

**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>
<b>Slaughter house and Meat Industry Sectional Committee, FAD 18</b>	<b>21<sup>st</sup></b>	<b>29 August 2024</b> (Thursday)	<b>14 30 h</b>	<b>Hybrid Mode ICAR-National Research Centre on Mithun, Dimapur, Nagaland</b>

**CHAIRPERSON:**

**Dr. S B Barbuddhe**  
Director,  
ICAR-National Meat Research Institute,  
Hyderabad

**MEMBER SECRETARY:**

**Debasish Mahalik**  
Scientist-C / Deputy Director  
Food & Agriculture Department,  
Bureau of Indian Standards, New Delhi

**ATTENDANCE SHEET – Please see Annex A (Page 12)**

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

Shri Debasish Mahalik, Scientist-C/ Deputy Director, Food and Agriculture Department welcomed the Chairperson and members of FAD 18 to the 21st meeting of the committee. Shri Mahalik apprised the committee members regarding the various issues under consideration of the committee. Further, Shri Mahalik highlighted critical aspects that will play a major role in standardization activity of the committee such as; implementation of handbook for technical committee members, focus on digitized standardization, conversion of R&D work to ISO and Indian Standards, IR portal implementation. At last, requesting for support from the committee, Shri Mahalik lauded the work done by the various members and urged for fruitful and conclusive deliberation on the issues raised in the agenda.

## **0.2 Opening Remarks by the Chairman**

Dr. S. B. Barbuddhe, Director, ICAR-National Meat Research Institute, Hyderabad and Chairperson, Slaughter house and Meat Industry Sectional Committee, FAD 18 in his opening remarks extended a warm welcome to all the members to the 21<sup>st</sup> meeting of the Committee. He also welcomed to new members National Egg Coordination Committee (NECC), Hyderabad, M/s Licious (Delightful Gourmet Pvt Ltd), Bengaluru and M/s Dhopeswar Engineering Private Ltd., Hyderabad. He also thanked to Dr. Girish Patil for hosting 21<sup>st</sup> meeting of FAD 18 in ICAR-National Research Centre on Mithun, Dimapur, Nagaland. Dr. Barbuddhe informed that the committee making Indian standards and ISO level also. Moreover, Dr. Barbuddhe informed about the mention of Indian Standards in the speech given by Honorable Prime Minister. He appreciated all the committee members of FAD 18 for their contribution in sanction R&D projects and requested for a continued effort and identify more and more areas related to Slaughter house and Meat Industry.

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

The committee noted that the minutes of the 20<sup>th</sup> meeting of Slaughter house and Meat Industry Sectional Committee, FAD 18 held on 17 May 2024 through Hybrid mode at Tamil Nadu Veterinary and Animal Sciences University, Chennai were circulated vide standards portal dated 27 May 2024. As, no comments were received, the committee approved the minutes of 20<sup>th</sup> meeting without any further modification.

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

### **2.1 SCOPE & ACTIVITIES OF THE COMMITTEE**

**2.1.1** The committee noted the updated scope of FAD 18 mentioned under 2.1.1 and after due deliberation, the committee decided currently no more modification is required in the scope.

**2.1.2** The committee noted the Program of Work (POW) of Slaughter house and Meat Industry Sectional Committee, FAD 18 enclosed at Annex 1 of the agenda.

### **2.2 COMPOSITION OF THE COMMITTEE**

**2.2.1** The committee noted the information provided under 2.2.1 and 2.2.2 of the agenda and decided to send a reminder to following organizations:

- a) West Bengal Livestock Development Corporation Limited, Kolkata, West Bengal (A Govt. of West Bengal Undertaking)
- b) Meat Products of India Ltd., Ernakulam, Kerala
- c) Broiler Co-Ordination Committee, Tamil Nadu

Further, the committee decided that in case the nomination is not received by end of November 2024, the nomination shall be recommended to Food and Agriculture Division Council for withdrawal.

