

INTERNATIONALIZATION OF INDONESIAN AGRIBUSINESS: FOSTERING AGRIPRENEURS BY LEVERAGING FOOD QUALITY MANAGEMENT

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ABSTRACTS

Food quality is becoming central issue for agribusiness actors as well as globalization and consumers' concern about food safety and food standards' rule. Thus, it is important for agripreneurs to manage their food quality to meet the consumer demand and to gain sustainable competitive advantage in the global food market. Based on literature review, this paper discusses the important of food quality management for Indonesian agripreneurs to develop a competitive position and expand their produce to global market. It is proposed that the necessary condition for fostering agripreneurs into global market is through the implementation food chain management.

Keywords : *agripreneurs, food quality, food chain, agribusiness*

INTRODUCTION

Nowadays, food quality and food safety are becoming a central issue for agribusiness managers as globalization, urbanization, lifestyle changes, and advances in food technology (Dunne, 2001; Timmer, 2004). Consumer demand for higher quality food have also been increasing based on consumers' increased knowledge about links between diet and health, awareness of quality characteristics and access to information about new production and processing technologies. Furthermore, agripreneurs are facing serious challenge associated with quality standards whereas there are differing standards and differing quality systems which exist internationally. Not surprisingly then the growth in number of quality standards denies

many agripreneurs to the access of food global market.

In order to respond these challenges, it is important for agripreneurs to adapt to the rapid changes, in this case to manage their food quality to meet the consumer demand, to gain sustainable competitive advantage in the global food market (Fearne, 2002). This paper is a conceptual paper provides an overview of the main issues derived from the literature search. This paper will discuss some critical management challenges relating to food quality for Indonesian agripreneurs. These challenges are attributes quality of food such as food safety and country-of-origin labeling, the implementation of food quality management, and the value chain considerations (Figure 1).

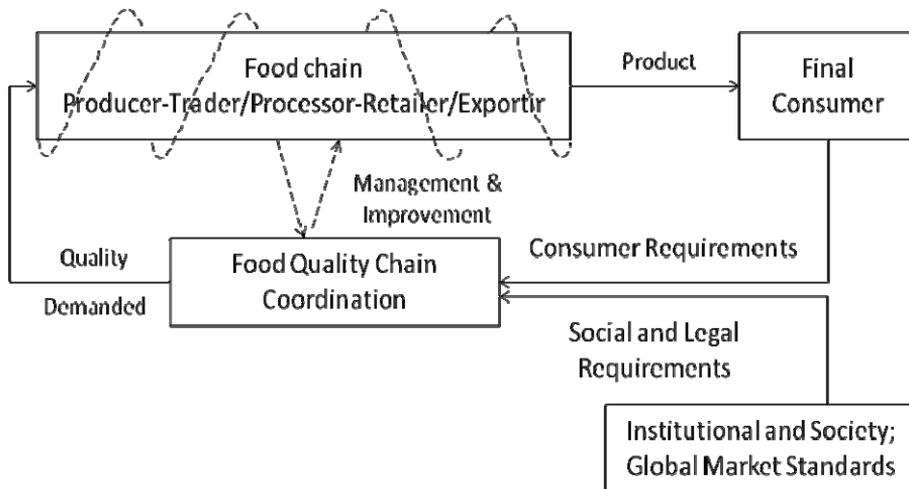


Figure 1. Food Quality Chain Coordination

(Source: Adapted from Boras and Toledo)

DISCUSSIONS

1. FOOD QUALITY

Quality is meeting or exceeding customer expectations (Luning et al., 2002) and the key concept in building customer value and satisfaction (Ophuis and Tripp, 1995). It indicates that food quality is important aspect for agripreneurs as quality can be described as the requirements necessary to satisfy the needs and expectations of the consumer to meet the consumer standard. In addition, quality has created opportunities for agripreneurs to differentiate their product (DAFF, 2006).

