

FSSAI's meta-analysis study finds gaps in lab-FBO ratio across India

Monday, 18 March, 2019

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FSSAI's meta-analysis study of food testing laboratories in India found serious gaps in the ratio of labs to the FBOs (food business operators) in the country. It recommended that there was a great need to fill the gaps, while in some cases, the study calls for a need for increase in the abilities of the labs.

The study found that the major challenges have been in the domains of equipment and machinery, manpower availability, skill development, regulatory, R&D (research and development), capacity utilisation as well as consumer awareness.

The study stated that at 100 per cent compliance by FBOs towards food testing, the deficit in laboratories was estimated at 284 labs overall in the country, with the maximum requirement in the southern region (124 labs), followed by the east (70), west (58) and north (31).

Further, at 100 per cent compliance by FBOs and the HORECA (hotel, restaurant and cafe) segment towards food testing, the deficit in laboratories was estimated at over 700 labs, with the maximum requirement in the south (312), followed by the west (210), east (130) and north (91).

Seventy-eight per cent of the labs were found have NABL (National Accreditation Board for Testing and Calibration Laboratories) accreditation, while 57 per cent, were FSSAI-notified. Other major accreditations held by the surveyed labs included BIS (the Bureau of Indian Standards), AGMARK, MoEF (the Ministry of Environment, Forest and Climate Change) and AYUSH.

In terms of in-house ability for testing, most of the surveyed labs had a chemical-based testing set-up. Microbiological and pesticide residue testing was found to be a comparatively more capital-intensive service, hence, fewer labs possessed the same. Presence of chemical testing was found the highest in FSSAI-notified private labs, while referral and FBO labs saw the maximum presence of biological testing.

Procurement and maintenance of high-end testing equipment was also found to be a major challenge faced by small and medium private sector labs owing to the lack of samples and minimal capacity utilisation.

Ashwin Bhadri, chief executive officer, Equinox Labs, stated in a country like India for which food safety remained a higher priority for all the food businesses and consumers, a thorough scrutiny of the industry was a must for obvious reasons.

“The report renders a profound analysis of the challenges that have been faced by several categorised laboratories. The research made can be beneficial in overcoming the shortcomings with alternative solutions,” he added.

“The study addresses the adversities in domains such as equipment and machinery, R&D, capacity utilisation and skill development. The recommendations provided in the draft can be implemented by the laboratories to combat the issues,” Bhadri said.

“Also, the report suggests the percentages of categorised labs and helps us understand the importance of having a few more,” he added.

The study

According to FSSAI, this meta study on food testing laboratories in India was envisaged with the intention of having a holistic overview of the food testing ecosystem in the country.

It is of critical importance to have an understanding of the existing infrastructure available for food testing in the country in terms of capacity, provision of equipment, technical manpower, geographical spread and testing capabilities.

Hence, a judicious mix of secondary and primary analysis was utilised to cater to assessment of these parameters.

During the entire exercise, feedback from all critical stakeholders in the food testing ecosystem such as APEDA (the Agricultural and Processed Food Products Export Development Authority), MPEDA (the Marine Products Export Development Authority), EIC (the Export Inspection Council of India) and NABL, amongst others, was considered and incorporated to derive key recommendations and chart a way forward to strengthen the food testing infrastructure in the country.

Under the purview of this study, as a starting point, food testing labs in India have been categorised based on their registrations (FSSAI-notified, FBO-owned labs, referral labs, institutional labs and non-FSSAI labs), geographical spread zone-wise (north, east, west and

south) as well as their varying testing capabilities (biological, chemical and residue testing), amongst others.

It was found that about 915 food and water testing labs exist at present in India. These includes NABL-accredited labs, FSSAI-notified labs, state labs, institutional labs, referral labs, etc. Under the FSSAI network, about 265 labs are operational, while 35 are EIC-approved, 40 are APEDA-recognised while 72 received assistance from MoFPI.

Geographically, the north, east, west and south zones of the country covered 30 per cent, 10 per cent, 27 per cent and 34 per cent, respectively of all food testing labs in the country.

In terms of testing abilities, a large number of labs can carry out the biological, chemical or both tests for the food and agri products (which covers a host of food items), while only a few of them (only 32 per cent) can test for pesticide residues in food products. Furthermore, a limited number of labs were found which can test for specialised products, like marine (16 per cent), nutraceuticals (four per cent) and genetically-modified products (two per cent).