

Food safety prerequisite for food security

Food security has often been simplified and conceived of merely in terms of having sufficient food. This simplification is not in compliance with Food Law No. 18/2012, which defines food security as “the fulfillment of food needs for every individual, in terms of quantity, quality, safety, diversity, nutritional value, availability and affordability, as well as in terms of its compliance with religion, beliefs and cultures, to live healthily, actively and productively in a sustainable manner”. Nutrition and safety – critical components of that definition – are often forgotten or are not addressed properly.

The development of food security without improving food safety and nutrition will not achieve the ultimate objective of having every individual “live healthily, actively and productively in a sustainable manner”. This is a critical issue that the government must solve to achieve the second Sustainable Development Goal (SDG): ending hunger, achieving food security, improving nutrition and promoting sustainable agriculture.

Consequently, all elements of food security, especially food safety, must be addressed simultaneously to achieve the goal mandated by Law No 18/2012.

As stated by the United Nations Food and Agriculture Organization (FAO), if it is not safe, it is not food. So food security really starts with food safety. This has been particularly apparent during the pandemic.

The importance of food safety is illustrated by a report by the World Health Organization. The report concludes that food safety problems, especially foodborne illnesses, cause almost one in 10 people to fall ill, resulting in about 420,000 deaths every year.

Nevertheless, according to WHO, the figure may still be an underestimate.

The WHO has also said the burden of foodborne diseases is substantial and needs to be addressed systematically. It has stressed that foodborne diseases are preventable and that everyone, every actor in the food system, has a role to play.



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Regarding food safety, Indonesia has dual challenges to address: domestic food safety and international food safety. Domestically, Indonesia needs to improve its food safety system and infrastructure, and internationally, the country needs to comply with increasingly stringent international standard of food safety, especially for its exported food products.

Domestically, the food safety problems faced by many Indonesians can be attributed to a lack of sanitation, leading to microbial contamination of food. Food safety problems associated with the use of unsafe chemicals and unsafe food additives have also been identified. Analysis has shown that the root causes of food safety problems include poverty and the fact that the food production system is dominated by households and small and medium food enterprises.

Most these micro, small and medium enterprises (MSMEs) have several weaknesses, such as a lack of basic food safety infrastructure (clean water, clean ice, cold chain systems, etc.), a lack of human resources (producers, consumers, government officials) and a lack of funding. Consistent and concerted programs to address these weaknesses need to be developed and implemented.

Challenge number two is the international challenge, associated with the need to comply with increasingly stringent international standards of food safety. International food safety standards are getting more and more stringent, and the allowable concentration of contaminants is getting smaller and smaller, approaching zero.

Even though exports constitute a significant and growing share of GDP in Indonesia – and

for most developing economies – developing the capacity to comply with international standards is obviously a big challenge.

The implementation of more stringent food safety standards also involves costs that may be prohibitive for some producers, which may have negative food security implications. These standards can, therefore, have negative social implications and go against rural development objectives. Stringent food safety standards may also raise food prices with negative consequences for poor consumers.

Furthermore, food safety and other sanitary and phytosanitary measures can, even unintentionally, act as a barrier to trade.

For better food security, Indonesia needs to start national food safety initiatives, including modernizing food safety authorities; establishing networks and increasing the capacity of stakeholders (SMEs, laboratories, NGOs, etc.) along the food supply chain from farm to table; executing empowerment programs, especially focusing on providing assistance to micro and small medium food enterprises; building effective inspection systems to ensure a culture of food safety; and developing large-scale food safety infrastructure and education programs.

Now is the best time for food safety initiatives because the pandemic has raised public awareness about safety in general.

With respect to the international food trade, Indonesia needs to establish stronger global food safety partnerships. It must be realized that food safety is a shared responsibility, and food safety problems can only be solved using a “farm to fork” approach. Every country involved in international trade must be reminded that the “farm” side may be in country A and the “fork” side may be in countries B and C. This means that understanding and collaboration between producing (exporting) countries and consuming (importing) countries is essential to strengthen the global supply chain of safe food.

This is critical to ensure safety as a prerequisite of food security, especially during the pandemic.



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Modern farmers: Residents of Neglasari village in Bogor, West Java, who are members of a farmers group prepare vegetable seeds that they will plant in their community field.