Consumers’ Perceptions and Attitudes of Organic Food Products in Northern Thailand

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Abstract

The adoption of organic production and processing is highly determined by market demand. Therefore, this is reflected in consumers’ perceptions and attitudes towards organic food products. This research draws on a survey of 390 respondents. Results indicated that the main reasons for purchasing organic food products are an expectation of a healthier and environmentally friendly means of production. Organic buyers tend to be older and higher educated than those who do not buy them. In addition, consumers’ trust in the authenticity of the goods and price are also issues. However, the main barrier to increase the market share of organic food products is consumer information.

Keywords: organic food, consumer behavior, food labels, consumer awareness

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Introduction

Food consumption patterns are changing as a result of health and environmental issues. Interest in organically produced food is increasing throughout the world. Global demand for organic products remains robust, with sales increasing by over five billion US dollars a year (Willer, Yussefi-Menzler, and Sorensen 2009). In Thailand, rapid socio-economic development has been accompanied by modernization and industrialization of agricultural food production. In the past, subsistence agriculture in Chiang Mai province, which has the second capital city and the largest city in Northern Thailand, was part of a traditional system in which farmers produced foods mainly for family consumption and exchanged the surplus with neighbors. Since the implementation of the National Economic and Social Development Plan in 1961, the Thai government has promoted an industrial and export-oriented agriculture. In order to maximize yields, farmers started to use chemical fertilizers, insecticides and pesticides in large quantities (UNDP 2007). Pesticide imports to Thailand have increased rapidly over the past decade; total tonnage has more than doubled between 1987 and 1996 (Thapinta and Hudak 2000). This has led to increasing problems related to economics, health hazards, and environmental issues. Investigations have shown that dangerous levels of pesticides are used in food production in Northern Thailand (IP-MDANIDA 2004). Based on this information, government agencies and NGOs in Chiang Mai province have focused their attention on organic agriculture. In 1997, the Ministry committed to provide funds to conduct the Pilot Project on Sustainable Agriculture Development for small farmers, which by 1999 was administered by local organizations in 34 provinces, including Chiang Mai province (Pattanapant and Shivakoti 2009). Organic agriculture is one of the sustainable agriculture approaches that are being promoted and practiced extensively in the province. Thai organic agriculture is still at an early stage, the organic production area being less than 0.02% of total agricultural land. In the 1998 about 1,005 hectares of cropland was farmed organically and this increased to 21,701 hectares by 2006, while market value increased by 3.4% between 2005 to 2006 (Panyakul 2008; Willer, Yussefi-Menzler, and Sorensen 2009; Eischen, Prasertsri, and Sirikeratikul 2006). Even though organic production increased between 1998 and 2006 it declined in 2007 due mainly to higher prices and production levels for conventionally produced products. An additional factor was that farmers were not convinced that there was a secure market channel for organic products.

Certification informs the consumer of the undesirable and unobserved pesticides that may or may not have been used in the production of food. Thailand has multiple forms of organic regulations and certifying bodies. A standard and certification by the national government has issued only one label, called “Organic Thailand”, by the Department of Agriculture (DOA), when the government set up standards for organic crop production in 2000 and developed a certification body for organic food products. The major certification body accredited by IFOAM is called “Organic Agriculture Certification Thailand” or ACT. This private organization was founded in 1995 and the members are NGOs, producer groups and other private organizations. The leading producer of organic food is Green Net Cooperatives. Both ACT and Green Net are supported by the Earth Net Foundation, which is playing a leading role in promoting organic farming in Thailand. There were about 4,000 hectares of certified organic production in Thailand in 2003 (IPMDANIDA 2003; Roitner-Schobesberger et al. 2008). In the Northern region, the Northern Organic Standards Association (NOSA) certifies all of the product markets through the Institute of Sustainable Agricultural Cooperatives (ISAC) and its affiliates. NOSA regulations were established by a coa-
lition of farmers, consumer advocates, and NGOs (Wyatt 2009). “NOSA” is a locally registered body, and the products it certifies are sold mainly in Chiang Mai province and other provinces in the northern region of Thailand. In 2007, the data show that about 726 hectares of organic farm land or 0.34% of total farm land, in Chiang Mai province were used for certified crops (Pattanapant and Shivakoti 2009).