**2.2.3** The committee noted the composition of the committee enclosed at Annex 2 of the agenda and decided to withdraw the membership of Shri Rohit Kumar, Indian Stainless Steel Development Association, Gurugram for lack of participation and contribution in Committee's work from the above organization, FAD 18 decided to withdraw the nomination from FAD 18 according to following clause of **Handbook for Technical Committee Members of Bureau of Indian Standards (BIS)**.

***“3.4 Termination of the Membership***

***3.4.1 Termination due to failure to attend meetings***

*Failure to attend two consecutive meetings of the Sectional Committee and/or at least 50 percent meetings of the Sectional Committee held in a year, shall attract termination of the membership of the Sectional Committee, except in extra-ordinary cases to be considered by the Division Council concerned (BIS office order Ref: PNC 09/18/2023-PNC-BIS dated 06 September 2023).”*

**2.2.3** The committee noted the information provided under 2.2.3 and requested all the conveners to present the Action Taken Report (ATR).

Further, after due deliberation, the committee approved the following timelines of the working group as tabulated below :

<b><i>Working groups of FAD 18</i></b>	<b><i>Approved Timeline in 21<sup>st</sup> meeting</i></b>	<b><i>Decision taken</i></b>
FAD 18/ WG I Working group on Slaughter House Management System	3 Months (December 2024)	The committee requested the working groups to submit the draft standard by end of December, 2024 which upon receipt will be circulated a preliminary draft (P-Draft) for a period of 30 days seeking comments from committee members.
FAD 18/ WG II Working group on Poultry Slaughterhouse Design and Operation	3 Months (December 2024)	

**ITEM 3 ANNUAL ACTION PLAN AND ANNUAL MEETING CALNDER**

**3.1** The committee noted the current status of the progress in Annual Action Plan for the year 2024-25 as enclosed at Annex 3 of the agenda.

**3.2** The committee noted the Annual Meeting Calendar for the year 2024-25 as approved by the committee in its 20<sup>th</sup> meeting and modified the Annual Meeting Calendar as follows:

Year 2024-2025	Quarter 1	Quarter 2	Quarter 3	Quarter 4
<b>Schedule</b>	May 2024	August 2024	November 2024	February 2025
<b>Venue</b>	Tamil Nadu Veterinary and Animal Sciences University, Chennai	ICAR- National Research Centre on Mithun, Nagaland	CSIR - Central Food Technological Research Institute, Mysore	ICAR - Indian Veterinary Research Institute, Izatnagar

**3.3** The committee noted the information provided under 3.3 of the agenda. Further the following decisions were taken in order to improve the efficiency:

- a) Upon circulation of a Preliminary draft (P-draft), within a period of 14 days all the committee members (both principal and alternate member) shall provide their inputs (editorial/ technical/ general/ I agree with the content of the draft).
- b) Upon circulation of a Wide circulation draft (WC draft), within a period of 45 days all the committee members (both principal and alternate member) shall provide their inputs (editorial/ technical/ general/ I agree with the content of the draft).
- c) As per Clause 3.4.1 of the ‘Handbook for Technical Committee Members of Bureau of Indian Standards (BIS)’; failure to attend two consecutive meetings of the Sectional Committee and/or at least 50 percent meetings of the Sectional Committee held in a year, shall attract termination of the membership of the Sectional Committee. No further exceptions shall be made.

#### **ITEM 4 NEW STANDARDS FOR STANDARDISATION**

##### **4.1 Doc. No. FAD 18 (23955) P ‘Rotary Animal Restrainer – Specification’**

The committee noted the information provided under 4.1 of the agenda. Considering the inputs received from experts during the meeting, after due deliberation the committee decided to incorporate the following modifications in the above draft standard:

- a) The word ‘ritual slaughter’ or any reference to any kind of ritual slaughter shall be removed from the foreword of the draft.
- b) Clause 5 ‘OPERATION AND MAINTENANCE REQUIREMENTS’ shall be shifted to the Annexures, where suitable as clause 5 is for guidance and not the main body of the standard.
- c) The FAD 18/ Panel IV to review the above draft standard (enclosed at Annex 4 of the agenda) considering the above recommendations and submit the final draft to Member Secretary, FAD 18 within a period of 14 days. Upon receipt of the draft standard, the draft will be sent into wide circulation for a period of 60 days seeking comments.

