

The need of communicating food safety in Indonesia

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The International Conference on Nutrition held in Rome in 1992 adopted the World Declaration and the Plan of Action for Nutrition, calling governments and other concerned parties to "adopt" and strengthen comprehensive measures to cover the control of food quality and safety with a view of protecting the health of consumers. However, since obtaining food for a large segment of the population is often still a challenge, the food safety issue is often overlooked.

This condition is also shared by Indonesia. In Indonesia, however, there is a growing recognition of the importance of food safety. This is especially true due to improved education and/or income, increased inflow of information, as well as the development of international trade. It is realised that assurance of today's consumer demands that his food supply is protected from (i) contamination by pathogenic micro-organisms, chemical residues, and physical hazards; (ii) decomposition; (iii) adulteration; and (iv) deception or fraud in the form of misleading claims and descriptions on labelling or in advertising. Consequently, the national food industry system needs to respond to the consumer demands for food safety. Food industries do not only need to comply with mandatory legislation set by food safety authorities, but also with trade specifications set by trade or industry organisations. To win the

1. Introduction

Food safety is a critical issue in many countries. Food Safety is closely related to health and productivity of the population and directly associated with competitiveness of food and agricultural products in the international trade arena. Many reported food safety problems in Indonesia are caused by basic errors in preparing foods due to lack of knowledge of basic food safety. Therefore, many food safety problems could have been avoided if those who prepare meals were trained in elementary food safety. Besides developing food safety regulations, government should develop intensive trainings or education for food producers as well as consumers. Communication of food safety to all stakeholders involved – from farm to table – is essential to ensure that only safe food reaches consumers' tables.

Many reported food safety problems in Indonesia are caused by basic errors in preparing foods, due to lack of knowledge of basic food safety (Hariyadi and Kimbatmaja, 2003). Although not well documented, available data on food safety problems confirmed this statement. In general, the food safety concerns were associated with lack of knowledge and poor practice, including poor sanitation and hygiene. Especially for processed foods, the problem is magnified by the use of non-food grade additives. The use of illegal colorants such as methanyl yellow and rhodamine B has been reported in syrup and street food sold in school areas. Chemicals such as boric acid and formaldehyde have been found to be used as food preservative. Furthermore, several food grade additives, such as artificial sweeteners, saccharine and cyclamate, are sometimes used in concentrations exceeding the recommended ones. Based on epidemiological surveillance data, microbial pathogens are still the leading cause of food borne outbreaks (Kandun, 2000).

2. Problems of food safety in Indonesia

competition in the global market, Indonesian food industries must comply with both; one is their legal responsibility and a prerequisite for market entry, the other is simply commercial reality, survival and development in ever increasingly competitive markets. Most recently, the challenge is responded by the government of the Republic of Indonesia through the establishment of an independent institution, i.e. The National Drug and Food Agency that reports directly to the president (Formerly a Directorate General of Drug and Food Control existed under the Department of Health). The change is expected to provide better management of food safety, which in turn improves human health. In addition, several other institutions are collaboratively responsible for the supply of safe food, namely the Ministry of Agriculture, the Ministry of Fisheries, the Ministry of Trade and Industry, the Ministry of Interior and the Ministry of State of Research and Technology. Another institution, the Ministry of State of Environment – that issues regulations on environment such as water supplies, treatment of wastewater etc – is also important to support the production of safe agricultural products.

3. Food safety problems of exported foods

To assure fair international trade in the global market, the Codex Alimentarius Commission is working to establish an international consensus on food standards, including food safety standards. The

Chemical contaminants are also of concern in agricultural product safety. In the 1970s when intensive farming was introduced, the use of pesticides also increased. Studies in the early 1980s on several street foods suggested that there was an alarming amount of pesticide residues in several street food products. Despite the fact that recent data were not available, in general, it can be concluded that pesticide problems are associated with lack of, or low, food safety awareness among farmers and food handlers.

