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Providing Sustainable Food in Urban Thailand

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Abstract. Increasing demand for sustainable foods can be a driver for environmental improvements along the food-supply chain as a whole. Research in Western Europe has confirmed the importance of distribution channels in supplying sustainable food and particularly in how they are able to combine consumer concerns with the specific presentation of sustainability in the shop. In the urban areas of Thailand only some distribution channels for sustainable food are available, such as supermarkets and specialized shops (including specialized restaurants). Supermarkets mostly offer sustainable products, but the range of sustainable products depends on the location of supermarket. Specialized shops focused on organic products, healthy food, or special dietary needs.

This paper reviews sustainable food providers i.e. supermarkets and specialized shops in Bangkok and combines literature review and empirical fieldwork. The focus was on the shop as the location where providers encounter consumers. Sustainability was observed at three levels; the general level, the shop level, and the product level. In particular communication, information, and other trust-building mechanisms at shop level were explored.

The paper concludes by confirming the central role of specialized shops and supermarkets in transition processes towards more sustainable food provision. Their engagement creates a pressure on other actors in the food supply chain such as producers, government agencies, and consumers to also shift their practices. Different strategies can be identified as ways to increase sustainability in food provision.

Keywords: sustainable food, urban Thailand, supermarkets, specialized shops

1. Introduction

The production and consumption of food have changed dramatically over the last thirty years, as more and more food is coming from all over the world (Oosterveer, 2005). Mode of production is far away from mode of consumption in terms of time and space (Giddens, 1990). Since the consumers do not see how foods are produced, they are concerned about the safety of their food. The consequences of such globalized food provisioning such as health and environmental impacts are also questioned (O'Doherty Jensen et al., 2001; Oosterveer, 2005).

In addition, food scares such as Mad Cow Disease, Bird Flu, and Melamine contamination make consumers aware that they live in a global risk society and confronted with risks that are unpredictable, uncertain and infinite (Beck et al., 2004). Concern, uncertainty, worries, and mistrust are important issues in contemporary discussions about food consumption (Torjusen et al., 2004). How can consumers be confident about the safety of their food? What kinds of tools are needed to construct trust among consumers nowadays? These challenging questions make up the topic of this study. This paper aims to deal with these questions by analyzing roles played by supermarkets and the specialized shops in Bangkok in the transition towards sustainability in the food sector.

2. Conceptual tools for understanding sustainable food consumption

To understand the practice of shopping for green food, it is important to study both the system of green food provision and consumer lifestyles (Spaargaren and Van Vliet, 2000) (**Figure 1**). The system of green food provision can be described in terms of a set of variables and indicators that characterize the main actors in the provision system, while consumer lifestyles refer to the set of variables describing consumption patterns of people who buy green food (Oosterveer et al., 2007). This paper focuses on the main actors in green food provision system in urban Thailand (the right side of conceptual model in Figure 1).

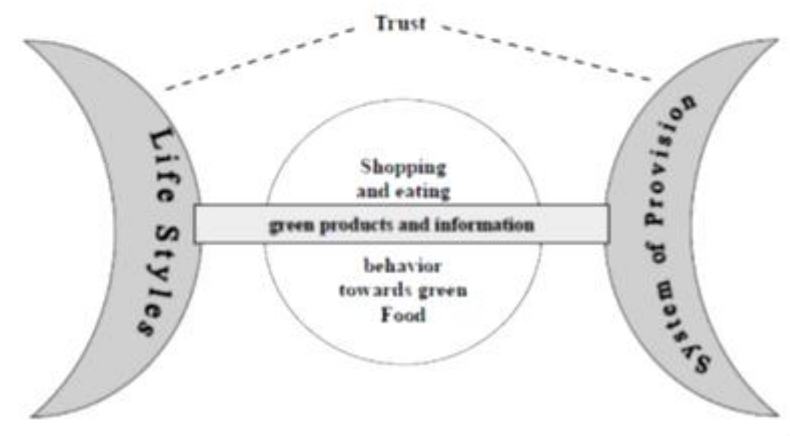

Figure 1: Conceptual Model for Green Food Shopping

In Bangkok, two main channels are relevant in distributing sustainable foods: 1) specialized shops and 2) supermarkets. Most supermarkets in Bangkok offer sustainable food products, but the range of sustainable products depends on the location of supermarkets (Roitner-Schobesberger, 2006). Specialized shops in Bangkok sell organic products, healthy food, and food products for special dietary needs. Some specialized shops combine restaurants and coffee shops within specialized shops. Food from the specialized shop is used for cooking. This paper mainly analyzes the strategies of specialized shops and supermarkets in Bangkok.

