TROPICAL FRUITS AND VEGETABLES IN CHINA

MARKET OVERVIEW





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Abstract for trade information services

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International Trade Centre (ITC)

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Report providing an overview of the Chinese market situation for imported tropical fruits and products, with special focus on mango, guava, pineapple, banana, papaya, watermelon, lemon and limes, manioc, and ginger - presents an overview of market structure and characteristics in China; outlines the tariff structure by product group, and addresses non-tariff requirements in the market; highlights consumer trends; describes distribution channels and retail structure for the target products; provides an overview of local retailers, and lists of major importers for selected products; includes bibliography (p. 49).

Descriptors: Tropical fruit, Bananas, Citrus fruit, Ginger, Cassava, China, Market Surveys.

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English

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Foreword

This publication has been prepared to provide guidance to exporters of developing countries – mainly from Africa – on accessing new and emerging country markets, such as China PRC.

Due to the negative impact of the global financial crisis, exporters from developing countries have recently faced shrinking or marginal export growth in many developed country markets. Although 80% of world imports are still into traditional developed country markets, the imports in large emerging markets, such as those of BRICS countries (Brazil, the Russian Federation, India, China and South Africa), are growing faster and there is significant potential for exporters.

The International Trade Centre (ITC) has a comprehensive approach to assisting least developed country (LDC) exporters in market development and market diversification for key products in some priority sectors. This includes improvement of market networks, increased knowledge of new market opportunities in emerging markets and promotion of South-South trade along the value chain, among other activities.

This report, prepared in 2010, is one of a group of sector and market studies in BRICS countries commissioned by ITC. The 10 tropical products studied here, banana, mango, watermelon, guava, pineapple, papaya, lemons and limes, oranges, manioc and ginger, were selected based on the current export supply of sub-Saharan Africa and the existence of reasonable Chinese imports of these products. The report supports the need for greater knowledge of the potential market opportunities for exports of selected tropical fruits and vegetable products to the Chinese market. It was funded by limited internal resources from the ITC regular budget as part of several technical papers on selected sector markets for BRICS countries, and due to costs few printed copies will be published. Dissemination to exporters in LDCs will be done electronically and through the ITC web site.

Although there is local production of tropical fruits and vegetables, China still needs to import. China's annual consumption of tropical fruits is about 19 million tons and growing. The imports of tropical fruits included in the study were about US\$ 280 million in 2009, a limited amount compared with the size of the population, but the market has been growing rapidly and may become promising for LDC exporters. In the case of the two vegetables included in this study, it was found that Chinese imports of ginger are small, but those of manioc were about US\$ 886 million in 2009. Due to proximity and preferential tariffs, the main exporters of the selected tropical fruits and vegetables to China have been Association of Southeast Asian Nations (ASEAN) countries.

The competitiveness of African exporters in the Chinese market may be low for some products, but can improve if African governments negotiate reduced tariffs and better market access. South Africa and Egypt do not require Chinese government permission to access the market, and this is an example that may be followed by other countries. This report provides an initial overview of the Chinese market for these products, advice for market access, as well as useful inputs for an initial proactive marketing strategy and preparation of the exporter's sales visit.

Emilio Portocarrero Chief, Sector Competitiveness Section Division of Market Development International Trade Centre

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Companies in China

Association of happy farmhouse of China

Beijing Nanyue Dadi Co., Ltd.

Beijing Shengbaotai Fruit Co., Ltd.

Carrefour

Guangdong Luhong Agriculture Production Trading Co., Ltd.

Guangxi Qinzhou Shi Qing zhou shan zhuang

Hangzhou Qunfeng Fruit Chain Co., Ltd.

Hebei Jiahua Agriculture Product Co. Ltd.

Huitong Economic Trade Ltd. Foshan

Jianxi XinFeng Reemoon Agriculture Development Co., Ltd.

KunMing JinMa ZhengChang fruit market

Ningbo Free Trade Zone Ganglong Fruit Co., Ltd.

Returned Customer Fruit Market

RT Mart

Shanghai Diamond International Trade Co., Ltd.

