

**KNOWLEDGE MANAGEMENT IN ORGANIC FARMING
VALUE CHAIN**



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VALUE CHAIN**

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ABSTRACT

This research aims to explore how farmers share their knowledge across the value chain in order to educate and encourage consumers to select and consume organic products.

To achieve this aim, a qualitative method with the use of an interview was used. The interviews were conducted with farmers (n=11) and consumers (n=15). The data were analyzed using content analysis.

The results showed that in order to educate and encourage consumers to select and consume organic products, tacit and explicit forms of knowledge sharing should be used. Tacit forms should be utilized when educating and encouraging consumers about taste, price, and quality, such as a product's freshness which would help them gain experience with organic products. For anything related to trustworthiness and health issues, explicit forms of knowledge should be applied. For example, farmers shared information about a product's certification and showed consumers its organic logo to demonstrate that the product was certified in order to gain trust.

KEY WORDS: Organic products/ Value Chain/ knowledge Sharing/ Trustworthiness

28 pages

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CHAPTER I

INTRODUCTION

People nowadays have become more concerned about their health as several diseases persistently exist and even have evolved further throughout the world. Moreover, as never before, pollution rates have also increased significantly in the past years. Meanwhile, technological advancement invented to facilitate a much easier living has taken an essential role in business by developing a sense of competitiveness in the field that considerably affected the agriculture industry. Many agriculturists have to adapt and alter their working process while trying new things that they believe can help them survive in the dramatically competitive market. Thus, they turn to use more chemicals in order to produce more and more and to get high production (Ramey, 2012). Those synthetic substances such as pesticides and fertilizers contaminate soils, water, air, the environment, and the products themselves, which, in turn, affect the consumers by being the cause of their sickness. People, therefore, begin to acknowledge the importance of eating healthily, which can improve their life and physical condition altogether. That is how the organic or healthy food category has gradually grown during the past few years in Thailand.

During the past two decades, however, consumers have switched from an emphasis on satisfying hunger to an emphasis on the promising use of foods to promote wellbeing and to help reduce the risk of disease (Niva, 2007, Bogue & Sorenson, 2001). Organic food, accordingly, has become one of the consumers' choices because it is more beneficial and safer. Yet, it is still growing only little by little in the food sector in some groups of people. Quah and Tan (2010) stated that once people become more and more educated about health and wellness-related issues, they will be more conscious of their nutrition preferences and benefits. A survey conducted by Nelson in 1991 stated that approximately 80% of Thai people who like to consume vegetables showed interest in purchasing pesticide-free vegetables because

they had negative perception regarding pesticide and concern over chemical residues in vegetables (Nelson, 1991).

Quah and Tan (2010) defined organic food as a green product or a product produced in an environmentally friendly manner that is safer because of little or no use of pesticides and herbicides. Those organic foods are considered to be more nutritious (Jolly, 1996). Besides, Hughner et al. (2007) cited health, nutrition, food safety, and environmental concerns as the reasons many consumers may decide to purchase and consume organic foods. Their research suggested that the perception of consumers, the belief that organic food is healthier than other types of food, and the eco-friendly production can positively determine the buying tendency of consumers. Additionally, as the health trend is becoming increasingly popular among Thai people, exercising is no longer the only option to stay fit since ingesting organic products is also another practical alternative to achieve that concept of a healthy life.

Nonetheless, some people are still skeptical about organic foods, given that they do not fully trust the quality of the products in terms of taste and price. They also seem to have difficulty adjusting their perception regarding organic products despite believing that living a healthy life is better. Hence, this research has been conducted to explore the knowledge farmers have to apply to the value chain in hopes to educate and encourage consumers to select and consume organic products.

CHAPTER II

LITERATURE REVIEW

This chapter discusses the findings of previous theories and literature to support the topic. It also examines the knowledge that a farmer should acquire to influence a consumer's decision when selecting organic products.

Gracia and Magstris (2007) cited that an objective of organic agriculture is to produce healthy and quality food without using synthetic chemical products. Thus, not only does organic agriculture preserve the environment, but it also improves public health and brings significant benefits to both the economy and social cohesion of rural areas. Organic produce is also believed to be healthier and safer for consumption than conventional produce (Gracia & de Magstris, 2007).