So, according to Levitt (1980), it is significant for agripreneurs to develop expected product rather than generic product. It means that they have to consider the benefits which extend beyond the core benefit and which are normally expected by the consumer in standard requirements. Then, agripreneurs could develop augmented products by added benefits which exceed the

consumer's expectation and make the product significantly different from those of competitors. Moreover, agripreneurs are challenged to create a potential product with its associated benefits which reflect new thinking and creativity and better meet the requirements of the customers (Levitt, 1980).

However, quality is different things to different consumers. Luning et al. (2002) defines perceived quality as the customer's judgement of the overall product quality with respect to its intended purpose, relative to the alternatives. The implication of this is quality expectation as an important factor in consumer choice behaviour. Subsequently, as quality is a complex concept which is defined in many different ways, consumers therefore use other attributes of quality to make a judgement of perceived product quality. These quality attributes may be categorized as intrinsic attributes and extrinsic attributes (Luning et al., 2002) and experience quality attributes and credence quality attributes (Ophuis and Tripp, 1995).

Intrinsic attributes. These attributes refer to physical product features and cannot be changed without also changing the tangible characteristics of the product. For example, for fresh fruit products, intrinsic quality attributes that helped consumers to select fruit are appearance, colour, size and shape, freshness, firmness, and variety (Ophuis and Tripp, 1995).

Extrinsic attributes. These attributes refer to those characteristics of the product which are not part of the physical products. According to Ophuis and Tripp (1995), price is the most well known extrinsic indicator of quality. It means that when no other information is available and the consumer must judge the quality of two similar products, the higher-priced alternative is generally expected to deliver superior quality. However, there are other attributes that most consumers rate quality as being more important than price such as branding, country of origin, store name, and type of packaging material (Jongen and Meulenberg, 1998). In addition, extrinsic attributes also refer to production system characteristics such as method and manner in which the product was produced (*e.g.* organic).

In what is rapidly becoming a global food market, the most widely used means of branding is country of origin. Consumers differentiate between products from different countries on the basis of product-country attributes based on actual product experience or information gathered through advertising and other sources of market information. Country of origin is believed to influence consumer product evaluations most when the consumer's level of involvement in the purchase decision of food is low (Verlegh et al., 2005).

Furthermore, the specific quality that can be promoted with a label referring to the

origin is geographical indication (GI) (FAO, 2008). GI is a quality sign protected under national intellectual property law, which enables producers to differentiate their produce by linking it to their geographically specific agro-ecological environment. It means that the location, region or area has an influence on the perceived quality and it indicates a signal to the consumer that the product originates from that GI has some specific quality characteristics. In this view, quality becomes a legal criterion, allowing a product to be distinguished as a result of its geographical origin (FAO, 2008).

Experience attributes. It is attributes which the customers can determine after purchase (CIES, 2003) and can be ascertained on the basis of actual experience (Ophuis and Tripp, 1995). Taste, texture and flavour are the important experience attribute for food. In most instances, texture that the consumer prefers for fruit is related to the mechanical properties of the flesh, mouth-feel and juiciness. Peri (2006) further expands on the sensory attributes to include memory, culture, values and emotions, for these bring together the consumer's knowledge or memory of food and the consumer's sensory reactions to it.

Credence attributes. It is attributes which the customer cannot determine/confirm before purchase or even after purchase and consumption (CIES, 2003). The credence attributes are desirable product benefits like nutritional value and wholesomeness that cannot be experienced directly (Ophuis and Tripp, 1995). To assess the credence attributes, consumers must rely on the judgement or information of others that the product contains the desired attribute.

Nowadays, health and food safety are typical credence quality attributes that is becoming more important as consumers want

to know that their food is safe, where it came from, how it was produced and who handled it (Promer International, 2000). According to WHO (2002), there are global food safety concerns such as microbiological hazards, chemical hazards (*e.g.* environmental contaminants, food additives, pesticides), and new technologies (*e.g.* genetic engineering). Consequently, agripreneurs should consider risk analysis (including risk assessment, risk management and risk communication) and understand well food risk categories (including high-risk food, medium-risk food and low-risk food). It is important as there are high risk consumer groups that must be concerned such as person with low immune systems, young children, sick and infirm persons and elderly persons.

The other growing concern for credence attributes are such as how the product was produced (organic, hydroponic), the means by which it was processed (*halal*, especially for Moslem community), the environmental quality (conservation, sustainability, including the presence of carbon labelling), or social equity (worker welfare, child labour, fair trade) (Peri, 2006). In addition, labelling is also required to provide nutritional information and to identify what components have been added to the food, including the presence of genetically modified organisms (GMOs).

So, it can say that nowadays consumer are shifting from traditional point of value (*e.g.* price, product quality, and product convenience) which tend to be visible, tangible, immediate and intuitive to emerging issues to attributes which tend to be invisible, intangible, delayed, and information dependant (Promer International, 2000). As a consequence, Indonesian agripreneurs should implement the food quality management to

improve their products to be more competitive in global food market.

2. THE IMPLEMENTATION OF FOOD QUALITY MANAGEMENT

The next challenges for Indonesian agripreneurs are how to implement management of quality. According to Luning et al. (2002), there are some considerations regarding to the implementation of quality management. Firstly is quality policy and strategy. It means that to be succeeding, agripreneurs should determine their (including organisational) goals, objectives and competitive strategies. In addition, it includes determining targeted customer segments, determining required resources to be used and determining quality system to be used.

Secondly is Juran's quality trilogy consideration including quality design and planning, quality control, and quality improvement. It is important to be concerned as quality design and planning includes planning/designing product specifications, resource input specifications, production processes and implementation of production. While quality controls are setting required standards for all inputs, production, and product output, determining differences and implementing corrections.

The reason why agripreneurs must implement quality continuous improvement is its significance to innovation management. It is important as innovation is the key to competitiveness and one of the critical success factors and strategies for agripreneurs firms (DTI, 2003). For example are monitoring changing customer requirements, applying new technologies, changing inputs for improved attributes and performance. One way to implement quality continuous improvement is by using total quality management (TQM).

However, there are some aspects may need to implemented before TQM can be implemented such as radical change in procedures and standards/benchmarks.

Thirdly is quality assurance (QA), includes internal auditing, external auditing, and tracking and tracing. According to Lunning et al (2002), QA is a process of guaranteeing that quality requirements such as safety, reliability, customer and organisation service expectations, are achieved by quality system. QA also ensuring that the quality system provides continuing confidence to the defined customers and consumers those quality requirements are continually being met. In addition, QA also aimed to ensure that quality system, which includes organisational structure, responsibilities, processes, and procedures, required standards of input resources are appropriate and are operating at the required level of performance.

Lastly are quality costs. According to Lunning et al (2002), it is important as agripreneurs should consider all of quality costs such as internal quality failure costs (*e.g.* scrap, re-inspection, downgrading, etc), internal quality failure prevention costs (*e.g.* planning, control, staff management, etc), external quality failure costs (*e.g.* complaint service, compensation, loss of customers, product liability, etc) and external quality failure prevention costs (*e.g.* inspection costs, etc).

Food Supply Chain Approach

The important consideration to implement food quality management is food supply chain coordination. As the keys to long-term competitive advantage in today's market are flexibility and rapid customer response, so, to meet consumer requirements, agripreneurs must implement food safety and quality

systems at each link along the food supply chain (DAFF, 2006). It means that food supply chain coordination is understood as the integrated management of an agripreneur network, in which the agripreneurs are working together to aggregate value to the products that will be consumed at the end point of the chain (Figure 1). The main reasons to manage the chain coordination are the characteristics of agribusiness products such as perishability of the production; variability of quality and quantity of products caused by biological variation, seasonality, unexpected weather changes and other biological hazards; differences on production time among the various chains production sectors; and the possibility of damage of the intrinsic quality (Ziggers & Trienekens, 1999).

Moreover, there are several reasons why by entering food supply chain management agripreneurs will be more benefits in the future. Firstly, in today's business environment, as Dunne (2001) stated that it is more benefit for agribusiness actors to build through cooperative with partners within a chain to compete to other chains. Fearné (2002) also argued that the competition now occurs between supply chains, so that is much more beneficial to look forward to engage in closer relationship within the chain rather than competing solely.

