

of the Committee.

2.2 COMPOSITION OF THE SECTIONAL COMMITTEE

2.2.1 The Committee reviewed the updated composition of FAD 5 along with the attendance record of last three meetings including the attendance in 26th meeting. Having considered that **ICAR, New Delhi** has missed two consecutive meetings of the Committee and that ICAR is already well represented in the Committee through its various institutes, the Committee decided to recommend their withdrawal to FADC.

2.2.2 The Committee considered the request for Co-option from Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar in FAD 5 Committee and their interest and expertise related to Committee's work. The Committee accordingly decided to recommend to FADC for their co-option.

2.2.3 The member secretary informed that **Federation of Indian Animal Protection Organizations (FIAPO), New Delhi** vide their e-mail dated 4 Oct 2023 has requested withdrawal of their membership from FAD 5 considering their expertise in animal welfare related standards which are being dealt under FAD 32 where they are already member. The committee accordingly decided to recommend to FADC for their withdrawal from FAD 5 committee composition

2.2.4 The Committee further reviewed the composition of various Panels under FAD 5 provided under **Annex III** of the agenda and decided to update the composition of the Expert Panel on test method standards (FAD 5/Panel 13) as follows:

- (i) Dr. Rajesh Nair, NDDB, CALF Lab – Convenor
- (ii) Dr. D T Pal, NIANP
- (iii) Dr. A Natarajan, TANUVAS
- (iv) Dr. Sachin Kumar, NDRI
- (v) Shri Shashikant Gupta, NDDB
- (vi) Dr. A. K. Pattanaik, *in personal capacity*
- (vii) Dr. R.S. Masali, CLFMA
- (viii) Dr. Jagadeesh Kodali, Vimta Lab, Hyderabad

ITEM 3 INDIAN STANDARDS PUBLISHED/ UNDER PRINT

The committee noted the information given under agenda item 3 regarding Indian standards published since the last meeting of the committee and appreciated the work done by the Committee.

ITEM 4 DRAFT INDIAN STANDARDS COMPLETED WIDE CIRCULATION

4.1 Doc. No. FAD 05 (16680) C, Compounded feeds for young stock — Specification (First Revision of IS 5560)

4.1.1 The Committee noted that the comments received on the WC draft were discussed by the expert panel **FAD 5/ Panel 11**. The Committee deliberated upon the recommendation of the expert panel given in the report submitted by the Panel which was provided as **Annex IV** of the agenda. The Committee agreed to incorporate changes in the draft as per recommendations of

the Panel However, with regard to incorporation of the levels of Urea @ 0.5% (Max), the Committee considered that rumen development starts from 12 weeks onwards and therefore during pre-ruminant stage, NPN source is not utilized efficiently and may cause toxicity in the calves. Thus, urea @ 0.5% can be used in calf growth meal, but not in calf starter meal.

4.1.2 The Committee further deliberated upon Comments from Hindustan Feeds Pvt. Ltd. on IS 5560: 1970 provided under **7.2** of the agenda wherein they had expressed practical difficulties in achieving specified maximum limit on Total Ash as 5%. The Committee considered that total ash refers to the inorganic residue remaining after total incineration of organic matter present in the feed and includes salt content, mineral content & siliceous matter whereas acid insoluble ash (AIA) mainly consists of silica and indicates contamination with earthy material. Level of silica is a good indicator for indigestible portion of the diet. It is therefore more appropriate to specify limit for AIA instead of total ash to ensure that the raw materials used in feed material are of good quality and not contaminated with earthy material. The Committee further noted that Indian standard IS 2052: 2023, Compounded feeds for cattle — Specification and draft standard buffalo feed and pregnancy feed also specify maximum limit for acid insoluble ash and not for total ash. The Committee accordingly agreed to remove the requirement of total ash while retaining the requirement of acid insoluble ash in Doc. No. FAD 05 (16680) C, Compounded feeds for young stock — Specification (*First Revision of IS 5560*). (Please also see item **7.2**)

The Committee decided to finalize the draft for publication incorporating the agreed changes as indicated in 4.1.1 and 4.1.2 above.