2.1 Organic Products

Organic food products are produced through organic farming methods rather than conventional methods (Reed, 2010). Instead of using fabricated chemicals such as fertilizers, pesticides, and genetically modified crops that enable factory farming production, organic farming methods opt for natural and traditional approaches. In animal husbandry, organic farming includes practices like offering organic feed and not using necessary antibiotics or growth hormones (Reed, 2010). In many countries, organic farms are certified through a central agency, and organic certification may be required for food to be marketed as organic (Reed, 2010).

Although organic farming does have lower yields than conventional farming, it does have benefits (Reed, 2010). For example, organic farming is believed to increase biodiversity and soil quality and not have the negative effects that conventional farming has on insect populations (Rundlöf, Edlund, & Smith, 2010). There is also a long-standing belief that organic food products have health benefits, for example, by having increased nutrient quality or reduced chemical contamination,

although there is mixed evidence to support this belief (Dangour et al., 2010). However, organic food is more expensive than conventional food, and therefore may be limited in availability to only the wealthiest consumers (Reed, 2010).

2.2 Knowledge

The definition of knowledge has been discussed widely, but a commonly accepted definition is yet to be reached (Bolisani & Bratianu, 2018). Nevertheless, the most common one is that by Nonaka and Takeuchi (1995; p.87) who refer to knowledge as “justified true belief.” Three conditions must be met according to this definition:

- 1) Truth condition – a proposition should be true by knowing it. If the proposition is known, then it is true, and what is known can be claimed as knowledge.
- 2) Belief condition – one who knows that proposition must believe in it.
- 3) Justification condition – the belief that one holds is true must be justified.

By combining these three conditions, knowledge can be referred to as a particular thing that is known to be true, that is believed by those who know it, and that can be justified by their belief that it is true (Bolisani & Bratianu, 2018).

2.2.1 Types of Knowledge

Experts have classified knowledge into several different types. For this article, the types of knowledge focused on are tacit and explicit.

Tacit knowledge refers to the hidden knowledge one possesses without being consciously aware of it. This type of understanding is also inexplicable, even via concrete ideas. It can be derived from an individual’s experiences, practices, or judgments (Koulopoulos & Frappolo, 1999).

Unlike tacit knowledge, explicit knowledge is based on facts that can be articulated, viewed, or judged in formal ways. It can also be transformed into written information that can be captured and distributed (Koulopoulos & Frappolo, 1999).

2.3 Knowledge Sharing

Knowledge sharing refers to the practice of exchanging information throughout the supply chain of a specific product, including producers, distributors, retailers, and end consumers (Kottila, 2009). Knowledge sharing through the supply chain creates what Kottila (2009) described as a learning chain, in which members of the network of actors exchange information while learning about the needs and benefits that the product they are exchanging offers. Kottila (2009) noted that there was little research into knowledge sharing in organic food supply chains, whereas the study conducted did not show a high level of customer knowledge among organic food producers. There have been efforts to educate consumers about organic food along with other ethical food choices such as Fair Trade, which have been effective at explaining the benefits that these types of products offer to consumers, producers, and the environment (Beske, Land, & Seuring, 2014). However, these programs were not always successful, especially in areas where there was not a lot of external knowledge or cultural norms surrounding organic food. Despite these limitations, knowledge sharing is seen as a critical factor in creating and sustaining sustainable food systems based on organic farming methods (Blay-Palmer, Sonnino, & Custot, 2016).

2.3 Factors Influencing Buying Decisions

There is a variety of possible factors consumers would consider in order to purchase organic food, including environmental attitudes and concerns about the effect of conventional agriculture on the environment (Rundlöf et al., 2010), health and hygiene beliefs (Dangour et al., 2010), and beliefs about the trustworthiness of food supplies and other factors (Reed, 2010). Additionally, there are some reasons that consumers may avoid organic food, such as perceptions that it is more expensive than other types of food or lack of understanding about what kind of benefits organic food offers to consumers (Beske et al., 2014). Since the study objective is to aid farmers in assembling knowledge networks to share information regarding organic food and convince consumers to try the products, four of the most prevalent perceptions about the chemical-free crops have been selected. Such perceptions revolve around the idea that organic food is more costly than conventional food, organic food quality is

different from conventional food, organic food is (or is not) trustworthy, and organic food tastes better than non-organic one. According to the literature review of this study, these four notions are among the most common reasons that could affect consumers' decisions when choosing or rejecting organic food.