Shanghai Fruit Co., Ltd.

Shanghai New Long March International Trading Co., Ltd.

Sumifru China Co., Ltd.

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Abbreviations

ASEAN Association of Southeast Asian Nations
BRICS Brazil, Russia, India, China and South Africa

CT consumption tax

FAO Food and Agriculture Organization of the United Nations

ITC International Trade Centre LDC least developed countries

VAT value added tax

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Executive summary

This report is aimed at giving exporters from least developed countries (LDCs) an overview of the current Chinese market situation in imported tropical fruits and vegetables. This study focuses on the following fruits and vegetables: mango, watermelon, guava, pineapple, banana, papaws, lemons and limes, manioc and ginger. It is divided into six sections:

- Market structure
- 2. Tariff regulations
- 3. Non-tariff requirements
- 4. Consumer trends
- 5. Distribution
- 6. Recommendations for future LDC exporters

For the purpose of this report a survey of Chinese importers and retailers of tropical fruits and vegetables was carried out to help identify the needs and the specificities of China's market.

In terms of market structure and market size, China is the world's top fruit producer with a total fruit output in 2008 of 192,202,000 tons. In 2009 it also imported 2,309,000 tons of fruit, with a value of US\$ 1.63 billion, with both volume and value increasing by 37% from the previous 2008 level. According to the United Nations Food and Agriculture Organization (FAO), per capita annual fruit and vegetable consumption in China is twice the global average.

There is also important domestic production of Chinese tropical fruits, especially bananas and pineapples, as parts of the country have regional tropical and sub-tropical climates. The Chinese Ministry of Agriculture estimated that in 2009 tropical fruits accounted for 25% of China's total fruit planting area, or over 20 million tons. The China Fruit Marketing Association estimates that one fruit in 10 consumed in China is a tropical fruit.

At 602 million tons a year, China's domestic vegetable output is huge, equivalent to 49% of the global output. However, the amount of vegetables imported into China is small in comparison, with only 88,000 tons reported for 2009.

Market access is governed by various tariff measures that result in different costs and access for exporting countries. For example, imports from ASEAN (the Association of Southeast Asian Nations) grew steadily over the past few years as a result of a preferential tariff agreement that applies a zero-tariff rate on 90% of China's ASEAN imports.

Whereas for LDC countries, until July 2010 China applied the Most Favoured Nations rate, making imports from LDCs 5% to 25% costlier than the same products from ASEAN countries. As of July 2010, however, 26 of the 48 LDCs were able to benefit from a new zero tariff policy, potentially making them as competitive as ASEAN exporters.

The importance of non-tariff measures (NTMs) should not be underestimated. These include compliance with local laws and regulations, specific customs procedures, obtaining import approval on a national level and using designated import channels.

Concerning consumer trends, the survey carried out among Chinese importers and the visit to several retail outlets for this report show that demand exists and is growing. However, this demand is specific in terms of location, with major geographical disparities between the more rural part of China in the North and the more cosmopolitan area in the South. In the South, higher living standards and the ability of people to afford more expensive imported fruit should drive demand further.

Regarding distribution, LDC exporters have to sell through importers and offer a large enough volume to reach a minimum shipment level enabling import by the container load. Moreover, the choice of import channels is not up to exporters, as imported fruits and vegetables are only allowed to transit through seven designated Chinese ports.

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In conclusion, it appears that the Chinese market for tropical fruits and vegetables will keep on growing at a steady pace in the near future. This demand may be fulfilled through the use of additional Chinese land in sub-tropical regions, with a further 17.5 million hectares available according to industry experts from the Chinese Ministry of Agriculture, or via increased imports. In the short term China is actively pursuing new supply sources.

For LDC exporters, this market represents both a real challenge and great potential.

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1. Introduction

This report was commissioned by International Trade Centre (ITC) and prepared with select fruit and vegetable exporters as the main audience. It reflects research and analysis that took place in August to November 2010.