These strategies are examined in terms of quantity and quality of sustainable products on offer by using observation techniques. Quantitative characteristics refer to the number of sustainable food products and the percentage of each product category in the shop. Qualitative characteristics refer to the information provided to the consumers as well as to the ways in which retailers communicate with their consumers.

3. Methodology

The objects of study were the retail outlets of supermarkets and the specialized shops in Bangkok. The specialized shops (in combination of restaurants and coffee shops) were selected by purposive samples selection. Four successful specialized shops were selected to represent "real" sustainable food retails. These four selected shops have run their business for at least three years. Thus, these shops have a stable structure and can represent the specialized shops in Bangkok. Their geographical location was not taken into consideration as they are spreading into various areas of Bangkok depending on the property rights of the owners. Three of these four specialized shops also combine restaurants or coffee shops in their premises. These restaurants and coffee shops are also investigated in this study.

In 2010, the number of supermarkets in Bangkok was 545, divided over 11 supermarket chains (Kantamaturapoj et al., 2012). In this study, five supermarket outlets in Bangkok; 1) TOPs, 2) Foodland, 3) Villa Market, 4) Gourmet Market, and 5) Golden Place were selected. The purposive sampling selection was applied to choose supermarkets where sustainable food products are available. Different operators of supermarkets were selected. In addition, the geographic location of the outlets was taken into consideration. These five selected outlets were located in the business area of Bangkok. Different formats of sustainable food were made available in response to the demand from middle-class consumers living and working in the area.

Data were collected with the help of participant observation as the main source of information. Nine Organic product ranges in Thailand (Green Net, 2005) were observed. The shops were visited initially as a consumer to figure out how sustainability is framed at the shopping floor. Each visit to one of the selected retail-outlets consisted of three rounds. Checklists adapted from Korbee (2008) were used in each round to collect the information. The central focus of the first round was on the images and impressions that consumers encountered when they enter the shop. These impressions refer to the images and wordings that immediately catch the consumers' eyes. The second round was more specifically focusing on the information given beyond the product level. This level refers to the way in which consumers are guided to find sustainable food products and to the way in which they are persuaded to buy them. These shop level characteristics consist of three elements; information to give on idea of sustainability, attention drawn to sustainable food products, and promotion of such products. Information tools, positioning of sustainable food products, information given by shop personnel, and promotion of sustainable food products are illustrated to characterize shop level. The third round is the most specific one, intended to find specific information about the available sustainable products.

The first round of observations was conducted in 2008 and this was followed up by a second set of visits in 2010. The reason for carrying out two surveys was to assess if any changes occurred in the sustainability strategies of retailers in this period. Changes in the assortment and percentage of the available sustainable food products would indicate an increase (or decrease) in the provision of sustainable food in central Bangkok.

4. Result and Discussion

This section discusses the sustainable food strategies of these specialized shops and supermarkets in terms of both quantity and quality. It starts by looking at the quantitative strategies, followed by the qualitative strategies. In the final section of this chapter the quantitative and qualitative strategies of the supermarkets and specialized shops are compared.

The quantitative strategies of specialized shops and supermarkets include the number and percentages of green food products that they carried. In the four specialized shops in Bangkok in 2008, 3-4 categories of the listed sustainable food products were found. The Navilit shop had the most types of rice, because they have their own rice farm and produce their own house brand of rice products. The Thai Sabai shop provided the highest number of sustainable processed fruits and vegetables and tea products. This shop has its own farmland and produces these products under their own brands. The Suan Nguen Mee Ma and Health Me shops provided smaller quantities of sustainable food but the variety of products was higher than in the other two shops and they bought their range from a wider range of suppliers. Table 1 shows the quantities and percentages of sustainable food on offer in four specialized shops in Bangkok in 2008 and 2010.

