



HORIZONS

Safety First

The Indian food processing industry must transform its practices if it is to meet global food safety standards. Susanna Athaide provides an overview

In June 2008, when the Indian government announced that 2008–09 would be 'Food Safety and Quality Year', there was little inkling of the importance that this issue would have in the coming months. In July 2008, 16 babies in China were diagnosed with kidney stones. The cause was traced to a certain brand of milk powder that had been adulterated with melamine. By September, tens of thousands of cases, some fatal, had been reported and the scandal made international news. The magnitude of the scandal was unprecedented.

Where earlier the issue might have remained confined to a certain area in China or limited to products of a single company, the effects of the 2008 Chinese Milk Scandal were felt worldwide. Sales of milk and milk products dropped dramatically in China. Foreign companies such as Cadbury's and Nestle, who had manufacturing plants in the country, recalled their products made in Chinese factories. More than 20 countries banned milk and related imports from China. Countries as far apart as Chile, Canada and Sri Lanka banned products that could have been contaminated.

Globalisation has its upsides and downsides. As was seen in the Chinese catastrophe, better processing, preservation and transportation facilities took food products from a single area to countries all over the world. The same infrastructure also transported the contaminated products to these countries. As India aims to increase its food exports, the authorities must consider all these issues when developing infrastructure to promote food processing. Safety processes must be integrated into the system at every step to prevent similar calamities.

Small and unorganised players

"The small and unorganised sector is the backbone of the large agrarian economy in

India. All the stakeholders need to focus on this sector in terms of training the manpower on Good Agriculture Practices (GAP), Good Manufacturing Practices (GMP) and Good Hygiene Practices (GHP)," says Mr Umesh C Tripathy from Dabur. Many small food producers lack the knowledge and resources to implement food safety practices. "While bigger producers may understand the significance of complying with GMP and GHP and take steps to strengthen their manufacturing units in these respects, the issue that needs greater attention is the SMEs in the organised sector as well as the larger unorganised sector," say Dr V Sudershan Rao and GM Subba Rao from the National Institute of Nutrition (NIN).

The Indian food industry is fragmented, and there is little communication between farmers, the industry and the government. There is poor implementation of laws and regulation and a low level of compliance. It is difficult for authorities to communicate information about food standards and the quality that must be maintained. Thus, "Obtaining raw material that is uniform and of processing quality is also a big challenge," says Dr JS Pai, Executive Director of the Protein Foods & Nutrition Development Association of India (PFNDAI).

Transportation and storage

"Roads, water and power are probably the most scarce in terms of infrastructure for the food industry," says Dr Pai. The lack of adequate transportation and the inaccessibility of certain areas results in food spoilage and wastage. Bad storage and transport facilities increase the possibility of contamination by pests or the growth of micro-organisms. Mr Dinesh Gupta of BRY-AIR says, "In India, it is a long journey from farm to table. Moreover,



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India has probably the highest percentage of food produce wasted because of lack of infrastructure for storage and transportation."

There is also a lack of post-harvest facilities such as modern pack houses, automated grading systems and cold storages. "The pressing requirements for development of infrastructure are at three levels: farm gate, processing centres and distribution channels for domestic and export markets. The most fundamental among these is the development pre-processing facilities (grading, sorting, quality testing and cold chain facilities) at the farm-gate level," says Mr Tripathy.

Technology

It is absolutely essential to incorporate technology at all levels in the food supply chain to ensure food safety. "Modernisation in the industry is necessary in most small and medium-scale units as newer equipment and technology become available. These also need to be developed indigenously with the help of research institutions so that they are not excessively costly," asserts Dr Pai. "Processing industries need to have the minimum laboratory facilities for microbiological analysis of the food," says Dr Padmaja Jonnalagadda of NIN. The testing facilities should be close to the farm and the market place, so that products can be tested before they are sold to consumers. Frequent testing of products at the manufacturing stage will lessen the need for product recall at a later stage.

Manpower

India faces a lack of trained manpower for food testing and certification. There is also a significant need for trained workers who can implement food safety processes in the food processing industries. "Given the diverse nature of the food industry in India, the food safety concerns are not uniform for the entire country. Hence, there is a need for trained personnel who can identify the local problems and suggest ways and means to employ GMPs and GHPs," says Dr Sudershan. "The grassroots-level food safety regulators, mainly food inspectors and sanitary inspectors, can be used as key educators or change agents rather than mere enforcers," he suggests.

What can the industry do?

To address the issue of food safety, industry players must concentrate on a few key points: the need for global standards, up-to-date technology and constant innovation. According to Mr Tripathy, "The food industry should proactively engage with backward linkages, implement cost-efficient technologies at processing and upgrade existing distribution infrastructure." He also adds that the industry should collaborate with the food retail chain to understand consumer requirements. Dr Jonalagadda emphasises that food companies should encourage regular testing of food products, while Mr Gupta is of the opinion that industries should switch from traditional to modern technologies as soon as possible.

Need for government involvement

At best, however, initiatives by a single food company will only improve the products of that company. If the Indian food industry is to improve as a whole, there is no feasible alternative to government initiatives.

The development of infrastructure rests solely with the government. According to Dr Jonalagadda, "Periodic monitoring by the State Food Lab Authorities with regard to the implementation of the food laws is a step towards food safety implementation at the community level."

Dr Sudershan notes that grassroots-level food safety regulators should be adequately trained to serve as key educators and change agents for smaller industries. The primary need for most food companies is for the government authorities to simplify existing regulations and make them uniform across the country. The tax structure is another area that needs re-examination and reform.

Mr Tripathy says, "The unorganised sector is the backbone of the large agrarian economy that we have in India. All the stakeholders need to focus on this sector to induce positive momentum in the supply chain. This will bring about a revolution in the food processing industry in India."

Active participation by the government can speed up the process of ensuring food safety in India and also make it easier for small industries to implement food safety practices. ☺