The following fruits and vegetables, referred to in the report as 'target products', are covered:

- Mango (fresh or dried) 08045020
- Watermelon (fresh) 08071100
- Guava (fresh or dried) 08045010
- Pineapple (fresh or dried) 08043000
- Banana (including plantains, fresh or dried) 08030000
- Papaws (papayas, fresh) (HS 08072000)
- Lemons and limes (fresh or dried) (08055000)
- Manioc (Cassava, dried) 07141020
- Ginger (09101000)

Note: No 10-digit H.S. codes could be obtained from Chinese customs officials.

The main objectives of this study are to provide a report comprising the following information for the Chinese fruit and vegetable markets:

- Brief and general introduction to China
- Overview of market structure and characteristics
- Overview of the tariff structure by product group
- Non-tariff requirements in the market
- Consumer trends
- Distribution channels and retail structure for the target products
- Recommendations
- Overview of local retailers
- Lists of major importers for selected products

This report covers all of Mainland China. Unless otherwise noted, figures and other information do not include the Hong Kong SAR, Macao SAR or Chinese Taipei.

The Chinese consumer market for fruits and vegetables is still heavily unregulated, with many sales taking place directly between small scale farmers and street hawkers; thus traditional institutions for record-keeping and tracking industry trends in the domestic industry may not be as reliable as in more developed markets. This report used a combination of primary as well as secondary data, collected from face-to-face and telephone interviews, news articles, press releases, published market research reports and government statistical reporting.

2. General introduction to China

Figure 1: Map of China and surrounding countries



General Information (2010): Area: 9.6 million sq km

Borders: 13 countries including India, Russia and Viet Nam

Time Zone: GMT+8

Currency: RMB - Chinese Yuan

Language: Mandarin (many local dialects)

Population: 1.34 billion (annual growth rate: 0.66%)

Economic Indicators (2010):
GDP (PPP): US\$ 9,872 trillion
GDP per capita (PPP): US\$ 7,400
GDP real growth rate: 10.3%
Annual inflation rate: 5%

Unemployment rate: 4.3% in urban areas Currency rate: RMB per US dollar-6.7852

Source: International Monetary Fund, CIA Fact Book, official government statistics.

After nearly 30 years of economic reform, in 2010 China became the world's second largest economy behind the United States of America. With China playing an increasingly integral role in the global economy, the government faces the challenge of balancing its long-term goal to move the economy away from manufacturing and heavy industry toward services with its short-term goal of supporting continued economic growth.

A large, complex population segment, the urban middle class, will soon redefine the Chinese market. Throughout the 1980s and most of the 1990s, urban middle class consumers were almost non-existent. By 2003, the Chinese Academy of Social Sciences (CASS) estimated, however, that China's middle class 1 accounted for 19% of the total population. This share is expected to grow to 40% by 2020. In recent years this phenomenon has led to an explosion in demand for luxury goods and services across all consumer sectors. It is consumers from this middle class segment that are the most likely to buy high-end foods, including imported fruits and vegetables.

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¹ Defined by the National Bureau of Statistics as having an annual household income of at least RMB 60,000 or approximately US\$ 9,000.

The growth of China's middle class has led to an increase in the consumption of imported tropical fruits. To meet this demand, supermarkets have a wide variety of imported tropical fruits that were not readily available several decades ago.

Most imported fruits originate from Southeast Asia, the United States, and South America; most tropical fruits relevant to this market survey are imported from Southeast Asia, namely Thailand, Viet Nam, the Philippines, Myanmar and Chinese Taipei. There are relatively small quantities of imported vegetables, as most vegetables consumed in China are widely grown domestically.

There are only seven points of entry into China for imported fruits and vegetables; they are located in the cities of Guangzhou, Shanghai, Ningbo, Nanjing, Xiamen, Qingdao and Tianjin. The largest among these is Guangzhou, with its Guangzhou Jiangnan Fruit and Vegetable Wholesale Market, representing an estimated 70% of all fruits imported into China.

Consumption of tropical fruits is expected to continue growing with the size of China's middle class. The main bottleneck for exporters aspiring to enter this potentially lucrative market is, and will remain for the foreseeable future, the restrictions China's national government places on the types and origins of fruit being imported into China. This is discussed in greater detail later on in the report.

