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Ensuring cleaner, safer food

Shashanka Bhide

Technical solutions to detect and rectify the contamination remain essential.

The E. Coli episode tells us that the potential for mishaps is greater in an inter-linked world with several producers and consumers. Apart from regulation to check contamination, producers need policy incentives for quality control.

The case of E. Coli in vegetables illustrates that whether it is bird flu, chemical contamination, adulteration or other food-linked threats to health, the potential for mishaps is greater now in an inter-linked world than before. The potential impact is magnified because producers and consumers are more in number than ever before.

The contamination of water sources by agricultural chemicals or by industrial pollution affecting water sources of agriculture, pose a serious threat to public health, and call for regulation of pollution sources.

What are the incentives to promote practices that minimise the risks to public health? Regulations on the international exchange of food and other plant or livestock material seem to be fairly strong, but when it comes to ensuring safety in food consumption the reliance is largely on individual awareness, with greater stress on controlling the spread of impact rather than preventing disasters.

Consumers are expected to wash fruits and vegetables well so that they are safer to eat; they are expected to boil water or filter to make it safe for use; or more often to simply be more immune to pathogens.

RISKS IN FOOD CHAIN

Why aren't there better returns to the supplier for safer products? Quality assurance is a desirable process, but generally costly to verify. Incentives are not strong enough for adoption of such measures in production or distribution, when there are a large number of producers or suppliers. There is a case for policy incentives to ensure that producers, distributors and consumers reap the benefits of ensuring quality.The implications of contaminated food are obvious for producers or consumers in a variety of conditions. The contamination may, however, happen at different stages of the chain that bring the produce from farm to the final consumer, and the fault may not lie with the farmer or the farm production technology.

For producers, the need for chemicals is generally unavoidable, given the present state of technology. Chemicals-free agriculture is not the norm. More effective chemicals may indeed have led to relatively pest-free produce. Losses in storage could be less now than before. But badly-handled technology is dangerous not only for the consumers of farm output, but for producers as well.

The potential risks come along with intensification of farm production. At one level, testing and certifying chemicals produced in the organised sector are a way of ensuring safer products in the market. Safe usage in such cases may be specified, and the effects of wrong usage better understood.

But where the ill-health is from unspecified sources, there is less preparedness to limit the impact. There is a need for both preventive and remedial infrastructure as the impact of the errors in the food chain, or more generally agri-human consumption link, gets magnified.

The outbreak of bacterial contamination of vegetable produce in Europe shows that even under the best of conditions, there are fatal risks in the food chain.

It was necessary to keep aside or destroy a significant quantity of the produce, as the source of contamination could not be traced. The situation was not very different when there was an outbreak of bird flu or the mad-cow disease. At

an aggregate level, the losses may be small but at the level of the individual producer or consumer the losses may be fatal.

REGULATION AND INCENTIVES

Technical solutions to detect and rectify the contamination remain essential. However, it is also necessary to maintain strong incentives for safer practices, from farm to the consumer, to minimise the risks to health.

While the common experience of adulteration of grains may have declined because of adoption of better grading, storage practices and marketing channels, incentives to adopt these practices may have improved. The higher prices for better grades of produce obviously reduce incentives for adulteration.

But the price difference between poor quality produce and safer produce, under conditions in which quality assurance cannot be verified, may also lead to adulteration and mislabeling.

Trust between producer and consumer is essential. However, as Indian agriculture modernises there would be a need to ensure that we also put in place infrastructure to promote and assure quality of produce.

The need for systematic testing of produce for safety and the quality of inputs going into the production process (such as water and chemicals) will increase not merely because of any decline in trust, but because private returns to quality assurance may become more distant.

The process should not end up raising quality for only a few. Policy initiatives should reduce the cost of quality assurance and increase the cost of breach of trust.

(The author is Senior Research Counsellor, NCAER. The views are personal. blfeedback@thehindu.co.in)

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