The study found that, in 2008, supermarkets provided 4-5 categories of the listed green foods in their shops. Gourmet Market carried the highest percentage of sustainable fresh fruits and vegetables, jams, and honey and Golden Place carried the highest percentage of sustainable rice, beans, honey, and meat. Villa Market provided the smallest number of sustainable foods from the nine listed product categories as they are more focused on exotic imported foods, such as flour, bread, and cereals.

In 2008 most of supermarkets except Villa Market, provided sustainable rice. However, the range of sustainable rice on offer was smaller than that of conventional rice. All the supermarkets provided sustainable fresh fruits and vegetables in relatively high percentages in comparison with conventional fresh fruits and vegetables. The percentage of sustainable fruit and vegetables at TOPs was the highest; followed by Gourmet Market, Foodland, Villa Market and Golden Place. For other product categories, the percentage of sustainable foods was relatively low. For example, only one sustainable tea was found in Gourmet Market (0.54% of the total 185 tea products) and in Villa Market (1.04% of total 96 tea products). Table 2 shows the numbers and percentages of sustainable food items available in the five supermarkets in Bangkok in 2008 and 2010.

Tables 1 and Table 2 show that the range and proportion of sustainable foods available in the specialized shops and supermarkets, is mixed when comparing the two surveys. Range and proportion of some sustainable food decreased while some others sustainable food products increased, especially the items that can be considered as not basic Thai foods. Only the number and percentage of sustainable food in the Ban Navilit specialized shop decreased, and was this probably due to the political protests which, for a time closed the road in front of the shop.

Different indicators were selected to determine the quality of the provider's performances in sustainable food provision. The qualitative strategies of supermarkets and specialized shops included providing information and communication about green food to consumers. The specialized shops try to attract consumers' attention by presenting a "back to nature" feeling. At the shop level, the specialized shops are more reliant on verbal communication with their customers. While some information is available on posters, pillars, and in leaflets, the shop personnel are the key informants, helping customers make their decisions about products. They are friendly and helpful in advising and directing consumers to sustainable food products. No separate corner for sustainable food is needed, since in most cases all the products on the shelves are sustainable. Only one shop separates the shelf by level of sustainability; organic, chemical-free, and chemical-safe products. The prominence and positioning of sustainable foods varied, due to the limited space within the shops. There was clearly an issue with regular availability of fresh products, since these were often sourced directly from the farmers (with no mechanism for returning out of date products). Fresh product procurement in the specialized shops was often done on a weekly basis and the availability of fresh products varied over the week. Specialized shops can also only carry relatively small stocks of dried food, as they would be responsible for all expired products themselves. Except for giving out information, there were very limited other promotion campaigns for sustainable food products in these specialized shops.

The specialized shops communicate their product level information in different ways compared with the supermarkets. The supermarkets mainly offer certified food products, while the specialized shops focus more on verbal communication. Most of customers in the specialized shops are health lovers, often patients who need to consume safe food. Most suppliers of specialized shops are local farmers who do not have enough reason to apply for official certification. Specialized shop owners select their suppliers by visiting the farms and observing the production process. Even without certification, the food products from these suppliers are reliable. In some case, the specialized shops increase consumer trust in non-certified organic food by arranging farm visits. Site visits not only allow the consumers to witness the reality but it also creates good relationships between the providers and the consumers.

Table 1 Availability of Sustainable Food in Four Specialized Shops in Bangkok in 2008 and 2010 (number and percentage)

Assortment	Ban Navilit			Suan Nguen Mee Ma			Health Me Shop			Thai Sabai Shop			General Trend
	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	
Rice	13/13 (100%)	4/5 (80%)	↓	7/7 (100%)	13/19 (68.42%)	↓	7/7 (100%)	1/10 (10%)	↓	5/5 (100%)	7/7 (100%)	=	↓
Fruit and Vegetables	-	-	=	4/4 (100%)	-	↓	12/12 (100%)	4/4 (100%)	=	8/8 (100%)	24/24 (100%)	=	=
Processed fruit and vegetables	-	-	=	-	2/2 (100%)	↑	3/3 (100%)	1/1 (100%)	=	40/40 (100%)	12/12 (100%)	=	=
Teas	-	-	=	-	11/11 (100%)	↑	-	6/6 (100%)	↑	40/40 (100%)	24/24 (100%)	=	↑ =
Bean	-	-	=	-	1/4 (25%)	↑	-	-	=	6/6 (100%)	6/6 (100%)	=	=

Assortment	Ban Navilit			Suan Nguen Mee Ma			Health Me Shop			Thai Sabai Shop			General Trend
	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	
Food Ingredients	2/2 (100%)	-	↓	3/3 (100%)	-	↓	4/4 (100%)	1/2 (50%)	↓	-	1/1 (100%)	↑	↓
Butter	-	-	=	-	-	=	-	1/1 (100%)	↑	-	-	=	=
Honey	1/1 (100%)	-	↓	1/1 (100%)	-	↓	3/3 (100%)	1/4 (25%)	↓	-	3/3 (100%)	↑	↓
Meat	-	-	=	-	-	=	-	-	=	-	-	=	=
Others	Milk, yogurt, sesame bars, rice crackers, instant	Milk, yogurt, sesame bars, rice crackers, instant	↑	Milk, yogurt	Eggs, balsamic vinegar, noodles, wheat grass	↑	Milk, yogurt	Milk, yogurt, eggs, cereals	↑	-	Eggs	↑	↑

Assortment	Ban Navilit			Suan Nguen Mee Ma			Health Me Shop			Thai Sabai Shop			General Trend
	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	
	soup	soup, eggs											
Additional features	-	-	=	Coffee shop	Coffee shop, restaurant	↑	Restaurant, delivery	Restaurant, delivery	=	Restaurant, coffee shop, spa	Restaurant, coffee shop, spa	=	**=**
Trend during 2008-2010	Mixed			Mixed			Mixed			Expanding			**Mixed**

Table 2 Availability of Sustainable Food in Five Supermarkets in Bangkok in 2008 and 2010 (number and percentage)

	TOPs			Foodland			Villa Market			Gourmet Market			Golden Place			General Trend
	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	
Rice	4/33 (12.12%)	12/120 (10%)	↓	7/31 (22.58%)	6/37 (16.22%)	↓	-	3/52 (5.77%)	↑	4/56 (7.14%)	8/96 (8.33%)	↑	3/9 (33.33%)	3/35 (8.57%)	↓	↓
Fruit and Vegetables	123/160 (76.88%)	66/220 (30%)	↓	57/102 (55.88%)	25/99 (25.25%)	↓	115/211 (54.50%)	75/165 (45.45%)	↓	387/547 (70.75%)	317/559 (56.71%)	↓	50/99 (50.51%)	31/127 (24.41%)	↓	↓
Processed fruit and vegetables	-	-	=	3/32 (9.38%)	3/32 (9.38%)	=	2/28 (7.14%)	3/122 (2.46%)	↓	3/118 (2.54%)	3/120 (2.50%)	↓	-	-	=	=
Teas	3/111 (2.7%)	10/101 (9.90%)	↑	-	-	=	1/96 (1.04%)	4/91 (4.40%)	↑	1/185 (0.54%)	6/298 (2.01%)	↑	-	-	=	↑
Beans	-	-	=	-	-	=	-	-	=	-	-	=	4/7 (57.14%)	-	↓	=
Food	3/317	-	↓	-	-	=	-	-	=	-		=	-	-	=	=