2.3.1 Price Perceptions of Organic Food

Cranfield and Magnusson (2003) mentioned that income is an integral factor that impacts the purchase intention for pesticide-free food. Wealthier households are likely to spend more on organic food, which is plausible because those who have a tight budget will not be able to afford the premium price. One of the most typical reasons that consumers do not buy organic food, according to the literature, is that they perceive the product as more expensive than conventional food. For example, in one study, the authors examined how European consumers perceive the price of organic food and the decisions in response (Aschemann-Witzel & Zielke, 2017). They conducted surveys between 2010 and 2014 by analyzing willingness to purchase organic food and willingness to pay a price premium. The result indicated that even though consumers could afford organic food due to their higher than average incomes, they still viewed the price difference as a barrier. While consumers were willing to pay a 30% price premium on average for organic food, many would not make a purchase at all, making it a significant hindrance because of this price difference.

Some consumers would rather spend more money on organic food than on conventional ones. For example, a study of consumers in Thailand showed that they would pay on average 88% more for organic Chinese kale or 51% for organic pork and jasmine rice (Sriwaranun, Gan, Lee, & Cohen, 2015). However, not all consumers are willing to pay price premiums for organic food; for example, consumers with children were less willing to pay, while those who lived in the city and had environmental concerns and knowledge of organic benefits were more likely to pay (Sriwaranun et al., 2015). Thus, it suggests that details about costs and the price comparison between traditional and chemical-free edibles are factors that would encourage consumers to make a buying decision.

One of the known gaps in the literature on the price of organic food is that almost all studies previously conducted have focused on willingness to pay or high

price perceptions as a cause of an attitude-behavior gap, but very few have investigated price learning, price knowledge, or affective and cognitive processes (i.e., how consumers think and feel about organic food prices) (Rödiger & Hamm, 2015). It means that what consumers actually know about organic food prices and how they compare to conventional food prices is poorly understood, and there is the potential that more education about price comparisons could help improve consumer knowledge and willingness to try organic food (Rödiger & Hamm, 2015). Price comparisons, therefore, are one possible way to increase organic food consumption. Sriwaranun et al. (2015) pointed out that policymakers, marketers, and producers should attempt to lower the price of organic products to attract more consumers. Furthermore, farmers should ensure their consumers that organic products are affordable and available for everyone.

2.3.2 Product Quality Perceptions of Organic Food

The perception that organic food is of higher quality than conventional one could affect consumers' decision-making regardless of the price difference. Therefore, being educated about organic food quality and safety is potentially essential for consumers' decisions. A study in Russia supported the idea that consumers use higher quality perceptions of organic food as a justification for the higher price (Bruschi, Shershneva, Dolgopolova, Canavari, & Teuber, 2015). These authors found that Russian consumers did perceive organic food to be higher quality, for example fresher and safer than conventional food (Bruschi et al., 2015).

Harper and Makatouni (2002) stated that the perceived quality of organic food includes perceptions of higher standards of safety and healthiness. Thus, the concerns over safety and health could influence consumer perceptions of organic food. The health benefits of organic food may be exaggerated, as a previous study has shown that there are only limited health effects of organic food compared to conventional food (Dangour et al., 2010). However, several studies demonstrated that consumers believe that organic food does contain these benefits and has improved in terms of quality over conventional food. For example, Sriwananun et al. (2015) showed that Thai consumers associated organic food with improved quality and improved attributes such as food safety.

Another study pointed out that consumers associate organic food with better taste and sensory characteristics and higher freshness levels, contributing to an overall higher perception of product quality compared to conventional food (Fernqvist & Ekelund, 2014). Yet, these authors mentioned that it was not entirely clear why this relationship persisted since there was no clear evidence base that organic foods actually were fresher than conventional foods in the literature (Fernqvist & Ekelund, 2014). Still, it does not mean that this is not the case, only that it is among the questions that have not been explored previously.

Although there is a possibility of superior product quality being a factor in purchase decision-making, not all studies have supported such an observation. For example, a study in Malaysia found that while perceptions of health and safety and environmental safety and animal welfare concerns did have a significant effect on consumer purchase of organic foods, product quality did not have a significant effect (Wee, Ariff, & Zakuan, 2014). This finding means that it cannot be assumed that product quality will affect the purchase decision. But, since there were no studies conducted to the extent to which product quality perceptions could be improved, this is another area that needs more research. Nevertheless, other studies such as that by Sriwananun et al. (2015) and Bruschi et al. (2015) did show that perceived quality played a role in consumer intentions toward organic food. Therefore, this study will serve a beneficial role in expanding knowledge on consumer perceptions of product quality and how knowledge networks can enhance these perceptions.