#### 4.2 Doc. No. FAD 18 (24818) WC Terminology of Meat Products and Meat Animals (Part 2) : Other Than Poultry

The committee noted the information provided under 4.2 of the agenda. Further, it was informed by Dr. P K mandal, RIVER, Pondicherry that there is a need to review the draft standard again as the draft lacks a lot of important definitions which should be included. Considering the above, the committee decided to give 1 month time period to Dr. Narendra Babu, TANUVAS, Chennai; Dr. S Ezhivelan, TANUVAS, Chennai; Dr. P K mandal, RIVER, Pondicherry for collection of all the related definitions and prepare the final draft. Further, the committee decided to circulate the final draft among the committee members for a period of 21 days seeking comments.

In case no comments are received during the 21 days period, the above draft will be sent into publication after due approval of the committee. However, if any comments are received during wide circulation stage, then the comments will be deliberated upon by FAD 18 in its next meeting.


#### 4.3 Doc. No. FAD 18 (25007) P ‘Requirements for Transportation of Food Animal Carcasses from Abattoirs to Processing Distribution Centers–Code of Practice’

The committee noted the information provided under 4.3 of the agenda and decided to circulate the above draft among the committee members for the period of 7 days for seeking inputs/comments. Further the committee decided to send the comments received during the circulation period along with comments received during the circulation of P-draft (enclosed at *Annex 8 of the agenda*) to FAD 18/Panel I : Code of Practices related to Slaughter House and Meat Industry and requested the panel to review the comments and submit the final draft to Member Secretary, FAD 18 within a period of 30 days. Upon receipt of the draft standard, the draft will be sent into wide circulation for a period of 60 days seeking comments with necessary approval of Chairperson, FAD 18.

#### 4.4 New subjects for standardization identified in seminar held at ICAR-NRC on Pig, Guwahati on 5 October 2023

The committee noted the information provided under 4.4 of the agenda and the following decision were taken:

<i>Sl. No.</i>	<i>Subjects recommended in the seminar</i>	<i>Action Taken till 20<sup>th</sup> meeting of FAD 18</i>	<i>Decision taken in 21<sup>st</sup> meeting of FAD 18</i>
a)	Specification for Stunning Box for Pigs	See 2.2..	See 2.2.3.
b)	Slaughterhouse Management System	The draft standard is yet to be received.	See 2.2.3.
c)	Small or Micro Slaughterhouses specifications	The R&D project has been allocated to Dr. M Muthukumar, ICAR- NMRI, Hyderabad.	See 8.1.

d)	Traceability of meat products	The proposal received were rejected to be concern related to financial evaluation. However, the ToR of this project will be hosted again at later stage.	The committee noted the information.
e)	Guidelines for waste management of slaughterhouses	Accordingly, the draft standard ( <i>enclosed at Annex 9</i> ) has been sent to Dr. M. Muthukumar, National Research Center on Meat, Hyderabad and Dr. Vasudevan V. N. Kerala Veterinary and Animal Sciences University, Thrissur vide E-mail dated 30 July 2024.   Annex 9_FAD 18 (25462) P_21st TC_FAE  The inputs are awaited.	The committee noted the information provided under the agenda and decided to give an extension of 14 days timeline to all committee members for providing inputs on the draft standard (enclosed at Annex 9 of the agenda).  Upon receipt of comments, the committee further requested Dr. Girish Patil, Convener, FAD 18/ Panel VI to convene a meeting of the panel to finalize the updated draft standard for further circulation.