4.2 Doc. No. FAD 05 (23757) C, Animal feeding stuffs — Determination of calcium content — Part 1: Titrimetric method [first revision of IS 13433 (Part 1)] (Adoption of ISO 6490-1:1985)

The Committee noted that no comment was received during the wide circulation period of the draft and decided to finalize the draft for publication as Indian Standard.

4.3 Doc. No. FAD 05 (19935) C, Calcite powder (CaCO₃) — Animal feed grade — Specification

The Committee noted that no comment was received during the wide circulation period of the draft and decided to finalize the draft for publication as Indian Standard.

4.4 Doc. No. FAD 05 (22002) C, Compounded feed for buffalo — Specification

The Committee noted that during the WC period, comments from NDRI, Karnal (from BIS Standards portal on 18-11-2023). The Committee deliberated upon the comments and decided as follows:

Sl. No.	Clause/ Table/ Fig. No.	Justification	Proposed change	Decision of Committee
1.	3.2 Ingredients 3.2.1	Mentioned as "Ingredients as listed in Annex B of IS 2052 may be used for	Either Remove Urea or NPN compounds or permit the utilization of urea	The Committee considered the comment and agreed to allow use of Urea in the feed formulation upto 1% in line with the IS 2052: 2023, Compounded feeds for cattle —

		compounded feed for buffalo" where Urea also included. But, Urea not permitted to be used in the Buffalo feed.	upto 1.0 %.	Specification.
2.	3.2 Ingredients 3.2.2	Here ratio has been given for total nitrogen to Sulphur as 10:1 to 12:1, if Urea added.	urea is not allowed in draft, that to be allowed	
3.	3.2 Ingredients 3.2.4	Raw materials like DORB, Rice polish & grains which generally contributes to 70 % of recipe/formulation, allow to purchase even if aflatoxin is upto 50ppb. Then how it is practically possible to produced feed within 20 ppb aflatoxin. Availability of raw material especially maize, soya extract, ground extract with low level of aflatoxin is very very difficult	Aflatoxin content in cattle feed can be set to Max. 50 ppb considering the carryover of Aflatoxin B1 from feed to Aflatoxin M1 in milk.	Representative from NDRI withdrew the comment on aflatoxin as NDRI's comment. Further, the Committee opined that the matter regarding limit of Aflatoxin B1 in Feed and feed ingredients has been deliberated upon earlier a number of times both at the Committee level as well as Panel level. The Committee accordingly decided to reinstate its earlier decision in the matter that maximum limit of 20 ppb for aflatoxin B1 in Compounded Cattle feed as well as feed ingredients is appropriate keeping in view the conversion factors of aflatoxin B1 to M1 in cattle, except for cereal grains, DORB and rice polish maximum limit of aflatoxin B1 is kept 50 ppb keeping in view their higher susceptibility to Aflatoxin contamination.
4.	3.3 Table 1 Requirements for Compound ed Feed for Buffalo	Urea not allowed to be used	It would have difficult and much costlier to product the feed with high protein (22 %) without incorporation of urea. As per BIS type II, allow to use urea upto 1%.	Please see decision of the Committee at SI. No. 1&2 above.
5.	4.2 Marking (c) Net mass	Net mass is mentioned on labelling	Change it to net weight	The Committee referred to its decision during 24 th meeting where the Committee considered the <i>The Legal Metrology (Packaged Commodities) Rules, 2011</i> where the "net quantity", in relation to commodity contained in a package, is defined as the quantity by weight, measure or number of such

				<p>commodity contained in that package, excluding the packaging or wrapper. It further provides under the provision 12 (2) (a) regarding the manner in which declaration of quantity shall be given which is as follows —</p> <p><i>'Except in the cases of commodities specified in the Fourth Schedule, the declaration of quantity shall be in terms of the unit of mass, if the commodity is solid, semi-solid, viscous or a mixture of solid and liquid'</i></p> <p>In line with this decision and in order to have harmonious approach across standards, the Committee decided to retain the term 'Net mass' in marking clause.</p>
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The Committee decided to finalize the draft for publication incorporating the agreed changes

4.5 Doc. No. FAD 05 (23749) C, Solvent extracted linseed meal (de-oiled cake) as livestock feed ingredient — specification (second revision of IS 3440)

The Committee noted that during the WC period, only one editorial comment was received from NDDDB Anand to replace '–' with 'Nil' in Table 1 for v) Castor husk, oil cake & vi) *Mahua* cake. The Committee agreed to the proposed change and decided to finalize the draft for publication as Indian Standard.