3. Market structure and characteristics

3.1. Market size

Fruit market overview

According to industry experts, China is the world's top fruit producer; the two most commonly exported fruits are apples and pears, accounting for 33% and 50% of total global output, respectively. China's fruit planting area was approximately 10,734,259 hectares, with fruit output of 192,202,000 tons in 2008 (the latest year for which figures are available), according to the National Bureau of Statistics of the People's Republic of China.

China's per capita annual fruit consumption is estimated at about 149 kilograms, well above the Food and Agriculture Organization's (FAO) estimate of a global average of 69.09 kilograms per capita. In 2009, China exported 5,255,000 tons of fruit, up 8.5% from a year earlier, with a value of US\$ 3.83 billion, grew 9.3% from the year before, according to Chinese customs (table 3.1). Imports totalled 2,309,000 tons, a 36.5% increase from 2008, with a value of US\$ 1.63 billion, up 37% from 2008. This led to a trade surplus in fruits of about US\$ 2.2 billion, a 27.6% decrease compared with 2008, according to the Ministry of Agriculture of the People's Republic of China (PRC).

Table 1: China's export and import volume and value of all fruits in 2009

| | Volume (tons) | Growth rate (2008- 2009) Value (billion) | | Growth rate |
|--------|---------------|---|-----------|-------------|
| Export | 5 255 000 | 8.5% | US\$ 3.83 | 9.3% |
| Import | 2 309 000 | 36.5% | US\$ 1.63 | 37% |

Source: Ministry of Agriculture of the People's Republic of China (2010).

Based on figures provided by various sources, the domestic market for fruits in China is about 189 million tons. According to importers interviewed for this report, kiwi, mango, guava, orange, grapes, pitaya, lemon, longan, durian, banana and pineapple appear to be the most imported fruit.

Table 2: Main imported fruit according to interviewed importers

| Fruit | Countries |
|-----------|---|
| Kiwi | New Zealand, France |
| Mango | Thailand, Australia |
| Guava | Taiwan |
| Oranges | South Africa, United States of America, Argentina |
| Grapes | United States of America, South Africa |
| Pitaya | Viet Nam, Philippines |
| Lemon | United States of America |
| Longan | Thailand |
| Durian | Thailand |
| Banana | Philippines, Thailand |
| Pineapple | Philippines |

Tropical fruit market

According to the FAO, global tropical fruit output reached approximately 82.7 million tons in 2008, with mango one of the most widely grown fruits, followed by pineapple, guava and avocado.

China mainly grows fruit that is native to temperate and subtropical climates, but also produces significant volumes of bananas, pineapple, longan, litchi, mango and coconut, and has smaller outputs of sugarapple, jackfruit, sapodilla, star fruit, papaya, guava, wampee, myrobalan, wax apple, and pitaya (dragon fruit). Tropical fruits are mainly grown in the tropical and subtropical provinces of Hainan, Guangdong, Guangxi, Fujian and Yunnan.

According to data from the Ministry of Agriculture, the planting area in China for tropical and subtropical fruit accounted for 25% of China's total fruit planting area in 2009, or about 2.5 million hectares, with total output exceeding 20 million tons. There are approximately 17.5 million additional hectares in China suitable for planting tropical and subtropical fruits, according to industry experts.

Tropical fruits are mainly imported from Southeast Asian countries; tropical fruits with the largest import volumes are durian, mango, longan, banana (including plantain), mangosteen and pineapple according to data from ITC. The Research Institute of Tropical Eco-agricultural Sciences and other agricultural research institutes report that durian and mangosteen are not planted in China, so the country is entirely dependent on imports of these fruits, mainly from Southeast Asia, especially Thailand.

The most commonly consumed tropical fruits in China are banana, pineapple, longan, litchi, mango, coconut and cashew. Demand for sweetsop, jackfruit, mangosteen, star fruit, durian, rambutan and wax apple is increasing rapidly among consumers in larger, more developed first-tier and second-tier cities. Industry experts estimate that about 80% of tropical fruit is consumed fresh rather than processed or canned.

