Chapter 3

Market opportunity analysis for food packaging industry in Shanghai

1. Macro-environment

1.1 Geographic environment [Kuang, 1995]

Shanghai, one of the largest commercial cities of China, is situated at 31" 14' north latitude and 121" 29' east longitude. Its western border lies toward Jiangsu and Zhejiang province. Its eastern and northern borders face the East Sea and Yangtze river respectively, while Hangzhou bay is on the south of Shanghai. Therefore, it is said that Shanghai has very advantageous geographical conditions : Inland and sea transportation, and good natural harbour. Figure 3.1 demonstrates Shanghai's geographic location. [Glasse, 1994]

The weather in Shanghai is warm and humid all year round with average temperature at 16°C. In August, the climate temperature would be 20°C, considered the hottest month. On the other hand, the lowest temperature would be 3°C in January. The total area of the city accounts for 6,340.5 Sq Km, 120 Km from North to South and 100 Km from East to West. Shang-Hai area has been administratively divided into thirteen urban districts, six urban counties, and a new area, namely "Pudong".

So far, Shanghai [Leong, 1993] is recognized as one of the best telecommunication system available. On account of its long history and entrepreneurial habit, Shanghai has very high potential in linking into international business.

1.2 Demographic environment [Glasse, 1994]

From Figure 3.2 to 3.4, it can be concluded that urban area is becoming bigger, on the other hand, suburban area is getting smaller as the time goes by. That means the development of civilization of Shanghai. And when considering the structure of population, it can be seen that people with twenty to fifty-nine years old period are the biggest groups of population in Shanghai. That reflects a large number of working people in Shanghai.

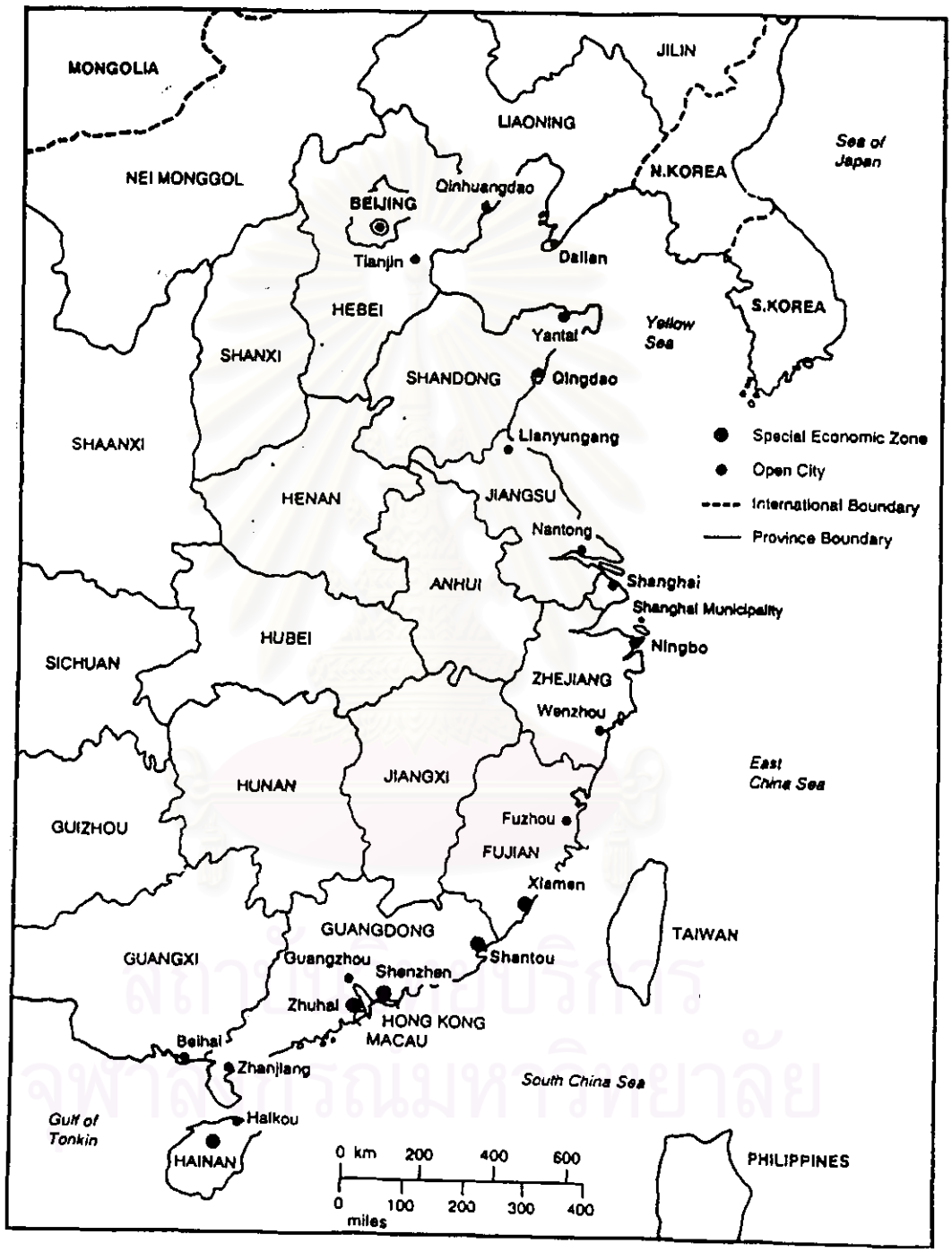

Figure 3.1 Shanghai's geographic location [Glasse, 1994]

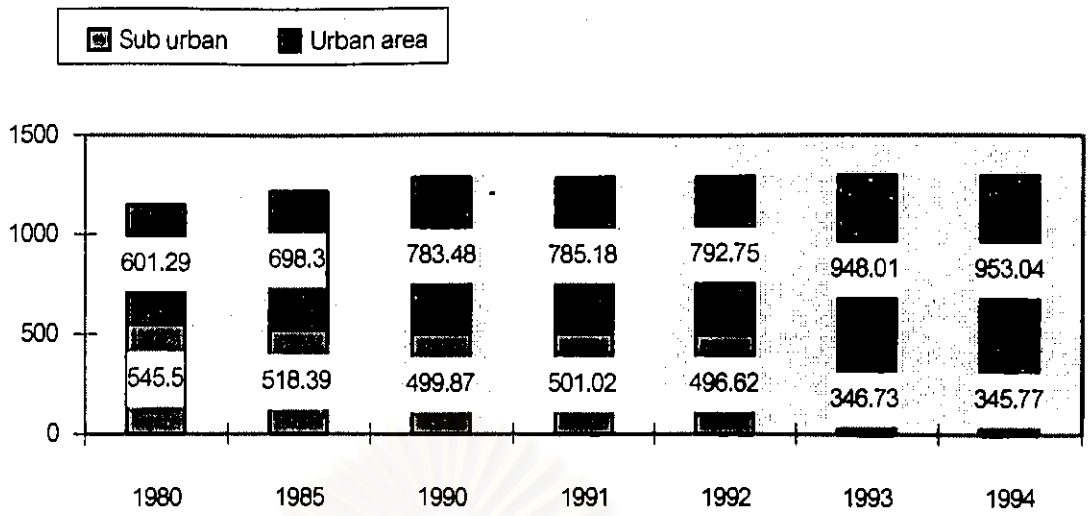

Figure. 3.2 : Population in Shanghai by Urban and Suburban 1980 - 1994 (unit : 10,000) (Kuang, 1995)

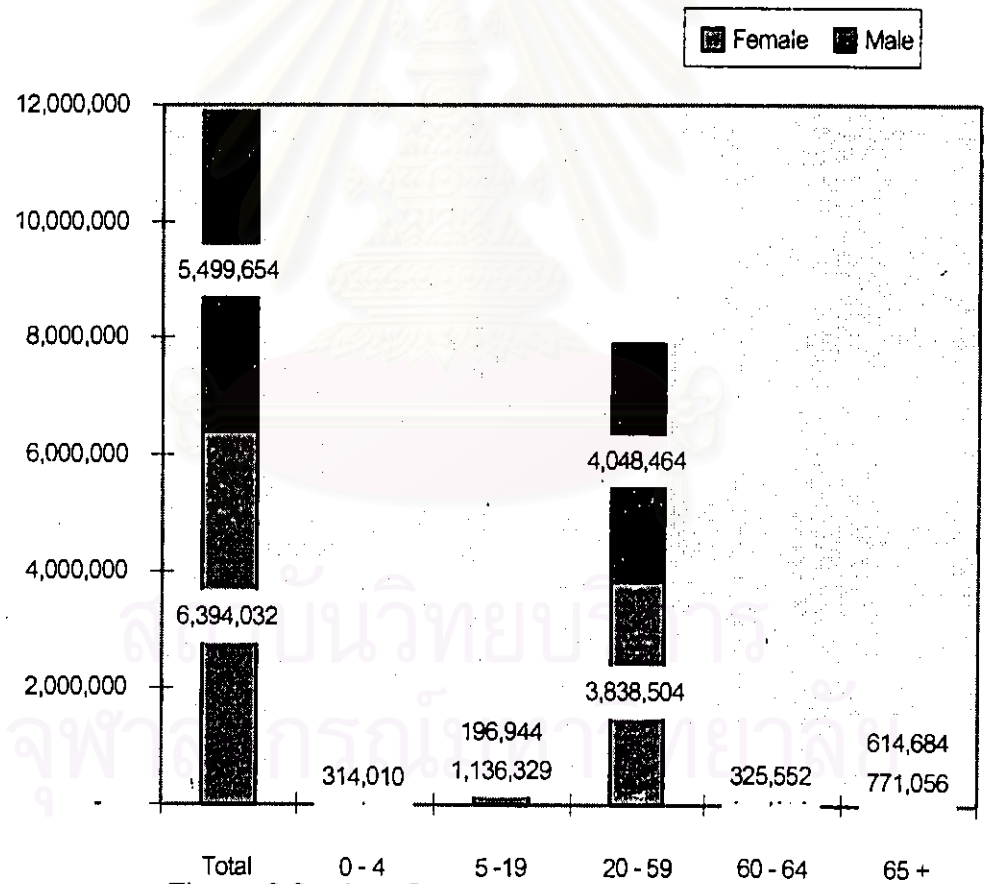

Figure 3.3 : Age Structure of Population in Shanghai, 1992 (Kuang, 1995)

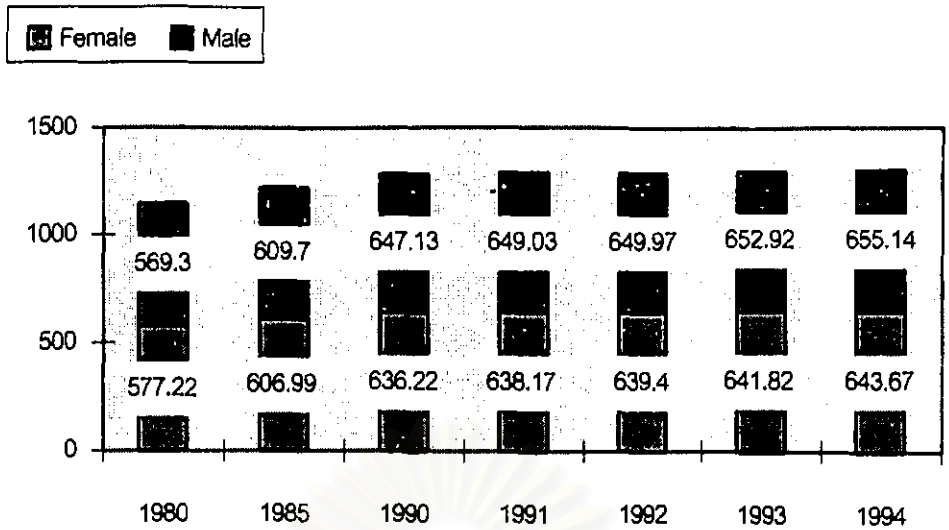

Figure 3.4 : Population by sex in Shanghai, 1980 - 1994 (Unit : 10,000) (Glasse, 1994)

1.3. Natural environment

1.3.1 Energy [Pennells, 1994] With respect to packaging industry, the need for power has mainly required electricity. Officially, it is said that electricity shortage will not take place in Shang-Hai. Sources in the business community nonetheless disagree with that. They believe that the electricity supply capacity can not come up with the current demand whereas such supply estimate accounts for 85% of demand estimate. Astutely, electricity supply is managed to facilitate economic zone, foreign business area and their accommodations.

The demand for power has been forecast to increase by 15% yearly. This indicates the power situation are turning out to be worse unless the government measures are capable of handling the expected rise in demand. Currently, managers in the Shang-Hai Minhang Economic and Technological Development Zone (ETDZ) say that electricity problems have been solved. Occasion power cut will be done solely for maintenance purpose with advance notice and less frequently than the early day.

1.3.2 Environment [Glasse, 1994] In China, environmental legislation is barely recognized even though pollution is becoming a major problem, especially in the industrialized area. Aiming to develop the economy while disregarding the consequences of environment side effects. China will therefore experience such growing pains. Such situations have taken place over and over again in the developing countries. It can be seen as in many cases :

* **Polyvinylchloride (PVC)** : Technically, Chlorine gas has been released during PVC processing. Such gas, as ones know, is one kind of the Green House Effect Gases, capable of depleting Ozone shield. In fact, PVC demand for China consumption is anticipated to climb up with steady growth rate owing to the recent government measures through lowering interest rate and providing better loan access.

* **FOAM (Expanded Polystyrene)** : On account of highly increasing foam demand, many joint-venture projects have been performed to establish new manufacturing facility, for example the Yangtze Petro-chemical and BASF and SINO-KOREAN. Technically, FOAM yields negative side environmental effects in terms CFC and recycle problem.

* **Chlorofluorocarbon (CFC)** : Currently China is [Vitoonthien, 1997] the biggest CFC producer of the world while such chemical has been forbidden in the developed countries and furthermore, United Nation (UN) has strongly supported to stop CFC usage in all countries.

Nonetheless, such mentioned environmental problems will be aware and eliminated by the government. Initially, Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and China's state Bureau of Environmental Protection have announced measures focussing on recycling of waste products, particularly plastics, glass and paper. Generally speaking, it must take a certain period of time until Chinese government and people will become aware of so.

1.3.3 Raw material [TM, 1997] Plastic packaging has mostly used plastic resin, processed by petrochemical reaction (e.g. polymerization, condensation). It is currently said that the supplier capacity has been climbing up to keep up with current resin demand whereas some of them still have to be imported from abroad. It is expected that local suppliers would satisfy most of the domestic demand by the turn of the century. The table 3.1 indicates the potential activities of plastic resin makers.

1.4. Technological environment [Glasse, 1994]

In relation to plastic packaging technology in China, it is generally said that plastic technology remains underdeveloped as Thailand did. All packaging technology mostly came from Japan, United State, and Germany. Packaging products have mainly produced in Zhenjiang, Jiangsu, Zhuhai,and Tianjin (Northern China). Few people were trained in modern packaging design and engineering. Local packaging companies still then have not adequate capacity to handle on-going market growth. These suppose to reflect the available product quality in China market.

1.5 Political / legal environment

Currently, Shanghai [Pennells, 1994] has been considered as the most lucrative tax base in China. All revenues collected by local government (Shanghai) have to go to central government (Beijing) and then partially flow back until two years ago. According to the negotiation between Shanghai and Beijing, not all revenues flow to Beijing and many measures have been improved to facilitate foreign investment. This is in order to promote more autonomy of Shanghai. It can be seen that Shanghai is capable of approving foreign investment projects up to 30 million US$, while in other cities, the maximum is merely 10 million US$.

Table 3.1 Potential activities of plastic resin manufacturers in China[TM, 1997]

Plastic resin manufacturer	Activity	Capacity
Dow chemical and Sinopec (Joint-venture)	Major integrated petro-chemical complex	600,000 Tons/year
Yangzi Petro-chemical	Polystyrene and Polyester plant	120,000 Tons/year
Yangzi Petro-chemical and BASF (Joint-venture)	Polystyrene plant	100,000 Ton/year
Sino-Korean	Polystyrene plant	105,000 Ton/year

Central government prefers sustaining their power to Shanghai anyway. In this way, pharmaceutical, pesticide licensing, import quotas, trade issues and sensitive industries still belong to Beijing's responsibility. That means the large business must essentially solidify the close relationship with both Beijing and Shanghai. New investors must spend the time for building such important network connection through government trade official, Chamber of Commerce, and also diverse social groups. It is noted that communist party is still the primary key to prosper the business and society.

Altogether, investors are also to take account of corruption issue in the fact that : Eat with government and business contact. Drink with them. Give them brochures and company souvenirs. But do not seriously pay bribes or any fee until regulations allow to do so.

In relation to packaging dealing with legislation and organization, packaging industry sector is confusingly administered by bewildering number of diverse ministries and organizations : Minister of Agriculture, the China National Packaging Corporation, The Minister for Material Handling and Various Regional Packaging Associations. several law related to packaging [Glasse, 1994]can be mentioned as follow :

* **Copyright Laws** : Commonly, Copyright infringement is still widespread in China, despite such laws being introduced and deployed.

* **Tax encouragement to foreign investment** : It is said that tax rate, reviewed by Minister of Finance, tends to become more favorable for foreign funded-enterprise in China : Canned food tax rate was reduced from 10% to 5% and the tax on beer from 40% to 25%.

1.6. Social / culture environment [TM, 1997]

China has a remarkably high economic growth rate for a few years. That subsequently impacts on social / culture environment either way, especially, people in east coastal cities where foreign investment mainly established have been changed. Such changes can be addressed as follow :

1.6.1 Nucleus family Nucleus family means that the family constitutes three or four persons per family. Such family life style seems to be the same as the big cities in many countries.

1.6.2 Better life standard Due to higher income on average, people basically needs better life standard, like health consciousness, house-hold appliances, recreation and so on.

1.6.3 Accommodation In shanghai, a number of employees live in apartments which commonly provide quite small space : bed room, living room, restroom.

1.6.4 Family planning Owing to rather excessive number of Chinese population, government has deployed family planning measure so as to keep control birth rate : such measure strongly limit only one child per family. Otherwise, the family having two or more children will gain any government welfare solely for the first child. It is noted that China has been ruled by Communist party whose welfare considered very importantly for Chinese people to earn their life, for example education, health-care .,etc.

1.7. Economic environment [Kuang, 1995]

Income distribution of Chinese population which can primarily reflects purchasing power of potential China market can be categorized into three sorts of consumers as follows : [Leong, et al., 1993]

1.7.1 The Super Rich

Annual income	:	Averaging US$ 5,000 and above
Population size	:	4 Million
Composition	:	About 80% are self-made entrepreneurs 15% are highly-paid (by Chinese standards) professionals working in join-ventures remaining 5%are government officials and civil servants.
Taste	:	Expensively branded foreign imports from Rolex watches (Cost up to US$ 20,000 and Mercedes and BMW to auctioning for number plates for such cars; often spotted at the brokerage houses around Shanghai where elite come to play in the stock-market.
Lifestyle	:	Luxurious and comfortable but remains low profile and are too busy for hobbies and holidays
Location	:	Mainly in Guangdong, Shanghai and Beijing
Personal Traits	:	An autocrat, living up to his "nouveau riches" well travelled and confident; may not be highly educated

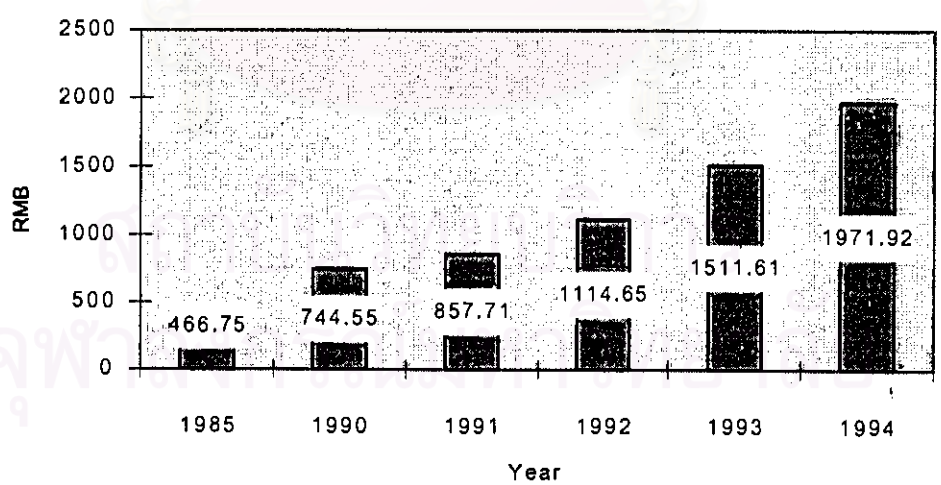

Figure 3.5 : GDP Achievement of Shanghai, 1980-1994

(Unit : 100 million RMB (Glasse, 1994)

1.7.2 The Rich

Annual income : Averaging US$ 3,000 and above

Population size : 30 Million

Composition : Mainly (about 90%) young professional "Yuppies" in their late 20s and early 30s, working for joint-ventures.

Taste : Imported, middle-range branded items; while the Super Rich goes for Gucci, Lanvin, Lacoste and Rolex, the Chinese Yuppies buy Goldlion ties, Siverlion shirts, Van Garie belts and watches made by Rado of Switzerland.

Lifestyle : Completely subscribe to the official line that to get rich is glorious ; high profiled and openly "flaunting"their newly acquired taste and wealth; love the "Good Life" and can be founded especially in 24 hour Western fastfood chains and discothque, such as MacDonald at Beijing's trendy Wangfrujing Street or at the Shanghai Disco in the Shanghai Hilton.

Location : All the rich urban areas especially Guadong and Liaoning.

Personal Traits : Confident, elegant, ambitious, cosmopolitan and may have been exposed internationally through traning stints.

1.7.3 The Mass Consumer Market

Annual income : Averaging US$ 1,500

Population size : 150 Million

Composition : Less educated and lower level workers in joint-ventures, middle-level civil servants and dependents of Yuppies.

Taste : High consumption of food and household items such as electrical appliances-branded, including locally made.

Lifestyle : Still very basic but increasingly enjoying higher ranged consumer necessities.

Location : Mainly urbanities in the better-developed cities and SEZs as well as the coastal provinces of Shangdong, Jiangsu, Zhejiang, and Fujian.

Personal Traits : Simple-minded but materialistic, easily over-awed by modern gadgets and overseas products.

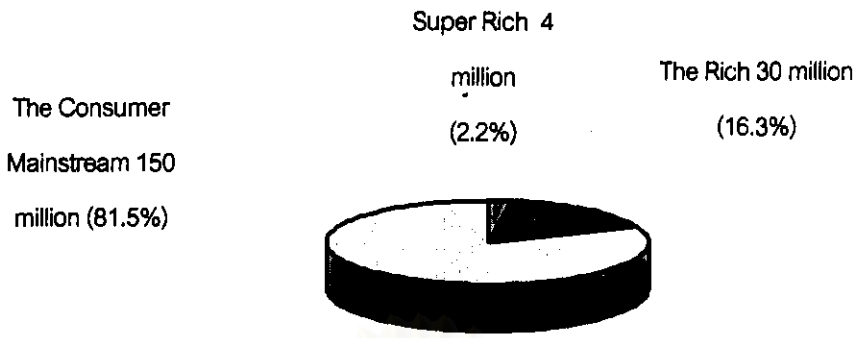

Figure 3.6 : China consumer market profile

Total Consumer Society : 184 million representing some 15.3% of the total population base.(Leong, and Lim, 1993)

2. Micro-environment

Market profile for packaging product prospects [Kotler, 1997] in Shanghai market were figured out by using the following methods :

* Observational and survey researches : This researches are best suited for descriptive market information. Such researches generally explain about consumer behavior (e.g., preference, belief, knowledge), available products and their features, and competitor profile.

* Contact method : This contact method are mainly personal interviewing. Most interviewees were key persons who worked for potential customer organization (e.g., supermarket, fast food store, food manufacturers and so on.) In some cases, potential competitors were informally interviewed.

* Sampling method : To estimate the demand and its growth, simple sampling data were collected by way of head count at various targeted places, such as supermarkets, fast food stores., etc.

* Expert opinion : Afterwards, such gathered information was brought into expert and staff meeting to discuss whether such information are reliable / possible and then adjust them.

The concluded market profiles for packaging product in Shanghai are therefore illustrated as below :

2.1 Foam box [TM, 1997]

2.1.1 Demand 210 million boxes/year

2.1.2 Product features

Lunch foam box : Its design (tray, cover, and hinge) is made solely for a food meal.

General purpose : Such sort of design is used for containing some other foods (eg., dessert, fruit) everywhere.

2.1.3 Competitor

Laiwell : Sale amount accounts for 60 million boxes/month.

Jinfong : Sale amount accounts for 60 million boxes/month.

The rest are small factories being situated all around Shanghai.

2.1.4 Consumer behavior

2.1.4.1 Chinese people customarily eat hot and oily food (eg., boiled rice, noodle, fried rice.)

2.1.4.2 Price of foam box is considered more importantly than quality of product.

2.2 Drinking cup [TM,1997]

2.2.1 Demand 240 million cups/year

2.2.2 Growth rate The growth rate of drinking cup could step up in parallel to the growth of user. It is then expected that the growth of fast food accounts of 60% per annum. And, the growth of other user group is approximately 20% per annum.

2.2.3 Product features

2.2.3.1. Paper cup : cup 9, 12, 16, 22-oz. The highest consumption is 16-oz cup.

2.2.3.2. Polypropylene cup (PP) : cup 9, 12, 16-oz. Such sorts of cup are mainly used for hot drinking and carbonated drinking. Cups predominately need printing for better appearance for example, COKE, PEPSI and some other product brands.

2.2.4 Competitor

2.2.4.1 Paper cup : Zhongyue cup : Zhuhai, Sweet Heart :

Shanghai, Nanjing

2.2.4.2 Plastic cup : Shensi Tianli Plastic Company: Zhejiang
Xiangshan Yinzhou Plastic Company :
Zhejiang

2.2.4 Additional points

2.2.4.1 12-oz cup is generally used.

2.2.4.2 Plastic cup and paper cup are equally used in common markets except fast food where paper cup is more preferable.

2.3. Dish / Tray / Lid [TM,1997]

2.3.1 Demand Dish : 40 million dishes/year
Tray : 40 million trays/year
Lid : 50 million lids/year

2.3.2 Growth rate 20% per annum

2.3.3 Product features

2.3.3.1. Dish Material : Polystyrene, Oriented Polystyrene
Shape : Diameter 125 - 155 mm. (Small dish) and 184 - 186 mm (Big one)

2.3.3.2 Tray Size : Approximately ten sizes are available in common markets whereas three of them have more frequently been used for containing fruits and vegetable.

2.3.3.3 Lid : This product application is actually to used with cup and four sizes are available in the markets. Most of them are made from Polystyrene. Firstly, hot lid for 9-oz cup is 81 mm of diameter. Secondly, cold lid for 9-oz cup is similarly 81 mm of diameter. Thirdly, cold lid for 12-oz cup is 84 mm of diameter with punched hole right in the middle. Lastly, cold lid for 16-oz cup is 93 mm of diameter with punched hole. Such hole is designed solely for straw.

2.3.4 Competitor Gin Yuan Fu Group : Sole Polypropylene dish and tray manufacturer posses market share of 10% in the market Shanghai Number 3 : Oriented

Polystyrene tray manufacturer

The other considerable suppliers are Laiwell, Jinfong and a plenty of small foam manufacturers.

2.3.5 Additional points

2.3.5.1 Low price is far more preferable.

2.3.5.2 By dish application, It is recommended that material should be polypropylene due to hot / oily resistance.

2.3.5.3 Tray has been remarkably proliferating on account of high growth of retail store and the related industries (e.g., vegetable, meat, seafood manufacturer)

2.4. Yogurt cup [TM,1997]

2.4.1 Demand Approximately 70 – 80 million cups/year

2.4.2 Growth rate Very high

2.4.3 Product features

2.4.3.1. Danone : Polypropylene cup has 66 mm of diameter and 81 mm of height. Also, four to six color printing is necessary for this product.

2.4.3.2 Yoplait : Its shape is same as Danone' s. But it has been made from Polystyrene.

2.4.3.3 Leed : Polystyrene cup has 68 mm of diameter and 84 mm of height. Four color offset printing is required.

2.4.3.4 AOQi : Polypropylene injection cup has 69 mm of diameter and 90 mm of height. This product needs Gravure printing process

2.4.4 Competitor

2.4.4.1. Zijiang Company Limited : Danone and Leed.

2.4.4.2. Fucheng : Yoplait

2.4.5 Additional points Intense competitive situation

All of customer factory is situated in Shanghai.

Premium quality is seriously required.

2.5. Ice-cream cup [TM,1997]

2.5.1 Demand Approximately 70 million cups/year. Four main brand names are available in the market : A&B, Meadow Gold, Mountain Cream, and Wall.

2.5.2 Product features

There are two distinctive ice-cream cups. Firstly, cup and its transparent lid made from Polystyrene.
Secondly, this sort of cup is made from paper and has 86 to 88 mm of diameter and 49 to 52 mm of height.

2.5.3 Competitor

2.5.3.1. Tianjin Sweet Heart : Paper ice-cream cup

2.5.3.2. Zhejiang Haiqi : Polypropylene ice-cream cup

2.5.4 Additional points

2.5.4.1. Despite overall demand seeming to be rather high to be economy of scale, too many various shapes of ice-cream cup are available in the market place.

2.5.4.2. Ice-cream companies have a tendency to change their package from paper to Polypropylene.

2.6. Noodle bowl / bowl [TM,1997]

2.6.1 Demand Approximately 150 million noodle bowls/year.
Approximately 50 million bowls/year

2.6.2 Product features

2.6.2.1. The most popular shape of noodle bowl is 147 mm of diameter and 67 mm of height.

2.6.2.2 Printing process is not necessary for this product.

2.6.2.3 Bowl : Small size is 135 mm of diameter and contains ten to twelve oz.
: Large size is 145 to 180 mm of diameter and contains 24- oz or more.

2.6.3 Competitor

2.6.3.1. Laiwell

2.6.3.2 Jinfong and the remainder are a number of small factories around Shanghai.

2.6.4. Additional points

2.6.4.1. Price is the most important factors for making decision to purchase.

2.6.4.2 Foam bowl tends to be forbidden due to government's environmental concerns.

2.7. Tray in bag [TM,1997]

2.7.1 Product features

2.7.1.1 Most of trays are made from Polypropylene due to microwavable application.

2.7.1.2 Polyvinylchloride and Polystyrene tray nonetheless are existing in the market place.

2.7.1.3 Bag requires Gravure printing process.

2.7.1.4 A number of tray shape are available. This is because such trays are designed in accordance with the various sizes of food stuff.

2.7.2 Competitor A number of small factories are situated all around Shanghai and Zhejiang.

2.7.3 Growth rate 20 - 25% per year

2.7.4 Additional points Market size is still small and constitutes many various sizes and shapes.

2.8. Egg tray [TM,1997]

2.8.1 Demand About two million packs/year for export market.

2.8.2 Growth rate 20% per annum

2.8.3 Product features

2.8.3.1. Sizes of egg tray are standardized : 6-egg tray, and 10-egg tray.

2.8.3.2 By its application, egg tray should be fed properly through automatic egg packing machine.

2.8.3.3 Transparent egg tray is more preferable. This is because buyer 'd like to see through all eggs containing inside.

2.8.3.4 Egg tray for local market has relatively low quality.

2.8.4 Competitor

2.8.4.1. Jinyuanfu : Low quality product solely for local market

2.8.4.2. Imported product : This egg trays, namely "BKS", have been imported from Austria to develop the China market.

2.8.5 Additional points

2.8.5.1. Locking mechanism is recommended on the purpose of product protection.

2.8.5.2 Like some other package product, price supposes to be the important factors to which user pay attention.

3. Buying Behavior

3.1 Purchase decision [TM,1997]

To make decision about select packaging product is mainly based upon intermediary user, such as food manufacturer, retail business, or other product manufacturers .,etc. It is noted that the aim of using packaging product is to protect, preserve and improve the appearance of product inside. It is therefore recommended that packaging product needs marketing activities focusing on intermediary user rather than does on end user.

3.2 Barely take concern of packaging implications [TM,1997]

A number of users barely realize so; even though, such packaging may evidently contribute to value added product. It can be seen as the following examples : Improper packaging material for fresh meat may spoil its taste, color, and quality. That results in product loss. Or, packaging product for electronic components needs appropriate material. Basically, electronic components have Electro-Static Discharge (ESD) that is likely to induce electro-static reaction with inappropriate packaging material. If so, such electronic components will damage.

Practically, marketers are to educate all users to take awareness of counter balance aspects : Right material / application, Hygienic human need, and Environmental friendly. All aspects can eventually lead to the appropriate packaging usage.

3.3 Low price and satisfied quality [TM,1997]

This is certainly the basic buyer requirements. Currently, it is said that the existing packaging products are, available in China market, seemingly lower quality

but indeed cheaper price than Thai packaging products. That supposes to be one of the market opportunity if effective marketing plan has been done and accomplished.

3.4. Life style [TM,1997]. [Kotler, 1997]

In fact, China is, having the population of 1.2 billion, considered the biggest population size of the world. In marketer's view, people's life style, especially in Big cities, has a tendency to eat fast food, travel with effective mass transit, and stay in a small room in the apartment .,etc. When thinking about their food and packaging that is one of their substantial part in their life, they needs ready to cook food, with disposable, microwavable / ovenable packaging. Recently, Chinese government has furthermore strongly promoted microwave industry aiming to produce cheaper microwaves for every family. Food packaging industry has correspondingly benefited so.

3.5. Buying process [Pennells, 1994].[TM,1997].[Kotler, 1997]

As mentioned previously, marketing activities should be mainly developed toward intermediary users. It is very necessary that marketer must find out who play the following roles in our potential customer organizations :

3.5.1 Initiator : A person who firstly suggests the idea of buying the product or service.

3.5.2 Influencer : A person who views or advise influences the decision.

3.5.3 Decider : A person who decides on any component of a buying decision whether to buy, what to buy, how to buy, or where to buy.

3.5.4 Buyer : A person who makes the actual purchase.

3.5.5 User : A person who consumes or uses the product or services.

The scheme (figure 3.7) represents distribution channels for food packaging products in China. In the old days, all distribution channels belonged to state-owned distribution department of China government until the early 1990s. Their state-owned distribution networks are hierarchical administered into three levels : state, provincial, and municipal.

Currently, private-owned organizations are capable of legally doing distribution activities in China. As a result of that, state-owned organizations themselves tend to privatize to be able to sustain their competitive advantages.

Nonetheless, such organizations' networks are still effective in remote markets. It is noted that all big cities are situated along the east coastal area and not many private-owned organizations are available in the western areas.

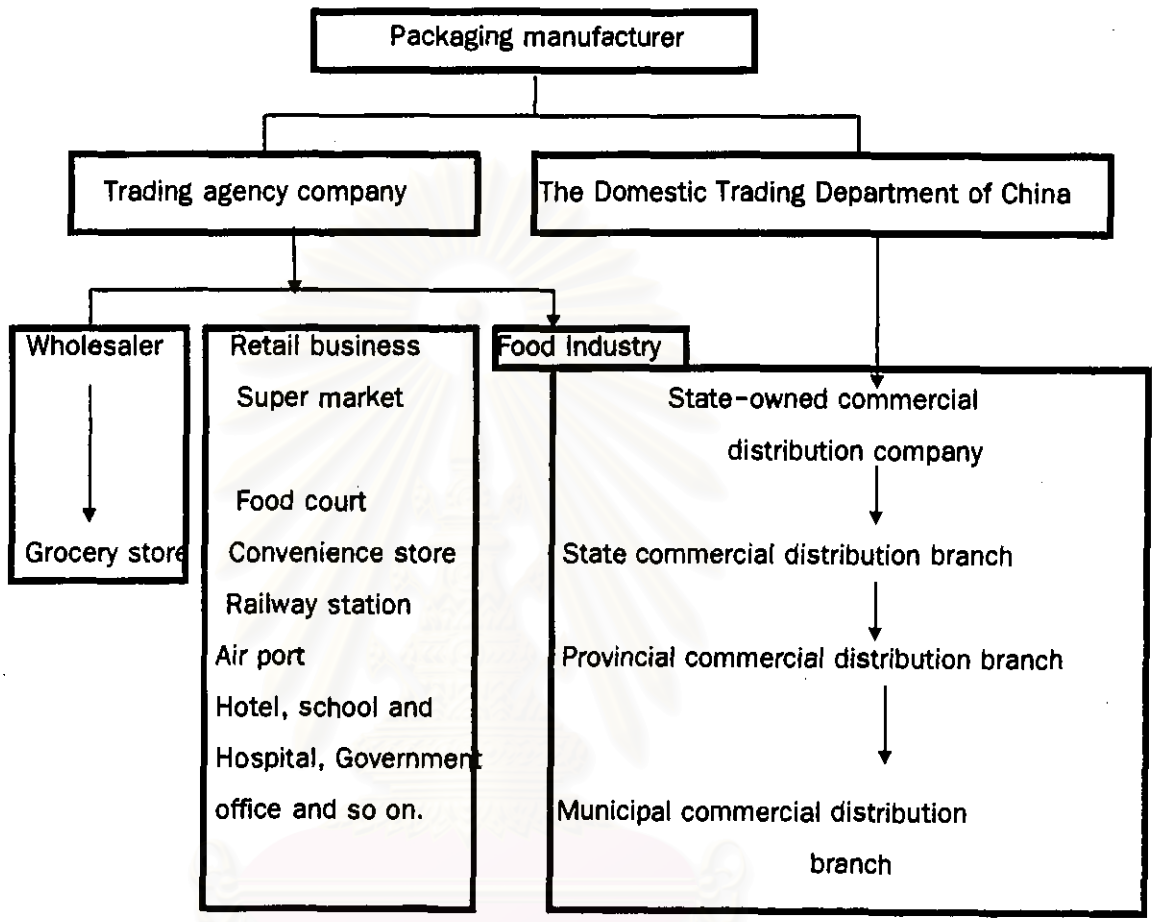

Figure 3.7. Distribution channel scheme of the whole China market [TM,1997]

4. SWOT analysis

4.1. Opportunities

4.1.1 Poor packaging product [Glasse, 1994], [TM,1997]

It is generally said that packaging product quality is rather poor on account of outdated technology and inexperienced packaging technology. As a result of that, many poor packaged products have been damaged on the way to user, or improper package usage may bring about the harmful chemical, for instance Polystyrene package chemically interacts with oily food and styrene monomer may harmfully spoil such food.

In recent years, Chinese goods have had to be shipped to Hong-Kong where they are repackaged and then sold for export. The Chinese government has therefore strongly promoted packaging industry. A 670,000 square meter packaging industrial zone planned for the city's Pudong Economic Zone which will become the hub of the packaging industry in east Shanghai.

4.1.2 Retail business boom [Glasse, 1994], [TM,1997]

Food packaging business get basically related to retail business. In parallel to high growth rate of retail business scale, packaging industry must speed up themselves to catch up such growing down-stream demand.

4.1.3 Some forbidden packaging material [TM,1997]

In the future, Chinese government will potentially prohibit some material usage, for example foam and Polyvinylchloride as mentioned earlier. To do market activities for substituted material, for instance Polypropylene, Polystyrene and so on, may work in replacing foam and PVC market.

4.1.4 Trends in substitution packaging material [TM,1997]

In China market, some packaging material tends to be partially replaced by plastic material. It can be seen as in case of paper packaging. Basically, paper is made from wood. As ones know, woods are becoming depleted and thus its price are going to come up. Competitively, plastic turns out to be a good substitute material to share paper packaging market.

4.2.Threats

4.2.1 Under supply of raw material [Glasse, 1994]

Until recently, packaging industry suffers from under supply of raw material. Due to the economic austerity measures in place, import activities have been restricted accordingly. Chinese government is however going to gradually liberalize the economy and promote petro-chemical industry, being up-stream industry for packaging industry. By the year 2000, such problems are expected to be eliminated.

4.2.2 Bureaucratic delay [Leong, et al., 1996]

It is noted that China has still been ruled by the Communist Party whose bureaucratic system involves rather poor administration, management competency, ideological rigidities and policy factors. Accordingly, these factors may delay project negotiation process, unless the real decision makers in Chinese business dealings are not addressed. Crucially, the establishment of personalized through networks must be conducted in China.

4.2.3 Customer perception [TM,1997]

In general, most Chinese customers pay highly attention to price rather than other significant factors. (e.g., quality, hygienic) The marketers have therefore got to do their tough homework to develop so.

4.2.4 Competitive Intensity [TM,1997]

On account of on-going Chinese market opportunity, competitive situation is certainly going to become more intense in terms of new potential comers and existing high capacity market share holders. This is because such packaging product prospects seem to be indifferent and easy to duplicate. The most considerable competitors in China is Taiwanese investors who have owned technology and they have historically had Chinese race. That means advantages in many ways in comparing to some other foreigner investors (e.g., language, culture, racism.)

4.2.5 Transportation [Glasse, 1994]

Transportation in China still remains a major problem in the fact that too few good roads are available and the best China transportation system is railway.

Such problem supposes to obstruct the business development unless the Chinese government can not solve such obstacle.

4.2.6 Tax and duties [TM,1997]

Actually, the machine import tax and duties are so high and very often changeable that lower and fluctuate the financial profitability of the project. Furthermore, Chinese government still remains inconsistency in practical foreign investment policy.

4.3.Strengths

4.3.1 Business and technology familiarization [TM,1997]

To do a business in China, the strategic direction of this project is to firstly concentrate on packaging business. This is because Thai Modern Plastic Industry Plc (TM)'s core competency is packaging industry. This indicates the business and technology familiarization in packaging business.

4.3.2 Strongly joint-venture partner [TM,1997]

Having readily signed up Memorandum of Understanding, CP inter-trade has been playing a significant role of joint-venture partner. As ones know, Charoen Pokphand (CP) is considered a big Thai multinational corporation, having doing several sorts of business in China. These also include retail business that supposes to be the potential customer base. It is unarguable that CP is highly capable of supporting the new packaging company in terms of marketing base and also networks of connection.

4.3.3 Proper strategic policy [TM,1997]

As TM's owned experience, they have been suffering from several problems caused by technological-driven management. That can be seen as a couple of projects that perform unprofitably in Thailand plant. Radically, marketing information and analysis were not done thoroughly and they subsequently brought about making incorrect decision. It is then strongly said that such China project's strategic policy can lead to better doing business in China.

4.4.Weaknesses

4.4.1 Distribution channel [TM,1997]

At the early stage, cost of goods distribution may be relatively high because the company still not have his owned distribution channel and it thus has to use external existing distribution channel. In other word, it is said that marketing base still be narrow at the beginning.

4.4.2 Chinese staff skill [TM,1997]

Despite mentioned packaging business familiarization being recognized, the company still needs many skilled Chinese people to handle almost activities but they actually have not enough skill to do so. That may subsequently bring about dissatisfied quality, service., etc.

4.4.3 Different culture and life style [TM,1997]

Chinese culture and their life style have uniqueness. Thai staff have got to adapt themselves to get along with such culture and life style. Perhaps, they may feel uncomfortable and affect negatively on their jobs.

5. The TOWS Matrix

5.1. SO strategies

5.1.1 Step by step product development

By using business and technology familiarization, step by step product development is an appropriate strategy that enables the company to sustain their leading edge among packaging companies in China.

5.1.2 Market oriented management

As mentioned previously, this strategy is necessary for doing future business in China and international market.

5.1.3 Constructive connection to government

The joint venture partner has ability to build up a good connection to both Beijing and local government. This will consequently benefit the new company in the long run.

5.2. ST_strategies

5.2.1 Existing_core_competency

As discussed before, existing core competency can deliver the solution to operating cost competitiveness, reliable quality, and service. In addition, it is necessary to continue educating the users about packaging applications. This will consequently bring about proper finer market segmentation, targeting, positioning and market activities in the future.

5.2.2 Good_connection

Good connection to government can facilitate in negotiation to do short term global sourcing and eliminate some other obstacles. This is because it is expected that the new company will inevitably face insufficient raw material supply and bureaucratic delay situation.

5.2.3 Strategic_alliances

Severe competition in China will happen. In some cases, to build up strategic alliances is a good alternative to be win-win situation.

5.3. WO_strategies

5.3.1 Training

Training is one of the other important thing to be taken into account. This is because Chinese staff still inexperience in packaging application and its technology.

5.3.2 Local_staff

Owing to difference in culture and life style, It is suggested to employ local staff as many as possible.

5.4. WT_strategies

5.4.1 Local_partner

Good local partner enables the new company to overcome many future obstacles. It is then strongly recommended that this local partner will take responsible for general management.

6. Segmentation, targeting, and positioning

6.1. Market segmentation

Theoretically, market segmentation can be done in many ways as appropriate. In this case, market segmentation for China market may be done by geography and user group as illustrated below.

6.1.1 Geography [TM,1997] Geographically, the regions whose market potential tends to be considerable powerful are Shanghai, Beijing, Tianjin, Guangdong, Zhejiang, Jiangsu, Fujian, Shandong, and Hubei.

6.1.2 User groups [TM,1997] By user groups, market segments are :

6.1.2.1 Carbonate drinking : Coke, Pepsi, and so on.

6.1.2.2 Fast food : Chinese fast food, American fast food.

6.1.2.3 Ordinary food shop, office and other public areas.

6.1.2.4 Food court, super market

6.1.2.5 Railway ministry

6.1.2.6 Food stuff packer : vegetable, fruit, dessert

6.2. Market targeting

6.2.1 Geography [TM,1997]

According to geographical segments, market targets should then be Shanghai, Beijing, Tianjin, Jiangsu, Hubei, Shangdong, and Zhejiang. This is mainly due to transportation, and purchasing power.

6.2.2 User groups [TM,1997]

In this point of view, it is founded that market targets should be :

6.2.2.1 Drinking cup : food court / super market, railway ministry, carbonate drinking, and ordinary food shop

6.2.2.2 Tray : super market, and food stuff packer

6.2.2.3 Bowl: Chinese fast food, food court, ordinary food shop and other public areas.

6.2.2.4 Dish: Chinese fast food, food court, ordinary food shop and other public areas.

6.3. Market positioning

Packaging products are considered the industrial products whose direct customers are, such as food manufacturers, retail store, and so on. Due to business/ technology familiarization in Thailand that has more development than it did in China, the product positioning is to offer better quality product (e.g., appearance, physical properties) at market price and moreover take account of technical and delivery service.

7. Marketing plan (4P)

7.1. Product

According to the marketing information, it is to make decision about what products are eligible as the following criteria : Market size and its trend, product applications, company core competency, and competitive situation. By these, four series of product are chosen for the first step : Drinking cup, tray, bowl, and dish. This is because such products are technically fairly easy to manufacture and mass market. Additionally, the business development is embarking on building up distribution network. It is consequently thought that the products for the following step are Yogurt / ice-cream cup and foam box that have tougher marketing and technology.

7.1.1 Drinking cups [TM,1997]

Demand for drinking cup in Shanghai is approximately 240 million cups per year. Printing is also the other product features that some customer groups strongly require. Main customer groups involve food court, ordinary food shop, and so on. The product portfolio of drinking cup models are therefore 9-oz, 9-oz with printing, 12-oz, 12-oz with printing, and 16-oz with printing. Raw material used is Polypropylene. This is because, by its application, 9-oz cup are mainly used for

containing hot drink, 12-oz cup are used for tea, and fruit juice, and 16-oz are used for carbonate drink. Among them, the expected percentage of such product portfolio are illustrated as below :

7.1.1.1 9-oz cup	15%
7.1.1.2 9-oz cup with printing	10%
7.1.1.3 12-oz cup	40%
7.1.1.4 12-oz cup with printing	20%
7.1.1.5 16-oz cup with printing	15%

7.1.2 Trays [TM,1997]

Tray market size is about 40 million trays per year with 20% of growth rate. Main customer groups are food stuff packer, and supermarket. The product portfolio of tray are tray I, tray II, tray III, tray IV, and tray V with the expected market size of 20%, 40%, 10%, 10%, and 20% of total demand respectively. Material used for making tray is polystyrene.

7.1.3 Bowls [TM,1997]

Bowl market size is approximately 50 million bowls per year. Main customer groups are food court, fast food, supermarket, and ordinary food shop. By its application, bowls are to used for containing hot and oily food (e.g., soup, noodle). It is thus recommended that Polypropylene is material for making bowl. The product portfolio of bowl are bowl I, and bowl II with the anticipated market size of 60% and 40% of total bowl demand respectively.

7.1.4 Dishes [TM,1997]

The anticipated demand for dish in Shanghai accounts for 40 million per year with 20% of growth rate. The customer groups are food court, ordinary food shop, and so on. Chinese food generally is hot and oily. To be able to contain such food safely, Polypropylene should be used as raw material. The product portfolio of dish are dish I, and dish II with the expected market demand of 50% and 50% of the total dish demand respectively.

7.2 Price

Despite superior product quality and service implications that have been planned to offer the potential customer, all customers basically 'd like to buy cheap products. That means market price should be settle as reference as Table 3.2.

7.3. Place [TM,1997]

Owing to packaging product considering as industrial products, place strategy is to market at :

7.3.1 Fast food : Chinese fast food, American fast food (e.g. KFC, McDonalds)

7.3.2 Ordinary food shop, office and other public areas

7.3.3 Food court, super market

7.3.4 Railway ministry

7.3.5 Food manufacturer and food stuff packer (e.g. vegetable, fruit, Dessert)

7.4 Promotion

It is noted that such packaging products are industry products. The promotion strategies are:

7.4.1 To promote the product profile effective, sale must contact the right persons in the customer organization. That means to identify influencer, decider, initiator, buyer, and user of each customer organization.

7.4.2 To continuously educate intermediaries, and end consumers about the packaging implications (e.g. health / environment / application concern) through several mass communications (e.g. television, radio).

8. Total Demand estimation [TM,1997]

Total demand estimation is firstly done by estimating Shanghai market size. Consequently, total market size can merely be calculated by comparing GDP, consumer rate per year, and population size among targeted market places to Shanghai' s. By that means, the total demands for some other region are therefore estimated as from the Table 3.3 to Table 3.6.

9. Sales forecast [TM,1997]

According to total demand estimation and product analysis, such information enables marketer to predict the anticipated sale amount and market share during year 1st to year 10th of the project as table 3.7. Such variables (anticipated sale amount, and market shares) were meinly analyzed by project staff opinion. Whereas points of considering the expected sale forecast are sale force capacity, potential customers, distribution channels, and competitive intensity.