4.6 Doc. No. FAD 05 (23750) C, Solvent extracted decorticated cottonseed meal (de-oiled cake) as livestock feed ingredient — Specification (third revision of IS 3592)

The Committee noted that during the WC period, only one editorial comment was received from NDDDB Anand to replace '–' with 'Nil' in Table 1 for v) Castor husk, oil cake & vi) *Mahua* cake. The Committee agreed to the proposed change and decided to finalize the draft for publication as Indian Standard.

4.7 Doc. No. FAD 05 (23751) C, Rice bran as livestock feed ingredient — Specification (second revision of IS 3648)

The Committee noted that during the WC period, only one editorial comment was received from NDDDB Anand to replace '–' with 'Nil' in Table 1 for vi) Castor husk, oil cake & vii) *Mahua* cake. The Committee agreed to the proposed change and decided to finalize the draft for publication as Indian Standard.

4.8 Doc. No. FAD 05 (23752) C, Pig feeds — Specification (second revision of IS 7472)

The Committee noted that no comment was received during the wide circulation period of the draft. However, during the meeting representative from PFA, New Delhi presented technical comments on the draft and requested the committee to consider these comments. The comments

provided by PFA are provided as **Annex B** of the minutes.

The Committee noted the comments from PFA on the draft and constituted following Working group to deliberate on these comments and submit its recommendation to the committee in two months' time:

- (i) Representative from NRC on Pig – Convenor
- (ii) Representative from PFA
- (iii) Representative from CLFMA
- (iv) Dr. Barman (*in personal capacity*)

4.9 Doc. No. FAD 05 (23753) C, Glossary of terms for animal feeds and feeding stuffs (*first revision of IS 9703*)

The Committee noted that no comment was received during the wide circulation period of the draft and decided to finalize the draft for publication as Indian Standard.

4.10 Doc. No. FAD 05 (23755) C, Mango seed kernel (solvent extracted) as livestock feed ingredient — Specification (*first revision of IS 12829*)

The Committee noted that during the WC period, only one editorial comment was received from NDDDB Anand to replace ‘–’ with ‘Nil’ in Table 1 for vi) Castor husk, oil cake & vii) *Mahua* cake. The Committee agreed to the proposed change and decided to finalize the draft for publication as Indian Standard.

4.11 Doc. No. FAD 05 (23756) C, Urea molasses block as ruminant feed supplement — Specification (*first revision of IS 13451*)

The Committee noted that during the WC period, only one comment was received from NDDDB Anand to change the requirement of Sulphur (Sl. No viii) of Table 1) to 0.80% (Min) and 0.50% (Min) in Hot and Cold process, respectively. The Committee deliberated that the requirement of sulphur mentioned in IS 13451 is 1.0% max in hot and cold process. However, based on the calculated availability of sulphur from different sources used in Urea molasses block production, the availability of sulphur would be maximum 0.84% and 0.54% in hot and cold process, respectively. The Committee accordingly agreed to incorporate the proposed change and decided to finalize the draft for publication as Indian Standard.

ITEM 5 DRAFT INDIAN STANDARDS COMPLETED P-DRAFT STAGE

Doc. No. FAD 05 (22003) P, Compounded feed for pregnant cows and buffaloes — Specification

The Committee noted that the comments received on the P draft were discussed by the expert panel **FAD 5/ Panel 11** and endorsed the recommendation of the expert panel given in the report of the panel provided as Annex IV of the agenda. The Committee decided to send the draft into wide circulation for a period of 60 days incorporating the agreed changes in the draft as per recommendations of the Panel 11.

ITEM 6 NEW WORK ITEM PROPOSALS FOR STANDARDIZATION: