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Food Quality and Safety Measures and Controls: The Future Challenge for Indonesia

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Abstract

Due to limited capacity possessed by the food authorities, the implementation of food safety and quality improvement measures is mainly directed towards the medium to major food manufacturers. Significant quality and safety measures programs are supposed to be also applied to the small, moving or home made food producers, such as the street food producers and the small restaurants called ``warung``. This paper tries to identify the problematical issues concerned (a) with improvement of food quality and (b) with proposing a feasible food quality and safety improvement program for the sectors of small, moving or home-made food producers. From our pilot study we found that some active participation of governmental institutions, vendors and consumers is the prerequisite for the success of the implementation of such an improvement program.

Key words: eating culture, street food producers, small food vendors, home food industry.

Introduction

Some recently emerging food scandals in Indonesia, such as the use of formalin, borax and Rhodamin B in some traditional unpackaged fresh food products, has stimulated the Indonesian citizen's concerns about food quality and safety. The gradual change of people's trust in traditional food production processes is also occasioned by increasing number food poisoning cases in Indonesia. It was reported that in 2004 there were 152 food poisoning incidents with a total of 7.295 poisoned victims and 45 deaths (Suara Pembaruan Daily, 2006). Until August 2007 there were at least 52 documented food poisoning incidents with more than 1040 poisoned victims. These facts are the cause for an increasing demand of the Indonesian consumer for receiving a transparent guarantee concerning the quality and safety of food. Our recently published study has confirmed that the confidence in product quality and safety was the most salient element among other important determinant factors for the buying decision process (Puspa and Kühn, 2007).

In the past, the Indonesian government and food authorities have implemented several improvement measures for ameliorating food quality standards. In 1998 together with the Australian Agency for International Development (AusAID) the Indonesian food authority (Badan POM) has tried to develop a concept for applying, managing and controlling food safety measures throughout Indonesia. The concept is called as The Indonesian Integrated

Food Safety System (IFSS), which consists of Food Watch (food intelligence), Food Stars (food safety promotion), and Rapid Response programs. However, due to the complex market structures these measures did not yet lead to optimal results as compared to international food quality and safety standards. Moreover, due to the limited capacity at the disposition of the food authorities, the enforcement of regulation and food safety programs is mainly directed to the medium and the big food manufacturers. Significant quality and safety programs to be applicable for small, moving or home made food producers, such as mobile street food producers and small scale restaurants called ``warung``, or family-based food producers are still absent. Unfortunately, these sectors carry the highest risk for mal-practicing the food quality and safety standards. As these producers contribute roughly more than 20% to the total national food consumption - especially in urban areas - they can be considered as important contributors to the food supply chains for adult and children. Formalization of this informal sector seems to be problematic. Dismantling of this sector is considered economically impracticable, inhumane and as an antecedent to the rise of new dilemmatic issues. Therefore, other options need to be considered. Managing and helping this sector to legally grow by actively providing them with guidelines and training concerning food quality and safety standards can be considered as one of several reasonable alternatives. With regard to this situation the present paper has the aims of (a) to identify the problematical issues concerning food quality and (b) to propose a plausible food quality and safety improvement program for the sectors of small, moving and home-made food producers.

A short description of the street food and ‘warung` conditions in Indonesia and their problematical issues.

The presence of street food vendors and small, low cost restaurants called ``warung`` for urban areas in Indonesia seems to represent the flip sides of a coin. On one side such food vendors are beneficial for the community, because they contribute providing ready-made food supplies for the community and they actively contribute to the economic growth of the respective areas. Mobile street food vendors and ``warungs`` are good alternatives when the demands on cost of food and consumption efficiency such as time, effort and practicality, are taken into consideration, because they usually sell a variety of items at a very low price. They are abundant in number and have a wide distribution. Therefore, they can efficiently (in terms of time and cost spent for traveling) be reached by the consumer. But on the other side, these food suppliers are being blamed for promoting food borne illnesses and for jeopardizing people's health, because of low food quality and bad hygiene.