## ITEM 5 REVIEW OF INDIAN STANDARDS

5.1 The committee noted the information provided under 5.1 of the agenda and the following decision were taken:

SI No.	IS Number	IS Title	Decision taken in 21 <sup>st</sup> meeting
a)	IS 1982 : 2015 Reviewed In : 2020	Ante - Mortem and Post - Mortem inspection of meat animals - Code of practice ( <i>second revision</i> )	The committee noted that the Action research project has been allocated to Shri Anurag, Scientist-C, BIS. Further, the committee requested Dr. B M Naveena, Convener, FAD 18/ Panel I to take up the review of the standard under FAD 18/ Panel I and provide the support to Shri Anurag for Action Research Project.
b)	IS 5558 : 1970 Reviewed In : 2020	Specification for chicken essence	See 5.3.
c)	IS 5960 (Part 11) : 2013 Reviewed In : 2020	Meat and meat products - Methods of test: Part 11 determination of glucono - Delta - Lactone content ( <i>first revision</i> )	The committee noted that, the action research project has been allocated to Neha Kumari, Scientist-D, BIS.
d)	IS 5960 (Part 5) : 2001/ ISO 1442	Meat and meat products - Methods of test: Part 5 determination of moisture	The committee noted the information provided in the agenda and approved

	Reviewed In : 2023	content (Reference Method) ( <i>first revision</i> )	the FAD 18 (26266) WC (enclosed at Annex 10 of the agenda) for publication.
e)	IS 8895 : 2015 Reviewed In : 2020	Handling, Storage and Transport of Slaughterhouse By-Products — Guidelines ( <i>first revision</i> )	The committee noted that the Action research project has been allocated to Shri Anurag, Scientist-C, BIS. Further, the committee requested Dr. B M Naveena, Convener, FAD 18/ Panel I to take up the review of the standard under FAD 18/ Panel I and provide the support to Shri Anurag for Action Research Project.
f)	IS 15937 : 2011/ ISO 13493:2011 Reviewed In : 2020	Meat and meat products - Determination of chloramphenicol content - Method using liquid chromatography	The committee noted the information and decided to circulate again the copy of ISO 13493: 2021 among committee members for a period of 14 days seeking comments regarding its adoption.  The committee further decided to adopt the ISO standard upon non receipt of comments within the allocated timeframe and send for wide circulation for a period of 30 days.
g)	IS 15938 : 2011/ ISO 13496:2000 Reviewed In : 2020	Meat and meat products - Detection of colouring agents - Method using thin - Layer chromatography	The committee noted the information provided in the agenda and approved the FAD 18 (26298) WC (enclosed at Annex 12 of the agenda) for publication.

### 5.3 Review of Pre- 2000 Indian Standards

The committee noted the information provided under 5.3 of the agenda and the following decisions were taken:

<i>(a) Product Specification (Food products)</i>			
<i>Sl. No.</i>	<i>IS</i>	<i>Status as of 20<sup>th</sup> meeting</i>	<i>Decision taken in 21<sup>st</sup> meeting</i>
1.	IS 5558 : 1970 Specification for chicken essence	The committee deliberated upon the draft revision received from FAD 18/Panel III and decided to circulate the draft among committee member for a period of 60 days seeking comments. Further, the committee decided to deliberate on the further action in	The committee decided to send the draft revision of IS 5558 : 1970 'Specification for chicken essence' (enclosed at Annex 13 of the agenda) into wide circulation for a period of 60 days seeking comments.

		its next meeting based on the comments received.	
<b>(b) Method of Test</b>			
<b>1.</b>	IS 13401 : 1992 Meat and meat products Determination of thiobarbituric acid value in meat - Test method	The committee noted the information provided and decided to allocate the standard to BIS officer for action research project as an action research project.	The committee noted the information and decided to drop FAD 18 (24826) WC.  Further, the committee decided to circulate the final report of the Action research project upon its completion among the committee members.