2.3.3 Trustworthiness of Organic Food

Consumers must also know about organic farming and trust in organic products. They need to understand how they could trust the goods and where they could investigate the authenticity of the offers. According to some authors, “trustworthiness is often described as consisting of three dimensions: competence (the ability of the trustee to act as expected by the trustor), integrity (honesty, promise-keeping and acting according to its stated values), and benevolence (caring and acting in the interest of the trustor) (Schneider, Stolze, Kriege-Stefen, Lohscheidt, & Boland, 2009, p. 3).”

Organic food is considered a credence good, or a product where consumers cannot inspect that it has the attributes that it promises; for example, consumers cannot tell by visual inspection that an organic fruit is different from a conventional fruit, but must instead trust that it is organic (Fernqvist & Ekelund, 2014). The statement suggests that trust in organic labels and claims are influential factors consumers will consider when purchasing a product. A study in Thailand showed that a lack of consumer trust in organic food was one of the major barriers to establishing a market for organic food products (Nuttavuthisit & Thøgersen, 2017). The authors found that consumers had low-level knowledge of organic food standards and the ethical principles underlying organic gardening. They also discovered that consumers did not trust organic food labeling and certification schemes due to their lack of understanding and the multiple overlapping certification programs in Thailand, which created confusion regarding the definition of any particular standard. Lack of trust in organic food affects consumer willingness to pay price premiums or to purchase at all, as well as reducing perceived benefits of organic food (Nuttavuthisit & Thøgersen, 2017). It implies that, as far as the situation goes in Thailand, there should be a significant effort to improve consumer beliefs regarding the trustworthiness of organic products, especially their trust in certification programs.

A study in Germany showed that consumers do not necessarily trust government-mandated certification labels for organic foods more than they do private labels (Janssen & Hamm, 2014). Although consumer attitudes toward these programs varied, there was, in general, the lowest level of trust for the generic certification mandated by the EU. Higher levels of trust were generally found for farmer's association certifications, which were often specialized for specific farming concerns (for example, including concerns like animal welfare in meat and dairy certification programs) (Janssen & Hamm, 2014). This shows that while the confusion about organic certification and labeling programs is a significant problem in Thailand (Nuttavuthisit & Thøgersen, 2017), the answer is not necessary to impose a single certification. Instead, it may be more effective for farmers to communicate more about their farming practices and farming ethics, to explain not just the personal benefits of organic food but also its environmental and animal welfare benefits (Janssen &

Hamm, 2014). It would provide more coherent information for consumers to make decisions.

Zanoli (2004) stated that consumers preferred buying organic products directly from the farmer to make sure that they acquire actual organic products. Consequently, farmers can become one of the credible parties that the consumers can rely on; for example, by opening their farms to visitors in order to show the process of organic farming.

2.3.4 Taste of Organic Food

The final factor to be considered is taste. According to the perception and understanding of conventional food consumers, they neither necessarily feel that organic food is more delicious or fresher nor presents any difference at all. As a result, Albright (2014) indicated that the studies considered in the BJN paper showed that higher antioxidant levels affect food's organoleptic qualities—taste, aroma, and mouthfeel—and how the human senses detect a food's unique flavor. People are yearning for more intense flavors, and there is good news that organic farming accentuates flavor in fruits and vegetables. However, many organic food enthusiasts could identify the distinct tastes between conventional and chemical-free food.

Several studies have supported the idea that consumers believe organic food has better taste characteristics than conventional food. For example, one study showed that consumers associate organic labels with better taste and freshness compared to conventional food (Fernqvist & Ekelund, 2014). Whether organic products taste better than conventional products depends on individuals and situations. For example, an experimental study showed that consumers did sometimes perceive organic apples as better tasting, although this was not consistent, and some consumers would choose organic apples even if they thought the conventional apples would taste better (Costanigro, Kroll, Thilmany, & Bunning, 2014). Research in Poland has also supported the importance of perceived superior taste in the acceptance of organic produce (Bryła, 2016). This author showed that consumers generally perceived organic food as having an exceptional and fresher taste than conventional food. Also, the author showed that superior taste perception affected the consumer's trust in the organic food claims and certification; in other words, the fact that it tasted better was

viewed as proof that it was better (Bryła, 2016). A study in China also supported the idea that consumers buy organic food because they view them as fresher and better tasting (Xie, Wang, Yang, Wang, & Zhang, 2015). In this study, about 65% of consumers identified freshness and natural taste as motivators for the choice of organic food over conventional food (Xie et al., 2015). Hence, the final issue that farmers could address through knowledge networks is the taste of organic food and how it compares to conventional food. This type of knowledge sharing would require emphasizing the freshness and natural taste of organic food while convincing consumers to try the food and compare the experience to the conventional one.

