

Organic food consumers' trade-offs between local or imported, conventional or organic products: a qualitative study in Shanghai

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Abstract

This paper presents a qualitative study of the trade-offs made by organic food product consumers in the Chinese Metropolis of Shanghai. More precisely, this article deals with trade-offs that consumers make between three types of products: (1) locally produced organic food products, (2) products that are locally and conventionally produced and (3) imported organic food products.

We used a qualitative methodology using open questions and projective techniques and based on 23 individual interviews. Local organic products are the products best perceived by the Chinese interviewees, who think that organic food is beneficial to health and makes agriculture more environmentally friendly. The fact that food is produced locally is another positive argument for many interviewees who do not perceive any important differences between local and imported, more expensive, organic food products. Local and conventionally produced food products give rise to worries related to health and consumers buy them only because they are much cheaper than organic products. The reasons for choosing organic products are mostly related to health issues. Altruistic motives such as environmental concerns, food miles concerns or support for small producers are only emerging.

This study mostly highlighted consumers' trade-offs between different individual benefits, mainly health vs. economic benefits. However, some trade-offs between altruistic (environmental concerns) and individual (economic) benefits are apparent, confirming emerging altruistic motives behind organic food consumption.

Introduction

Since market reforms commenced in 1978, Chinese agriculture has experienced an intensive use of land, water, nitrogen fertilizers and pesticides causing pollution to become a serious threat, not only to the public health, but also to the environment's ability to replenish itself (Naughton, 2007).

As early as 1980, the Chinese government was itself aware of the urgency and seriousness of the environmental degradation caused from the intensification in agriculture, and launched an initiative to promote 'Chinese Ecological Agriculture' (CEA). The CEA concentrated on promoting *principles and practices* inherent in a more environmentally friendly agricultural production. However, on the one hand, the CEA principles coincided with the need for collective coordination on material recycling, waste utilization and labour use, and on the other hand, in the same time the agricultural market reforms were splitting up village collectives into very small individual, often dispersed plots. Likewise, CEA

had not developed a market for the outputs stemming from ecological agricultural practices, making it impossible for farmers as well as consumers to gauge any material rewards from CEA products (Sanders, 2006).

With the 8th Five Year Plan of 1989, a renewed concern for both environmental protection and the quality of production highlighted the idea of developing a 'pollution-free product', which very quickly was termed 'Green Food'. By 1993 the China Green Food Development Centre (CGFDC) was established directly under the auspices of the Ministry of Agriculture, and in 1995 it had formulated two standards of 'Green Food': Grade 'A' and Grade 'AA'. The Grade 'A' represented a transitional level between conventional and organic food,¹ where the use of pesticides,

¹Organic farming is a form of agriculture that relies on crop rotation, green manure, compost, biological pest control, and mechanical cultivation to maintain soil productivity and control pests, excluding or strictly limiting the use of synthetic fertilizers and synthetic pesticides, plant growth

fertilizers and other agricultural chemicals are extremely restricted. For Green Food achieving Grade 'AA', all synthetic pesticides and chemicals are prohibited to be used in the production process making it equivalent to the standards of organic food. This bifurcation of Green Food standards laid the groundwork for a rapid articulation of replacing Green Food Grade 'AA' with organic certification and conform the monitoring and control practices to all major international standards for organic food. In 2002, CGFDC achieved accreditation by IFOAM giving it the right to certify organic products, and in 2005 China introduced the China National Organic Product Standard phasing out the 'AA' grade (Sanders, 2006; Paull, 2008). Together with this institutional policy change, focusing on *product* promotion rather than emphasizing *principles and practices*, a parallel rapid growth in supply and markets for Chinese organic products has taken place. Since the first organic tea was certified in 1990, organic farming has grown rapidly in China in terms of arable land, export value and home market expansion.