Secondly, an integrated supply chain has a potential to offer more benefits range from reduced costs, improved processes and customer services to better food quality (Spekman et al., 2002). The high transactions' costs associated with searching information about quality, monitoring and testing quality of inputs, searching for a trading partner with whom to exchange, screening partners, of bargaining, monitoring, and transferring the product to its destination also contribute to

the trend towards integration of markets (Brennan, 2004). In addition, by managing the performance of integrated supply chain well it can deliver better value to customer (Fearne, 2002). It means that it is very important for every agribusiness today and in the future because by focusing on consumer and customer it will be match the right product to consumers' needs.

Thirdly, by building a closer relationship within a chain offers high potential benefits to the agripreneurs involved in term of creating sustainable competitive advantage. As Fearne (2002) argued that to gain this advantage every firm have to get closer and long relationship with other firms because of more efficient. Thus, closer collaborative relationship is likely to deliver a more competitive advantage for all chain' participants.

However, by entering food supply chains, the requirement of trust and commitment is very high and it should be underpinned by good leadership, cultural and strategic (Dunne, 2001). It indicates that food supply chains management would not be succeed without open communication, the willingness to work together and higher degree of trust and commitment as offered through collaborative relationship. It means that all members of a food chain should work together to serve the final customer and must cooperate, preferably through both horizontal and vertical chain integration to maximize a competitive advantage.

To assure the food quality in the global market, the food chain approach includes the adoption of good practices which establish basic principles for farming, including soil and water management, crop and animal production, storage, processing and waste disposal (*e.g.* Good Agricultural Practices (GAP), Good Hygiene Practices (GHP) and

Hazard Analysis and Critical Control Point (HACCP) systems) (FAO, 2008). HACCP is used for assuring food safety and it is achieved by systematically assessing hazards, developing control system, and establishing preventive measures. In addition, although the final link in the food chain, consumers themselves are also important. So, advice to consumers on the storage, handling and preparation of foods in the home is an essential element of the food chain approach (FAO, 2008).

Based on those explanations, it is clear that the most important key in the food chain coordination is to strengthen each and every link in the complex process of food reaching the consumer (FAO, 2008) whereas one weak link can mean the whole food chain collapsing. However, at present, the food supply chain in Indonesia is poorly organized as there are long marketing chains, insufficient market information availability and transportation facility. Farmers, processors, wholesalers, retailers and others who play a role within the food supply chain also have limited trust of each other, which reduces efficiency and increases transaction costs within the chain. Moreover, the emergence of modern markets, such as supermarket and hypermarket, in Indonesia and the growth of export market have challenge agripreneurs (producers) as they needed high grades and standards in their procurement (Chowdhury et al., 2005).

In fact, most of the agripreneurs in Indonesia are smallholders who have a low bargaining position. Small-scale farmers are often constrained in what they can produce by limited marketing opportunities, and faced unfair marketing system which makes they sell their agriculture produce before the harvest (*ijon* system). Small-scale farms are mostly inefficient users of agricultural inputs, so that per unit cost of production is relatively high.

Moreover, the inability of farmers to store their produce results in selling their produce right after harvesting. Thus, it will reduce the quality of their products.

So, it is challenge and opportunity for agripreneurs in Indonesia to develop food supply chain management that integrates all agripreneurs from all segments of the supply chain vertically into joint business (coordination) based on agreement and standardization of specific process and product for every food supply chain (Dunne, 2001; Fearne, 2002). For example, an exporter can build partnership with farmers directly or farmers organizations to supply global markets.

CONCLUSION

To sum up, it is clear that rapid growth in food quality and food safety concerns in global market give a challenge to improve competitive advantages for agripreneurs. So it is important for Indonesian agripreneurs to understand the emerging issues relating to the food quality well so they could manage their product quality better as management of quality is developed as a function of credence, provenance, auditing, continuous improvement, innovation, and value chain considerations. The coordination of the food quality along food chains is highly recommended to endow the chains of larger competitiveness in the global market and to assure the safety of the food supplied to society.

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