2.4 Research Framework

Chen and Chang (2012) found that tacit knowledge could negatively impact knowledge sharing when there was a high level of structural organization. Tacit knowledge seemed to be a suitable means during knowledge transfer when there was no or only a low level of structural organization. However, high levels of organization are more suitable for complex forms of knowledge sharing such as sharing explicit knowledge (Chen and Chang, 2012).

Moreover, Rumanti, Samadhi and Wiratmadja (2016) conducted research with Indonesian Small and Medium Enterprises (SMEs) on knowledge sharing using individual tacit and organizational explicit knowledge. The results indicated that the mentioned knowledge played a vital role in knowledge sharing among SMEs staff.

Therefore, this research aims to investigate knowledge sharing between farmers and customers to identify suitable and effective ways to transfer knowledge and educate consumers about the value of organic products, as shown in figure 1.

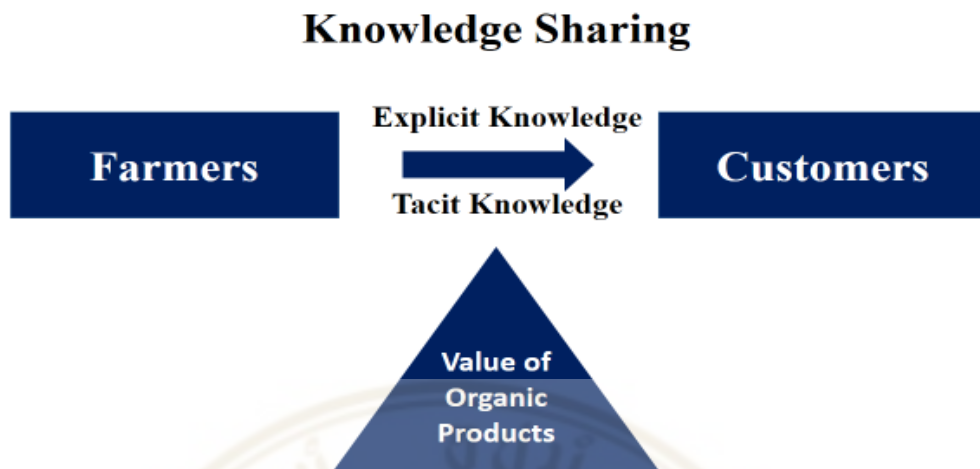


Figure 2.1 Research Framework

CHAPTER III

RESEARCH METHODOLOGY

This study utilized the qualitative analysis method in the form of in-depth interviews to collect information from the interviewees. The approach could provide more accurate information directly gathered from the consumer perception and behavior toward organic products. Thus, it was ideal to understand each interviewee so that they would offer more insights, including their opinions, reasons, and feelings. The questions of the qualitative research were open-ended questions aiming to get the most detailed information or perception from the interviewees. The interview allowed interviewees to express their thoughts and feelings, which may lead to a better understanding of the researcher regarding the organic consumer perspectives and factors that could determine their purchase decisions. Moreover, the results obtained from the collected data belonged to the actual consumers whom the researcher interviewed at the organic market named “Sukjai Market” in Sampran, Nakhon Pathom.

“Sukjai Market” is the place where farmers sell their organic products. In order to join, they have to offer products that meet the criteria of the market. In case some products are not entirely organic, they will honestly inform consumers so that they can decide if they will make a purchase. Meanwhile, consumers can buy fresh and reasonably-priced organic products at “Sukjai Market” directly from farmers. Hence, the market itself is a confirmation of authenticity since every farmer will be certified and guaranteed by the standard of “Sukjai Market”. Consequently, data collected from this place can contribute to a more accurate result because it is somewhat similar to the mocked-up scenario between the farmers who do organic farming and the consumers. The majority of the buyers at this market already have experience consuming organic products and tend to continue doing so, or at least have become more interested in such toxic-free produce.

To perform the interview at “Sukjai Market”, the researcher would interview two types of interviewees: consumers and farmers, in the direction of getting the perception of the consumers while allowing the farmers to present their products, reasoning with customers why they should select organic goods even though sometimes they are slightly more expensive.