In 2008, 1 853 000 million hectares were certified organic making China the country with the third largest organic agricultural land in the world (Willer and Kilcher, 2009). The organic production itself is concentrated in 11 out of the country's 31 provinces mainly along the eastern part of China. The major driving force behind the Chinese organic production is the export markets found in Europe, US, Japan and Australia, and the export value is approximately USD\$800 million (Kledal *et al.*, 2007). However, the organic home market consumption and demand has also been growing steadily, being so far concentrated around wealthy residential areas of large urban metropolis such as Shanghai, Beijing, Guangzhou, Nanjing and Shenzhen. Shanghai is economically the most important city in China with 18 million inhabitants. It is the major capital of the Lower Yangtze region where ten per cent of China's population live, producing 21% of China's GDP in 2003. The incomes in the region are found to be higher and urbanization rates are significantly higher than in any other area of China (Naughton, 2007).

Major outlets of organic products found in Shanghai are international supermarkets like Wall Mart and Carrefour as well as Chinese supermarkets like Hualian Shiji and Nong Gong Shang covering more than 2/3 of the organic home market followed by local restaurants, hotels, health shops leaving a very small share for direct sales and tourist resorts (Table 1). The organic products mostly sold on the home market are fresh vegetables represented by more than sixty different varieties and where the ten most sold are illustrated in Table 2. Among non-food products tea and rice are the most common products sold (Kledal and Sulitang, 2007).

Fang (2002) found the proportion of organic food product consumers to be 80% expatriates, and the last 20% to be high middle class native Chinese. Interviews of procurement officers in the various supermarket outlets selling organic, estimated that 60% of the organic food product consumers were expatriates, and the rest 'well to do' native Chinese. Similar distribution percentages

regulators, livestock feed additives, and genetically modified organisms (http://ec.europa.eu/agriculture/organic/home_en). Organic agriculture methods are internationally regulated and legally enforced by many nations, based in large part on the standards set by the International Federation of Organic Agriculture Movements (IFOAM), an umbrella organization for organic organizations established in 1972.

Table 1 Type of consumer outlets selling organic products and their market share

Type of outlet	Market share (%)
Supermarkets	60–70
Restaurants/Hotels	8–12
Specialty shops	5–10
Direct sales	2–5
Tourist resorts	1–3

Source: Kledal and Sulitang (2007).

Table 2 Ten most produced and sold organic vegetable in Shanghai 2007 (random order)

Organic vegetable
Potato
Carrot
Tomato
Green pepper
Cucumber
Chinese cabbage
Green vegetable
Onion
Ginger

between natives and expatriates were found in the metropolis of Cairo and Nairobi (Kledal *et al.*, 2008 and 2009).

Literature review: organic food product consumers in emerging economies

The literature on organic food consumption is already very extensive. Most studies concern the motivations of consumers who buy organic products and the values embedded in these motivations and reveal that values associated with organic products are heterogeneous. Some studies have shown that organic food consumers are environmentally conscious (Storstad and Bjorkhaug, 2003), but many studies confirm that organic food is also likely to be purchased as a result of egocentric values, such as health or pleasure, or health and taste (e.g. Zanoli and Naspetti, 2001). Sirieix *et al.* (2006) demonstrate a dynamic between self-oriented and other-oriented motives. However, questions remain concerning the links between personal consumer values and consumer behaviour (Wier *et al.*, 2006), the links between individual values and altruistic values (benevolence and universalism), and the related question of consumer reflexivity (Giddens, 1991).

Local food does mean different things to different people (Wilkins *et al.*, 2002). The most common definition of local food derives from the distance between the point of production and the point of consumption. In this study, we use a broad definition of local as domestic, as opposed to imported food products.

Very little is known about local and/or organic food product consumers in developing countries (Soares *et al.*, 2006 for South America; Roitner-Schobesberger *et al.*, 2008 for Asia), while in these emerging economies, the question of consumer trade-offs between organic and conventional, local and imported products

are important in terms of rural development and public policy. The links between local and/or organic food consumption and social embeddedness is indeed relevant question for emerging economies. This question is related to social mobilization for sustainable agriculture (Moreno-Penarada, 2006). Sirieix *et al.* (2007) have conducted a qualitative study in Brazil and France, and have shown that imported organic food is more rejected in Brazil than in France, and in both samples, consumer concerns and internal conflicts are linked to both individual and altruistic values. For example, some French consumers are willing to buy organic imported products such as bananas because they like them (individual value of pleasure) and others because they think that buying fair trade organic products allows them to support small producers in developing countries (altruistic value). Some Brazilian consumers reject imported organic food because they think the quality is lower (individual value of pleasure), and others because they feel socially embedded and want to support Brazilian organic producers (altruistic value).

