrid (Virtual +  
Physical)  
s**

<b>Sl. No.</b>	<b>Organization Name</b>	<b>Members Name</b>
1.	Indian Council of Agricultural Research, New Delhi	Dr. Shyam Narayan Jha (Chairperson FAD 20)
2.	Agriculture Machinery Manufacturers Association, Pune	Dr. Surendra Singh Shri Mitul Panchal
3.	Dr Panjabro Deshmukh Krishi Vidyapeeth, Akola	Dr. Suchita V. Gupta Dr. Bhagyashree N. Patil
4.	ICAR - Central Institute for Women in Agriculture, Bhubaneswar	Dr. Sachidananda Swain Er. Chaitrali S. Mhatre
5.	ICAR - Central Institute of Agricultural Engineering, Bhopal	Dr. Ravindra Naik
6.	ICAR - Central Institute of Post-Harvest Engineering and Technology, Ludhiana	Dr. Sandeep Mann
7.	ICAR - Indian Institute of Horticultural Research, Bengaluru	Dr. A. Carolina Rathina Kumari
8.	Mahatma Phule Krishi Vidyapeeth, Rahuri	Prof. Vikram Parasharam Kad
9.	National Committee on Precision Agriculture and Horticulture, New Delhi	Shri Anand Zambre
10.	Northern Region Farm Machinery Training and Testing Institute, Hisar	Dr. Mukesh Jain
11.	Punjab Agricultural University, Ludhiana	Dr Sandhya Singh Dr Maninder Kaur Dr Rohit Sharma
12.	Tamil Nadu Agricultural University, Coimbatore	Dr. P. Sudha

13.	In Personal Capacity	Dr. Pitam Chandra
14.	In Personal Capacity	Shri Jix Antony
15.	In Personal Capacity	Dr. R. Vishwanathan
16.	Food & Agriculture Department, BIS, New Delhi	Mrs. Suneeti Toteja (Head, Scientist – E),
17.	Food & Agriculture Department, BIS, New Delhi	Shri Pradeep Sharma (Scientist – B/ Asst Director)