According to the importer interviews, banana, pineapple and mango are most popular imported tropical fruits. The China Fruit Marketing Association estimates that consumption of tropical fruit accounts for approximately 10% of all fruit consumed, or about 19 million tons.

Vegetable market overview

China leads the world in both total planted area for vegetables and volume of vegetable output, accounting for 43% and 49% of the global totals, respectively. The value of Chinese vegetable output was

approximately US\$ 128.84 billion² Per capita annual vegetable consumption was about 440 kilograms, nearly double the world average.

According to figures from the Ministry of Agriculture, China's vegetable planting area in 2009 was 18,209,000 hectares, a 1.8% increase over 2008; vegetable output volume was 602 million tons, up 4.5% from 2008.

China's vegetable export volume was 8,027,000 tons in 2009, a 2% decrease compared with 2008. The value of exports, however, was US\$ 6.77 billion, a 5.2% increase over 2008, according to the Ministry of Agriculture. About 88,000 tons of vegetables were imported in 2009, a 15.3% decrease from the previous year, while the value of imports was US\$ 100 million, 10.9% less than 2008. Thus the trade surplus for vegetables was US\$ 6.67 billion in 2009, a 5.5% increase over 2008.

Manioc is the most popular imported tropical vegetable, according to importer interviews.

Consumption and market among nine target products

Table 3: Market size and potential for selected fruits and vegetables in 2009

| Fruit / vegetable type | Domestic production (tons) | Export volume (tons) | Import volume (tons) | Global consumption per capita (kilograms) | Estimated domestic consumption (tons) | Estimated market potential (tons) |
|------------------------------|----------------------------|----------------------------|-------------------------|--|---------------------------------------|-----------------------------------|
| Mango | 882 000 | 6 642 | 33 092 | ~8 | 908 450 | ~10 720 000 |
| Watermelon** | ~63 000 000 | 57 840 | 263 670 | ~20 | ~63 205 830 | See below |
| Guava | ~50 000 | 550 | 208 | Not available from FAO | ~82 542 | Not available |
| Pineapple | 961 642 | 2 507 | 12 117 | 2.7 | 97 1252 | 3 618 500 |
| Banana | 8 834 000 | 13 170 | 491 338 | ~12 | 9 312 168 | 16 080 000 |
| Papaya | ~130 000 | 418 | 448 | ~1.35 | ~130 030 | ~1 809 000 |
| Lemons | 1 025 600 | 4 720 | 8 988 | ~1.87 | 1 029 868 | 2 505 800 |
| Manioc | ~3 000 000 | 0 | 6 019 427 | ~17 | 9 019 427 | 22 780 000 |
| Ginger** | 6 500 000 | 339 939 | 781 | 0.2 | 6 160 842 | See note |

Sources: *Domestic production*: National Bureau of Statistics of China, the Ministry of Agriculture of the PRC, and experts from relevant associations and institutions;

Import and export volumes: the ITC website and China Customs;

Global average consumption per capita: the FAO and other experts at relevant associations and institutions.

Domestic consumption: domestic production – export volume + import volume

Market potential: global average per capita consumption multiplied by China's population (roughly 1.34 billion)

^{**}The per capita consumption of watermelon and ginger is far higher in China than the global average. Figures from the FAO for global per capita consumption, therefore, cannot be used to calculate China's per capita consumption. Calculations for China's watermelon market were made using the estimated domestic consumption, plus the increased domestic consumption year on year for the last several years amounting to a growth of around 500,000 tons per year for the near future. Similarly, Chinese consume ginger at a far higher rate than the global average, and consumption has been growing at a rate of around 10% per year; therefore, the market can be estimated at growing by around 650,000 tons per year.

 $^{^{2}}$ RMB 880 billion based on US\$ 1 = RMB 6.83.

3.2. Pricing and origin

Most fruit importers can earn a 30%-50% margin while some vegetable importers can earn a 20%-50% margin.