In spite of the growing demand for organic food products in China, nearly nothing is known about organic food products consumers in China. More precisely, we do not know if today's growth in organic food consumption in China's urban centres is only due to individual benefits such as taste and health or whether it is also related to social embeddedness and support of small organic producers, as it is for some consumers in Europe (Sage, 2003) as well as in new industrialized countries such as Brazil (Sirieix *et al.*, 2007).

In order to contribute to answer these questions, this research studies the trade-offs made by organic food products consumers between three types of products: (1) locally produced organic food products, (2) products that are locally and conventionally produced and (3) imported organic food products.

Methodology

From a focus on buyer behaviour to broader studies on consumers and consumption, there have in the last 40 years been different perspectives on how the consumer should be understood (Ostergaard and Jantzen, 2001). Consumer research now assumes that people partly consume goods for what the goods mean to themselves or communicate to others. In this context, qualitative and interpretive approaches to studying consumption have been increasingly used (Beckmann and Elliott, 2001).

The present study does not aim to evaluate a market or a level of organic food consumption but to understand consumer motives and trade-offs. Given the comprehensive aim of this study, a qualitative approach was thus the relevant approach. Besides, obtaining quantitative data from emerging markets is more challenging than collecting data in high income countries (e.g. absence of sampling frames, low penetration of Internet, fewer scanner data) (Burgess and Steenkamp, 2006).

Compared with high income countries, developing countries exhibit a much greater degree of within-country heterogeneity (Burgess and Steenkamp, 2006). In this context, since this study deals with organic food product consumers, it would not have been relevant to conduct a quantitative survey of whole China where most persons do not consume and are not familiar with organic products.

Given these reasons, we decided to conduct a qualitative survey with individual in-depth interviews of native Chinese consumers in Shanghai, who were purposely selected because they were occasional or regular buyers of organic products. Therefore this study involved a small number of organic food consumers, who have come to a position on local and organic food and are different from individuals who do not buy or know organic products.

Sampling method

The recruitment criteria for the sample were the following: interviewees had to be native Chinese consumers (excluding expatriates) and regular or occasional organic food consumers. They were recruited in supermarkets and accepted to participate without any incentive. Because of this selection process and the sample size, this group obviously does not constitute a random sample and is not intended to be representative of the population of Shanghai. However this choice is relevant for a qualitative study which main contribution is towards theory and conceptual development. In this case, once the data allow to saturate categories, there is little point in adding more interviews. For this study we obtained enough data with 23 interviews.

Materials and methods

Projective techniques help the researcher uncover consumer perceptions, thoughts that would not be detected by more straightforward questioning (Gordon and Langmaid, 1988; Steinman, 2009). Those most often used include associations to presented stimulus, constructions of stories or pictures, competition of sentences, arguments, etc., expressive techniques of role play or drawing. The first published study on projective techniques in the consumer literature was the Haire shopping list study (Haire, 1950). Thanks to this study using fictitious characters, Haire found that some motives exist, but cannot be revealed by direct questioning and need to be identified in an indirect manner.

In this study, we used open questions and several projective techniques to make interviewees compare locally produced organic food products, products that are locally and conventionally produced, and, imported organic food products. More precisely they would:

- 1 Answer questions related to their attitudes and consumption intentions (related to environment, health, price) towards each type of product.
- 2 Describe the person who typically buys and consumes each type of product.
- 3 Describe the person who never buys or consumes each type of product.
- 4 React after reading a discussion between three imaginary consumers (one who buys local or imported organic food, regardless of the mode of distribution or length of the distribution chain, the second one who only buys local and organic products and prefers not to buy them in supermarkets and, the third one who buys conventionally produced local products).
- 5 On the basis of open questions about food miles, discuss mode of distribution, and support of organic producers.

Table 3 Breakdown by age

Age	
<30	3
31–40	7
41–50	5
51–60	6
+60	2
Total	23

Table 4 Breakdown by income

Annual Income		
Less than 20 000	4	Low income: A
20 000–50 000	12	Low-medium income: B
50 000–100 000	5	Medium-high income: C
100 000–150 000	2	High income: D

Data analysis

This instrument was tested in France and used in a similar study in Brazil (Sirieix *et al.*, 2007; Sirieix *et al.*, 2008). The data analysis process was conducted in two phases. The first one consisted of counting the frequencies of responses to questions in part 1 and 4. The second part consisted of the analysis of the responses to open questions and comments to all questions. All the answers and comments made by the participants were audio recorded and transcribed. Transcripts were used to identify themes or categories. Two researchers looked at each interview transcript, looked for indicators of categories, named them and coded them on the documents, compared codes to find consistencies and differences. Categories were then compared, selected and collapsed into broader thematic groups for the analysis.

Main results

Sample

The sample is constituted by 23 organic food product consumers in Shanghai (12 women and 11 men). Seven interviewees belonged to the middle class or higher by the level of income (more than 50 000 CNY² per year). Twelve interviewees mentioned a level of income between 20 000 and 50 000 CNY. The last four ones had less than 20 000 CNY per year. The breakdown by age and income is presented in Tables 3 and 4 below.

Four interviewees declared to be regular organic food product consumers, and 19 declared to be occasional organic food product consumers. Nineteen mentioned vegetables, eight mentioned rice and 6 fruits. Three of them mentioned tea and one interviewee bought organic honey. None of them talked about cheese, meat, eggs, wine, olive oil or medicinal herbs.

When interviewees were asked where they buy organic products, supermarkets were mentioned 22 times, organic shops were

²Chinese Yuan. 1 Euro is the equivalent of 9.55 CNY

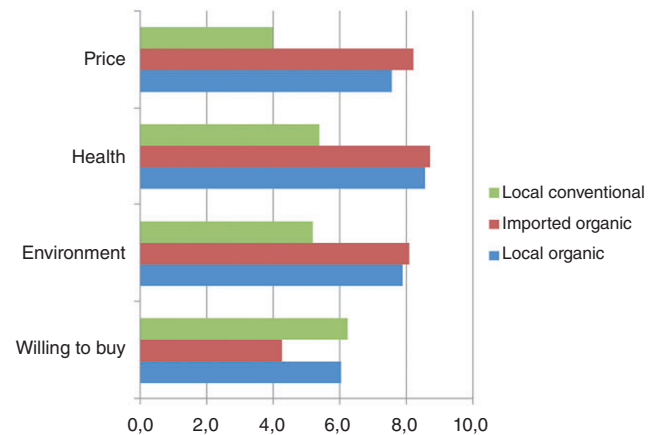


Figure 1 The average scores of products.

mentioned three times, buying directly from the farmer was mentioned 4 times and open market was mentioned once. The majority of consumers buy organic food in supermarket which is consistent with the data presented in Table 1. The interviewees mentioned that supermarkets are more reliable, and that they trust the products in the supermarket.

Descriptive results from Part One: attitudes and consumption intentions (related to environment, health, price) towards each type of product

First, the interviewees were asked to give a score for three types of products: 'locally produced organic product', 'imported organic product'³ and 'conventionally produced local product' on the basis of four criteria:

- The price: 0 = cheap, 10 = expensive
- The health: 0 = bad, 10 = healthy
- The environment: 0 = bad, 10 = good for the environment
- Willingness to buy: 0 = not at all, 10 = really

To be sure that the participants had a good understanding of what are organic food products, local product and, the differences between these products, we asked them to give examples of products of each type and we gave explanations when needed. The interviewees were then asked to express their spontaneous opinion about these three types of products (Fig. 1).

Organic products are strongly believed to be better for health and for the environment. However, local conventional products are seen as the cheapest and imported organic products the most expensive. Therefore, the score for willingness to buy is significantly lower for imported organic products.

³In relation to imported organic products, only 14 interviewees gave scores when discussing imported organic products. The other 9 interviewees declared that they did not know any imported organic products and thus could not give a single score. As a result, the scores concerning imported organic products are calculated with the scores of 14 persons.

Factors explaining the trade-offs between locally produced organic food products, products that are locally and conventionally produced, and imported organic food products

These results come from the content analysis of the comments added to part 1, answers to the open questions (parts 2, 3 and 5) and free comments added to part 4. Five common thematic groups appeared: health, price, environmental concern, support of organic producers and trust. One category – the lack of perceived utility – was specific to imported organic products.

Health as the main motive for consuming organic products

Most interviewees insisted on the link between organic products and their healthy characteristics. Twenty two interviewees thought that organic food is beneficial to health, six of them used the term 'natural' and three of them used 'nutritious' in order to explain why this kind of products could be beneficial to health. Three of them preferred to consume organic products because they had a child or elderly people in their own family.

On the contrary, local conventional food products give rise to worries and suspicions. Sixteen interviewees were worried about the chemical load that they received from conventional products. They talked about the health risks related to conventional products: five of them said there were too many chemicals and pesticides in conventional products; another three did not trust the Chinese labeling and control systems; six of them said the government should control the chemicals used in food production and promote organic and safe products.

Three interviewees only did not associate conventional food with health concerns: 'it might be OK to consume, the government also controls the chemical inputs' (6C, man, 31–40, D⁴); 'we didn't find any harm to our health so far' (9C, woman, 31–40, B); 'it's not bad for health, and we can secure ourselves by buying from big well-reputed supermarkets' (13C, woman, 41–50, D).

Price as the main barrier against organic products

Organic products were, however, considered as very expensive and seemed, for most interviewees, to be bought only by richer people (all interviewees declared in part 2 that the person who typically consumes organic food products is first of all 'a rich person'). But this perception of price is moderated by different points of view. One person thought that organic products were worth the higher prices because of their 'better quality' (22C, woman, 31–40, B), and another one just said that prices were acceptable (13C, woman, 41–50, D). Finally, four people hoped that organic products would become cheaper, so the consumption of organic food would increase.

In general, the interviewees hesitate to buy imported organic products that are more expensive than regular items, and seven interviewees never tried or bought imported organic products. The most frequent reason for this was the higher price of imported products. Only three interviewees thought that the price was

acceptable. Hence, most interviewees feel more or less obliged to buy some conventional products, mainly because they are cheaper (19 interviewees), but also easier to acquire (14 interviewees) and with more variety (12 interviewees).

An emerging motive: environmental concern

The environmental dimension and its link to organic foods is also one of the positive aspects mentioned by the interviewees. Seventeen interviewees made a link between the fact that organic products were free of chemicals and pesticides, and good for the environment. Eleven people used the terms 'safe' or 'clean' associated with the term 'chemical-free'.

However, at the beginning of the interview, when participants were asked what they thought about imported food, none of them talked about environmental concerns or food miles. Participants were only concerned by the freshness or the quality of imported organic food. At the end of the interview, after a question about environmental issues and food miles, 10 interviewees still did not have any idea about the impacts of transport on the environment. More precisely, two persons accepted imports and exports and did not see why transportation should be a problem. For the others, it was clear that food miles had negative effects on the environment, but eight interviewees thought that pollution, due to the transportation, was inevitable. Four people said that they did not have a choice for various reasons. 'Local food cannot be produced organically, that's why we can't avoid importing organic food'. Another one thought that the 'current level of development' was responsible for environmental issues linked to food transportation ('Without this transportation how can we consume different kinds of food from different countries?'). Only two interviewees suggested alternative resources. One proposed to eat more locally produced organic products and the other one proposed alternative ways of transportation 'more environmental friendly such as train and ships'.

