

**Title:** Determinants of Consumer Willingness to Purchase for Organic Products in Thailand

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## **Determinants of Consumer Willingness to Purchase for Organic Products in Thailand**

The adoption of organic production and processing is highly determined by market demand. Therefore, this is reflected by consumers' determinants for organic products. This research draws on 390 respondents to explore perceptions and attitudes of consumers. Results indicated that the main reasons for purchasing organic products are healthier expectation, and environmental friendly. Organic buyers tend to higher education and have children in their household than those who do not buy them. In addition, consumers' trust and price are also affected. Findings provide more evidence on consumers' underlying purchase motivations and to establish appropriate market strategies to develop the future demand.

**Keywords:** Consumer behavior, food consumption, organic agriculture, organic foods.

## Executive summary

The study an attempt was made to examine consumers' attitudes and willingness to purchase towards organic food products. Although the interest of consumers in organically produced food has increased in response to consumers' concerns about food safety, human health and the environment. Organic food products still do not have gained a high share in Northern Thailand's food markets. In Chiang Mai, local and national NGOs have been promoting organic agriculture. Organic productions systems are divided into two categories are including self-reliance and commercial organic agriculture. The production is expected to rise to meet international and domestic market demand. As people in Thailand have become for health and environment conscious, the demand for organic food products have raised accordingly. The decision-making process is importance of motives in product categories. Hence, this paper aims to understand the determinants related to the consumer behavior in Chiang Mai Province and identifies the factors that affect consumers' behavior towards organic food products. The study was based on sample of 390 respondents. The findings indicated that 90% of respondents had already heard of the term "organic" and 69% of respondents had ever bought organic foods. Moreover, the environmental friendly and health conscious are strong motives for consumers and seem to affect organic food consumption. Furthermore, trusting the organically produced is also important for consumers as they note the rapid growth of big distribution channels in the organic market. Over 50% of organic buyers somehow trust about organic food products and they not sure that it's really organic food products. The price difference between organic and non-labeled conventional vegetables at the supermarket in Chiang Mai City varied between 50% and 414%. Furthermore, demographics were found to influence the way respondents choose organic products and causes differences in the perceptions and attitude toward organic products.

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## **INTRODUCTION**

The concept of organic farming can be defined in many ways. One of them is the definition developed by the Codex Alimentarius based on contribution from experts from all over the world. According to the Codex, organic farming involves holistic production-management systems for crops and livestock which emphasize management practices inputs. This is accomplished by using cultural, biological, and mechanical methods instead of synthetic materials whenever possible. In Thailand, the production is expected to rise to meet international demand but there is also a domestic market for organic products. The increase of 'healthy' foods and the establishment of certificates for hygienic or safe food indicate that there is a potential market but there is low the production of organics and limited research on the consumption. Moreover, the empirical research conducted about consumers' perception of organic food products in Bangkok shows that consumers' attitude towards organic food products is important for consumers' purchasing behaviour (Schobesberger et al. 2008).

The interest of consumers and public institution in organically produced foods has increased, in response to consumers' concerns about food safety, human health and the environment (IPM DANIDA 2003; Willer, Menzler, and Sorensen 2008). As people in Thailand and around the world have become more health-conscious and concerned about the environment, the demand for organic food has risen accordingly (Lea and Worsley 2005; Tsakiridou et al. 2008). It is thus an opportune time to expand the production base and market for organic products from Thailand. Organic farming is a growing sector in Thailand which is encouraged by the government and many private initiatives. In Chiang Mai, local and national NGOs have been promoting organic agriculture. Organic productions systems are divided into two categories are including self-reliance and commercial organic agriculture (Pattanapant and Shivakoti 2009). Therefore, there are many standards of certifying body and codified set of regulations. The major certifying organization in Thailand is 'Organic Agriculture Certification Thailand' (ACT), which is accredited by an international organization called IFOAM (IPMDANIDA 2003). The Organic Thailand, which certification through the government is through the Department of Agriculture (DOA) and the National Bureau of Agricultural commodity and Food Standards (ACFS) logo certifies growers according to Thai standards for organic farming. Moreover, unofficial certifying bodies such as the Northern Organic Standards Association (NOSA) is a locally reiterated body and the products it certifies are sold mainly in Chiang Mai and other provinces in the Northern region of Thailand (Pattanapant and Shivakoti 2009).

In addition, the decision-making process is the importance of motives and barriers may vary between product categories (Lockie et al. 2004; Lea and Worsley 2005; Padel and Foster 2005; Chen 2007; Arvolat et al. 2008; Essoussi and Zahaf 2008). Moreover, consumer' attitudes in particular towards the health attribute and towards the environment are the most important factors that explain consumers' decision-making process for organic food products (Radman 2005; Magistris and Gracia 2008; Ozcelik and Ucar 2008; Ahmad and Juhdi 2010) furthermore, it has been found that larger information about the organic food market, which increases consumers' organic food knowledge, is important because it positively influences consumers' attitudes towards organic food products (Gracia and Magistris 2007; Aryal et al. 2009; Pieniak,

Aertsens, and Verbeke 2010). Willingness to pay a premium price is often interpreted as an effect of personal value (Krystallis and Chryssohoidis, 2005). Hence, this paper aims to understand the determinants related to the consumer behavior on organic food products in Chiang Mai Province and identifies the factors that affect consumers' behavior towards organic food products.

