Implementation of Green Marketing Strategy in China

- A Study of the Green Food Industry

Master Thesis in Business Administration

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Abstract

Title: Implementation of Green Marketing Strategy in China - A Study of the Green Food Industry

Research Aim: Our research aim is to explore factors which influence Chinese consumers' behavior, analyze marketing strategies of company we interviewed according to four Ps of conventional marketing mix, and finally put forward our own opinions about how green food companies use four Ps of conventional marketing mix to implement green marketing strategy in green food industry in China.

Methodology: This thesis studies green marketing of green food industry in China from two aspects, consumers and company we interviewed by conducting a mixed methods research. Quantitative and qualitative data are simultaneously from consumers and company though questionnaires and interviews survey respectively.

Conclusion: Based on the analysis on Chinese consumers and the empirical materials collected from our interview with a green food company we draw some implications on how to implement green marketing strategy in the industry of green food in China. As the factors which influence Chinese consumers' behavior and characteristics between green agricultural products and green processed food are different, green marketing strategies of the two kinds of products should be implemented by different ways.

Keywords: Green food, Green marketing, Green marketing mix, Consumer behavior, Green consumer

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1 Introduction

1.1 Development of Green Marketing

The environmental issue has become a global hot spot because of Global environmental degradation, the international community, the efforts of governments, the green movement and the impact of public media. Promotion environmental protection is the theme of human society, and also is the voice of sustainable human development. Green marketing is increasingly becoming the mainstream of business marketing strategy. Some companies of Fortune 500 had implemented green marketing. For example, in May 2005 GE announced the launch of a program called "Ecomagination". Ecomagination was GE's new investment strategy. It reduced water consumption, improved the level of water reuse, reduced greenhouse gas emissions and improved energy efficiency by green technology of GE, while it increased earnings of company. In the words of CEO Jeff Immelt, it's for sustainable development. The project involves the areas of solar energy, hybrid locomotives, fuel cells, lower-emission aircraft engine, lighter and stronger durable materials, efficient lighting and water purification technology. In 2005 GE planned to increase investment for the program from $7 billion to $15 billion in 2010, in 2007 GE raised the investment for the program from $29 billion to $25 billion in 2010. As of October 2008, the scheme had resulted in 70 green products being brought to market. As clean energy is a global demand, GE's renewable energy business expanded fast in the U.S. and global market. Since 2002, GE has invested a total of $850 million to develop renewable energy technologies (GE, 2008). In 2009 GE's renewable energy initiatives, which include solar power, wind power and GE Jenbacher gas engines using renewable and non-renewable methane-based gases, employed more than 4,900 people globally and had created more than 10,000 supporting jobs (GE, 2008).

There are many well-known international companies attach importance to Green marketing. The Green marketing as a sustainable development strategy for them

prevents loss of competitiveness. This strategy helps them improve their social prestige and economic benefits. However, Chinese companies lack a lot in this regard. Green marketing strategy of most companies is only a slogan, but is not implemented in the actual operation of business. Actually companies and consumers can get benefit from Green activities. During the process from enterprise to explore the green demand of consumers to meet green demand of consumers, consumers get environmentally friendly and healthy products, and companies obtain ecological benefits, social benefits and business benefits.

1.2 Green Food

1.2.1 What's green food in China?

Green food is a Chinese eco-certification scheme for food (Paull, 2008). Green food are domestically certified and labeled to be safe from chemical contamination and whose production and processing use environmentally friendly processes with reduced use of synthetic inputs (Giovannucci, 2005). According to Giovannucci (2005), there are four environmental criteria need to be met for production of Green Food:

• Area should meet the highest grade of air standards in China

• Heavy mineral residues are restricted in irrigation water and soil (tests for mercury, cadmium, arsenic, lead, chrome, etc)

• Processing water must meet the National Drinking Water Standard

• Chemical applications are restricted and regulated, and some of the most poisonous pesticides and herbicides are banned

1.2.2 History and development of green food in China

Green Food program of China was founded by China's Ministry of Agriculture (MOA) in 1990. The China Green Food Development Centre (CGFDC) was founded

in 1992 under the control of the MOA (Aiguo, 2005). The CGFDC owns the Green Food logo, develops and maintains the Green Food standard, coordinates inspections and monitoring, is responsible for certification, and draws income for certification fees (Paull, 2008). There are two basic ideas of the development of green food. First one is to improve food quality and safety, and enhance the health of consumers. Second is protection of agricultural ecological environment and promoting sustainable agricultural development.

According to research of Paull (2008), Green food growth from 1997 to 2007 has been substantial in China. Green products have grown from 892 in 1997 to 14,229 in 2007. Green food companies grew from 544 to 5,315. Output in million tons grew from 6.3 to 72 million tons, Green food hectares expanded from 2.14 million hectares to 10 million hectares. Production value grew from $2.9 billion to $20.7 billion. (Data sources: Youfu, 2002; Lijuan, 2003; CRI, 2007; SCIO, 2007)

1.2.3 Driving force behind the development of green food industry in China

In 2005 Sudan 1 Red Dye which links to cancer and other negative health effects was found that it was used in food in many major Chinese cities. Heinz Company added the red dye to chili sauce in Beijing, and the red dye also was found in vegetables and noodles in other cities. There were 1,200 restaurants of Kentucky Fried Chicken (KFC) which were found red dye, and medicine in Shanghai also contained Sudan 1. (Hu, 2005)

In 2006, officials in Shanghai and Beijing discovered illegal amounts of chemicals in aquatic products. The main chemical is called Malachite Green which is an organic compound that is used as a dyestuff and is also great harmful for health. (Zhang, 2009)

In 2008, Melamine was found in the milk formula products which came from the suppliers of mike, Sanlu Group, is a name brand and is a major player in the industry in China. It caused a fresh outbreak of kidney disease and six babies died

and 294,000 were made sick by the tainted formula with 51,900 requiring hospitalization. (Bradley, 2009)

In 2011, food products marketed under Shuanghui Group's Shineway brand were produced from pigs that were fed Clenbuterol. Clenbuterol is an additive that can speed up muscle building and fat burning to produce leaner pork. Dizziness, heart palpitations and profuse sweating can be led by Clenbuterol. In 2007 Shuanghui Group is No.166 of top 500 companies in China. (AFP, 2011)

More and more Chinese consumers worry about the food safety because of the growing number of food safety incidents. However, it also provides opportunities for green industry in China. Since more and more Chinese consumers are aware of the importance of the concept of green, how to transform the consciousness into buying behavior is key point for marketers.

1.3 Research Aim

Consumers' concern about food safety is increasing daily because of the large number of food safety incidents in China. Demand of consumers for safe and healthy food makes more and more companies to enter the green food field. Kinds of green food, green food companies and economic value of green food have gotten a qualitative improvement after twenty years development. But in term of size and profitability, green food companies still cannot compete with general food companies. The number of famous green food companies in China is very small. We think the development of green food industry in China is still in an exploratory stage because of the short development time. As we know the four Ps marketing mix is very famous theories of marketing strategies, prior literatures suggested that the four Ps of conventional marketing mix can also be addressed in green marketing strategy but in innovative ways.

So our research aim is to explore factors which influence Chinese consumer

behavior, analyze marketing strategies of company we interviewed according to four Ps of conventional marketing mix, and finally put forward our own opinions about how green food companies use four Ps of conventional marketing mix to implement green marketing strategy in green food industry in China.

1.4 Research Questions

To achieve our research aim, we study three questions below:

a. What factors and how these factors influence the consumption of Chinese consumers on green food?

b. What are the marketing strategies of the company we interviewed according to four Ps of conventional marketing mix?

c. How to use four Ps of conventional marketing mix to implement green marketing strategy for green food companies in China?

2 Methodology

2.1 Mixed Methods

Creswell (2009) advanced three research designs: qualitative, quantitative and mixed methods. The distinction between qualitative and quantitative is often framed in terms of using words (qualitative) rather than numbers (quantitative), or using open-ended questions (qualitative) rather than closed-ended questions (quantitative). Mixed methods research is an approach involving the use of qualitative and quantitative approaches, and the mixing of both approaches in a study.

As our research studies green marketing of green food industry in China from two aspects, consumers and companies, we adopt questionnaires and interviews

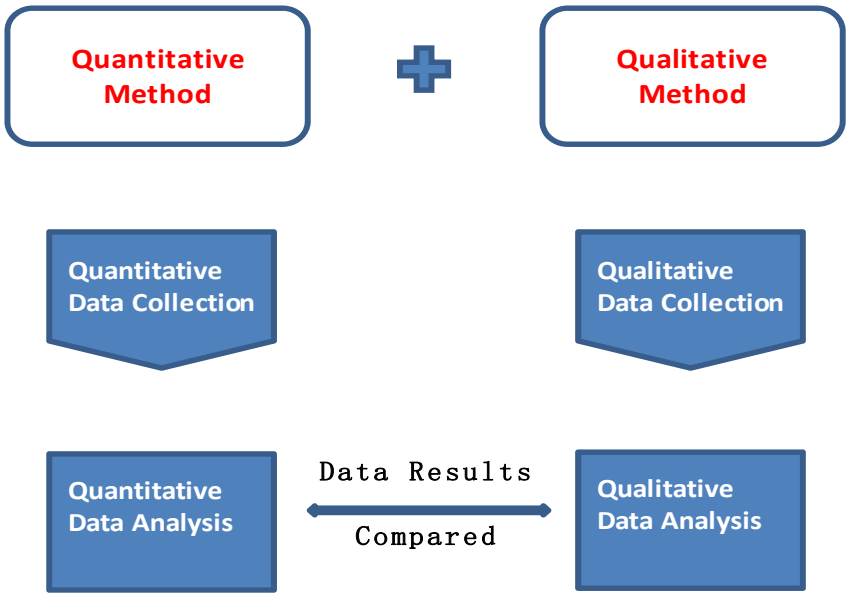
survey respectively to collect data from them. Hence, we will use mixed research methods in this thesis.

A common mixed methods approach explained by Creswell (2009) is concurrent triangulation approach, where quantitative and qualitative data are collected simultaneously and then compared and analyzed the differences or similarities. The weight is usually equal for both the quantitative and qualitative data.

This approach is quite suitable for our research since we need both empirical materials from consumers and companies within limited time and resources. Thus this thesis will collect quantitative and qualitative data simultaneously from consumers and companies though questionnaires and interviews survey respectively and put equal weight on them. After data collection we expect to get empirical findings from the original materials and then we will analyze and compare the empirical materials to draw the differences or similarities. This process can be exhibited in the below figure.

Figure 2.1

Research method structure



Source: Creswell, 2009

2.2 Deductive vs. Inductive

Deductive and inductive are two main approaches in scientific research (DePoy & Gitlin, 2005). A deductive approach is in which existing theories are used as a starting point and tested by empirical findings of researchers. While inductive approach is used by researchers to formulate a new theory starting with empirical data.

As to this thesis, we choose the deductive approach since the purpose of our research is to get some implications regarding green marketing in China's green food industry rather than intend to formulate any new theories. Our research is based on existing theories concerning green marketing and consumer behavior. The theoretical framework is used when we analyze our empirical findings from data collection.

2.3 Quantitative and Qualitative Data

In this thesis both quantitative and qualitative data will be collected and analyzed with equal weight according to Creswell (2009)'s concurrent triangulation mixed method approach. According to Silverman (2002), questionnaires are used to measure how intensely people feel about issues in quantitative research. Bryman and Bell (2003) argued that interviews are an effective solution to address specific areas of interests in a form of qualitative research.

In this thesis, the quantitative data is collected through questionnaires survey from consumers to analyze the altitude and purchasing behavior of green food consumers. The interview with a company in green food industry enables us to get qualitative empirical findings on how to implement green marketing strategy.

The collection process of quantitative and qualitative data will be conducted simultaneously.

2.4 Primary Data and Secondary Data

In data collection, it is important to distinguish between primary and secondary data. Primary data is collected by the researcher himself, which can take many forms, such as interviews, questionnaires, observations or other forms of gathering data. Secondary data refers to information collected from other sources that was not specifically created for the particular study in question, example company websites, research reports or annual reports (Burns, 2000).

Primary data of this thesis include two sources. The questionnaire survey from consumers provides empirical data concerning consumer altitude and behavior towards green food. In addition, the interview with a company in green food industry provides empirical materials to analyze green marketing strategy in China. These empirical materials are presented in the part of empirical findings.

Secondary data in this thesis include prior literatures, research reports and other information related to green marketing and consumer behavior. These data are collected mainly from internet and literature search and presented in the part of introduction and theoretical framework.

2.5 Questionnaires Survey Design

2.5.1 Sample

The sample of our questionnaires survey is selected from Chinese consumers. We classified three groups according to annual income: a. annual income less than 50,000; b. annual income between 50,000 to 100,000; c. annual income more than 100,000. The sample size is set as 150 in total and 50 in each income group.

We did questionnaires in different food markets, for example in supermarkets and open fairs. This is conducted simultaneously until we collected 50 valid responses for each income group.

2.5.2 Questionnaires Design

According to Malhotra (2004), several aspects need to be taken into consideration when constructing a questionnaire. That is, what type of result will be needed? How are they formulated, what type of questions will you ask and how will the respondent answer them? This thesis follows Malhotra (2004)'s approach. After considering these issues, we designed 8 choice questions in the questionnaires (see Appendix 1). These questions are consisted by four parts. Firstly respondents are asked about their income level to be put in the corresponding income group. Then respondents are asked about their knowledge about green food and their altitude and viewpoint towards the problem of food safety in China. In the third part, we divide green food into two categories, green agricultural products and green processed food. The reason for this divide is that they are also the main product categories of our target interview company and we think it is worth differentiating them since consumers may have different altitudes upon them. Respondents are asked whether they buy these products and the frequency and reasons of their consuming choices respectively. In the last part, respondents are continually asked about their consideration in priority of the factors which influence their purchasing behavior of these two categories products.

2.6 Interview Survey Design

2.6.1 Company

Since this thesis is to study green marketing in green food industry in China and we considered two categories of green food, green agricultural products and green processed food, the company we choose is one produce both categories of green

food. The company we interviewed is a small private company. Its main products are vegetable, fruit, aquatic products, meat products, edible mushrooms and so on. The factory of company has seven advanced FD (Vacuum freeze-dried) production lines and six AD (Hot-Air dehydration) production lines. All raw materials cultivation base of the company get registration certificate from China Inspection and Quarantine Bureau (CIQ). More detail information about the company is in Appendix 2.