Support of organic producers is not important

The interviewees do not particularly support local organic producers, but think that ideally, all producers should apply organic principles to production. Besides, they do not specifically support small scale producers and do not seem to distinguish between small or large organic farms. They think it is a government responsibility to 'support both small and big organic producers' (1C, man, 51–60, B), for economic reasons ['Another way to reduce the price of organic food could be through larger-scale production' (15C, woman, 41–50, B)].

According to several interviewees, since their country is developing, the major concern is to increase economic growth, whatever problems may appear at first concerning pollution or social aspects. The main issue is to increase food production and achieve high tech levels. Then, after a period of booming, ethical considerations may appear among some consumers who begin to realize that it is important to react against a non-analysed and centred growth.

The question of trust

Most of the interviewees trust locally produced organic food. However, two of them were not able to distinguish conventional

⁴Identification: Consumer n° (6), gender (man), age (31–40), income (The letters A, B, C and D refer to the level of annual income per interviewee).

Table 5 Numbers of persons who disagree or agree » with each of person 1 arguments

Person 1	Disagree	Agree
I buy organic products because they are good for my health and my family's health	0	22
I buy organic products because they are good for the environment.	1	13
I buy organic products in order to help small producers	2	4
For all these aspects (health, environment, support to small producers) all organic products are good, wherever they come from	0	3
All organic products are the same, wherever you buy them (open market, supermarket, directly from the producer)	0	5

products from organic products and three of them explained that they did not totally trust organic products, and doubted if organic products were really chemical-free and '100% natural'. They think that government should control more organic producers ['some producers might cheat us, but it is again government, who should take care of this' (7C, man, 21–30, C)].

Imported organic products: no perceived utility

Apart from the price, another reason for not buying imported products was the absence of perceived difference between locally produced and imported organic products. ['Normally, I like the products from Shanghai or around. For me there is no big quality difference between local and imported foods' (10C, woman more than 60 years of age, B)]. Besides, imported products are seen as not as fresh as local ones because of the long-distance transportation (11C, man, 21–30, B). Two people added that Chinese people had everything in China, so they did not need to buy imported products.

Towards a better understanding of the trade-offs: discussion between three fictitious persons

This part of the interview uses a projective technique consisting of imagined discussions between three persons who all have different points of view (see Tables 5–7). These persons give different value and importance to the health aspects, to the small scale producers, to the environment and to the distribution.

- The first person makes his choice of organic product to secure his and his family's health, to support small scale producers and for environmental reasons. This person thinks that it does not matter where organic products are sold.
- For the second person the organic production must be local or national. She refuses to buy imported organic products, and does not buy organic products in supermarkets.
- The third person puts more value on local production and the price of the products, and buys conventionally produced local products.

The participants had to read all the three persons' arguments, say with whom they agreed and disagreed and finally, tick the

Table 6 Numbers of persons who disagree or agree » with each of person 2 arguments

Person 2	Disagree	Agree
I really pay attention to the origin of organic products.	4	11
Organic food must be produced locally; if not I don't buy it	6	3
From my point of view, organic products should not be sold in supermarkets	6	0
Organic products in supermarkets are not as good	5	0
Organic products in supermarkets do not help small producers	5	2

Table 7 Numbers of persons who disagree or agree » with each of person 3 arguments

Person 3	Disagree	Agree
I'd rather buy a local and conventional product than an imported organic product	11	0
I'd rather buy a local and conventional product than an imported organic product because of the pollution due to transportation	10	0
I'd rather buy a local and conventional product than an imported organic product if it is cheaper.	11	2
There are organic products that are not produced by small producers	10	2
If I want to help small local producers, it is more useful to buy local products than organic products.	10	1

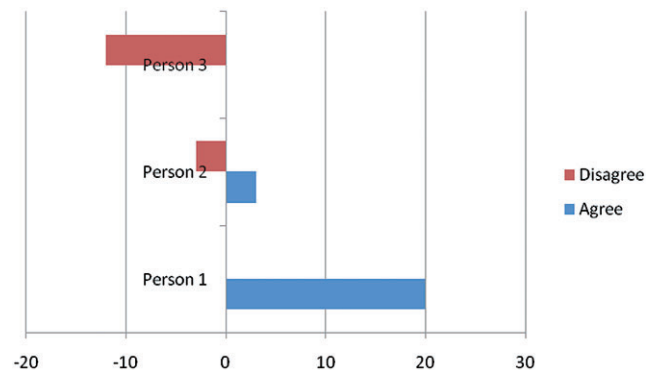


Figure 2 The division by agree or disagree (in number of consumers).

boxes corresponding to all the arguments they agreed with and explain why they agreed with each chosen argument. The next figure shows the division between opinions 'agree' or 'not agree' with each person (Fig. 2). The sum shows how many times the person was selected.⁵

⁵The sum is not 25, since one person did not answer this question, four interviewees could not disagree with any person, two interviewees agreed with two fictitious persons, and two disagreed with two persons.

Twenty interviewees agreed with the first person. The interviewees could disagree with the person while agreeing with some of her arguments. This is the case regarding the health aspect. Some people who disagreed with person 1, agreed with the health argument. In total, 22 persons thought that organic products are better for the health which confirms that health is the most important reason for consuming organic products. For example, one interviewee said 'I agree with first consumer's first idea that organic products could be good for our health that is why we consume them' (2C, man, 31–40, C).

Environmental aspects and the origin of products are mentioned as second reasons to buy organic products.

Only three persons partially disagreed with the first consumer. One did not think organic products were good for the environment and the others did not believe that it could help small producers.

Three interviewees mostly agreed with the second person. Three totally disagreed with her. The rest of the interviewees agreed or disagreed with some of the arguments. Eleven persons really paid attention to the origin of organic products. Six thought that it is not a problem if organic products are sold in supermarkets. For five interviewees these products are just as good if they were sold elsewhere, and it is not relevant to say that supermarkets are not good for small producers. Some of the interviewees give such explanations as: 'I think that supermarkets are most reliable and we trust the products in supermarkets' (3C, woman, 41–50, C).

However, consumers who agreed with this second fictitious person have strong arguments concerning small producers such as 'it is hard for them to get into the market' (18C, woman, 41–50, B).

The attitudes towards the third invented person are quite clear: two interviewees partially agreed with him, but 11 disagreed. The two interviewees who agreed had chosen the price of organic products or the fact that organic producers are not always small producers as their reasons for agreement. Indeed, they claimed that 'small producers don't have enough capital to invest in organic farming' or 'I think that small producers cannot produce organic foods'. Those who disagreed with the third fictitious person thought that he was too extreme. In general, they disagreed upon the fact that he was extolling local farmers because they are cheaper and pollute less since there is no import. For the interviewees, the fact that products are organic is the priority whether or not the products are local or imported.

Frequently, persons who agreed with the first fictitious person disagreed with the third one. Eight interviewees did not disagree with any of the three fictitious persons. They thought that each one of them had relevant arguments.

Discussion

Individual motives as the main factors explaining consumers trade-offs

The trade-offs made by the participants were mainly based on what they would gain or lose in terms of health and purchasing power. Health is the primary reason for consuming organic products and the main barrier preventing from consuming conventionally produced local products.

Trust in the health benefits of organic foods could stem from information from a range of different actors such as retailers who

sell organic products as well as the Chinese government which frequently communicates about food safety and takes a range of measures in order to encourage people to have healthier meals. This link between health concerns and organic food consumption confirms previous results from studies in mature markets (e.g. Zanolini and Naspetti, 2001; Sirieix *et al.*, 2006).

Conversely, price is the main benefit associated with conventionally produced local products and the main barrier against organic products. Besides, the lack of perceived quality difference between locally produced and imported organic product is another individual motives explaining the preference for locally produced organic products. These results confirm those of previous studies highlighting the importance of individual motives behind organic food consumption (e.g. Grankvist and Biel, 2001; Zanolini and Naspetti, 2001; Wier *et al.*, 2006).

However, as regard to health, some participants consider both their own and their children's health. This result is consistent with a previous study demonstrating a dynamic between self-oriented and other-oriented motives. The consumer motives cannot be explained by a mere opposition between egocentric and universal values, rather spheres radiate out from the person; himself, family and relatives, society. (Sirieix *et al.*, 2006).