However, a specific feature of local Thai food markets is the coexistence of different environmentally friendly, healthy or hygienic labels. Therefore governmental institutions started different certification systems for different safe food products (Eischen, Prasertsri, and Sirikeratikul 2006). Safe Food labels were therefore introduced by the Thai Government. They are based on standards that have been agreed upon by both The Ministry of Public Health and The Ministry of Agriculture and Cooperatives. The standards for safe food are not as strict as for organic food; farmers are allowed to use chemical fertilizers and pesticides, but tests are carried out to make sure that residues do not exceed a maximum level. Certificates are issued to the farmers and food suppliers whose products pass the tests (IPMDANIDA 2003). The first safe food label is “Hygienic Fresh Fruit and Vegetable”. With this label the use of agro-chemicals is regulated and controlled and the residues on the products have to be below a specific level that is safe for consumers. The second label is “Pesticide-Safe Vegetable” which is assigned to retailers of agricultural products who conduct tests for toxic substances before selling the products. These products are from production systems using agro-chemicals, but the residues have to be within the defined levels. The third label is “Food Safety”, the products are tested for residues and if they are below the maximum residue level farmers and producers can use this certificate (Wyatt 2009).

Organic farming is a growing sector in Thailand, which is encouraged by the government and many private initiatives. Therefore, production is expected to rise to meet the growing demand in the domestic market for organic foods. The increased range of healthy foods and the establishment of certificates for pesticide controlled vegetables indicate that there is a potential market. Consumers everywhere know very little about the production process, as there is no identification with the product and its producer. This might be true for Thailand as well, and therefore leads to low levels of confidence in organic production, which would indicate that there is not enough information on the consumers’ side about organic production. So it has to be explored how much knowledge of organic farming consumers already have, and how they would like to be more informed. Studies concerning consumer demand for organic food products are still under-developed in the Northern Thai region. Therefore, the present paper aims to understand the perceptions and attitudes towards organic food products in this region, to collect detailed information of the demographic characteristics and to identify the reasons affecting consumers’ behavior towards organic food products.

**Literature Review**

It is a worldwide phenomenon that people have become more and more separated from the origins of their food. Worried about their health, consumers seek out certified products to protect themselves from toxins and carcinogens. With an increasing awareness of the domestic problems regarding pesticide poisoning and diseases from fresh food products, the Thai government overhauled its approach to food safety (Srithamma, Vithayarunguangrsri, and Posayanonda 2005). The increasing consumer demand for higher quality produce and food safety makes organic food
an interesting option. There have been a considerable number of studies on organic consumers in many countries, especially in Europe and other western countries (Onyango, Hallman, and Bel-lows 2007; Gracia and Magistris 2007; Gracia and Magistris 2008; Magistris and Gracia 2008; Makatouni 2002; Squires, Juric, and Cornwell 2001; Briz and Ward 2009; Essoussi and Zahaf 2008; Storstad and Bjorkhaug 2003; Shepherd, Magnusson, and Sjoden 2005; Batte et al. 2007). Many studies have found a variety of factors that can potentially influence organic food consumption. Concern for health, environmental protection, concern for the chemical residues in conventional food products, pesticides, nutritional concern, as well as improved taste and flavour in organic food products are some of the factors identified (Storstad and Bjorkhaug 2003; Voon, Ngui, and Agrawal 2011; Sangkumchaliang and Huang 2010). According to Tsakiridou et al. (2008) a study of Greek consumers seems to show that they are informed about environmental and health issues. Consumers’ attitudes, in particular towards the health attributes and towards the environment, are the most important factors that explain consumers’ decision-making processes for organic food products (Tsakiridou et al. 2008; Lea and Worsley 2005; Roitner-Schobesberger et al. 2008; Magistris and Gracia 2008). Moreover, it has been found that more information about the organic food market, which increases consumers’ organic food knowledge, is important because it positively influences consumers’ attitudes towards organic food products (Briz and Ward 2009; Gil and Soler 2006).