Data Collection

The data from this study were collected from a sample size separated into two groups: the consumers and farmers. The sample size of the consumers was 15, while the farmers' was 11. Interviewing consumers would assist in studying and understanding why they choose organic products and the perception behind their selection. It was also necessary to focus on the farmers who implement organic farming because these agriculturalists could provide a thorough knowledge of how they work and cultivate their crops, promote their farms, and acknowledge the consumers.

To get the desired information from the questionnaire, the interviewer must carefully investigate each interviewee and situation. However, the open-ended questions make it possible to reach under superficial responses and reasonable opinions to collect information from an individual's emotional response. Such an expressive reaction is relevant to the interviewer because, oftentimes, it is what drives a person's decisions or influences their behavior. The interview for consumers was around five to fifteen minutes, depending on the given answers and the situation at hand. Additionally, the moods of the interviewees during an interview also affected the duration as some of them were not comfortable answering multiple questions when they traveled with their parents or children. Even so, many people were willing to help by responding to the entire questionnaire and voicing their opinion on each question. By all means, interviewing the farmers lasted about seven to twenty-five minutes per session based on their knowledge and style of answering the questions. Some of them enjoyed explaining how they operated their farm, how they developed and solved the problems together with expressing their feelings and opinions on organic farming. The obstacle during the interview was the interruption from customers because we had to stop from time to time before resuming the session once they finished trading.

CHAPTER IV

DATA ANALYSIS

This chapter presents the research results from the interviews. The chapter has been divided into four sections, which are explicit knowledge, tacit knowledge, knowledge about the ethics of farmers, and the value-added by the relationships between farmers and consumers.

4.1 Interviewee Information

The data as seen in Table 1 are collected from 11 farmers and 15 consumers. The farmers included in this research come from a wide range of organic farms such as crop farms, chicken farms, goat milk farms, rice farms, and mushroom farms. All farmers have engaged in organic farming, harvesting and releasing their products to the market. Most of them have at least five years of experience in organic farming practice.

Table 4.1 Farmer information

Farmers	Type of Farming	Organic Farming Experience
F1	Crop farm	5 years
F2	Crop farm	5 years
F3	Goat milk farm	5 years
F4	Crop farm	4 years
F5	Crop farm	More than 10 years
F6	Chicken farm	3 years
F7	Rice farm	Several years
F8	Rice farm	10 years

Table 4.1 Farmer information (cont.)

Farmers	Type of Farming	Organic Farming Experience
F9	Mushroom farm	2 and a half years
F10	Crop farm	2 years
F11	Crop farm	6 years

The consumers selected are those who have experience buying organic products and are classified into three groups: regular consumption, occasional consumption, and rare consumption. These consumers are 28 to 65 years old with moderate to high incomes.

4.2 Value of Organic Products

4.2.1 Farmers' Views

Almost every farmer stated that they switched to organic farming because of their health. They believed that doing organic farming was safer.

“I changed because I had high blood pressure from inhaling chemicals. It caused me headaches.” (Interviewee F4)

“I changed to organic farming because I wanted good health.” (Interviewee F11)

Cost, product quality, trends and market opportunities, and environmental and social responsibilities shown in table 3 are also other factors that lead farmers to organic farming.

“The Thai food consumption trend has been shifting toward healthy food. This is a huge market opportunity. Not only organic farming benefits farmers and consumers but also the environment and community.” (Interviewee 8)

“I have seen the market opportunity for organic farming.” (Interviewee 9)

Table 4.2 Reasons for shifting to organic farming

Farmers	Health	Cost- Effectiveness	Superior Product	Environmental and Social Responsibility	Trend and Market Opportunity
F1	✓				
F2	✓	✓	✓		
F3	✓		✓		
F4	✓		✓		
F5	✓			✓	
F6			✓		
F7					✓
F8	✓				✓
F9					✓
F10	✓	✓		✓	
F11	✓	✓	✓	✓	

4.2.2 Consumers' Views

The customers' views of organic products varied. In this case, the researcher divided the consumers into three groups based on their frequency of consuming organic products. These groups are 1) regular consumption, 2) occasional consumption, and 3) rare consumption.

Table 4.3 Types of organic consumers

Consumers	Regular	Occasional	Rare
C1	✓		
C2			✓
C3			✓
C4		✓	
C5	✓		
C6	✓		
C7			✓
C8			✓
C9		✓	
C10		✓	
C11	✓		
C12	✓		
C13	✓		
C14	✓		
C15		✓	

For regular consumers, they stated that they consumed organic food due to concerns about their health. As interviewee C4 mentioned, some people close to her passed away because of cancer, and she thought that she was also at risk of developing cancer. That was why she sought out organic products and tried to better care for her health. Interviewee C5 also recognized the benefits of organic food.