Until now the implementation of the food safety program of 1998 (IFIS) developed by the food authorities has had no impact on the mobile street food vendors and warungs. In a complex and heterogeneous market structure such as in the Indonesian food market, where abundant market players (small/local, medium/regional, big/international producers) actively play a role, the gradual and multi- step implementation process will yield only a slow progress. Based on available reports provided by the food authorities, it seems obvious that until today the IFIS program is focusing on providing training and education for building up a professional facilitator- and food inspector pool and on building up an established laboratory network for food intelligence programs. Food intelligence and controls are now targeted to agribusiness products and finished food products manufactured by medium to small food producers. Besides that, we found it difficult to obtain data or figures from official reports or published studies on the issue of Indonesian street food. It is also not clear which priority is being given to the street food vendors in the implementation of the IFIS program. From our initial pilot study recently done focusing on street food vendors and warungs in Jakarta, we understand that all of the 42 respondents clearly mentioned that so far they never received any training, information service (``penyuluhan``) or other beneficiary program given by the

Indonesian government or by other food authorities. Possibly, this was due to the small number of recruited respondents. From the press releases of some governmental institutions, we understand that some departments have sporadically and inconsistently organized aid programs, such as providing soft loan credits or giving some utensils or raw materials to street food vendors. However, the coverage, impact and results of those aid programs are still unclear.

We noted a number of possible problematical issues concerning mobile street food and warung businesses. These issues are most likely the reason why this sector is being neglected so far. Understanding these problematical issues and finding out appropriate solutions will be the future core progress, especially for implementing management of food safety program. We can categorize these issues into several problem areas as follows.

1. Structural:

Street food vendors and warungs can be classified as a part of an informal sector, which is always presumed to be unsuitable for the development of a modernization program for big cities. In the past the informal sector was believed to have some negative characteristics, such as to lack economic development and to be unmanageable. Therefore, the suggestion was made to formalize this sector by giving all unskilled people permanent jobs. But nowadays the picture of the informal sectors is different. On one side the informal sectors contribute to a significant economic growth of the nation (Winarno and Allain, 1990). They survive in the competition. They are not depending on official help given by the government. They operate independently and according to their capabilities and capacities. But on the other side, due to the absence of simultaneous and comprehensive management programs performed by the authorities, they are often faced with difficulties in coping with the modernization agenda pursued by the local government. Their operation is often breaking the newly established local government rules. They often have to sell their products in illegal places. Therefore, the conflicts concerning the selling locations between the local government bodies and street food vendors can not be avoided.

Until now it was not yet clear under which governmental department this sector should be managed. Based on the extent of the business this sector can be grouped under small and medium scale trade. Therefore, it is supposed to be under the responsibility of the Ministry of Trade. From the point of view of its organizational structure the Ministry of Cooperative, Small and Medium Enterprises of the Republic of Indonesia is the appropriate department to handle this sector. The only available organizational structure designed for street food vendors is a cooperative. Till 2000 there were only 408 general street vendors' (including street food vendors) cooperatives with a total number of 71.401 individual members listed with the Indonesian Ministry of Cooperative, Small and Medium enterprises. In comparison to the real numbers of street food vendors, the number of listed cooperative members is very low indicating the lack of interest in joining a cooperative. Moreover, considering its type of business i.e. food products, we can argue that the Ministry of Health and other food authorities such as the "Badan POM" are supposed to have a greater responsibility. Due to the variety of the characteristic and functionality this sector requires intra- departmental participation. This is quite impractical to be implemented because the organizational structure adopted by the Indonesian Government was not designed for cross departmental action. This may be one of the explanations as to why this sector is being left alone so far.

2. Identification

Street food vendors and "warungs" are mostly operated in the urban regions such as in Jakarta, Surabaya, Bandung, Semarang, Medan etc. They are abundant in number. A

Study done by Chapman (1984) has estimated that in a small region such as Bogor, with a total population of 250.000 close to 1.800 individual street food enterprises were present. Based on this figure one can predict that more than one million street food enterprises would be expected throughout all Indonesian regions. However, no official data can be found. Up to now they operate freely or without any license. A huge number of individual street food vendors encounters a certain level of difficulty for identification and listing activities. Besides that many food street vendors work irregularly or on a seasonal basis.