In any case, the importance of individual factors appears to be country specific and/or time specific. Even in cases where similar attitudes between different countries were depicted, cultural differences lead consumers to seek different values when making purchasing decisions on organic food products. Consumer behavior involves a complex and sophisticated pattern that requires marketing research in order to understand the process. The basic idea behind consumer research is the questioning of consumers about their reasons for buying, however researchers have to go deeper and also ask people how and in which circumstances they purchase and consume. Consumer behavior consists of ideas, feelings, experiences and actions, along with additional environmental factors like advertisements and price (Krystalis and Chrysohoidis 2005; Tsakiridou et al. 2008; Fotopoulos and Krystalis 2002). The premium price accruing to organic food products directly impacts the consumption levels (Aryal et al. 2009). Instead the demand for organic products must be seen in relative proportion of income that is usually spent on food consumption (Tsakiridou et al. 2008). Furthermore, consumer behavior is a dynamic process because of continuous changes in ideas, perceptions and activities of the consumers. Attitude is shaped selectively to compromise consumers needs. Learning is gained by experience and it affects consumers’ behavior. Scientific evidence suggests that almost all behaviors are learnt. Learning differentiates between stimuli and a response, and consumer behaviors translated as learnt attitude, along with how it is learnt and experienced, is very important for marketers (Padel and Foster 2005).

Additionally, demography is especially of interest to marketers as it is important to see how population is changing in number and distribution of gender, age and other demographic characteristics and variables. Family structure, marriage and divorce rates of individual counties also have effects on consumption habits; for example, couples with children have many more health concerns when buying food than singles. The presence of children in the household has been regarded as a significant factor, which positively influences consumers’ organic food attitudes as well as buying behavior (Essoussi and Zahaf 2008). Moreover, children have effects on changing the buying decisions of the parents when they are shopping in a supermarket. Children’s age can be
considered as a key factor, meaning that the higher the age of children in the household, the lower the propensity to buy organic food (Roitner-Schobesberger et al. 2008; Lea and Worsley 2005). Education has also been reported as a significant factor affecting consumer attitudes towards organic food products. People with higher education are more likely to express positive attitudes towards organic products (Gracia and Magistris 2007). Higher income households are also more likely to form positive attitudes and to purchase more organic food (Aryal et al. 2009; Haghiri, Hobbs, and McNamara 2009).

In general, the intention to purchase organic decreases with a limitation of knowledge and awareness towards those products, with many factors effecting consumers’ perceptions and attitudes. In consumer behavior theory, consumers make their own decisions based on an individual’s intention to perform a behavior, which is influenced by attitudes (Ajzen 1991). In this research the simple framework was developed from Aryal et al. (2009) and used to analyze consumers’ perceptions and attitudes towards organic foods. Consumers decide whether to buy or not based on three main aspects: knowledge, attitude, and intention (Aryal et al. 2009). Consumers’ knowledge is a construct that effects how and what consumers decide to buy. People’s knowledge is affected by the type and quality of information made available to consumers. Advertisements, processing, awareness of certifications and labels, all play a pivotal role in knowledge enrichment. Thus, knowledge and awareness are critical in the consumers’ behavior. In addition, demographic characteristics are also important factors for purchasing behavior, which can explain the purchase of organic products. Individual socio-demographics include economic characteristics (i.e. personal or household income) and are commonly included as determinants of choice. If an individual cannot clearly differentiate between organic food and conventional food products, a price premium on the organic food product can confuse and affect the individual’s purchasing decision. Consumers’ age, education, family size, marital status, and children in household, along with product attributes, affects their attitude and preference to buy the products.

Methodology

The survey was undertaken in two stages. First, a face-to-face survey was made in December 2009 with visitors to “the 6th Northern Agricultural Fair” held at the Faculty of Agriculture at Chiang Mai University. Collaborative organizations came from both governmental and private sectors. The cooperation from all sectors involved included, in part, the Institutions in Agricultural, which has played an important part in the role of knowledge and innovation in agriculture. The survey was performed with a systematic sampling of fair visitors. No claims can be made that the sample group represents the general populations. However, the fact that the fair visitors are interested in family farm products, and possibly in organic foods, suggests that survey respondents provide an interesting study group for this issue.

The second part of the survey was carried out during December 2009 and January 2010 at three different markets: the community market of The Multiple Cropping Centre (MCC market), the Royal Project shop (Doi Kum) and Tops supermarkets. The Multiple Cropping Center (MCC) was established in 1969 with an aim to promote and increase the productivity of irrigated rice-based cropping systems in northern Thailand through multi-disciplinary research activities. They have community market projects to let the farmers and consumers meet each other directly. Every