“I consume organic because I have noticed the health problems. After consuming organic food, I can feel the change; for instance, when doing health checks, the doctor said that my health is getting better.” (Interviewee C5)

Regarding taste, these regular customers did not have any problems with it. Interviewee C1 even said that organic food had a better taste while other types of food reeked of soil and were foul-smelling, something she did not like. For her, organic products were tasty and fresh. Furthermore, the interviewees had no problems with the high price. Interviewee C6, who has a young child, added that she was not concerned about the cost, mentioning that the higher cost was acceptable. The most important factor was quality, whereas the product's origin should be natural. Interviewee C1 agreed with this and commented that at Sukjai Market, she was impressed with the farmers (sellers). She trusted them, so she was okay with the higher price. In line with other respondents, interviewee C5 said that it was alright for the rate of organic food to be higher as she knew about its benefits.

Non-regular customers who occasionally consume organic products agreed that organic goods were more expensive than conventional products. However, they did not have problems with that. They stated that they were okay with the higher price since the products were also rich in nutrition.

“I have no problems with the price of organic products. I think given the benefits for health, it is okay to pay more.” (Interviewee C15)

Besides, this group reasoned that they consumed organic products because they were beneficial for health. They believed that consuming organic products could help reduce the risk of being sick from chemical contamination.

“I chose organic nutrition because someone close to me became ill and passed away because of cancer. I think I also have a chance of developing cancer. So, I should look after my health by eating something good, such as organic products.” (Interviewee C4)

Normally, customers will look for the certificate or organic symbol to confirm that the products they are buying are organic. Interviewee C6 added that she trusted Sukjai Market because the organic products sold there had been certified by a

third party. They also stated that organic products made them feel good as they were delicious and healthy.

Some interviewees pointed out that recommendations from friends was also a factor that led them to purchase organic products.

“Personally, I only use a few organic products, such as perfume. I use it because of a friend’s recommendation.” (Interviewee C9)

The results for the group rarely consuming organic products were different from the other two groups. It showed that this group had quite negative ideas about organic products since they did not believe that the products were worth the money, tasty, nor could help them avoid chemicals.

“I think organic food is not perfect. It is not tasty. The cost is also high. I do not really worry about the chemical issue since everyone has to face this anyway.” (Interviewee C4)

“I do not consume organic produce. Firstly, it is expensive, and I do not think it is that good.” (Interviewee C7)

4.3 Knowledge Sharing

The knowledge sharing between farmers and consumers can be considered explicit and tacit knowledge. From the study, the farmers used various methods to communicate with their consumers, for example, by employing standardized labels, posting on websites, and interacting directly with customers. These explicit knowledge forms were exercised to help the farmers provide information concerning the organic farming process and organic standards. They also aided in verifying product authenticity to secure consumer trust.

“We also share knowledge in our organic farmers’ groups via Facebook and on our website in written form.” (Interviewee 11)

Regarding tacit knowledge, the results showed that farmers were using this type of knowledge directly to provide information about quality (freshness, health, shape, and color) and the taste of products while indirectly creating trust. In addition, some farmers even said that they offered consumers to try the products. They also invited consumers to their farms to experience it themselves.

“We ask consumers to try our organic rice and compare the taste and quality by themselves. They can experience and see the benefit of organic rice themselves.” (Interviewee F7)

The consumers held similar views about organic knowledge sharing among themselves and farmers. Most consumers stated that the farmers showed them a logo or label indicating that the product had been certified by both private and public accredited parties. The farmers also encouraged them to test the products to savor the taste and freshness. These kinds of knowledge sharing fostered understanding and trust among consumers. The consumers then added that these forms of knowledge motivated them to purchase more organic products.

Knowledge sharing related to organic products can be done in several forms between expert (government agent) to farmer, farmer to farmer, farmer to consumer, and consumer to farmer. This sharing of knowledge can help create relationships and networks in the organic production supply chain.

“Nowadays, consumers are knowledgeable about organic products. They provide some suggestions to farmers. We are doing knowledge sharing, and it helps create good relationships between the farmer and consumer.” (Interviewee F9)

4.4 Discussion

The results showed that both tacit and explicit knowledge sharing happened between farmers and consumers. Farmers built trust mainly via explicit forms of knowledge, corresponding with Rumanti et al. (2016), who found that explicit knowledge is more suitable when transferring formal information. In this case,

farmers applied explicit knowledge in the form of certification and standardization from an accredited body to notify consumers about their organic products and create trust. By doing so, consumers were likely to exhibit better understanding and more confidence in organic products.