	TOPs			Foodland			Villa Market			Gourmet Market			Golden Place			General Trend
	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	2008	2010	Change	
Ingredients	(0.95%)															
Butter	2/12 (16.67%)	2/12 (16.67%)	=	-	-	=	-	-	=	-	-	=	-	-	=	=
Honey	-	-	=	1/9 (11.11%)	4/25 (16%)	↑	1/54 (1.85%)	7/40 (17.5%)	↑	4/55 (7.27%)	5/54 (9.26%)	↑	2/4 (50%)	2/16 (12.5%)	↓	↑
Meat	All (100%)	All (100%)	=	1/4 (25%)	-	↓	-	-	=	All (100%)	All (100%)	=	All (100%)	All (100%)	=	=

	TOPs			Foodland			Villa Market			Gourmet Market			Golden Place			General Trend
	2008	**2010**	**Change**	**2008**	**2010**	**Change**	**2008**	**2010**	**Change**	**2008**	**2010**	**Change**	**2008**	**2010**	**Change**	
Others	Cereals, vinegar, flour	Cereals, vinegar, flour, coconut oil	↑	Canned soup,	Cereals, canned soup, yogurt, eggs	↑	Cereals, canned soup	Eggs, cereals, canned soup, soy sauce, potato chips	↑	Vinegar	Eggs, salmon, vinegar	↑	Cereal drinks	Cereal drinks	=	↑
Trend during 2008-2010	Mixed			Mixed			Mixed			Mixed			Mixed			**Mixed**

The qualitative strategies of the supermarket were also discussed at three levels. According to the first impressions the supermarkets draw attention to sustainable food, by addressing safety and health concerns. Wordings such as “healthy” and “safety” can be easily observed when entering the supermarkets. The supermarkets in Bangkok generally try to use modern methods to attract consumers’ loyalty: TOPs and Foodland have a specific focus on consumers with a modern lifestyle who shop in supermarkets. TOPs has set up a “go green” organic campaign to express their claim to be a modern supermarket chain that cares about the environment while Villa Market and Gourmet Supermarkets emphasize the availability of quality food in order to attract high class consumers. The first impression of the Golden Place supermarket is its close links to the Royal Project, which is taken to imply the reliability and quality of food.

At the shop level, it seems that most customers of the supermarkets are relatively rich people (including many foreigners) with a high potential for purchasing safe but expensive products. The information at the shop level is often in English, which is not widely used by Thai people. Most supermarkets offer sustainable food as an alternative to conventional products. The promotion of sustainable food is therefore crucial for them. Sustainable vegetables were positioned separately in all the supermarkets. Some supermarkets, such as Gourmet Market and Villa Market, even had separate corners for sustainable food to direct regular consumers to these products as well as to attract new consumers. Sustainable foods were presented in the supermarkets using different levels of sustainability: hygienic, hydroponic and organic. Personnel were not available in the supermarket to direct consumers to sustainable food products, although some supermarkets (like Foodland) have product consultants to communicate with consumers.

At product level, there is more similarity in the sustainable food products sold in the supermarkets, because they acquire these products from the same large suppliers such as Rai Pluke Rak and Doctor Vegetable (for vegetables) and CP and Betagro (for meat products).

Sustainable food products in the supermarket were generally third party certified, whether domestic or foreign. Some certified food products in the supermarket are imported from Western countries and consumers are able to notice the logo and read the information on the package. Third party certification makes the consumers trust the food although they do not know the origin of the product. The labels from IFOAM and the DOA's Organic Thailand were the most commonly found certifications in the supermarkets. International labels, such as USDA and Bio Agri-cert were found in the more upscale supermarkets (Villa Market and Gourmet Market), which import food. However, consumers are easily confused by too many logos from different certification bodies. Some suppliers put many logos on the package. Some logos were put on every product, which makes the certified products look ordinary instead of extraordinary. Too many labels on all products can reduce the trust in sustainable food.