## MATERIALS AND METHODS

The study was based on sample of 390 respondents in four different locations. First, The Northern Agricultural Fair such event held in Chiang Mai which the collaborative organizations include both governmental and private sectors was conducted. The two locations of market channels included Tops Supermarket and MCC market which is The Multiple Cropping Centre of Chiang Mai University provides a certified community market for its farm group. The one food store is Royal project shop is the place that sells products from the Royal project, which to integrated pesticide reduced practices and to improve the lives of highland farmers by establishing new markets that contain health food product. The survey was conducted face-to-face interviews. The survey was performed with a systematic sampling of respondents, who passed by in four different locations.

The questionnaire contained questions which were not relevant to all interviewees. The group of people, who have never heard of organic, is named "unaware". The group of people, who have heard of organic, is named "aware" and it is also divided in two sub-groups. Those people who are aware but never purchase organic foods are categorized in "non-buyers" group, this group is asked the reason why they do not purchase and then asked the demographic characteristics question. Those people who aware and have purchased organic foods are categorized as "buyers" group, this group is asked about knowledge, attitude and the statement that mention before. Face-to-face survey was made with visitors to the Agricultural Fair held in Chiang Mai University and three health markets. The survey was performed with a systematic sampling. Only those visitors that were willing to take part in the survey were interviewed.

The questionnaire was developed in English and translated into Thai. In order to check the validity of the translations, these questionnaires were then translated back to English. The data was then processed with SPSS 17.0 for Windows; the collected data was summarized using descriptive statistics, cross tabulation and Chi-square test (at a 5% level of significance) to analyse differences between consumer types.

## RESULTS

The findings of study indicate that 90% of interviewees had already heard of the organic term. And about 69% of interviewees had ever bought organic foods. The average age of the interviewees is 35 years old. About 63% of the interviewees are female and 37% are male. Most of buyers (54%) tend to have academic degree and likely to have children living in their household, the relationship was statistically significant. In addition, about 46% of buyers reported having children in their household, compared to non-buyers (38%) and non-aware (26%) groups were statistically significant between the three groups.

In the term of awareness about 73% of these people said that they have a little knowledge about organically produced foods. Almost 15% estimated their not sure what organic meant and only 12% thought they know a lot about organic products. However from the finding, they are often not sure which products are organic and which are not. When compare buyers and non-buyers group. The buyers are overrepresented, about 97% of organic buyers were answered that they know a lot about organically produced food. The relationship between organic knowledge between groups of consumption is significantly different with ( $\chi^2=24.014$ ,  $p<0.0001$ ). Thus, mislabeling affects consumer trust in the labeling process and can have detrimental consequence for the market acceptance of organic products. Batte et al (2007) mentioned the lack of labels information might be related to the fact that although most markets have district sections for labeled and non-labeled vegetables, they tend not to distinguish further between hygienic, safe, and organic products (Batte et al. 2007). In term of certification, all of labels were not well known, with about 31% of consumers recognizing the organic Thailand (DOA) label and only less than 10% recognizing the other three organic labels (ACT, IFOAM, and NOSA; respectively). The certification and labeling are necessary, they are not sufficient for alleviating organic food market failures. The market efficiency and consumer benefits from labeling of organic food very with the level of product type misrepresentation in the food supply chain.

Environmental friendly and health conscious are strong motives affect organic food consumption. As 97% and 94% of the organic buyers said that they purchase organic food products because organic farming is good for environment which reflects the high level of agreement with organic farming and organic food products do not carry pesticide residues, respectively. About 94% of organic buyers purchase organic food products because they are support for local farmers. Almost 88% of organic buyers purchase organic products because they have a high safety level of guarantee and control. Additionally, pesticide free and fresher than conventional food products are also affects consumers to purchase (90% and 64%, respectively). Furthermore, the findings, over 50% of organic buyers somehow trust about organic products, they not sure that it is really organic food products. The pinpoints the level of trust they have towards who is deciding whether a product can be considered as organic or not, and following what procedure. Trusting the certification process is more important for consumers as they note the rapid growth of big distribution channels in the organic market. Therefore, without the supporting demand for organically grown products, the potential for this sector of agriculture clearly has limitations (Briz and Ward 2009). The organic buyers were asked how they rate the prices of organic products. In February 2010 the price difference between organic and non-labeled conventional vegetables at the supermarket in Chiang Mai City varied between 50% (for French bean) and 414% (for red oak). Despite the price difference, almost 44% of the organic buyers said that the price of organic products was a problem. Consumers consider price in the context of disposable income, but also value of money and need to feel in a position to justify premium through other gains to be willing to pay a higher price for organic products.

## CONCLUSIONS

The study an attempt was made to examine consumers' attitudes and willingness to purchase towards organic food products. The main motives to purchase organic food are environmental and health benefits, and support local farmers also found. The organic buyers in Chiang Mai City tend to have higher education and have children in household than those not purchasing organic

food products. Furthermore, trusting the organically produced and consumers' perception of products price are also important.

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