3. Asset

Most mobile street food vendors and “warungs” operate using basic skills and a small amount of capital. The street food operation often involves entire families in the procurement of raw materials, preparation and cooking as well as the sale of food (Winarno and Allain, 1990). Financial limitations are the main handicap for implementing food quality improvement programs. Street food vendors are often uneducated and low - skilled people. Mostly, they come from urban areas and have no or only limited formal educational background. The cooking knowledge was obtained from a long standing family tradition. Both of these -low financial capability and low intangible ability - seem to be the main features of this sector.

4. Infrastructure

The operation of street foods (procurement, preparation, production) was often done using minimal facilities. They do not have a specific production location. The food is prepared at home or at the selling spot. In the urban areas such as Jakarta not all houses, especially small and temporally made houses, are equipped with electricity and potable water. Street food stalls or street food centers equipped with electricity and potable water are rare. The street food vendors usually sell their products on every possible corner of the street without any hygiene facilities. The problems increase especially when they are selling the products not in a permanent location or when they are mobile. It is almost impossible to find potable water on the way. Often they have to buy the water or obtain it for free from a customer’s house. The mobile vendors use simple selling vehicles. They are not equipped either with electricity, modern containers for keeping the raw materials or modern cookery needed for preparation and consumption of food. The absence of these important infrastructural items, such as electricity and potable water, will hamper efforts to realize safety issue improvement programs.

A Concept for Improvement

For the governmental bodies, who are engaged with food safety programs in Indonesia, the above description of the status of street food vendors is not new. For several years now, the status and condition of this sector has remained unchanged. However, in the near future the existence of this sector can no longer be ignored. An appropriate, simultaneous and comprehensive management approach especially concerned with improvement of food safety and quality issues seems necessary to be initiated in order to improve people’s health. This managerial action should be beneficial for both consumers and street food vendors. Some publications suggest that the participation of both parties and a coordinated effort from the government food institutions will be the prerogative for the success of program implementation (Rehber and Ulusoy, 1998; Baro et al, 2007). The presence of adequate financial support is also one of the key success factors in managing this sector.

Based on the result of our ongoing pilot study and on our analysis a plausible managerial measurement relevant to be implemented for food safety and food quality

improvement for the sector of small, moving and home made food industry in general can be classified into several steps of improvement as presented below :

1. A need for documentation.

It is quite urgently required to understand in detail the extent of small, mobile and home made food vendors, because the finished products produced by these vendors are marketed without any license. The extent of this sector can be categorized through identification, registration and listing programs. At least data should be gathered to understand the type of food being sold and the location and name of responsible actors. Further identification can be elaborated in order to understand the product quality; type of training needed and may be of other required improvement programs. On a smaller scale, this idea is in line with the food traceability concept. When the products are difficult to be registered individually registration should be made mandatory for the producers. Documentation is not only important for registering the operation but it should also be utilized for becoming acquainted with the players. It should also be designed in such a way that the food institutions can work closely and hand in hand with the vendors. Documentation should not only be designed for controlling and monitoring the business operation but it should also be used as a basis of information for implementing aid programs. Documentation should be done voluntarily. Computer based documentation provides an advantage, because it will enable the institution to up date the basic data in the future.

2. A need for coordination and a comprehensive agenda

Since the nature of street food vendors requires an interdepartmental approach each department can participate according to its individual functions. However, improvement programs defined by different departments should be performed in cooperation. Principally, each related department can set up their own projects but it should be targeted to the same aim or goal. Practically, planning and implementation of programs should be managed by one selected institution as the coordinator. In general, if we look at what happened in the past, we can argue that the aid program conducted by the Minister of Cooperative, Small and Medium Enterprises, e.g. soft loan credits provided to some street food vendors would be more efficient when combined as an incentive provided for vendors who are committed to adopt the food quality improvement program installed by the Health Minister or the Badan POM.

As this sector contributes by more than 20% to the food supply for the urban population and as it contributes significantly to the economic growth of the relevant regions it requires serious managerial measures. Improvement programs dealing with food safety and quality should be installed in a consistent manner. Continuous and comprehensive improvement programs can be set up accordingly. Stepwise improvement actions may be reasonable, especially because of the complexity of the business. The implementation of these programs should be continuously controlled and evaluated in order to take better actions in the future.