The research found that farmers would rely more on tacit knowledge when it came to subjective knowledge based on individual judgments like the taste and quality of organic products (freshness, color, and shape). They would offer consumers taste testing to experience the product themselves since these kinds of knowledge cannot be formalized or articulated, as stated by Koulopoulos and Frappolo (1999) who explained that tacit knowledge is a form of knowledge depending on individual experiences, attitudes, and judgments. It can be varied, different, and without solid form. Thus, using tacit forms of knowledge to provide information about the taste and quality of organic products is preferable.

Moreover, this research revealed that consumers perceived the value of organic products differently based on diverse consumer experiences. Regular and occasional consumers had more trust in organic products and were happy to pay more, while rare consumers displayed less trust in the products and showed a higher price sensitivity when making a purchase. Sriwaranun et al. (2015) found that consumers did not mind paying 50% more for organic products.

Likewise, this research discovered that regular consumers believed that organic products were superior in taste. It is similar to several studies that reported that consumers believe that organic products have a better taste (Bryła, 2016; Fernqvist & Ekelund, 2014; Costanigro, 2014). Nonetheless, the result from the rare consumption group turned out to be quite different. The group rarely consuming organic food expressed that they did not feel any disparities between organic and non-organic products, supported by Albright (2014), who mentioned that organic products did not always taste better. The results of this research are corroborated by the results of previous studies.

In short, this research found that farmers and consumers share knowledge about organic products using both tacit and explicit forms. Most knowledge sharing is concerned with the value of organic products in terms of trustworthiness, quality, and value for money, which are the key factors that determine whether consumers will purchase organic products.

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This research employed a qualitative approach in the form of interviews to achieve the aim of the study, which is to explore how farmers share their knowledge across the value chain in order to educate and encourage consumers to select and consume organic products.

The data were collected from farmers (n=11) and consumers (n=15). The results showed that tacit and explicit forms of knowledge sharing should be used to educate and encourage consumers to select and consume organic products. The tacit knowledge should be utilized when educating and encouraging consumers about taste, price, and quality; for instance, product freshness as such encouragement will allow them to be more familiar with these chemical-free goods. Meanwhile, explicit forms of knowledge should be applied to anything related to trustworthiness and health issues. For example, farmers share product certification and organic logo to demonstrate that the product is certified in order to gain trust.

In conclusion, this research found that farmers have to apply both tacit and explicit knowledge forms to the value chain (value for money, trustworthiness, health value, and taste) in order to educate and encourage consumers to select and consume organic products.

5.2 Recommendations

The results of this research suggested that consumers with different experiences of organic products hold different viewpoints on organic products. Regular consumers seem to display a positive attitude, while rare consumers, on the contrary, voice quite negative opinions. Farmers and business owners must acknowledge each customer's different experiences when educating and encouraging

them to consume organic products. Government should play its part by cooperating with farmers regarding various management issues such as price support. For example, they should coordinate with the private sector in order to support and provide selling locations. It would assist in lowering the cost of organic products since farmers do not have to pay rent for their lots. In addition, the government should educate consumers by advertising on TV and social media and also enhance students at schools and universities. However, farmers might need to provide more information regarding organic farming and products to educate those new to organic consumption. Explicit forms of knowledge sharing would be appropriate and effective to help form a basic understanding. Then, implementing tacit forms of knowledge in terms of value for money, taste, and health benefits by asking these consumers to try the products while helping them gain experience at the same time. Furthermore, the results also showed that family and friends could help promote organic consumption among the rarely consuming group. Farmers and organic business owners can also educate and promote organic products via word of mouth in order to reach those who rarely consume organic products.

5.3 Limitations and Recommendations for Future Research

Similar to other studies, this research has some limitations that should be noted. For instance, this research used a qualitative approach. The data were analyzed and presented in a descriptive form rather than a numerical form. Therefore, future research can address and make use of this gap by adopting a quantitative approach in order to analyze and discuss the results in numerical and statistical forms. Unfortunately, this research only focuses on farmers and customers due to time restrictions. Many stakeholders, such as government agents, suppliers, and traders, have been involved in organic farming and have been vital to the supply chain. Accordingly, expanding the range of the research by including more stakeholders can open more doors for organic farmers to increase the number of customers in the future.

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