Table 4: Price references for imported fruits

| Fruit | Origin | Price (US\$ /kg) |
|-----------------------------------|---|-----------------------|
| Mongo | The Philippines, Viet Nam, Thailand | 2.20-5.86 |
| Mango | Taiwan 'Kaite' / 'Aiwen' | 6.15 / 11.25 |
| Watermelon | United States of America | 0.88 / 1.46 |
| Guava | Taiwan, the Middle East | 1.61-4.63 |
| Pineapple | The Philippines, Taiwan | 1.42-5.80 |
| Banana | The Philippines | 1.17-3.16 |
| Papaya | Taiwan, United States of America | 1.71-2.28 |
| Lemon (lime not widely available) | United States of America | 2.87-3.64 |
| Orange (for reference) | South Africa / United States of America | 1.90-2.05 / 1.70-1.99 |
| Kiwi (for reference) | New Zealand | 2.93 |

Sources: Visits to Auchan, Wal-Mart, Suzhou Rainbow Department Store, and four small fruit retail shops in Suzhou, Jiangsu Province.

Table 5: Price references for domestically grown fruits

| Fruit | Origin | Price (US\$ /kg) | |
|-------------------------------------|--|---|--|
| Mango | Hainan Province | 0.88-3.75 | |
| Watermelon | Zhejiang and Hainan Provinces | 0.26-0.76 | |
| Guava | Fujian Province | No domestically grown guava available outside of southern China | |
| Pineapple | Hainan, Fujian, and Guangdong Provinces | 0.59-1.17 | |
| Banana | Guangdong and Hainan Provinces | 0.23-0.88 (sesame type) | |
| Papaya | Hainan Province | 6 0.73-2.28 | |
| Lemons (limes not widely available) | Sichuan, Guangdong, Guanxi, Fujian Provinces | 1.66-2.34 (lemons), 1.46 (limes) | |
| Orange (for reference) | Zhejiang, Sichuan, Hubei, Hunan, Jiangxi, Guangdong, Guanxi, Fujian Provinces | 0.59-1.17 | |
| Kiwi (for reference) | Shannxi Province | 0.88-1.46 | |

Sources: Visits to Auchan, Wal-Mart, Suzhou Rainbow Department Store, and four small fruit retail shops in Suzhou, Jiangsu Province.

Prices for domestic and imported dried manioc and ginger:

- Domestic ginger: US\$ 1.46 / kg (based on prices in Suzhou supermarkets)
- Dried turmeric: US\$ 1.03 US\$ 3.51 / kg (based on tele-interviews with importers that purchase it from Myanmar)
- Dried manioc: US\$ 200 US\$ 220 / ton (based on tele-interviews with importers)

3.3. Domestic production³

Mango

China's mango planting area grew substantially prior to 2005, but declined from 2005 to 2007 when the national government implemented policies to develop higher-yielding varieties. Thus, the yield per unit area has increased, while the total output has remained stable and planted area decreased for two years to 2007.

Table 6: Domestic mango production

| Mango (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------------------|---------|----------|---------|---------|---------|
| Planting area (hectares) | 132 100 | ~120 000 | 102 800 | 120 400 | 117 300 |
| Output (tons) | 741 500 | ~740 000 | 741 500 | 800 800 | 882 000 |

Watermelon

China's watermelon planting area remained stable in 2005 to 2009. Total production output grew slightly.

Table 7: Domestic watermelon production

| Watermelon (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------------------------|------------|------------|------------|------------|-------------|
| Planting area (hectares) | 1 707 500 | 1 785 500 | 1 731 200 | 1 733 400 | ~1 750 000 |
| Output (tons) | 59 893 432 | 62 613 415 | 62 036 158 | 62 821 690 | ~63 000 000 |

Guava

Related national agricultural departments, associations, experts, and the FAO were unable to provide detailed statistical data for guava output. Experts from the China Fruit Marketing Association estimate that total guava production was more than 50,000 tons in 2009, but could not estimate the total planting area or provide additional figures.