3. A need for improvement of awareness

As a prerequisite for the successful implementation of food safety and quality improvements both consumers and vendors should have a high level of awareness concerning the health aspects of food consumption. The current status quo suggests that both players seem to be skeptical regarding such measures. Awareness concerned with the nutrition based health promotion of both players is required to be leveraged. Together with the governmental food institution the participation of both parties is

expected to ameliorate actions in the future. In this case, the participation of consumers for improvement of food safety and quality will be remarkably important, because of their direct influence on the success of the business of the street food vendors. Changing consumers' behavior towards street food vendors should be able to educate the vendors to take some improvement measures. In that case through managing the street food vendors the government should be able to guarantee the consumers to have enough alternatives of healthy food choices. The awareness of a certain level of "business ethics" among street food vendors has to be awakened. The feeling of being responsible for providing healthy food to consumers and being responsible for disease prevention measures should be spread in this sector. In order to motivate the vendors to actively participate in the improvement basic training programs dealing with food safety such as the HACCP concept for street food vendors (CAC/GL-22-Rev.1-1999 and CAC/RCP 43-1997) should be installed in a step wise manner.

4. Suggestions for the Implementation program of the HACCP concept for street food vendors.

The HACCP (CAC/GL-22-Rev.1-1999 and CAC/RCP 43-1997) concept for street food sellers (mobile and permanent ones) appears to be a good starting basis for the food quality improvement framework. However, since the conditions of street food enterprises in Indonesia is far behind the average standards of the international street food business, a step wise approach seems to be more realistic and viable. Depending upon the individual vendor's condition a certain improvement target can be set. Through implementing the identification and listing programs mentioned above the working conditions and capabilities of each individual vendor can be representatively figured out. Based on the above mentioned HACCP concept we can argue that in general some salient and current basic minus points should urgently be improved with first priority (forthwith agenda). (2) Middle term improvement actions, which can be taken to improve the conditions resulting from phase one action and (3) long term projects necessary for significant food quality improvement should be implemented (Advancement).

Forthwith agenda:

- Cleanness of permanent utensils for cooking and consumption of food. The usage of disposable utensils for consumption can be considered as an alternative.
- The availability of potable water, especially in big cities such as Jakarta, Surabaya etc.
- Cleanness and hygiene of the food producers and seller (also consumers) such as:
 - no smoking while preparing the foods,
 - washing hands before selling foods,
 - consumers are not allowed touching the food contact surfaces before buying,
 - protection of food from dust, pests and other pollutants,
 - the usage of cleaned cloths, towel etc.

Improvement:

- The quality of the vehicle equipped with appropriate containers designed for raw materials, finished food products and other materials.

- Cleaning and disinfection
- Improvement of cooking methods ascertaining no contaminations, freshness and health aspects of the food.

Advancement:

- Central food stalls equipped with electricity power supply, hot water, adequate lighting, washing and cleaning facilities, adequate drainage and waste disposal systems and facilities, toilette.
- Development of food traceability and transparency.
- Regular food quality testing and inspection.
- A certification program can be implemented as a rewards system given to vendors who reached the standard food quality and safety program.

Conclusion

The mobile street food vendors and warung enterprises contribute to more than 20% of the food supply for urban populations and contribute significantly to the economic growth of the relevant regions. Therefore it requires serious managerial measures. The variety of the characteristics and functionality of this sector, which requires intra-departmental participations is not the only problematical issues encountered in this sector. The absence of identification and infrastructural support of this sector and the limited tangible and intangible assets lead to a certain complexity in implementing the food safety and quality programs. As a consequence thereof solutions of these problematical issues should be worked out. A documentation program can be performed in order to understand the extent of this business. Due to the nature of street food vendors requiring an intradepartmental approach, improvement programs will be more efficient if and when they are performed interdepartmentally, but with clear program coordinator competency. Awareness concerned with nutrition based health promotion of both consumers and vendors is required to be leveraged. Finally, stepwise improvement actions such as those guided by the HACCP initiative should be reasonably and cautiously implemented because of the complexity of the business.

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