2.6.2 Interview Design

According to Saunders et al. (2003), there are three types of interview forms for researchers to choose from: structured, semi-structured and unstructured. We find the semi-structured format appropriate since it helps to explore and explain variables that have emerged in the empirical material in the questionnaires. The interviewee is manager of the company, and she is also a member of board of this company. She has devoted in food industry for about 20 years. She knows the environment of China's food industry very well. We conducted the interview aiming to get information about the company's entry into the green food market, viewpoints concerning the problems of food safety and marketing strategy in term of the four Ps of marketing mix – Product, Price, Place and Promotion. However, the interview questions are not preset but asked as the interview proceeded (see Appendix 2).

2.7 Data Analysis

Data Analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condense and recap, and evaluate data (Shamoo and Resnik, 2003). Since we use a mixed method in this thesis, we will interpret the two types of empirical materials differently. For quantitative data, we mainly use some simple descriptive statistics, which involves simple percentage

and frequencies to analyze the responses of the questionnaires. For quantitative data, we extract useful information by interpreting and summarizing the viewpoints of the interviewee according to the interview transcript.

2.8 Reliability and Validity

According to (Burns, 2000), reliability refers to how well something can be used to obtain the same result repeatedly while validity refers to how relevant the questions are in order to fulfill the research purpose. We argue that our thesis is reliable since in the quantitative approach, the questionnaire have been checked and tested and the results are replicable, and in the qualitative approach, the interview transcripts are also multi-checked by authors and interviewee. Our research also has validity due to that the questioners data are accurate and reflect what they are intend to measure. Besides, we provide sufficient information concerning the interview process and the interview transcripts are also included in the appendix

.

3 Theoretical Frameworks

3.1 Green Marketing

Green marketing has not a uniform definition yet since it emerged in the late 1980s. However, many scholars categorized it in the social marketing (Brenkert, 2008; Jamrozy, 2007; Peattie et. al, 2009; Polonsky, 1995), which is to apply the tools of traditional marketing to social, environmental or cultural issues (Brenkert, 2008; Jamrozy, 2007), so the concept of green marketing can be traced back earliest in 1970s when Kotler and Zaltman first introduced the notion of social marketing in 1971 (Crane & Desmond, 2002).

Prakash (2002) used the term green marketing to describe the relationship

among the marketing discipline, the public policy process and the natural environment is very importance. He also identified what terms used by other researchers to describe this relationship, like ecological marketing (Fisk, 1974; Henion and Kinnear, 1976), environmental marketing (Coddington, 1993), greener marketing (Charter and Polonsky, 1999), sustainable marketing (Fuler, 1999) and green marketing (Peattie, 1995; Ottman, 1992).

Fisk (1974) first related marketing with ecological crisis. Next year the first workshop on “Ecological Marketing" was held by the American Marketing Association (AMA) in 1975, which resulted in Henion and Kinnear (1976)’s first book on green marketing entitled "Ecological Marketing" published. Since then many literatures on this or similar topic emerged. Coddington (1993)’s “environmental marketing” was defined as “marketing activities that recognize environmental stewardship as a business development responsibility and business growth opportunity”. Charter and Polonsky (1999)’s definition of “greener marketing” is the marketing or promotion of a product based on its environmental performance or an improvement thereof. “Sustainable marketing” has been defined by Fuller (1999) as “The process of planning, implementing and controlling the development, pricing, promotion and distribution of products in a manner that satisfies the following three criteria: (1) customer needs are met (2) organizational goals are attained, and (3) the process is compatible with ecosystems”.

Peattie (1995) defined green marketing as “the holistic management process responsible for identifying, anticipating and satisfying the requirements of customers and society, in a profitable and sustainable way”. He argued that green marketing should be differentiated from general social marketing and identified the following advantages of green marketing compared with general social marketing:

• Company’s strategy is more focused on environmental issues

• Nature and environmental are the subject having an important value by itself, as well as society needs and society values

• Concentration on the global issues instead of the local issues

All these term mentioned above have a similar emphasis of protecting the environment when marketing a product or service, and hence they are sometimes used interchangeably in spite that actually there are still minor differences among them.

Besides the above discussion on the concept of green marketing, there are still quite many literatures in this area and many researchers put forth their own definitions or notions on green marketing. These statements of the concept of green marketing can be categorized from different perspective:

(1)Product –focus perspective

Simula, Lehtimark, and Salo (2009) claimed that green marketing means new technologies and new products have more sustainable impact on the environment today. Green marketing is also used to refer to the efforts of a corporation to design, produce, distribute or promote products that will not have a bad impact on the environment (Polonsky and Mintu-Wimsatt, 1995; Grove et al, 1996).

The Queensland Government (2006) also presented its definition of green marketing, "To develop and promote products and services that satisfy your customers' wants and needs for quality, performance, affordable pricing and convenience without having a detrimental impact on the environment".

These definitions all focused on the product and its impact on environment. They emphasized the environmental protection but this is mainly achieved by new products' introduction or improvement of product and product-related procedures.

(2)Objective perspective

Stanton and Futrell (1987) defined green marketing as actions intended to replace

current needs and wants with minimal harmful impact on our environment. Grant (2007) suggested that the objective of green marketing is to educate and make consumers willing to go green by changing their life styles and behavior and then to minimize environmental harm while maximize the economic benefits. According to Peattie (2001), the term “green marketing” has been used to describe marketing activities which attempt to reduce the negative social and environmental impacts of existing products and production systems, and which promote less damaging products and services. He further claimed that the global social understanding of “green” practices and principles for marketing has also evolved along with the improved understanding of the interaction between businesses, society and the physical environment. Polonsky (2001) also concluded the main motivations for creating and marketing greener products are product differentiation with the main purpose to create a competitive advantage, to become a market leader, and cost savings.

Ottman (2006) proposed two objectives of green marketing, improved environmental quality and customer satisfaction and summarized five rules following which she claimed it can lead to product improvement that can improve marketability, strengthen overall performance and become a potential source of innovation.

• Make the consumers be aware of and concerned about the environmental issues that your product addresses.

• Make the consumers feel that by using your product they will make a difference.

• Make the consumers believe your claims.

• Make consumers believe your product will also work well as non-green alternatives.

• Make consumers afford any premiums.

According to Glorieux-Boutonnat (2004), marketing is focused on seducing

consumers and generating profitable sales rapidly and generally takes the environment into consideration only as far as it helps achieving that goal. The environmental management tries to reduce the impact of production on natural resources, reducing the amount of material or energy or using more ecological materials. On the other hand, the marketers are focused on convincing and seducing the consumer by all the means such as more sophisticated packaging with more space for communication, or shifting to materials that is more appealing to the consumers, regardless of its impact on the environment (Glorieux-Boutonnat, 2004). The two basics requirements of green marketing seem to be the top management involvement and long-term objectives that includes the will to educate consumers (Glorieux-Boutonnat, 2004).

However, Schaefer (1998) argued it is vital to emphasize that green marketing is the voluntary policy with the purpose to solve ecological problems and that is different from those legal and regulatory approaches that are obligatory and that is why they cannot be treated as marketing tools.

The varied viewpoints above can all be regarded as coming to the concept or definition of green marketing by presenting and summarizing its objectives from various aspects.

(3)Strategy perspective

This category of definition investigated green marketing from a strategic view and generally regarded it as a strategic tool of corporate marketing management.

According to Hartmann and Ibanez (2006), green marketing generally focuses on the efficiency of cognitive persuasion strategies, and believes that the consumer's high involvement concerning environmental issues is an effect of growing environmental knowledge. McDaniel and Rylander (1993) used the term green marketing to describe marketers' efforts to develop strategies targeting the environmental consumer. Green marketing is linked with the strategy to promote

products by using environmental claims either about their characteristics or about the system policies and processes of the companies that manufacture or sell them (Prakash, 2002). Menon and Menon (1997) claimed that green marketing is a part and a parcel of the overall corporate strategy as it requires an understanding of public policy processes.

Finally, we would like refer to Polonsky (1994)'s definition of green marketing. Green marketing includes a wide range of activities related to: product design, the manufacturing process, service delivery processes, packaging, construction and renovation of buildings, recycling, and other areas such as marketing communications (Kilbourne, 1998; Polonsky, 1994). So, according to Polonsky (1994)'s definition,

"Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment".

This definition incorporates much of the traditional components of the marketing definition and emphasize that green claims should state they are "less environmentally harmful" rather than "Environmentally Friendly", which means green marketing should look at minimizing environmental harm, not necessarily eliminating it.

3.2 Green Marketing Strategy

3.2.1 Defensive vs. Assertive

McDaniel and Rylander (1993) argued that increased environmental consciousness means consumer marketers should realize that green marketing

can bring profitability rather than only pure altruism. They emphasized that green marketing must be fully integrated into a company's marketing strategy and put forward two main approaches to green marketing strategy. The first is defensive strategy and the second is assertive strategy.

Defensive

The defensive strategy is also called reactionary approach. McDaniel and Rylander (1993) claimed that most companies tend to adopt a defensive green marketing strategy because it requires the minimum effort aimed at avoiding negative consequences. They described three types of defensive approaches. The first type is to comply with minimum government environmental regulations to avoid tax or penalties. A second type is to meet minimum standards to avoid a consumer boycott. A third type is react to competitors'' environmental activities to keep pace with competition by doing no more than what is needed (McDaniel and Rylander, 1993).

The cost of defensive strategy may be relatively lower since it only requires the company make the minimum greening effort but the benefit of this strategy is also quite limited. McDaniel and Rylander (1993) claimed that a company which adopts a defensive strategy probably will not attain any significant increase in market acceptance, and even will lose its market share. The company image will also not be improved compared to competitors since most consumers will eventually recognize that this company is only making the minimum greening effort. Thus, this company will not gain a competitive advantage and will be more susceptible to consumer or government backlash (McDaniel and Rylander, 1993).

Assertive

The alternative to a defensive strategy is an assertive strategy, also called aggressive strategy. This strategy requires company being a "first mover" on environmental issues and making more effort than government regulations and

consumers' expectations, which means marketers should respond to market incentive rather than to regulations (McDaniel and Rylander, 1993).

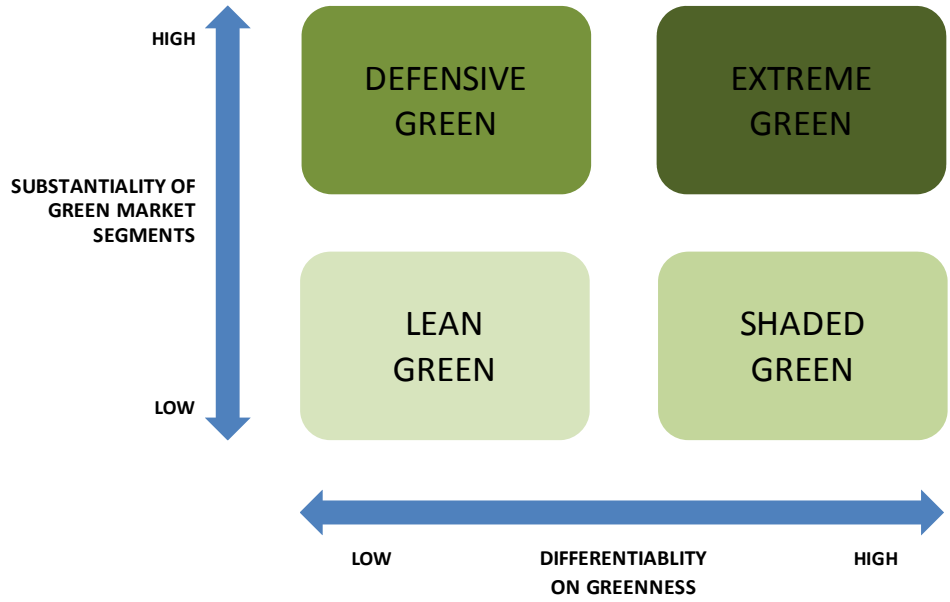
McDaniel and Rylander (1993) claimed that assertive strategy can provide company a sustainable competitive advantage and emphasized the importance of being a "first mover" in green marketing. They argued that the "first mover" image is the key to profiting from green marketing while the latecomers may be seen as imitators and even be doubted of its true intent by consumers. The company which adopts a assertive green marketing strategy will be more likely regarded as a sincere environmental activist and this positive public image can bring a sustainable competitive advantage. McDaniel and Rylander (1993) further stated that besides increased profitability, the company with an assertive leadership position may avoid scrutiny and regulation by doing more than required. Additionally, assertive strategy requires company establish a long-term perspective on environmental issues which is also the reason it can result in sustainable competitive advantage. Thus, with the multiple benefits of assertive strategy, McDaniel and Rylander (1993) argued that, for business marketers, this strategy is desirable on the basis of profitability alone.

3.2.2 Lean, Defensive, Shaded and Extreme

Ginsberg and Bloom (2004) identified four types of green marketing strategies from two dimensions: Substantiality of green market segments and Differentiability of greenness. The four strategies, which varied in the extent of the two dimensions, are Lean Green, Defensive Green, Shaded Green and Extreme Green strategy. They can be displayed in the two grid matrix below. They claimed that companies may choose one of the green marketing strategies from the matrix after self-inspection concerning the likely size of the green market in their industry and their ability to differentiate their products on "greenness" from competitors.

Figure 3.1

The green marketing strategy matrix



Source: Ginsberg and Bloom (2004)

Lean Green

Companies adopting a Lean Green strategy can be regarded to be good corporate citizens. They are usually in a small green market where there is no substantial profitability. They seek long-term preemptive solutions and want to comply with regulations but their main interest is cost reduction and efficiency improvement through pro-environmental activities, and then gaining a lower-cost competitive advantage, not a green one. Lean Greens are often hesitant to publicizing or marketing their green initiatives since they are weak in the abilities to differentiate themselves from competitors on greenness and cannot afford to be held to a higher environmental standard. (Ginsberg and Bloom, 2004)

Defensive Green

Companies in this Defensive Green strategy recognized that the green market segments are important and profitable. They usually use green marketing is

usually used as a reactionary approach or precautionary measure to respond to government regulations, consumers' claims and competitors' actions, and defend their environmental records with public relations. Defensive Greens have sincere environmental initiatives but seldom promote and publicize these initiatives and only make minimum green effort because they are not capable to differentiate themselves from competitors on greenness. Unless they are convinced that they can obtain a sustainable competitive advantage through greening effort, they will not choose to launch an aggressive green promotion which would be wasteful and would create expectations that they could not meet. (Ginsberg and Bloom, 2004)

Shaded Green

Companies using Shaded Green strategy have the ability to differentiate themselves from competitors on greenness, but they normally choose not to market their green initiatives and not to promote their products' green attributes. The reason for their choice is they are in a small green market which means it will be more profitable if they promote other attributes, and provide the direct and tangible benefits to consumers. Environmental benefits are only promoted secondarily when necessary and their products are often sold through mainstream channels (Ginsberg and Bloom, 2004). For these companies, green marketing is seen "as an opportunity to develop innovative needs-satisfying products and technologies that result in a competitive advantage." (Polonsky and Rosenberger, 2001)

Extreme Green

For Extreme Green companies, they are in a substantial and profitable green market segment so greenness has been a major driving force behind the company. And these companies also have the capability to differentiate themselves from competitors because they are shaped by holistic environmental philosophies and values and environmental issues are fully integrated into the business and product life-cycle process. Some extreme green practices involve life-cycle pricing

approaches, total-quality environmental management and manufacturing for the environment. Extreme Green companies are more likely to attain sustainable competitive advantage. They often focus on niche markets and choose boutique stores or specialty channels to gain profitability (Ginsberg and Bloom, 2004).

According to Ginsberg and Bloom (2004), differences among the four strategies of green marketing can also be reflected from how these strategies implement the classic marketing mix four Ps (product, price, place and promotion) respectively (see the figure below). The lean green strategy focuses mostly on product related areas, including product design, development and production process. The defensive green strategy involves the element of promotion besides product, using promotions as a responding tool and defends with public relations. The shaded green strategy still puts emphasis on pricing issues as well as product and promotions when pursuing greenness. The extreme green strategy incorporates greenness into every aspect of the marketing mix with an elaborately selected distribution channels and distributors (Ginsberg and Bloom, 2004).

Figure 3.2

Using the primary marketing mix tools in green marketing strategy

	Product	Price	Place	Promotion
LEAN	X			
DEFENSIVE	X			X
SHADED	X	X		X
EXTREME	X	X	X	X

Source: Ginsberg and Bloom (2004)

3.3 Green Marketing Mix

Green marketing strategy can be implemented through the process of greening

the classic Marketing Mix. Bradley (1989) first introduced the concept of "Green Marketing Mix" and provided a Green-Market-Mix checklist for companies to conduct an audit to check whether their products are light or dark green. He still argued that "Green Marketing Mix" can be applied to all types of product no matter the targeted market is B2B or B2C. Bradley (1989)'s Green-Market-Mix checklist has 8 items: Price, Product, Package, Promotion Distribution, Advertising, Sales Force and After Sales Service. Each item also have several sub-items which are used to check first from customer's point of view and then from the company's own perspective. Environmental Protection Agency of the Queensland Government (2006) suggested that the four Ps of conventional marketing mix can be addressed in green marketing strategy but in innovative ways. In last section, Ginsberg and Bloom (2004) linked his four types of green marketing strategies with the four Ps (product, price, place and promotion) of the marketing mix and identified the differences of how these elements involved in each strategy. This section will continue to discuss the four Ps in green marketing strategy.

3.3.1 Product

Product is the core of green marketing mix and the most important element in whole green marketing strategy. However, it should be kept in mind that green product is not limited to the final object only but involves all the elements of the product, such as the materials it used, the production process, the package of the product , etc. Thus, green product can be discussed in three subcategories below: product, production, and the package.

Product

According to the Queensland Government (2006), marketers that implementing green marketing strategy should either develop products that satisfy customers' environmental needs or develop environmentally friendly products that have less impact than competitors. These products in its suggestion include products made

from recycled goods, or it can be recycled or reused itself, or be efficient, environmentally responsible packaged, green labeled, organic, rentable or loanable, and certified. Bradley (1989) claimed that not only the green product itself but also the waste of green product should not damage to the environment and society.

According to Charter (1992), green product can be developed in several ways:

• Repair: repair components of a product to extend its life;

• Recondition: overhaul a product to extend its life;

• Remanufacture: produce a new product based on an old one;

• Reuse: repeat usage of a product;

• Recycle: reprocess a product or convert it into raw material;

• Reduce: use fewer raw materials or reduce disposable waste. (Prakash, 2002)

Production

Glorieux-Boutonnat (2004) claimed that to "go green" is expensive to invest in a short-term but can be very profitable in a long-term since it can bring cost reductions in the production process. This advantage can be attained by eliminating redundant process and then reducing the usage of materials. Miller (2008) also suggested improving the recycling of the waste materials and the use of recycled materials in the production cycle. It is suggested to design or modify the production process at the first stage because this offer the company a leader position in green production.

Package

Packaging is also a factor that cannot be neglected for a company which adopts a green marketing strategy. Bradley (1989) claimed that the material of package should be biodegradable and environmentally safe and it's better to reuse or

recycle these packaging materials. Besides, the package itself can contain environmental information to catch consumers' attention and provide some environmental advices.

3.3.2 Price

Pricing strategy is a substantial part in the Green marketing Mix. In most cases the price of green product is higher than traditional product, which means there is a price premium. So the pricing strategy in green marketing strategy is to balance and combine the consumers' price sensitivity and environmental conciseness. Due to price sensitivity, price can be determining factor for consumers when confronting the choice between a green product and an ordinary one. Consumers usually will not pay a price premium by themselves and only choose green product when they are the same price, quality and other conditions as ordinary products. In another word, most consumers will only be prepared to pay a premium if there is a perception of additional product value in the term of improved performance, function, design, visual appeal or taste (Queensland Government, 2006).

However, Polonsky and Rosenberger (2001) argued that consuming green product does not always mean consumers cost more if all the associated costs and product life-cycle are taken into considerations. He mentioned two terms of cost, initial out-of-pocket expenses and lower long-term costs. Green product often requires higher initial cost but in a long-run, it will be economy. For example, fuel-efficient or electric vehicles, power-efficient appliances and clean-energy equipment usually have a higher initial price, but in long-term perspective it can save consumers more because the energy costs are saved (Queensland Government, 2006). For marketers, it will be quite necessary to deliver consumers enough information concerning the cost-savings in the long-term when they have to price a premium on their green products.

3.3.3 Place

Place, also referred to Distribution in Green marketing strategy requires the company provides customers the access to their products in a greener way in the delivery process. This process includes transportation ways, distribution channels, locations and every link from transporting the products out of the company to delivering them to customers. Place strategy can have a significant impact on how the customers are reached and maximizing the value for customers. Marketers have to place their products as broadly as possible since most consumers will not search green products actively just for the sake of it but need these products displayed before them (Queensland Government, 2006).

The place strategy should also be consistent with the environmental image and successful greener distribution can differentiate the company from competitors and then bring competitive advantage (Queensland Government, 2006). There are some specific suggestions like using recycled or used materials in stores, reducing and saving resources in the transportation, using environmental friendly vehicles and reducing product movements. From a wider perspective, greener place strategy also requires the company find a green distributor which will associate responsibility with their products (Bradley, 1989).

3.3.4 Promotion

Green promotion involves communicating information on the environmental commitments and the efforts made by companies to consumers. This element in the green marketing mix includes various activities like paid advertising, public relations, sales promotions, direct marketing and on-site promotions (Queensland Government, 2006). Marketers have to consider "What environmental information should be communicated and how should it be communicated?" before promotion (Polonsky and Rosenberger, 2001). So the primary issue for green promotion is to communicate substantive and meaningful environmental information to consumers. There has been evident of consumers' skepticism and cynicism toward green claims after some companies used "green" as a tactic tool

and communicated unreal environmental information (Miller, 2008). Many green promoting activities were labeled “green washing” in 1990s, limited the benefit of green promotion and harmed the reliability of green marketing. Thus all green promotional information need to be scrutinized to avoid been criticized as “green washing” (Polonsky and Rosenberger, 2001).

Queensland Government (2006) emphasized the importance of credibility in communicating with consumers. This can be reflected in the company’s environmental claims which should never overstate or establish expectation that cannot be reached and select simple and trustworthy communicating channels. Ottman (2008) also pointed out one rule in green communicating is to “Be transparent” to ensure consumers that the company’s green claims are real and meaningful. Polonsky and Rosenberger (2001) argued that over-claim of green promotion may be perceived by consumers as “green washing” and ignored or encounter a boycotting or regulations.

3.4 Consumer Behavior

3.4.1 Definition of Consumer Behavior

Consumer behavior is a comprehensive subject, of which the structure and meaning covers many discipline fields, like sociology, psychology, economics and marketing etc. The conception of consumer behavior originates since the inception of marketing. Many scholars have defined and interpreted consumer behavior in different perspective.

Walters and Paul (1970) stated that “consumer behavior is the process whereby individuals decide whether, what, when, where, how and from whom to purchase goods and services.” Engel, Blackwell, and Kollat (1978) defined consumer behavior as “those acts of individuals directly involved in obtaining and using economic goods and services, including the decision processes that precede and

determine these acts". Both definitions focused on the buying and decision process. Schiffman and Kanuk (1991) claimed consumer behavior is what displayed by consumers in searching for, purchasing, using, evaluating, and disposing products and services that they expect will satisfy their needs. Hawkins, Best, and Coney (2004) further pointed out consumer behavior happens for a particular product. Consumer behavior will be different when consumers buy different products. Even for the same products, consumer behavior will also vary depend on changes of the environment. Therefore, to explore consumer behavior is to understand the consumption activity and decision-making process when consumers purchase particular products or services to meet their own needs.

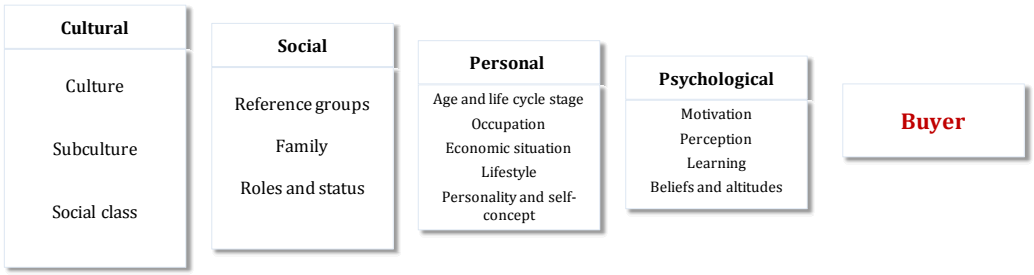
3.4.2 Factors Influencing Consumer Behavior

Kotler (1998) identified four main factors that can influence consumer behavior: cultural, social, personal, and psychological factors (see figure below). Marketers can make use of these factors to target interested buyers and shape products and appeal to satisfy consumer's needs better. Cultural factors are the most basic determinant of consumer's needs and behavior, including the basic values, perceptions, preferences, and behaviors that learned from family and other sources. Subcultures are the "cultures within cultures" that have distinct values and lifestyle and can be based on anything from age to ethnicity. People with different cultural and subcultural characteristics have different product and brand preferences. So marketers can focus their marketing programs on the special needs of certain groups. Social factors also influence consumer behavior. The reference groups, which includes family, friends, social networks and professional associations, can strongly affect product and brand choices. The buyer's age, life-cycle stage, occupation, economic circumstances, lifestyle, personality, and other personal characteristics can influence the buying decisions. Consumer's lifestyle, the whole pattern of acting and interacting in the world, are also an important influence on purchase decisions. Finally, consumer behavior is affected

by four major psychological factors, each of which provides a different perspective to understand consumer's psychology.

Figure 3.3

Factors influencing consumer behavior



Source: Kotler, 1998

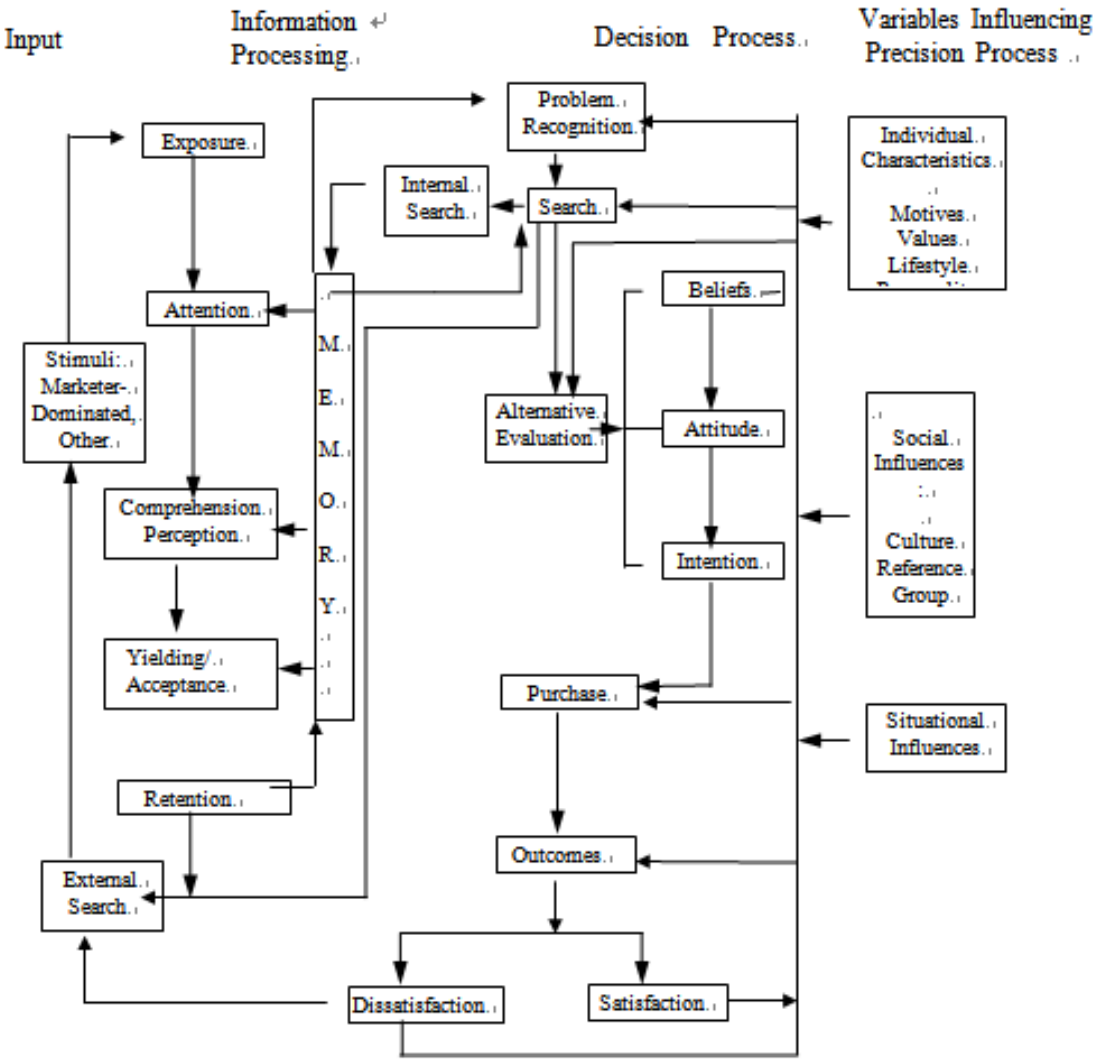
3.4.3 Engel, Kollat, Blackwell (EKB) model

The EKB model is a comprehensive model of consumer behavior to describe the development of knowledge concerning consumer behavior. It was proposed by Engel, Kollat, and Blackwell firstly in 1968 and has been revised for several times to improving its descriptive ability. This model examined the decision-making process of consumer behavior and the influencing factors on it. It is the most clear and integrated model among present consumer behavior models and also the most frequently refereed one.

EKB model is based on consumer decision-making process, including four stages: Information input, Information processing, Decision process, and Variables influencing decision process (see figure below).

Figure 3.4

Engel, Kollat, Blackwell (EKB) model



Source: Engel, Blackwell, and Miniard, 1995

Information Input

Information input refers to the information obtained by the consumers through the marketing activity entered into the decision-making stage. This information will influence the demand cognition of decision-making process after getting into consumer memory. If the information is still inadequate, consumers will further collecting relevant information through external search.

Information Processing

After exposure to information and through a process of attention, perception, acceptance, consumers finally decided whether to keep these information and then transform them into the long-term memory.

Decision Process

EKB model considers consumer's decision-making process as a problem-solving process. It is the central focus of the model, including five basic steps: Problem recognition, search for alternatives, alternate evaluation, purchase, and outcomes.

Variables Influencing Decision Process

Kotler (1998) argued that the study of consumer behavior is a process of understanding the black box of consumers. Consumers make buying decisions after stimulated by individual and environmental influences. Individual characteristics include motives, values, lifestyle, and personality. The social influences are culture, reference groups, and family. Situational influences, such as a consumer's financial condition, also influence the decision process.

3.5 Green Consumer

Green consumer is the driving force behind the green marketing and the target of the green marketing strategy (Peattie, 1992). Marketers can find whether "greenness" is a selling point of their target market and how to incorporate it into the green marketing mix through fully understanding the green consumer (Ginsberg & Bloom, 2004). Green consumer is linked with green consumption which involves consuming in an environmental friendly and sustainable way. Thus green consumer can be defined as those who actively or voluntarily consume products that have minimal detrimental impact on the environment to satisfy their needs. (Ottman 1993; Peattie, 2001).

Prior researches have presented some characteristics of green consumers. Many findings show that green consumers tend to be female, young people and the level of education and income has remarkable positive relationship. (Straughan and Roberts, 1999; Diamantopoulos et al., 2003). Green consumers can also be divided into market segments according to their "greenness". A very widely referred and used model was provided by Roper ASW (2002). By focusing on a range of consumers' environmental concerns they divide green consumers into five groups below:

• True Blue Greens: Most committed and most active

• Greenback Greens: Willing to pay the most for green products

• Sprouts: Environmental fence-sitters

• Grousers: Concerned but less active

• Basic Browns: Inactive

This segmentation is based on the green consumers' environmental concerns which is a multi-dimensional construct, including knowledge, attitude and purchasing behavior. So it is a mixing model that doesn't distinguish green attitude and green purchasing behavior. Consumers' environmental knowledge, green values, beliefs and attitude are the source of the formation of actual green purchasing behavior. However, green attitude cannot always lead to green purchasing behavior, for example, not all consumers with environmental conscience and attitude are willing to pay the price premium of green product. Thus, there is a gap between green attitude and actual purchasing behavior of green consumers. Marketers should be aware of this gap and their marketing strategy should be toward filling it.

3.6 Summary

Green marketing has developed over 30 years since the concept of green marketing emerged in 1980s. Many researchers have studied green marketing in different perspectives and applied in various industries. Some of them focused on the products and claimed the design, production, distribution and promotion of the products should not be harmful to environment in green marketing (Polonsky and Mintu-Wimsatt, 1995; Grove et al, 1996). While other researchers emphasized the objective of green marketing, which include minimum harmful impact to environment, meeting with consumer's needs and wants, as well as the profitability and competitive advantage of the company (Grant, 2007; Peattie, 2001; Ottman, 2006; Glorieux-Boutonnat, 2004; Schaefer, 1998). Thus, green marketing should be seemed as a strategic tool and incorporate it into the overall strategy of enterprise (Hartmann and Ibanez, 2006; McDaniel and Rylander, 1993; Prakash, 2002; Menon and Menon, 1997). From the strategic perspective, prior literatures provide many green marketing strategies from different levels. The Defensive and Assertive green marketing strategy proposed by McDaniel and Rylander (1993) can be seemed as the two approaches on corporate level that companies can choose to integrate green marketing into its marketing strategy. This level of green marketing strategy reflects the altitude of the company on greenness. The competitive advantage gained from adopting assertive green marketing strategy and being a "first mover" on environmental issues is particularly emphasized. From business level, companies can choose from four types of green marketing strategies, Lean, Defensive, Shaded and Extreme, which is put forward by Ginsberg and Bloom (2004) from two dimensions substantiality of green market segments and differentiability of greenness. Green marketing strategy can also be implemented through the Green Marketing Mix (Bradley, 1989) on functional level, no matter what types of the target markets. The Green Marketing Mix is the greening of classic four Ps marketing mix - Product, Price, Place and Promotion. In this thesis, we mainly studied green marketing from the functional level and based on the Green Marketing Mix to research how to

implement green marketing strategy in China.

However, most prior researches studied green marketing strategy only from the perspective of the company, with less analysis on the consumers and consumer behavior. So this thesis tries to study green marketing strategy and consumers simultaneously through a mixed research method. Consumer behavior is quite a complex process and can be identified by four main factors, cultural, social, personal, and psychological factors (Kotler, 1998). The EKB model also examined the decision-making process of consumer behavior and claimed that consumers make buying decisions after stimulated by individual and environmental influences. There is interactive relationship between consumers and companies. So this can be an opportunity for companies that implement green marketing strategy to attract green consumers. Roper ASW (2002) identified five types green consumers based on their environmental concerns. It should be noted that environmental concerns is a multi-dimensional construct that include knowledge, attitude and purchasing behavior and green attitude cannot always lead to green purchasing behavior. So this thesis aims to analyze Chinese consumers' altitude and the reasons of their green consuming choices. These empirical findings can be used to get implication on how to implement green marketing strategy in China's green food industry.

4 Empirical Findings

4.1 Questionnaires

According to the questionnaires survey data we collected, we do statistical analysis by figures.

Figure 4.1

How does each consumer think the food security status of China?

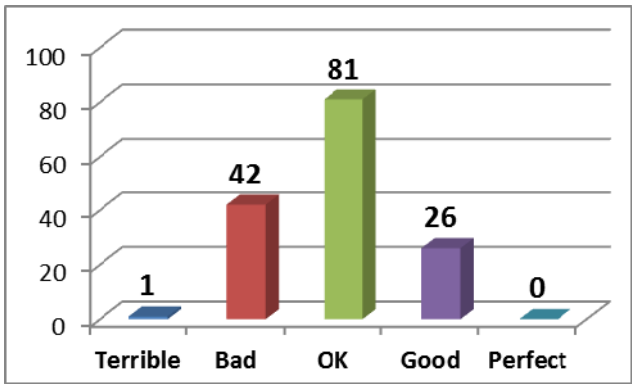
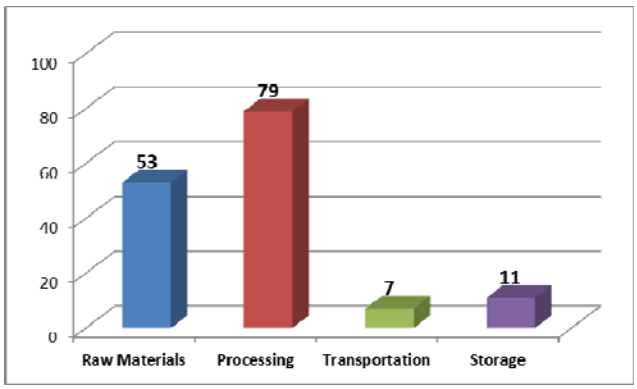


Figure 4.2

Which process does each consumer think the food safety problems of China exist in?



There are 150 people in total. 54% people think the food security status of China is Ok, and 28% people think it's bad. 52.67% people think food safety problems of China exist in Processing, and 35.33% people think food safety problems of China exist in Raw materials.

We made on two types of products classification survey in the questionnaire.

Figure 4.3

How often dose each consumers buy green agricultural products?

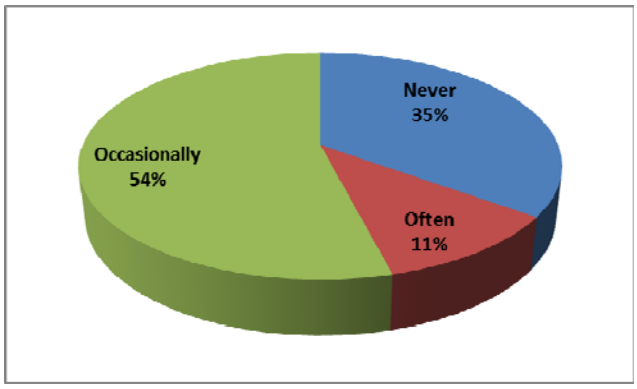
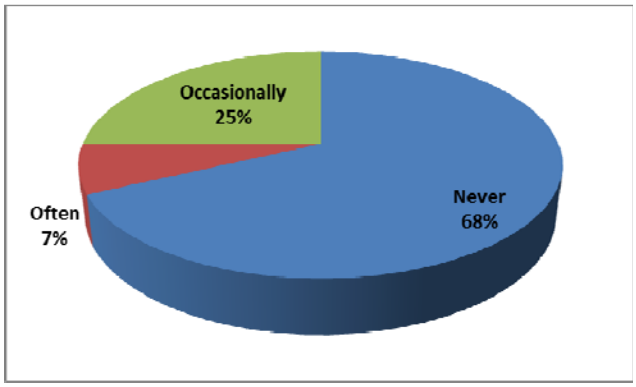


Figure 4.4

How often does each consumer buy green processed food?



The figure 4.3 shows that there are 35% people never buy green agricultural products, 54% people buy them occasionally and only 11% people often buy them.

The figure 4.4 shows that there are 68% people never buy green processed food, 25% people buy them occasionally and only 7% people often buy them.

We did detailed investigations about two types of consumers who purchased green products according to the annual income.

Three kinds of income group

a. Lower income level: annual income less than 50,000

b. Middle income level: annual income between 50,000 to 100,000

c. Upper income level: annual income more than 100,000

Five kinds of purpose of buying green products

A Benefit for Healthy

B Better taste and more nutrition than general food

C Gift giving

D Try

E Others (No similar general products can be chosen, environmental protection, inadvertently purchase, follow the fashion and so on)

Figure 4.5

Consumers' primary consumptive purpose of buying green agricultural products

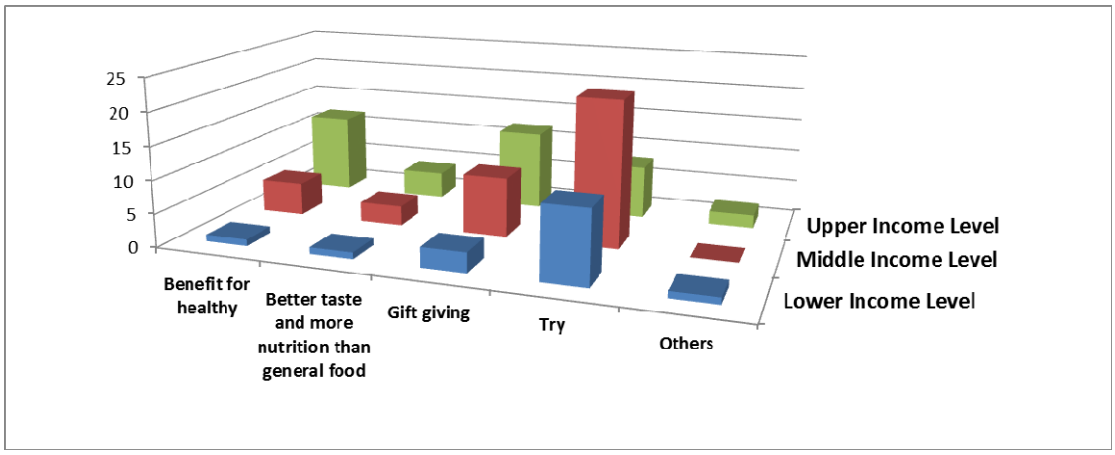
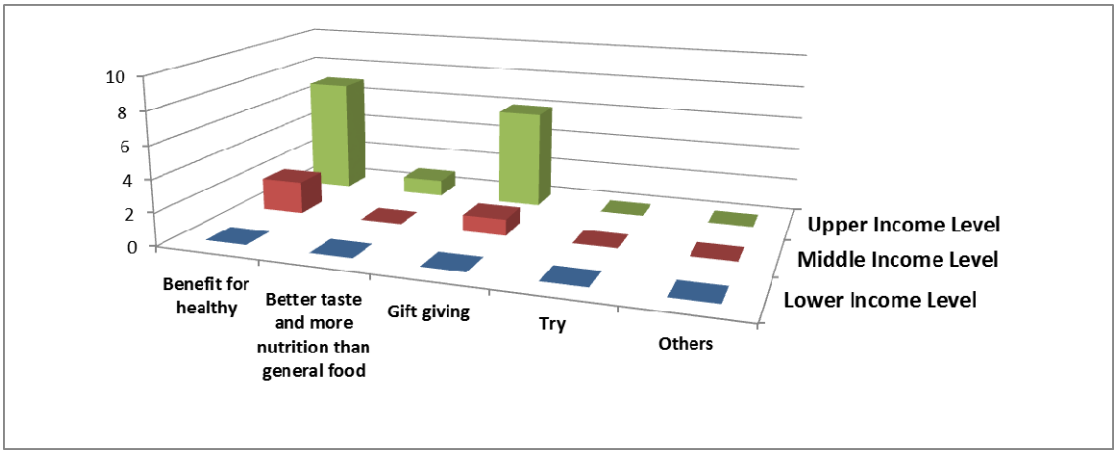


Figure 4.6

The primary consumptive purpose of frequently purchase green agricultural products



The figure 4.5 shows that, the main consumptive purpose of consumer is to try, gift giving and taking into account personal health issues. The purpose for the vast majority of consumers is to try first, and then is gift giving and last is taking into account personal health issues.

Comparing the two tables shows that spending power of green agricultural products of a-income group is the lowest. Although b-income group has a high number of green agricultural products consumption, the frequency is far less than c-income group. From the proportion of the consumption aspect, a-income group and b-income group are inclining to try, but c-income group are inclining to gift giving and personal health issues.

Figure 4.7

Consumers' primary consumptive purpose of buying green processed food

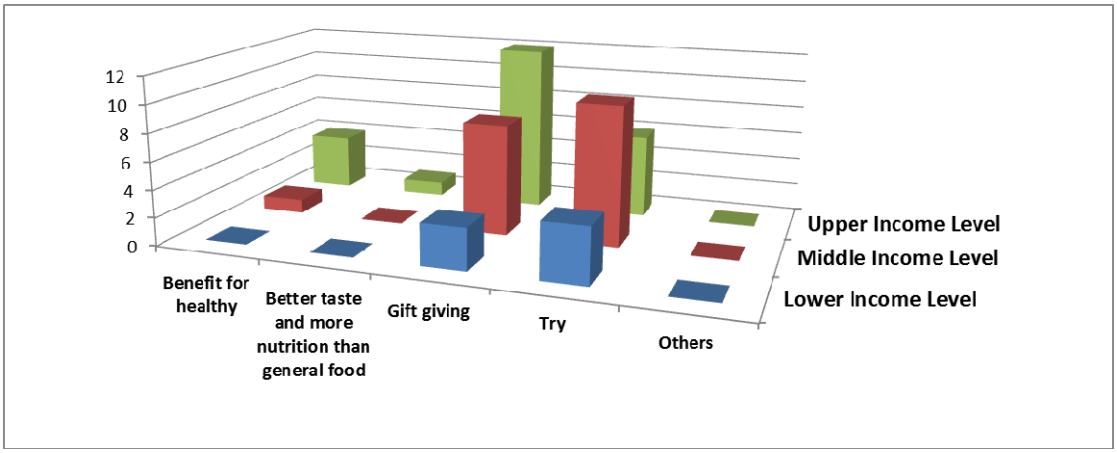


Figure 4.8

The primary consumptive purpose of frequently purchase green processed food

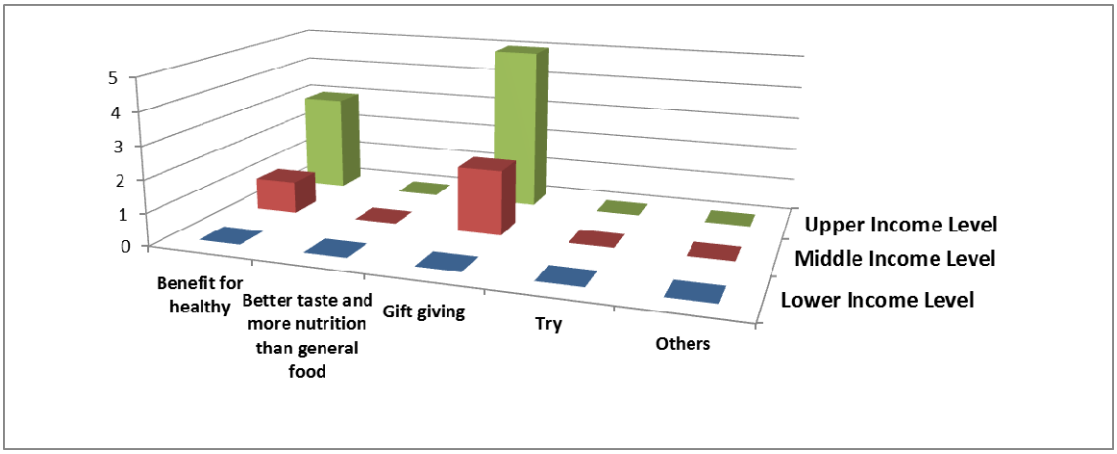


Figure 4.7 and figure 4.8 show that, the general trends are similar with figure 4.5 and figure 4.6. C-income group are still the main consumer, and a-income group are not inclining to buy green processed food basically. Comparing the four figures show that, the number of purchasing green processed food is substantial reduction compared with the number of purchasing green agricultural products. A-income group don't buy green products basically. B-income group are inclining to try, but not often to buy. The main purposes of purchasing green products of c-income group are gift giving and personal use. From the green agricultural products aspect, c-income group are inclining to personal use, but inclining to gift giving from the green processed food aspect.

We also did detailed investigations about the two types of consumers who don't purchase green products according to the annual income.

Seven kinds of reasons of not buying green products

A The high prices

B Not necessarily reliable

C Not convenient to buy

D Brands are not well-known

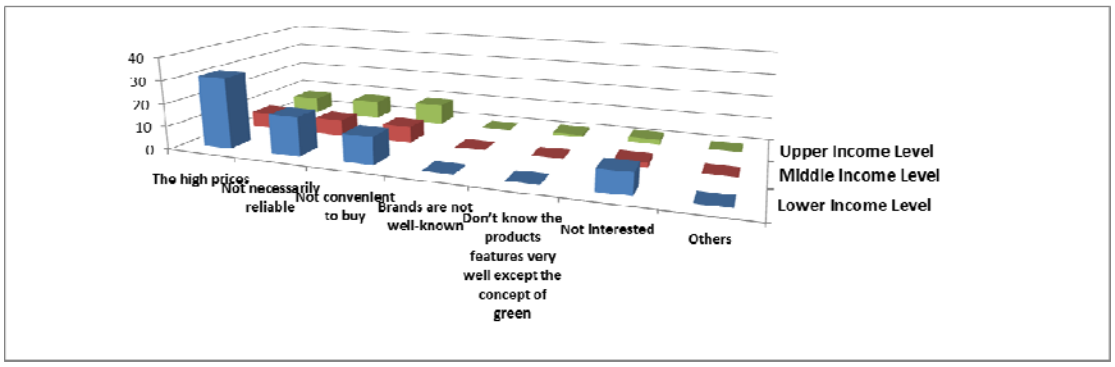
E Don't know the products features very well except the concept of green

F Not interested

G Others

Figure 4.9

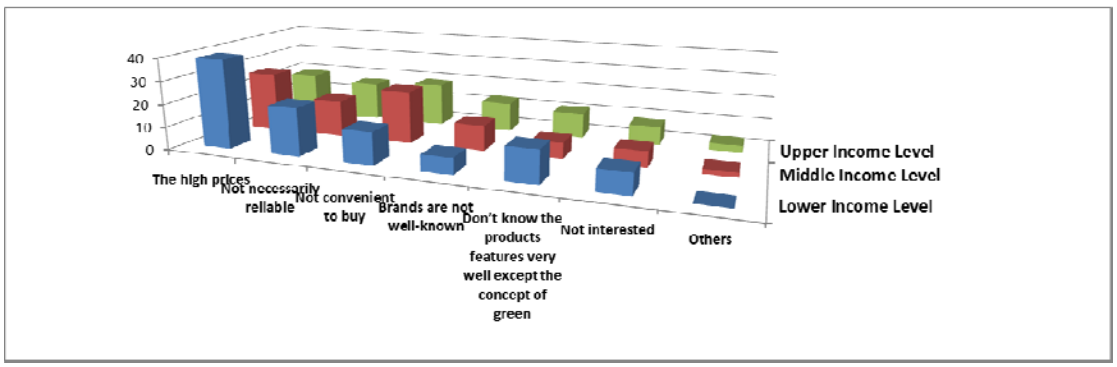
Reasons that consumers don't buy green agricultural products (Multiple choices)



Usually consumers are inclining to integrated consider various factors when they purchase. Therefore we investigated by multiple choice. The figure 4.9 shows that the main reasons of consumers who don't buy green agricultural products focus on A, B, C and F. But the three income groups in the four areas were significantly different scale. A-income group are inclining to focus on price, and the number of b and c-income groups is relative average in different area.

Figure 4.10

Reasons that consumers don't buy green processed food (Multiple choices)



The figure 4.10 shows that the reasons of not purchasing green processed food are refer to different areas. Compared with the figure 4.9, the number of D, E and F significantly increases. The number of c-income group in each area is inclining to average, we think that means there is a big difference for concept of consumption of consumers, some people focus on price, some people focus on brand and others people focus on whether convenience to purchase.

We asked people arrange some factors of consideration in priority, 1 means very important and 6 means not very important.

A Price

B Benefit for health

C Facilitate the purchase

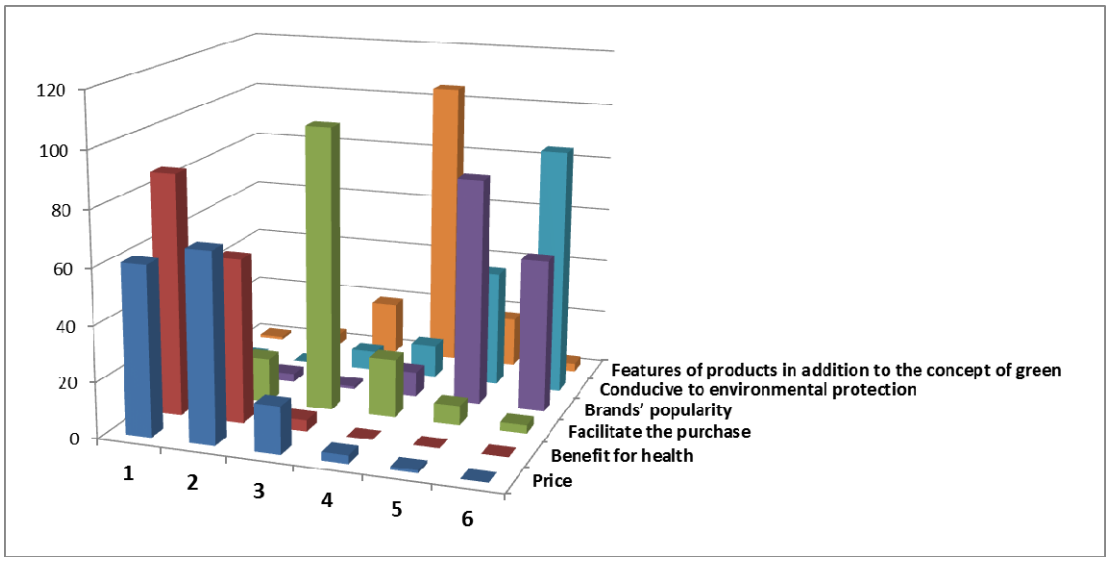
D Brands' popularity

E Conducive to environmental protection

F Features of products in addition to the concept of green

Figure 4.11

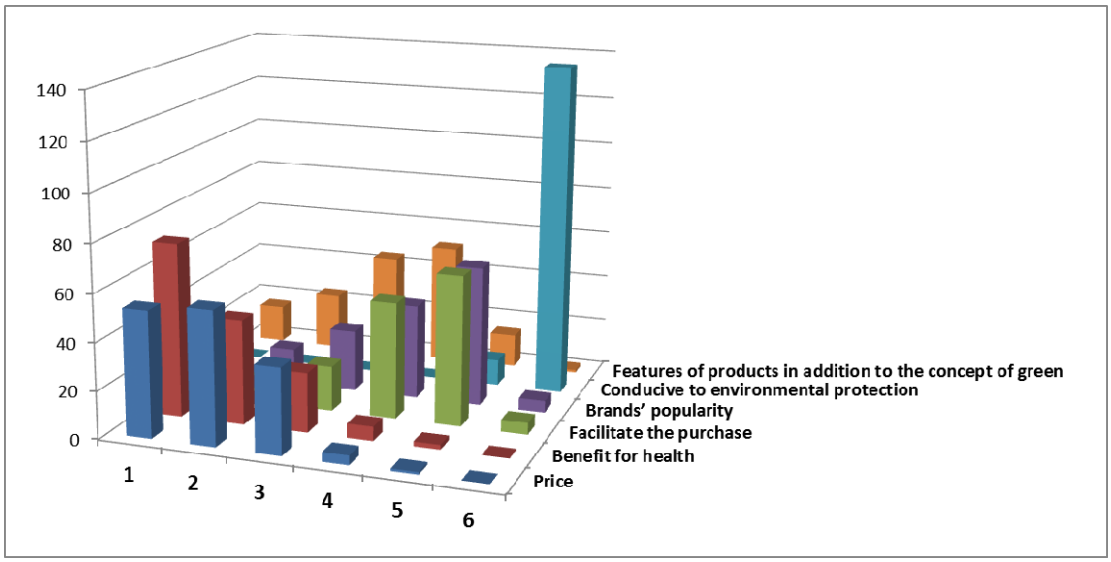
Factors of consideration in priority (Green agricultural products)



The figure 4.11 shows that, Price and Benefit for health are first considered, and then are Facilitate the purchase, features of products in addition to the concept of green, Brands' popularity, and last is whether conducive to environmental protection.