Location	No. of samples	Aflatoxin content (ppb)
Lampung	15	22-3308
Central Java	8	52-4074
East Java	11	101-3710
	B1	84-3021
	B2	11-1858
	G1	528
	G2	144
	Total	22-6171
		52-4873
		101-5336

Table 2. Aflatoxin content of maize collected from different places in Indonesia

of soybean was low and fell within the acceptable range. However, Dharmaputra also reported that generally the aflatoxin content of soybean was low and fell within the acceptable range. (Tabel 2). Aflatoxin was also frequently found in peanuts, especially during the rainy season. Eighty percent of the peanuts collected in West Java contained more than 30 ppb aflatoxin. Storage and slow drying processes of the grain were thought to be the main cause of the problem. Aflatoxin was frequently found in large amounts (> 30 ppb). Most maize samples collected from different places in Indonesia contained aflatoxin, with aflatoxin concentrations ranging from ten to several thousands ppb. A review by Dharmaputra (2000) suggested that another microbial contaminant of concern is mould, particularly its *monocytogenes* from food has not been reported. Up to present, isolation of *L.* catching places in East and Middle Java.

rationale behind the Codex is that the consumers will benefit from international standards because food meeting these standards is safe, wholesome and properly labelled—whether produced domestically or imported. The importance of food safety in international trade is particularly shown by the fact that food safety is appearing frequently on the agendas of international leaders, and it has become central to negotiations with respect to trade over the last decade.

Government, farmers, food handlers and other stakeholders in the Indonesian food industry system need to realise the growing importance of food safety, especially in the international trade arena. Food safety problems have a negative impact on the Indonesian economy, due to the fact that many Indonesian exported foods are detained and/or refused entry by importing countries. Data from FDA's Import Refusal Report (IRR) indicate that during the year 2002 alone, more than 200 cases of imported food from Indonesia were refused to enter into the USA due to food safety reasons (Table 3).

Table 3 indicates that more than 80% of the reasons for refusals for exported food are due to being filthy. "Filthy" has been defined as the condition in which the article appears to consist as a whole or in part of any filthy, putrid, or decomposed substance. As compared to other exporting countries, 80% of the reasons for refusals for exported food due to being filthy is relatively high. During the year 1999 (Table 4) This data indicated that (1) the food safety awareness and practices of food handlers in Indonesia are relatively poor as compared to that of other countries, and (2) the food safety problem in Indonesia is mainly attributed to the poor understanding of basic principles of food handling and lack of good practices, especially with respect to sanitation and personal hygiene.

unsafe food, it is important to raise producers' (industries, farmers, etc) awareness on food safety. This can be done by regular education or training. For small to medium scale food processing industries, the training should also include knowledge of illegal additives.

It is also necessary to enforce all available regulation, by communicating food safety, including (i) disseminating information on the legislation to producer and consumer, and (ii) by penalising those who did not comply with the regulation. Communicating food safety matters to consumer is also important to improve consumers' knowledge, so that consumers will be more informed about hazards associated with food.

The need of communicating food safety is apparent, especially focusing on training programs that include, but are not limited to the following:

- The importance of good hygiene
- The impact of poor personal cleanliness and unsanitary personal practices on food safety.
- The importance of hand washing – after each absence from the workstation, after using the bathroom, before and after eating, and before commencing work – on food safety

- The technique of proper hand washing techniques, that include: hand washing with warm water (if available); proper use of soap; and thorough scrubbing (including cleaning under finger nails and between fingers), rinsing, and drying of the hands.

- The importance of using sanitation facilities. All employees should be encouraged to use on-site latrines and to avoid eliminating wastes outside of these facilities. The use of well maintained sanitation facilities for waste elimination helps to reduce the potential for cross-contaminating fields, produce, other workers, and water supplies, and increases the likelihood that employees will wash their hands after using such facilities.

- The important role of people (employees) in achieving sanitation and hygienic standards. This should be emphasised, since employees are not machines but more important than machines. Respect their individuality and build on their strengths. In a competitive business environment, well informed employees are the most important assets. If you take care of them, they will take care of your business interests.

5. Conclusions

Effective communication of food safety needs to be strategically designed to increase the awareness of all stakeholders involved in managing food safety. Adopting the "from farm to table" food safety approach and involvement of all parties, starting from farmers, growers, handlers, and consumers, are critical to food safety. The role of food industry and the government sector is also critical.

The importance of food safety in health and economic development of the nation needs to be realised fully not only by industry and consumers, but also by the government. Considering the "from farm to table" approach, many government agencies need to be actively involved in food safety programs, especially in providing a framework for maintenance of food safety across the food continuum "from farm to table". This includes development and/or enforcement of food safety laws, regulations, directives, standards, policies and procedures form a foundation for food control systems. Due to the limited resources of the government, technical and financial assistance from international agencies (such as FAO, WHO and WTO) are needed to develop such systems.

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