Emerging altruistic motives for buying organic products

The interviewees appeared to be much less driven by altruistic motivations than by individual motivations. For most interviewees, environment is a new matter of concern, and no interviewee developed ideas about animal welfare, even among those who are used to eating organic meat, eggs or milk. More globally, our survey revealed that the consumers we interviewed are not very concerned about ethical aspects in relation to agriculture or feeding.

These results are consistent with Follett's analysis of the 'Food futures' offered to the US Most Americans opt for the conventional food system and are not conscious of its consequences, but some realize that their food choices can create environmental, social and political change (Follett, 2009). In this study, however, some altruistic motivations appear too. Some of the interviewees realize that 'chemical free' also means preservation of the environment, are starting to become aware of the consequences of development and are worried about their environment and the environment of future generations.

Generally, altruistic values and universalism are found more frequently and are more present among 'concerned' consumers. Previous studies in Brazil and Southern France have shown that a growing number of concerned people who mostly buy organic products on organic farmers' markets choose them for environmental reasons or buy organic products produced by small producers in order to support this type of production (Sirieix *et al.*, 2007). However, in this study of native Chinese consumers in Shanghai, support for the environment or small-holder farmers does not manifest itself that strongly. For most of the interviewees, organic production is seen from an individualistic or family point of view, and altruistic motivations are only emerging. The results from this study could be linked to the fact that organic farm policy in China has so far been focusing more on product promotion than emphasizing the principles and practices of this production

method, in spite of CEA's focus on promoting principles and practices inherent in a more environmentally friendly agricultural production. However, our results highlight an emerging concern for environmental and ethical issues related to the way food is produced.

Conclusion

Main research findings

The first aim of the study was to understand the trade-offs that selected organic food consumers in Shanghai make between three types of products: (1) locally produced organic food products, (2) products that are locally and conventionally produced and (3) imported organic food products.

The second aim was to find if these consumers' trade-offs are based on gains and losses related to individual or altruistic motives.

Local organic products are the products best perceived by the Chinese interviewees, who think that organic food is beneficial to health and makes agriculture more environmentally friendly. The fact that food is produced locally is another positive argument for many interviewees who do not perceive any important differences between local and imported, more expensive, organic food products. Local and conventionally produced food products give rise to worries related to health and consumers buy them only because they are much cheaper than organic products.

The factors that best explain these trade-offs are the following:

- Health is the main motive for choosing organic products and the main loss associated to products that are locally and conventionally produced.
- Conversely, price is the main barrier for choosing organic products and the main benefit associated to products that are locally and conventionally produced.
- Environmental concerns are emerging altruistic motives, even if Food miles are not spontaneously evoked by consumers.
- Other altruistic concerns such as support for local organic producers are quite absent.
- The question of trust is a major question related to organic food.

Contrary to studies showing consumer concerns and internal conflicts linked to both individual and altruistic values, this study mostly highlighted consumers trade-offs between different individual benefits, mainly health vs. economic benefits. The interviewees appeared to be much less driven by altruistic motivations such as environmental concerns that are only emerging. An important implication of this study is related to the marketing and communication campaigns aiming to promote local organic products. These campaigns should focus more on the emerging or absent altruistic motives such as environment or support of local producers than on health since organic products are already perceived as the best products for health.

Research limitations and recommendations for further study

This qualitative study was based on the individual interviews of 23 people who were purposely selected, because they had certain characteristics that relate to the topic of the study. Because of this

selection process and the sample size, this group is obviously not intended to be representative of the population of Shanghai, and the results are not suitable for making inferences or predictions. The interviews conducted in this study, provide explanations to organic food product consumers' trade-offs and motives behind these trade-offs but do not give any quantitative indication of the organic market situation in China's major metropolis Shanghai. To evaluate market development in Shanghai and China, quantitative studies including people who have no previous experience of organic food are needed. From a theoretical perspective, it would be interesting to complete this research with a study of organic food products consumers coping strategies when facing the trade-offs that we explored.

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