Figure 4.12

Factors of consideration in priority (Green processed food)



The figure 4.12 shows that Price and Benefit for health are still first considered. Conducive to environmental protection is last one. Compared the figure 4.11 and figure 4.12 shows that, in addition to E, when consumers purchase the two kinds of green products, priority factors are differences. From the green agricultural products aspect, the sequence of consideration of most consumers is A-B-C-D-F-E. But from the green processed aspect, there are huge differences on C, D and F. Some people think C is more important than D, and some people have contrary opinion. Advantages of A and B are not prominent any more.

4.2 Interview

Our interview target is a small private food processing enterprise. Their products include ordinary primary agricultural products, green primary agricultural products, ordinary processed food and green processed food. The major products of this company are processed food that most of them are instant food. We got all the information from our interviewee. She is the manager of the company and is also a member of board of this company. She said in the early stage of company operation most members of the marketing team are from Sino-Japanese joint ventures. They know how to do business in oversea markets better than do that in domestic market. So in order to ensure company has a stable growth environment,

the company focused on overseas markets in the early stage and pursued capital accumulation. At the same time the company developed their domestic marketing team and gradually familiar with domestic market. This strategy created a basis for two-way development of domestic and foreign markets for company in the future. The interviewee believed that the bad condition of China's food safety is the most reason which caused the development of the green food industry in China. Lots of food safety incidents which are exposed by media proved the opinion of interviewee. The interviewee also mentioned that although the Chinese government has strict food safety regulations and quarantine standards, there are still lots of loopholes in the course of implementation. Coupled with illegal suppliers pursued personal gain and did not follow the regulations and standards in the production process in order to reduce the cost of production, and supplied a large number of unqualified products to enter domestic market through illegal channels. These issues are root causes which caused the bad condition of China's food safety.

The company has two branches of green products when the company implements their green marketing strategy, one is green primary agricultural products, like vegetables, and another is green processed food. According to the interview, we know that green primary agricultural products are basis for the development of green processed foods of the company. There are two reasons. Firstly, primary agricultural products are raw materials of green processed food, and secondly, the aim of development of primary agricultural product markets of the company is to not get high profit, but to promote green brand, create a good enterprise image and increase consumer acceptance of green processed food. The interviewee believed sale of the green processed food is the main source of profit for their company.

According to the opinion of interviewee, we summarize her answer about implementation of green marketing strategies of the company according to the marketing mix. The first step of green marketing strategy is green products. A

large number of potential demand of green food and support of national policy are main driving force for the company to enter into the green food industry. Green products are not only to meet the health needs of people but also reduce environmental damage in the process of production.

The second step is price. The price of green products is generally higher than the price of similar general products, so the targets of green products of the company are tended to high income groups. The main reason of high price is high cost, and the high cost exists in each aspect in the process from production to sale. Take example for green vegetables. First of all, place of origin is different. The standards of soil, water, air and surrounding environment of the cultivation of green agricultural products are higher than the cultivation of general agricultural products. And environmental quality cannot be dropped in the production process, so the rate of standard planting bases is higher than the general planting bases. In the cultivation process, the use of pesticides and labor force are different. Pesticides which are allowed by government can be used for general agricultural products, but there are strict limitations for green agricultural products. Under the premise of ensuring the production, organic fertilizers have to be used for green agricultural products, so it increases cost green agricultural products. Quality of environment needs to be monitored in the production process, the workload is more than the normal, so it increases labor cost. In the process of transportation and storage of green products, it is necessary to ensure conducive to environmental protection, energy saving in addition to not subject to contamination and deterioration. Processing equipment of green products is required disinfection of high frequency in the course of processing and packaging. The packaging materials should be reduced or avoided waste generation, and it also should be easy to recycle, reuse and decompose. The high cost of green agricultural products causes high price, so green agricultural products usually don't enter low-level markets. The consumers of low-level markets prefer purchase low-price general agricultural products because they have low income level, and

suppliers of green products need to pay lots of different management fees if they provide their products to high-level markets, so it further increases the cost. Therefore, the high price of green agricultural products is cause by many factors. The high cost of green raw materials determines the high cost of green processed food in a large extent.

The third step is place and promotion. The company has two branches of green products. One is green primary agricultural products, another is green processed food. The promotions of the two types of products of enterprise are not exactly same.

We also summarize the same and difference between marketing mix of green agriculture food and marketing mix of green processed food according to the answer of our interviewee. From the same point of view, although the green concept creates competitive advantages for company, the interviewee think Chinese consumers have high awareness of green concept, and most consumers are aware of the difference between green products and general products. Therefore, the company did not promote green concept into too much energy, instead, the company chosen reasonable and right sales outlets in order to make more consumers who have spending power and propensity to consume access to the company's products. From sale aspect, the company didn't blind pursue low sale price to compete with their competitors, but through good product quality and brand create profits. In addition the company directly sold its products to consumers by themselves, and they also chosen agents and sold their products as a wholesaler.

From the different point of view, the main performance of different reflects on the promotional aspect. Promotion of green agricultural products is a silent way. Firstly the company set up special sales outlets to attract consumers' attention. Because the characteristics of primary agricultural products are single, in addition to the green concept, there are no many differences between green products and general products in the physical properties, but there are still a little difference,

like shape, color and taste. Therefore, the company didn't choose gift or special sales, instead of choosing a small amount of packaging for consumers to try. From the price aspect, the company adjusted it according to freshness of products to ensure that products can be sold in the insurance period and reduced storage costs. Promotions of green processed food are more positive than green agricultural products. Because most processed products of this company are instant food, characteristics of products are not distinctive visual, and consumers don't know them until they try. Therefore, first step is to adjust and develop new products to meet the needs of different consumers according to the consumer feedback to further expand sales and improve corporate brand image. Secondly, promote products features except green concept and increase consumer acceptance by way of gift and special sales. Thirdly, pay more attention to commuters and students at the choice of target in the promotion.

5 Analysis and Discussion

5.1 The Factors Influencing Chinese Consumers on Green Food

According to opinion of the Walters and Paul (1970), "Consumer behavior is the process whereby individuals decide whether, what, where, how and from whom to purchase goods and services." Kotler (1998) summarized four points to interpret the factors which influence consumer behavior, cultural, social, personal and psychological factors.

We mentioned six factors of consideration when consumers purchase green food in our questionnaires, Question 7 and Question 8. The six factors are Price, Benefit for health, Facilitate the purchase, Brands' popularity, Conducive to environmental protection and Features of products in addition to the concept of green. According to the questionnaire data we can find the six factors of consideration in priority order are different, it is showed in figure 4.11 and figure

4.12. We believe that is influenced by the four points which were summarized by Kotler (1998). According to opinion of Kotler (1998), people with different cultural and subculture characteristics have different product and brand preferences. Social factors can strongly affect product and brand choices. Personal characteristics and psychological factors can influence the final decision of product and brand. According to the EKB model (Engel, Blackwell and Miniard, 1995), figure 3.4 shows that these factors which are mentioned by Kotler (1998) influence each step of Decision process. So we think that's reason why consumers consider lots of factors when they purchase green food.

Although there are lots of factors influence consumers' decision and the results of Figure 4.11 and 4.12 are different, whether green agricultural products or green processed food, the factors of Benefit for health and Price still ranked first and second. The two factors are decided by products themselves. Therefore we believe although cultural, social, personal and psychological factors influence consumers' behavior, the factor of products is more important than any factors.

5.2 Marketing strategies of company

According to the opinion of Ginsberg and Bloom (2004), Companies should consider the likely size of the green market in their industry as well as their ability to differentiate their products on "greenness" from those of competitors before choosing one the strategies in the matrix. The high and low of substantiality of green market segments and the high and low of differentiability on greenness are not absolute variable, but relative variable. Which kinds of green marketing strategies should be chosen depend on enterprises themselves

Lean Green

Ginsberg and Bloom (2004) thought Coca-Cola Co. can be characterized as a Lean Green company. Although Coca-Cola Company is not defined itself as a green band,

actually the company has invested heavily in various recycling activities and package modifications. Substantiality and the ability of differentiability are low for the company. As we know Coca-Cola Company own lots brand, if Coca-Cola Company tied its environmental efforts, it would run the risk that all its products would be pigeonholed as green, and also, by publicizing its green marketing efforts, Coca-Cola might actually do itself more harm than good (Ginsberg and Bloom ,2004). So compared with its general products, being a totally green company is not good for Coca-Cola Company. The company doesn't get huge revenues by improving on consumer acceptance of the concept of green. Coca-Cola Company is not inclining to spend more focus on greenness. Therefore, Coca-Cola Company chooses Lean Green, and just focus on Product, not Price, Place and Promotion.

Defensive Green

According to the opinion of Ginsberg and Bloom (2004), some companies use Defensive green strategy because they think substantiality of green market segments are high but they have no capable to differentiate themselves from competitors on greenness. They use this strategy just to respond to government regulations, consumers' claims and competitors' actions, and defend their environmental records with public relations. And they usually don't choose to launch an aggressive green promotion which would be wasteful and would create expectations that they could not meet. Ginsberg and Bloom (2004) take Gap Inc. as an example. The company has long promoted energy conservation and waste reduction, and its corporate headquarters has been described as a prime example of sustainable building. These activities are mentioned on the web site of the company, but the company does not publicize them externally much beyond that. (Ginsberg and Bloom, 2004)

Shaded Green

Some companies are inclining to using Shaded Green strategy if they have high

ability of differentiability and market of their green products is small. These companies usually promote other attributes to get more profitable, environmental benefits are only promoted secondarily. For these companies, green marketing is seen "as an opportunity to develop innovative needs-satisfying products and technologies that result in a competitive advantage." (Polonsky and Rosenberger, 2001) Take care of fuel–efficient hybrid in China as an example, demand of cars of fuel-efficient hybrid in China is small compare with developed countries, so markets of cars of fuel-efficient hybrid in China is small. Motor companies usually not promote its environmental attributes, but fuel efficiency, and it means consumers would spend less on gas.

Extreme Green

The company we interviewed has two branches in green food field, which are green agricultural product and green processed food. The green marketing strategies of green agricultural product and green processed food of the company are both involve in the four aspects of green marketing mix to differentiate their products from those of competitors and increase their competitiveness, and their strategies are Extreme Green. The company increases their competitiveness and ability of differentiability of green agricultural products through opening special outlets and increasing types of agricultural products, indirect promotion by media also help the company increase consumer acceptance of the concept of green. The company increases their competitiveness and ability of differentiability of processed food though strengthening promotion and development of processed products, they also have some channels to facilitate consumers to buy. Because of the instability of China's food environment the huge food market of China provides a good basic for development of the company. As consumers have different needs for different foods, the substantiality of green market segments is high. Green marketing strategies of the company we interviewed belong to Extreme Green, but each green marketing strategy focuses on different aspects.

5.3 Green marketing mix of the company we interviewed

Although Green marketing strategies of the company we interviewed belong to Extreme Green, each green marketing strategy focuses on different aspects. Therefore, we will analyze each aspect in the following section, and explore the relation of the four aspects of each green marketing strategy.

5.3.1 Product

According to the data 54% people think the food security status of China is Ok, 28% people think it's bad. 88% people think the problems of food safety of China exist in Raw materials and Processing. Therefore, the environment of the food situation in China provides a basis for the development of green food. That's why more and more companies enter the green food field.

One of the characteristic of green food is benefit for health, which is resulted by the strict regulations and control of pesticides and production process, but the first aim of strict regulations and control of pesticides and production process is minimum of environmental hazards. The figure 4.11 and figure 4.12 shows that whether green agricultural products or green processed food, benefit for health is the most important consideration when consumers purchase green food in addition to the factor of price. Conducive to environmental protection is the last one. The purposes of regular consumers are benefit for health and gift giving, but the root cause of gift giving is still benefit for health. Proportion of the two purposes is 94.12% in regular consumption of green agricultural products, and it is 100% in regular consumption of green processed food. So the concept of green for consumers only means health. But green food companies need to consider the two factors in the production process, especially in processing and packaging links. They should necessary to ensure products are not subject to secondary pollution, and also to ensure the reduction of harm to the environment. Therefore,

it's very hard to identify which green marketing strategy of green food companies is Defensive and which one is Assertive like other companies' green marketing strategies in other fields because of the conceptual differences between consumers and producers. The companies usually take defensive strategies in order to reduce costs during the production process, and they usually assertive strategies when they face consumers.

One of difference of green marketing strategies between green agricultural products and green processed food is Product. Green processed food is different with green agricultural products. Based on the concept of green, companies can develop the features of products in addition to green concept according to demand of consumers. Companies can create the differentiation between general products and green products to make up the restrictions by high prices. For example, if some companies use potatoes to produce chip, they can create different flavor to meet the requirement of different consumers.

Another difference of green marketing strategies between green agricultural products and green processed food is package. Package is very important parts of product. A good package can let consumers know the products very well and attract consumers' attention. But package between the green agriculture food and green processed food are different. When consumers buy some green canned vegetable, they can know features of the processed food according to the package. Like flavor of some canned vegetable are sweet, some are spicy, but if consumers buy green vegetable and green fruit, seldom products focus on package, they know what it is very well. So it's very hard for green food companies to improve package to reduce the limitation of high price of green agricultural products.

5.3.2 Price

We believe that the price of green products is an important factor. The two factors of environmental protection and food safety are considered by green good companies result in the price of green food is higher than the price of general

food. The investigation of the three income groups shows that the demand of consumption of low-income group is very low. The number of people who consider price factors is 92.1% of the number of low-income consumers who don't buy green food. The number of consumption of green food of middle-income consumers significantly increases, but the number of consumption of regular consumers is only 10% of the number of middle-income consumers. The number of people who consider price factors is 63.36% of the number of middle-income who don't buy green food. High-income consumers are the main force of green food consumption, the number of consumption of regular consumers is 36.06% of the number of high-income consumers. But the number of people who consider price factors is 66.67% of the number of high-income who don't buy green food.

Compared with factors of price and product we think green products are the basis for companies to develop markets and price is driving force for companies to improve their green marketing strategies. According to the figure 4.11 and figure 4.12, the concept of green of agricultural products is 58% in the primary considerations and 39.33% in the secondary consideration. Price of agricultural products is 40.67% in the primary consideration and 45.33% in the secondary consideration. And the concept of green of processed food is 48.67% in the primary consideration and 29.33% in the secondary consideration; price of processed food is 35.33% in the primary consideration and 37.33% in the secondary consideration. The impact of concept of green of products is higher than the impact of price. Therefore, we don't think companies can stimulate consumers spending and maximize benefits by lower price. The interview information shows that the company also mentioned their price strategy. They didn't blindly pursue the sale of low price, but sale green agricultural products through the way of opening outlets to strengthen the aspect of Place, and sale green processed food through the way of improving products and promotion to strengthen the aspects of Product and Promotion.

Since the concept of green products results in high prices and high prices also restrict the sale of products, so in order to pursue the goal of maximizing the interests, green food companies should strengthen the aspects of Place, Promotion and Product.

From consumers' point of view, most people don't choose green food because of high price. Some people buy green food as gift-giving not for themselves. But that does not mean green food in China is luxury. The reasons of the issue are refer to the psychology of consumers, and we also mention it a little in theory framework. We believe the high price means relative high not absolute high compared with similar products. For example, some people prefer buying a 2,000kr cell phone rather than to buy a 10kr egg. Another reason is that if consumers buy green food for themselves in order to health, they should maintain long-term buying habits. The cost of long-term accumulation is high for low and middle-income group.

5.3.3 Place

According to the data we find, for green agricultural food, the number of people who consider place factors is 36.36% of the number of low-income consumers who don't buy green agricultural food. The proportion of middle-income consumers is 63.63% and the proportion of high-income consumers is 75%. For green processed food, the proportion of low-income consumers is 32.59%, the proportion of middle-income consumers is 74.19% and the proportion of high-income consumers is 70.37%.

The figure 4.11 shows that, for green agricultural food, in addition to factors of product and price, location is a priority consideration for consumers. For green processed food, compared with figure 4.10 and figure 4.12, because the question, which is about reasons consumers do not buy, is multiple choice, the proportion of people who consider the location factor is very high in the number of people

who don't buy green processed food, but compared with others factors, like brand, feature of products exclude green concept, the location is not very important compared with other factors. According to the interview information, the company set up special marketing shops to sell their green agricultural products but no special outlets to sell processed food. But the factor of Place cannot be ignored in the green market strategy of green processed food.

Why do Chinese consumers think the factor of Place of green agriculture products are more important than other factors, why does it different with green processed food? We believe that it depends by physical characteristics of products. Shelf life of green agriculture products, like vegetable, fruit and meat, are very short, but the quantity of daily consumption is large. So the purchase frequency of agriculture products is higher than processed food

5.3.4 Promotion

One of differences of green marketing strategies between green agricultural products and green processed food is promotion. The interview information shows that the company didn't do any promotion about concept of green for their green products. For green agricultural products, there is no any promotion to introduce their products, and for green processed food, there are only some traditional promotions to introduce the features of products except the concept of green, like gift and special sales. We believe that business marketing is in line with the actual status of the market environment. According to the questionnaire we find all consumers know or hear of green food. So we think companies do not need to increase the cost and effort to promote the green concept. We think another reason is there are lots of food safety incidents that are exposed by media in China. Lots of negative coverage is indirect promotion for green food. So outsides have done a lot of green propaganda for company in the environment of food safety of China. Therefore, that not means there are no any activities to promote the green concept. For green agricultural food, there are no people don't

buy green agricultural food as they don't know the feature of products in addition to green concept. But for green processed food, the proportion of consumers is 31.68%. The figure 4.12 shows that more and more people first consider features of the product in addition to green concept.

We believe that the physical characteristics of green agriculture products are visible. We don't think green food company need to spend time and money to introduce what are potatoes or what are bananas to their consumers. But green processed food is different. We can easy find lots of activities in supermarkets. Food companies usually provide some processed food for consumers to try.

As the diversity of factors affecting consumers purchase we think companies should do more detailed promotion to implement their marketing strategies. The Kotler (1998) detailed describe how these factors affecting consumer purchase behavior. Compared figure 4.11 and figure 4.12, in addition to green concept and price, other aspects in figure 4.12 don't show the distinct characteristics as same as that in figure 4.11. That means priorities of consumers are different. The purposes of consumption are not same even in the same income group. According to the EKB model (Engel, Blackwell and Miniard, 1995), information and the factors which are mentioned by Kotler (1998) are key point to influence the decision of consumers. So when companies implement their green marketing strategies of green processed food, promotions need to be more detailed and more powerful.

Figure 5.1

Comparison of marketing mix between green agricultural products and green processed food

	Green agricultural products	Green processed food
Product	Physical characteristics are visible and simple.	Characteristic are depended by product categories.

	Differences cannot be created. Restriction of high price can't be offset by improving product. Package is not important for consumers.	Difference can be created by developing new products according to requirement of consumers. Restriction of high price can be offset by improving product. Package can be used to attract attention of consumers and introduce products to consumers.
Price	High cost results in high price. High price restricts green consumption. Low price sales is not an efficient way	High cost results in high price. High price restricts green consumption. Low price sales is not an efficient way
Place	Factor of Place is the most important way to offset the restriction of high price	Compared with other factors, this aspect is not important, but it can not be ignored.
Promotion	Promotion is not necessary because of the visible and simple physical characteristics and media publicity.	Promotion is very important way to offset the restriction of high price. Because features of products can be created based on consumers' demand, products should be introduced to consumers.

5.4 Green marketing mix in green food industry in China

After analysis on the consumers and companies we interviewed, we get some general ideas about how green food companies use four Ps of conventional marketing mix to implement green marketing strategy in green food industry in China. We summarize two tables through analysis of information of interview and questionnaire. Although the green marketing strategies of green agriculture products and green processed food are both belong to Extreme green, they are still different from marketing mix aspects.

Figure 5.2

Marketing mix for green agricultural products

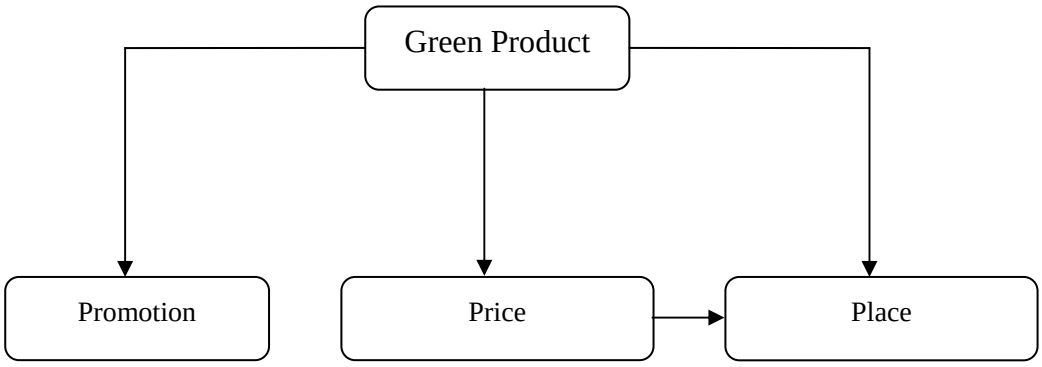
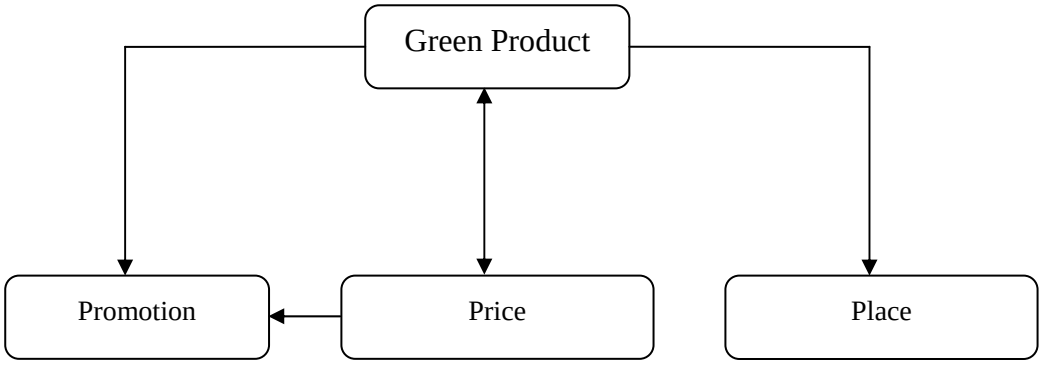


Figure 5.3

Marketing mix for green processed food



According to compare with figure 5.2 and figure 5.3, although the two green marketing strategies are both refer to four Ps, direction of focus are different. Strategy of green agriculture products is inclining to focus on Place, and strategy of green processed food is inclining to focus of Promotion and improvement of product.

Because high price restricts green consumption, so companies need to use other way to reduce the restriction of high price. Physical characteristics of green agricultural products are visible and simple, difference cannot be created and package is not important for consumers, so strategy of green agricultural products cannot reduce the impact of high price through improvement of product, but strategy of green processed food can do that. According to information of interview and questionnaire, we can find Place is most important for strategy of green agriculture products to reduce the restriction of high price.

Because characteristic are depended by product categories, difference can be created by developing new products according to requirement of consumers, and package can be used to attract attention of consumers and introduce products to consumers, so promotion and improvement of products are very important ways to reduce the restriction of high price.

So we believe that extreme green strategy is necessary if companies want get profit from green food market, but they should divide their strategies into two branches, green agricultural products and green processed food, and focus on different dimensions.

6 Conclusion

This thesis studied green marketing of green food industry in China from two aspects, consumers and companies by conducting a mixed methods research. Quantitative and qualitative data are simultaneously from consumers and

companies though questionnaires and interviews survey respectively. 150 questionnaires in total from Chinese consumers were collected and a telephone interview with a manager of a green food company in China. After analyzing these data we draw some implications concerning consumers and companies in the green food industry in China and make some suggestions on green marketing strategy.

6.1 Consumers

To investigate the green food industry in China, we introduced the issue of food safety since the concept of green product in China has two terms of meanings. Firstly it should be environmental friendly and secondly it should be safe to consumers' health. The second meaning is particularly emphasized in China. The results of questionnaires survey also reflected that most Chinese consumers are disappointed to the issues of food safety in China and think the primary problem of food safety is the raw material and the production process. We divide green food into two categories - green agricultural products and green processed food in our research. In both categories, whether the product is safe and healthy is the most important factor that influences Chinese consumers' purchasing behavior. The green concept of green food only make sense for Chinese consumers when they perceived that these green food products can benefit their health or much safer than other food products. The price of green food is another influential factor for Chinese consumers. The demand of green food is still low in China especially for lower income group. Chinese consumers rarely consider purchasing those green foods with high price premium except for gift-giving. As to the factor of place, Chinese consumers show different altitude. For green agricultural products, the selling place of green food has high consideration propriety. While for green processed food it is not so important. We further found that the media reports have aroused Chinese consumers' attention upon the issue of food safety and Chinese consumers are easily affected by these media publicity.

Generally, no matter green agricultural products or green processed food, the factors of Benefit for health and Price still ranked first and second factors that influence Chinese consumers' purchasing behaviors. This means although cultural, social, personal and psychological factor also influence consumers' behavior, the factor of product itself is more important than any others.

6.2 Company

The company we interviewed adopted an extreme green marketing strategy according to the classification of Ginsberg and Bloom (2004). This company has two branches in green food field, which are green agricultural products and green processed food. The green marketing strategies of two categories both involve in the four aspects of green marketing mix to differentiate their products from those of competitors and increase their competitiveness. The company increases their competitiveness and ability of differentiability of green agricultural product through opening special outlets and increasing types of agricultural products. Indirect promotion by media also helps the company increase consumer acceptance of the concept of green. The company increases their competitiveness and ability of differentiability of processed products though strengthening promotion and development of processed products. They also have some channels to facilitate consumers' buying behavior. Because of the instability of China's food environment, the huge food market of China provides a good basis for development of the company. As consumers have different needs for different foods, the substantiality of green market segments is high. Green marketing strategies of the company we interviewed belong to Extreme Green, but each green marketing strategy focuses on different aspects.

6.3 Suggestions

Based on the analysis on Chinese consumers and the empirical materials

collected from our interview with a green food company we can draw some implications on how to implement green marketing strategy in the industry of green food in China according to the marketing mix. For green food company, marketers need to make sure their green food products meet the standards of regulation. This means their green food has to be safe and healthy to consumers, as well as environmental friendly. Marketers should ensure products are not subject to secondary pollution and also ensure the reduction of harmful impact to the environment. As to pricing strategy, low-price approaches may not appropriate for green food companies. Marketers can improve their ability of differentiating greenness through development of products and promotion strategy to enhance their competitive advantage and then get the benefit of the price premium.

Because characteristic are depended by product categories, difference can be created by developing new products according to requirement of consumers, and package can be used to attract attention of consumers and introduce products to consumers, so promotion and improvement of products are very important way to reduce the restriction of high price. We also argue that extreme green strategy is necessary if companies want to profit from green food market. However, marketers should keep in mind they take different strategies on the two categories of green food.

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Appendix

Appendix 1

Questionnaire

1. What is your annual income?

A <50,000 B 50,000 ~ 100,000 C >100,000

2. Do you know green food?

A yes B no

3. How do you think the food security status of China?

A terrible B bad C ok D good E perfect

4. Which process do you think the food safety problems of China exist in?

A raw materials B processing C transportation D storage

5. Have you bought green agricultural products?

A yes B no

5 (A-1) What is the primary consumptive purpose of buying green agricultural products?

A Healthy

B Better taste and more nutrition than general food

C Gift giving

D Try

E Others (No similar general products can be chosen, environmental protection, inadvertently purchase, follow the fashion and so on)

5 (A-2) How often do you buy green agricultural products?

A often B occasionally

5 (B) What are reasons that you don't buy green agricultural products? (Multiple choice)

A The high prices

B Not necessarily reliable

C Not convenient to buy

D Brands are not well-known

E Don't know the products features well very except the concept of green

F Not interested

G Others

6. Have you bought green processed food?

A yes B no

6 (A-1) What is the primary consumptive purpose of buying green processed food?