It seems that specialized shops better provide sustainable food for the consumers in terms of quantity because they focus more on sustainable food. Supermarkets provide smaller percentages and less variety of sustainable foods. The update in 2010 shows some expansion of sustainable food in supermarkets but no growth in the sustainable food in the specialized shops. Tables 1 and 2 show that the percentage of sustainable rice substantially decreases in both types of shop. Sustainable fresh fruits and vegetables had declined in supermarkets but remained the same in specialized shops. There was no growth for processed fruits and vegetables, beans, butter, and meat, but sustainable tea was more often found in both the specialized shops and the supermarkets. Overall little changed overall in this period. Thus, it is too early to identify any trend of sustainable food provision in Bangkok or whether it is increasing or decreasing. This inconclusiveness might have been affected by the political unrest and economic crisis during 2008-2010. Nevertheless, the variety of assortments of sustainable food sold in specialized shops and supermarket has increased with a wider range of sustainable products now including cereals, cereal drinks, cider vinegar, and canned soup, which are not typical Thai food stuffs.

It is interesting to note that the typical Thai diet items, such as sustainable rice, decreased while exotic sustainable foods saw an increase. Various reasons might explain this finding. One reason is that the largest demand comes from foreign customers and some Thai customers who prefer eating western food. Another reason is that sustainable food has been replaced with nutritional food. For example, the organic rice in the Health Me Shop decreased from 100 percent in 2008 to just 10 percent in 2010. The other 90 percent was replaced by germinated brown rice that contains many nutrients, dietary fiber, vitamins and gamma amino butyric acid. Since health is the often the main motive for consuming sustainable food, the definition of health in terms of safety and nutrition is attached with the products.

5. Conclusion

Overall, the specialized shops are better in providing direct communication between staff and the consumers. Official standards are not such an important strategy for specialized shops to increase consumers' trust in the safety of food, since they set up informal activities to build trust between the providers and the consumers. The consumers buy sustainable foods in the specialized shops not only because they trust the food, but also because they are impressed by the services and the friendliness of the shop personnel. The customers of specialized shops are mostly regular consumers, who buy green foods no matter how expensive they are or how long the distance to the shop. By contrast, supermarkets communicate indirectly with their consumers. Information about sustainable foods is provided by posters and official standards. Supermarkets offer sustainable food as one of several alternatives. Therefore, promoting sustainable food products takes a similar role as other alternative food products, such as imported food, functional food, and special food for patients. The target groups of supermarkets are consumers who are looking for convenience when shopping, in terms of variety of food, price and distance. For these reasons, it can be concluded that specialized shops are more focused on providing sustainable food to habitual or committed green consumers. However, there are not enough of these consumers to drive on overall change to sustainable food provision. The specialized shops remain a niche market in Bangkok due to the lack of sustainable food supply, management, and workforce. However, these shops are very active in offering sustainable food to consumers and are keen to encourage consumers in Bangkok to consume more sustainable food.

Reference

[1] Beck U., Willms J., Pollak M. (2004) Conversations with Ulrich Beck Polity Press Cambridge.

[2] Giddens A. (1990) Structuration theory and sociological analysis, Brighton, UK: Falmer Press. pp. 297-315.

[3] Green Net. (2005) Organic Agriculture Situation in Thailand Earth Net Foundation.

[4] Kantamaturapoj K., Oosterveer P., Spaargaren G. (2012) Emerging market for sustainable food in Bangkok. International Journal of Development and Sustainability 1.

[5] Korbee D. (2008) Greening food provisioning, Wageningen University, Wageningen.

[6] O'Doherty Jensen K., Larsen H., Mølgaard J.P., Andersen J.O., Tingstad A., Marckmann P., Astrup A. (2001) Organic foods and human health.

[7] Oosterveer P. (2005) Global food governance Wageningen University.

[8] Oosterveer P., Guivant J.S., Spaargaren G. (2007) Shopping for green food in globalizing supermarkets: sustainability at the consumption junction. The SAGE Handbook of Environment and Society, Sage publications:p411-428.

[9] Roitner-Schobesberger B. (2006) Consumer perceptions of organic foods in Bangkok, Thailand, Universität für Bodenkultur, Wien.

[10] Spaargaren G., Van Vliet B. (2000) Lifestyles, consumption and the environment: The ecological modernization of domestic consumption. Environmental Politics 9:50-76.

[11] Torjusen H., Sangstad L., O'Doherty Jensen K., Kjærnes U. (2004) European consumers' conceptions of organic food: a review of available research.