Table 3.2 Price of product prospects [TM,1997]

Product prospect	Expected selling price (RMB/PCS)
Drink cup 9 oz.	0.090
Drink cup 9 oz. Prnt	0.100
Drink cup 12 oz	0.110
Drink cup 12 oz prnt	0.130
Drink cup 16 oz	0.170
Bowl size 1	0.110
Bowl size 2	0.220
Dish size 1	0.170
Dish size 2	0.220
Tray size 1	0.220
Tray size 2	0.200
Tray size 3	0.210
Tray size 4	0.220
Tray size 5	0.230

Table 3.3 Demand for cups

Region	Population (million)	Cup/man-yr	Year									
			1 million	2 million	3 million	4 million	5 million	6 million	7 million	8 million	9 million	10 million
Shang hai	16.00	15.00	240.00	288.00	345.60	414.72	497.66	597.20	716.64	859.96	1,031.96	1,238.35
Beijing	11.30	11.65	132.00	158.40	190.08	228.10	273.72	328.46	394.15	472.98	567.58	681.09
Tianjin	9.40	9.35	88.00	105.60	126.72	152.06	182.48	218.97	262.77	315.32	378.38	454.06
Zhejiang	43.40	7.47	324.00	388.80	466.56	559.87	671.85	806.22	967.46	1,160.95	1,393.14	1,671.77
Jiangsu	70.90	6.95	493.00	591.60	709.92	851.90	1,022.28	1,226.74	1,472.09	1,766.51	2,119.81	2,543.77
Shangdong	87.10	5.40	470.00	564.00	676.80	812.16	974.59	1,169.51	1,403.41	1,684.09	2,020.91	2,425.10
Hubei	58.20	3.92	228.00	273.60	328.32	393.98	472.78	567.34	680.80	816.97	980.36	1,176.43
Total	296.30		1,975.00	2,370.00	2,844.00	3,412.80	4,095.36	4,914.43	5,897.32	7,076.78	8,492.14	10,190.57

Re. The anticipated growth rate of 20% per annum

Table 3.4 Demand for trays

Region	Population (million)	tray/man-yr	Year									
			1 million	2 million	3 million	4 million	5 million	6 million	7 million	8 million	9 million	10 million
Shang hai	16.00	2.50	40.00	48.00	57.60	69.12	82.94	99.53	119.44	143.33	171.99	206.39
Beijing	11.30	1.94	22.00	26.40	31.68	38.02	45.62	54.74	65.69	78.83	94.60	113.52
Tianjin	9.40	1.56	15.00	18.00	21.60	25.92	31.10	37.32	44.79	53.75	64.50	77.40
Zhejiang	43.40	1.25	54.00	64.80	77.76	93.31	111.97	134.37	161.24	193.49	232.19	278.63
Jiangsu	70.90	1.16	82.00	98.40	118.08	141.70	170.04	204.04	244.85	293.82	352.58	423.10
Shangdong	87.10	0.90	78.00	93.60	112.32	134.78	161.74	194.09	232.91	279.49	335.39	402.46
Hubei	58.20	0.65	38.00	45.60	54.72	65.66	78.80	94.56	113.47	136.16	163.39	196.07
Total	296.30		329.00	394.80	473.76	568.51	682.21	818.66	982.39	1,178.87	1,414.64	1,697.57

Table 3.5 Demand for bowls

Region	Population (million)	bowls/man-yr	Year									
			1 million	2 million	3 million	4 million	5 million	6 million	7 million	8 million	9 million	10 million
Shang hai	16.00	3.13	50.00	60.00	72.00	86.40	103.68	124.42	149.30	179.16	214.99	257.99
Beijing	11.30	2.43	27.00	32.40	38.88	46.66	55.99	67.18	80.62	96.75	116.10	139.31
Tianjin	9.40	1.95	18.00	21.60	25.92	31.10	37.32	44.79	53.75	64.50	77.40	92.88
Zhejiang	43.40	1.56	68.00	81.60	97.92	117.50	141.00	169.21	203.05	243.66	292.39	350.87
Jiangsu	70.90	1.45	103.00	123.60	148.32	177.98	213.58	256.30	307.56	369.07	442.88	531.46
Shangdong	87.10	1.13	98.00	117.60	141.12	169.34	203.21	243.86	292.63	351.15	421.38	505.66
Hubei	58.20	0.82	48.00	57.60	69.12	82.94	99.53	119.44	143.33	171.99	206.39	247.67
Total	296.30		412.00	494.40	593.28	711.94	854.32	1,025.19	1,230.23	1,476.27	1,771.52	2,125.83

Re. The anticipated growth rate of 20% per annum

Table 3.6 Demand for dishes

Region	Population (million)	dishes/man-yr	Year									
			1 million	2 million	3 million	4 million	5 million	6 million	7 million	8 million	9 million	10 million
Shang hai	16.00	2.50	40.00	48.00	57.60	69.12	82.94	99.53	119.44	143.33	171.99	206.39
Beijing	11.30	1.94	22.00	26.40	31.68	38.02	45.62	54.74	65.69	78.83	94.60	113.52
Tianjin	9.40	1.56	15.00	18.00	21.60	25.92	31.10	37.32	44.79	53.75	64.50	77.40
Zhejiang	43.40	1.25	54.00	64.80	77.76	93.31	111.97	134.37	161.24	193.49	232.19	278.63
Jiangsu	70.90	1.16	82.00	98.40	118.08	141.70	170.04	204.04	244.85	293.82	352.58	423.10
Shangdong	87.10	0.90	78.00	93.60	112.32	134.78	161.74	194.09	232.91	279.49	335.39	402.46
Hubei	58.20	0.65	38.00	45.60	54.72	65.66	78.80	94.56	113.47	136.16	163.39	196.07
Total	296.30		329.00	394.80	473.76	568.51	682.21	818.66	982.39	1,178.87	1,414.64	1,697.57

Table 3.7 Sale forecast for China project

Product prospect	Market share	Year 1 million	2 million	3 million	4 million	5 million	6 million	7 million	8 million	9 million	10 million
9-OZ Cup	10%	29.628	35.554	42.664	51.197	61.437	73.724	88.469	106.163	127.395	152.874
9-OZ Cup PRNT	10%	19.752	23.702	28.443	34.132	40.958	49.149	58.979	70.775	84.930	101.916
12-OZ Cup	10%	79.008	94.810	113.772	136.526	168.831	196.598	235.917	283.101	339.721	407.665
12-OZ Cup PRNT	10%	39.504	47.405	56.886	68.263	81.916	98.299	117.959	141.550	169.860	203.152
16-OZ Cup PRNT	10%	29.628	35.554	42.664	51.197	61.437	73.724	88.469	106.163	127.395	152.874
Bowl I	5%	12.345	14.814	17.777	21.332	25.599	30.718	36.862	44.234	53.081	63.698
Bowl II	5%	8.230	9.876	11.851	14.221	17.066	20.479	24.575	29.490	35.388	42.465
Dish I	5%	8.230	9.876	11.851	14.221	17.066	20.479	24.575	29.490	35.388	42.465
Dish II	5%	8.230	9.876	11.851	14.221	17.066	20.479	24.575	29.490	35.388	42.465
Tray I	15%	9.876	11.851	14.221	17.066	20.479	24.575	29.490	35.388	42.465	50.958
Tray II	15%	19.752	23.702	28.443	34.132	40.958	49.149	58.979	70.775	84.930	101.916
Tray III	15%	4.938	5.926	7.111	8.533	10.239	12.287	14.745	17.694	21.233	25.479
Tray IV	15%	4.938	5.926	7.111	8.533	10.239	12.287	14.745	17.694	21.233	25.479
Tray V	15%	9.876	11.851	14.221	17.066	20.479	24.575	24.490	35.338	42.465	50.958