A Healthy

B Better taste and more nutrition than general food

C Gift giving

D Try

E Others (No similar general products can be chosen, environmental protection, inadvertently purchase, follow the fashion and so on)

6 (A-2) How often do you buy green processed food?

A often B occasionally

6 (B) What are reasons that you don't buy green processed food? (Multiple

choice)

A The high prices

B Not necessarily reliable

C Not convenient to buy

D Brands are not well-known

E Don't know the products features well very except the concept of green

F Not interested

G Others

7. Suppose you consider buy green agricultural products, please arrange these factors of consideration in priority order, from very important to not important.

A Price

B Benefit for health

C Facilitate the purchase

D Brands' popularity

E Conducive to environmental protection

F features of products in addition to the concept of green

8. Suppose you consider buy green processed food, please arrange these factors of consideration in priority order, from very important to not important.

A Price

B Benefit for health

C Facilitate the purchase

D Brands' popularity

E Conducive to environmental protection

F features of products in addition to the concept of green

Appendix 2

Interview

Company information

Company name: Qingdao Dayangjian Food Co., Ltd

Company type: Private Limited Liability Company

Company Registration Number: 3702852801158

Date of Establishment: 2001-12-29

Number of employees: 200-300

Management System Certification: ISO 9002

Business model: Production, Processing, Distribution and Wholesale

Major markets: China Japan Southeast Asia

Main products: Agricultural products Freeze dried food Instant Food

Main service: Processing of agricultural products and aquatic products

Food & Beverage Agent

Company introduction:

The factory of company has seven advanced FD (Vacuum freeze-dried) production lines and six AD (Hot-Air dehydration) production lines. The main kinds of products are vegetable, fruit, aquatic products, meat products, edible mushrooms. All raw materials cultivation base of the company get registration certificate from China Inspection and Quarantine Bureau (CIQ)

Interview Questions and Answers

1. When did your company begin to enter into the green food field?

Our company came into contact with green food industry in 2002, and began to develop green good market in 2005.

2. Why did your company want to enter into the green good field?

Actually we went into this field by a passive way, in other words, many factors push us into this field. Our company established in 2001, and at the same year China became a member of WTO. That's good news for import and export companies, we can easier access to world market. But there is a little difference between food industry and other industries, Green Barriers. The high food safety standard is still a huge obstacle for us to enter into other foreign markets, especially the developed countries' markets. Our target markets were overseas markets from the inception of our company before 2005, especially the Japanese market, not to explore domestic market. Because our company set up in a coastal city, near Japan, so we have a geographical advantage. On the other hand, most of our market development team members came from Sino-Japanese joint venture, and they have lots of overseas work experience. So we know Japanese food industry better and operation easier in Japanese market than in Chinese market. But Japan has a very high food safety and inspection standards for imported food, especially the pesticide residues standard. Most raw materials of our processed products come from domestic, but quality of most general raw materials cannot meet Japanese standards, moreover, we don't want to import raw materials from other countries or purchase good quality raw materials from other domestic companies because of the high cost, so we have to into the green food field. But our products are not completely green. Because if we use green raw materials to

instead general raw material, that results in high cost. So we used green production techniques, but in order to save costs, we didn't strictly in accordance with green good safety and quarantine standards to do, the safety and quarantine standards of our products are higher than general product, but lower than the strict definition of green food. We officially entered the real sense of green food industry when we developed domestic market in 2005.

3. Why do you say most general raw materials or agricultural products from China cannot meet the Japanese standard? Is it because their standard very high indeed, or are there some food safety problems in China?

I want to separate to talk about the issue of Japanese standard for imported food and problem of the Chinese agricultural products. First is about the issue of Japanese standard for imported food. Not only Japan, China also has a high standard for imported food, and it's very higher than the standard of domestic food. I think the high standard for imported food just is a protection measure for their food industry. I think there are some problems indeed about general agricultural products of China. China is a developing country, and world factory. Some basic elements, like air, water and soil, are the possibility of contamination. When we placed an order for our suppliers of general raw materials, we usually raise requests about regulation of the production process and quality of the products. Suppliers are also in strict accordance with our requests to do, but the quality is sometimes still cannot meet our standards because some mobile elements are very hard to control, like air, rainfall and groundwater. For general raw materials, we cannot ask them to do according to the standard of green products. Regulation and operational processes are very different, and it also increases cost. Because the cultivation of agricultural products requires time, one month to several months, so if the raw materials cannot meet our demand, we have to postpone our entire production plan and can't complete clients' orders on time. It will causes very

serious consequences. Therefore, in order to avoid risks, we used green technology to require the standards of our products at that time.

4. Why did your company begin to develop domestic market after 2005? I think there is a high risk to explore green food market in China. Why did your company still choose green food industry while your company explored low-cost general food market? What's the main direction of development of your company in green food industry in China, green primary agricultural products or green processed food?

Sales network and customers of our company were focused on the overseas markets especially Japanese market at the early stage of company operations, and we don't know the legal system of the domestic market, sales channels, industry characteristics and rules very well. In order to have a virtuous cycle of growth process for a fledgling new company, like our company, we pay more attention to the advantages of the company itself to explore overseas markets. Therefore, the development of the domestic market is not very in-depth. But that does not mean we abandon the development of the domestic market. We had also done a lot of small orders from domestic market before 2005. We want to know Chinese food industry and gradually train our marketing team for domestic market by this way. In 2005 our board believed that the opportunity of entering the domestic market was ripe. Because we had regular customers' resources, good distribution networks and mature development team, and our company got accumulation-type growth through the development of overseas markets in the first three years, that also laid a good foundation for the development of the domestic market. So in 2005 we began to develop the domestic market.

Why we still choose green food industry while our company explores low-cost

general food market, about this question I think, from the perspective of the environment of Chinese economy, we are very optimistic about the prospects for the development of domestic green food market. First of all, there are lots of food safety incidents which are exposed by media that causes the people worry about the food safety of domestic. I read a report called *Consumer food safety information report for 2010-2011*. The report showed that there were 70 percent people think the food security situation of China is insecure. Secondly, people's living standards and the popularity of environment protection awareness are improved. People pay more attention to healthy lifestyles and consumers are willing to buy green food. So that lays a good foundation for development of green food market in China. Thirdly, in order to implement sustainable development strategies, Chinese government propose lots of stringent requirements about environmental protection for different industries. Government policies also strongly support the development of green food industry. Lots of green food companies get subsidies and special treatments in the whole process from production to sale. So that accelerates development of green food industry.

From the perspective of our company itself, our company is not a company which focuses on production and sale primary agricultural products. Our primary agricultural products are mainly used for raw materials of processed food. Apart from that, scale of our primary agricultural products is small in the market compare with our processed products. So compare with other large-scale companies which focus on production and sale primary agricultural products, we have no advantage in scale, cost and sales channels. For our primary green agricultural products, we don't compete with other competitors by large-scale competition selling, we hope enhance our brand image through the promotion of primary green agricultural products, then help us to promote our green processed food in the market and get profits. Promotion of primary green agricultural

products is only a part of our whole green marketing strategy. We don't expect that we can get the huge benefits form primary green agricultural products market. From the perspective utilization of funds, I think we can get more benefit from processed products than primary products. So our main development direction is green processed food in green food industry.

5. You said nearly 70 percent of people worry about the security of Chinese food safety. There are lots of well-known food companies occurred food safety incidents. Kentucky Fried Chicken (KFC) used in the red dye in its 1,200 restaurants in 2005. This year food products marketed under Shuanghui Group's Shineway brand were produced from pigs that were fed clenbuterol. Although their products are not green food, usually people trust them and believe that their products are safe. According to your several years' experience in food field, do you think what causes this problem?

Safety standards of import and export food in China are very strict, and there are also good legal systems. Usually there is no problem about import and export food. Because commodity are inspected several time from exporting countries to importing countries, the safety standards of importing countries are usually very high. However, there are some loopholes in the regulation of domestic food industry. First, standard is low. For the same commodity, there is a large gap between the standards of food from domestic and standards of imported food. The standards of pesticide residues of food from domestic are several times than the standards of imported commodities, and even some test items are not tested. Second, supervision is not enough. Some food are not systematic tested when they enter into the low-level markets. Supervision departments often only carry out spot checks. Some private and illegal suppliers don't do any supervision in the production process, some unqualified food enter the low-level markets by illegal channels. There are also some food safety incidents in high-level markets, but the

problems still come from raw materials, come from low-level markets. For example, the Shuanghui incident, when the low-level local governments test the raw materials, they only test the pig whether healthy or not, like foot and mouth disease and other diseases. They can't test the presence of some chemicals in raw materials, like Clenbuterol. The work of testing the presence of chemicals belongs to senior local governments. But senior local government departments will not conduct a comprehensive inspection, only carry out sample checks. Therefore, there are some unqualified food existing in the high-level markets.

6. You also said sale of primary green agricultural products is only part of green marketing strategy of your company, and your company focuses on the green processed food in the green food industry. Could you from product itself, product price, product sales channels and other aspects explain for me how your company markets these two kinds of products in the Chinese green market, and what's the different between the two marketing strategies?

We have three sales channels to sale our primary green agricultural products. First, other processing companies purchase our products as raw materials. Second, our products are sold to dealers, or seek agents. Third, we enter into the primary green agricultural product markets directly face consumers. Usually we don't have any promotions when our products are sold as raw materials to other processing companies and distributors. Our consumers place orders and provide specific product information for us six months or one year in advance. We just fulfill orders on time. When we directly face consumers as wholesaler or retailer, our main consideration are sales methods, sales location and price. Our aim firstly is to improve our brand image, and secondary objective is to create profits. Take example for vegetables, from the product itself aspect, firstly we ensure quality and freshness of vegetables which are key point when price of our products are

very similar with price of competitors. Secondly we increase the diversity of products in order to increase the scope of consumers' choice. This is conducive to sale of our products. For example, we classified sale vegetables by size and freshness even the same type of vegetables. From the price aspect, firstly taking into account storage costs and a shelf life of vegetables, our price will be changed according to cost. Secondly we set different price for the same kind of vegetable according to size and freshness to ensure we can sell out our products in the short shelf life. Thirdly we set different price according to different sale locations and condition of competitors in order to increase consumers' acceptance of our products. From the sale locations aspect, we need to make our product faces more consumers who have propensity to consume and consumption capacity, like in densely populated areas and areas with high living standards. From the promotion aspect, characteristics of the primary agricultural products have specificity, for example, like green vegetables, most things like shape, flavor and color are only a little different between green vegetables and general vegetables, and the most difference is the concept of "green". I think almost all consumers know what the concept of "green" mean. We don't need to spend energy do promotions about concept of "green" and product itself, but we pay more attention to the sales methods. For example, we set up special stores to sale green primary agricultural products. From the decoration of store aspect, we create a country-fresh look in order to attract the attention of consumers with the original ecological environment. We don't select the way of gift or special sales, but change the packaging specifications. We have a small amount of packaged products in order to meet the psychology which consumers are willing to try new things. Though most characteristics are same but there is still a little difference in color, shape, flavor and so on. So if they are satisfied, they might buy in large quantities in the future.

We have two sales channels to sale our green processed food. First, find agents or sale our products to dealers. Second, sell products as a wholesaler or retailer. Whether seek agents or sale by ourselves we focus on the sales location and price as same as green primary agricultural products. Our marketing strategy is also including product improvements and a variety of promotional activities. From the products aspect, our main products are instant food. We adjust products' taste, color, shape, and packaging, and also develop new products according to the consumers' demand. There is a high cost of transportation and storage of vegetables because of keeping fresh. Therefore, the geographical scope of sales is relatively limited. But market of processed products is very broad, and the tastes of consumers in each region are different. Some people like spicy, and some people like sweet. So we adjust the proportion of ingredients of our products. From the packaging aspect, we have different packaging forms like small amount and mixed flavors, that's mainly to facilitate consumers to try. There is also a large package in order to benefit for consumers and reduce packaging costs of our products. From sales location and price aspect, our target and method are as same as the green primary agricultural products, and we also select the appropriate sales locations according to the characteristics of the products. We sold products with spicy taste in southwest of China and products with sweet taste in southeast of China. Because most of our products are instant food, so our targets are mainly students and office workers. From the price aspect, we set price according to the regions and the situation of competitors, but we don't blindly pursue low prices. I think as long as our price are kept in a price range which consumer can accept, quality and brand are the key factors of success. From the promotion aspect, we also don't put the concept of "green" as the core of our promotions in the promotion process, but focus on the other features of products. We introduce features of our products to consumers by more active promotions. The features of our instant food are not distinctive visual as same as green vegetables, consumers don't understand our products until they try. So we introduce our products by gift

and special sales, and also seek high reputation agents to explore market, and we also develop different kinds of new products to meet different consumer groups. However, whether primary green agricultural products or green processed food most of our target are high income group.

7. I think prices are the main factors affecting consumer purchase, could you explain for me what factors result in the high cost of green food?

Take example for the green agricultural products and general agricultural products, the cost is increased in each link during the process of green products from production to final sales. In each link green products are required to be test by certification authority in order to insure green products are qualified throughout the whole process. First of all, place of origin is different. The standards of soil, water, air and surrounding environment of the cultivation of green agricultural products are higher than the cultivation of general agricultural products. And environmental quality cannot be dropped in the production process, so the rate of standard planting bases is higher than the general planting bases. In the cultivation process, the use of pesticides and labor force are different. Pesticides which are allowed by government can be used for general agricultural products, but there are strict limitations for green agricultural products. Under the premise of ensuring the production, organic fertilizers can be used for green products, so it will increase cost green products. Quality of environment need to be monitored in the production process, the workload is more than the normal, so it will increase labor cost. In the process of transportation and storage of green product, it is necessary to ensure conducive to environmental protection, energy saving in addition to not subject to contamination and deterioration. Processing equipment of green products are required disinfection of high frequency in the course of processing and packaging. The packaging materials should be reduced or avoided waste generation, and it also should be easy to recycle, reuse and decompose. The

high cost of green agricultural products causes high price, so green products usually don't enter low-level markets. The consumers of low-level markets prefer purchase low-price general products because they have low income level, and suppliers of green products need to pay lots of different management fees if they provide their products to high-level markets, so it further increases the cost. Therefore, the high price of green products is cause by many factors. But I think the high cost is only one of reasons which result in high prices.