Pineapple

China is one of the world's 10 main producing countries. Pineapple is mainly produced in the provinces of Guangdong, Hainan, Guangxi, Fujian and Yunan. China's pineapple planting area grew by an annual average of 5% in 2005 to 2009, while the total production increased at a rate of 2%-5% per year.

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³ In this section, multiple sources were used to corroborate figures in the respective tables, including the China Rural Statistical Yearbook, China Statistical Yearbook, the Ministry of Agriculture of the PRC, National Bureau of Statistics of China, South Subtropical Crops Institute, Chinese Academy of Tropical Agricultural Science, the FAO, and other related associations and experts. In several instances, data from the FAO varied significantly from official figures. Government data was used and considered more reliable where available.

Table 8: Domestic pineapple production

| Pineapple (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------------------|---------|---------|---------|---------|----------|
| Planting area (hectares) | 53 200 | ~55 900 | ~58 700 | ~61 600 | ~64 700 |
| Output (tons) | 848 902 | 890 701 | 905 090 | 933 633 | ~961 642 |

Banana

China's banana planting area grew by an average of 5.6% per year. Output grew at a varied pace, however, due to factors such as climate and new growing techniques, according to industry experts.

Table 9: Domestic banana production

| Banana (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------------------|-----------|-----------|-----------|-----------|-----------|
| Planting area (hectares) | 276,300 | 285,600 | 306,600 | 317,800 | 338,800 |
| Output (tons) | 6 518 128 | 6 801 249 | 7 796 656 | 7 834 672 | 8 834 000 |

Papaya

China's cultivated papaya can be divided into three categories: tropical papaya used for immediate consumption, shine skin papaya and wrinkled papaya. The latter two belong to the Rosaceae family of flowers and are temperate plants mainly used for medicinal and ornamental purposes.

Papaya is mainly produced in Guangdong, Guangxi, Fujian, Hainan, and Yunnan provinces. According to the FAO table below, the Secretary-General of the Guangzhou Fruit Association reported that the total planting area for papaya in China is 9,700 hectares with an annual output of 520,000 tons.

Table 10: Domestic papaya production

| Papaya (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------------------|---------|---------|---------|---------|----------|
| Planting area (hectares) | 5 663 | 5 652 | 5 686 | 5 826 | ~5 900 |
| Output (tons) | 118 475 | 151 283 | 117 914 | 120 359 | ~130 000 |

Lemons and limes

The statistical data for lemons and limes in the table below is only from FAO data. Limes are not commonly consumed in China, so the figures below refer primarily to lemons.

Table 11: Domestic lemon and lime production

| Lemons and limes (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|--|---------|---------|---------|---------|------------|
| Planting area (hectares) | 51 472 | 56 424 | 63 705 | 65 705 | ~70 000 |
| Output (tons) | 662 581 | 716 918 | 842 166 | 917 166 | ~1 025 600 |

Manioc (dried)

Relevant government departments, associations, and experts had no nationwide statistical data for domestic production of manioc. Guangxi Province is the largest manioc-producing region, with its planting area and output accounting for 70% of China's total, according to several experts. The Ministry of Agricultural of Guangxi Province provided figures for provincial manioc production, which were extrapolated to get the figures below.

Table 12: Domestic manioc production

| Manioc (domestic production) | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------------------|------------|------------|------------|------------|------------|
| Planting area (hectares) | 435 000 | ~430 985 | ~446 377 | ~316 429 | 466 900 |
| Output (tons) | ~2 760 000 | ~2 885 000 | ~2 868 000 | ~2 571 000 | ~3 000 000 |

Ginger

The following data comes from The Ministry of Agriculture of the PRC.

Table 13: Domestic ginger production

| Ginger (domestic production) | 2008 | 2009 |
|------------------------------|----------|----------|
| Planting area (hectares) | 132 066 | 152 076 |
| Output (tons) | 5 320 00 | 6 500 00 |

3.4. Import developments 2004-2009

Overview of imports

China's year-on-year import volumes of tropical fruits are influenced by many factors, such as climate variations, harvesting conditions, domestic output, consumption trends and prices from exporting countries. Under an agreement on preferential tariffs between China and ASEAN countries, China's volume of agricultural imports from this group of countries has been steadily increasing.