## ITEM 6 INTERNATIONAL ACTIVITIES

### 6.1 Status of ISO Ballots under ISO/TC 34/SC 6

The committee noted the information provided under 6.1 of the agenda and requested Dr. P K Mandal, Convener, FAD 18/ Panel V to review the ballots for timely submission of responses through IR portal in consultation with Member Secretary, FAD 18.

### 6.2 International Relations (IR) Portal

The demonstration of the International Relations (IR) Portal was conducted for the committee members. Further, the committee decided to mandatorily use the IR portal for streamlining the ISO and other related international standardization activity starting from ballot processing, meeting notice, delegation proposal, briefing meeting etc.

## ITEM 7 MAPPING OF EQUIPMENT WITH INDIAN STANDARDS

The committee noted the information provided under 7 of the agenda and requested the panel to review the document prior to next meeting of the committee.

## ITEM 8 RESEARCH PROJECTS TO BE TAKEN UP FOR INCLUSION OF EMPIRICAL DATA AND INSIGHTS

### 8.1 Review of Research projects allotted on 1<sup>st</sup> Phase

The following project leaders gave a brief presentation of the work done:

SI No.	R&D project Details	Allotted to	Date of Sanction of 1 <sup>st</sup> phase of fund	Date of completion of the project as per guideline
a)	Development of protein biomarker-based test method	Dr. B M Naveena	15 July 2024	15 January 2025



	for authentication of cold-slaughtered chicken in fresh and cooked meat.			
b)	Study on requirements and operational aspects of small-scale slaughterhouses for hygienic meat production	Dr. M. Muthukumar	15 July 2024	15 January 2025
c)	Development of lateral flow immunoassay integrated smartphone device-based method for authentication. test in-situ meat	Dr. B M Naveena	15 July 2024	15 January 2025
d)	Study on Shelf-life assessment of shell eggs.	Dr. Vishnuraj M. R	11 July 2024	11 January 2025
e)	Development of smart sensor probe-based method for rapid detection of freshness of dressed chicken.	Dr. Suman Talukdar	15 July 2024	15 January 2025

Further, the committee decided to conduct the 1<sup>st</sup> phase review as per the GUIDELINES FOR RESEARCH & DEVELOPMENT PROJECTS FOR FORMULATION AND REVIEW OF STANDARDS (First Revision) issued by BIS, in the month of September 2024.

## 8.2 Research project on ‘Study on Shelf-Life assessment of Meat’

The committee noted the information provided under 8.2 of the agenda. After, due deliberation the committee requested the members to prepare the ToR on the above subject in consultation with Dr. B M Naveena, ICAR- NMRI, Hyderabad. Further, after due deliberation, the committee decided to take up the project after completion of approved R&D projects under Phase 1.

## 8.3 Research project on ‘Validation study of various available methods on determination of thiobarbituric acid value in meat and meat products’

The committee noted the information provided under 8.3 of the agenda.

## 8.4 Research Project on Determination of Meat Content in Meat Product

The committee noted the ToR on the above subject received from Dr. Vasudevan V. N. as enclosed at *Annex 14* of the agenda. Further, after due deliberation, the committee decided to take up the project after completion of approved R&D projects under Phase 1.

## ITEM 9 ANY OTHER BUSINESS

**9.1** Mr. Rajesh, M/s Licious (Delightful Gourmet Pvt Ltd), Bengaluru requested to committee to consider the sustainability aspects of the meat industry for standardization. He further proposed to take up developing guidelines for Life Cycle Approach for Meat Industry. Considering the above,

the committee requested Member Secretary, FAD 18 to identify if any ISO standards are already available in this subject and place it in the next meeting of the committee for consideration.

**9.2** Dr. S B Barbuddhe, Chairperson, FAD 18 requested the committee members to analyze whether standardization is possible on 'Decision support system for ante-mortem and post-mortem inspection in slaughterhouse'. Further, he requested the committee members to present their findings in the next meeting of the committee for consideration.

**ITEM 10      TIME AND PLACE FOR THE NEXT MEETING**

The committee after due deliberation decided to hold its next meeting at CSIR - Central Food Technological Research Institute, Mysore in the month of November 2024.

**ANNEX A**  
**ATTENDANCE**

**Slaughter House and Meat Industry Sectional Committee, FAD 18**

Dated: 29-August-2024

Venue: ICAR-NRC on Mithun, Dimapur, Nagaland

Sl. No.	Organization	Member Represented
1.	ICAR- National Meat Research Institute, Hyderabad	<b>Dr. S. B. Barbuddhe</b> (Chairperson)
2.	CSIR- Central Food Technological Research Institute, Mysore	Dr. Tanaji Kudre
3.	Dhopeswar Engineering Private Limited, Hyderabad	Shri Shirish Dhopeswarkar
4.	Indian Meat Science Association, Hyderabad	Dr. Girish Patil
5.	National Research Center on Meat, Hyderabad	Dr. M. Muthukumar Dr. B M Naveena
6.	M/s Licious (Delightful Gourmet Pvt Ltd), Bengaluru	Shri Rajesh Singh
7.	Ministry of Food Processing Industries, Delhi	Dr. G. Srinivasan
8.	Municipal Corporation of Delhi, New Delhi	Dr. V. K. Singh
9.	National Research Centre for Pig, Guwahati	Dr. R. Thomas
10.	People for Ethical Treatment of Animals, Mumbai	Dr. Kiran Ahuja
11.	Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Pondicherry	Dr. Prabhat K. Mandal
12.	Tamil Nadu Veterinary and Animal Sciences University, Chennai	Dr. S. Ezhilvelan
13.	Bureau of Indian Standards, New Delhi	Shri Debasish Mahalik, (Member Secretary)
<b>Members join the Meeting on Virtual Mode</b>		
Sl. No.	Organization	Member Represented
1.	Animal Welfare Board of India, Balabgarh, Haryana	Dr. Sujit Kumar Dutta
2.	CSIR- Central Leather Research Institute, Chennai	Dr. T. S. Uma
3.	Confederation of Indian Food & Trade Industry & Industry, New Delhi	Shri Kannan B.
4.	Deonar Slaughterhouse, Mumbai	Dr. Kalimpasha Ahmedkhan Pathan
5.	Greater Hyderabad Municipal Corporation, Hyderabad	Dr. K. Chakrapani Reddy
6.	Indian Meat Science Association, Hyderabad	Dr. Rajiv Ranjan Kumar
7.	Indian Poultry Science Association, Izatnagar	Dr. Jaydeep Rokade
8.	Indian Veterinary Research Institute, Izatnagar	Dr. A. R. Sen Dr Suman Talukder
9.	Kerala Veterinary and Animal Sciences University, Thrissur	Dr. Vasudevan V. N. Ms. Renuka Nayar
10.	National Egg Coordination Committee (NECC), Chandigarh	Shri Ajit Singh

11.	Rajiv Gandhi Institute of Veterinary Education and Research (RIVER), Pondicherry	Dr. V. J. Ajay Kumar
12.	Voluntary Organization in Interest of Consumer Education (VOICE), New Delhi	Shri M. A. U. khan Dr Rajiv Jha Dr. H. Wadhwa
13.	Tamil Nadu Veterinary and Animal Sciences University, Chennai	Dr. R. Narendra Babu
<b>Special Invitees</b>		
1.	Bureau of Indian Standards	Shri Anurag
2.	ICAR IVRI, Bareilly	Dr A K Biswas
3.	Voluntary Organisation in Interest of Consumer Education (Voice), New Delhi	Shri Harbans Wadhwa
4.	ICAR -NMRI, Hyderabad	Dr. Vishnuraj M.R
5.	ICAR-NRC on Mithun, Dimapur, Nagaland	Shri Harshit Kumar