In China, seven of the nine fruits and vegetables covered in this report are primarily imported from Southeast Asian countries, and in increasingly large volumes. The exceptions to this trend are lemons and limes, which are mostly imported from the United States, and papayas, which have seen a steep decline in imports.

The gradual increase in the popularity of tropical fruits among middle class Chinese has led to growth in total consumption of the selected tropical fruits, such as mangoes, guavas, pineapples and bananas. Moreover, import quantities, especially from ASEAN countries, are increasing as tariff rates decline (tariff reductions began in 2005 and tariffs on 90% of all goods from ASEAN members are now at zero).

According to several fruit and vegetable importers based in Ruili, Yunnan Province (on the border with Myanmar), limited records on trade between Yunnan Province and Myanmar were kept before 2008. Therefore, data for several of the fruits and vegetables below show a sharp increase in imports from Myanmar beginning in 2008, which often led to a steep increase in world imports as well.

July to September is the main season tropical fruits are imported into China; several out-of-season fruits, such as watermelon, apple and orange, are primarily imported from December to February. Dried manioc is imported all year round, but most commonly from November to December. Ginger is mostly imported during the second half of the year (with the peak season from November to December).

In the following tables, the top importers of the selected fruits and vegetables to China for years 2005 to 2009 have been listed. All figures are from the ITC Trade Map website, with additional input provided by importers and retailers. Although China Customs does not record 10-digit HS codes, during the interviews to Chinese importers, some information regarding specific fruit or vegetable varieties was identified.

Mango

China's import volume of mangoes grew more than 750% from 2005 to 2009; however, the import value has only barely doubled. This discrepancy can be attributed to the larger volume purchased from Myanmar, which sells fruit at much lower prices and the decreasing price of mangoes in general. However, mangoes are perishable and most importers incline toward mangoes from nearby countries, such as Thailand and the Philippines.

An importer who works in Ningbo Free Trade Zone Ganglong Fruit Co., said there are 38 varieties of mango in China, and the most popular varieties of mango (Okrung and Chok Anan) are usually imported from Thailand. The Okrung variety (Yao mango, egg mango or small mango) is a fruit that weighs about 50g, with green-yellow colour skin and light yellow coloured flesh. It is soft, juicy, very sweet with low acidity and usually bought for personal consumption.

Most popular are the sweet varieties such as Chok Anan or Chauk anan (Honey mango) imported from Thailand, India, Bangladesh and Pakistan. The fruit is oval with tapered tips and is about 12 cm in length. The ripe fruit and flesh are light yellow and have a sweet taste.

Mangoes are usually bought in supermarkets, such as Wal-Mart and Carrefour, at fruit stalls and from fruit peddlers on the street. People believe that mangoes sold on the street or at fruit stalls are fresher and of better quality.

Table 14: Mango imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|---|--------------|-----------|-----------|-----------|------------|------------|
| World | Volume | 4 249 173 | 6 490 220 | 1 831 834 | 20 808 040 | 33 092 464 |
| vvorid | Value | 3 944 | 4 599 | 1 905 | 5 815 | 8 286 |
| N de la | Volume | 0 | 120 000 | 92 300 | 18 293 416 | 30 171 612 |
| Myanmar | Value | 0 | 17 | 18 | 2 167 | 3 684 |
| Theilend | Volume | 280 971 | 732 175 | 715 918 | 1 099 381 | 1 616 190 |
| Thailand | Value | 353 | 879 | 833 | 1 639 | 2 737 |
| Dhilinninaa | Volume | 1 892 616 | 2 111 690 | 692 096 | 808 295 | 819 766 |
| Philippines | Value | 2 254 | 2 332 | 637 | 1 104 | 1 220 |
| Chinaga Tainai | Volume | 515 138 | 277 920 | 274 918 | 438 726 | 422 052 |
| Chinese Taipei | Value | 715 | 262 | 350 | 671 | 541 |
| Peru | Volume | 0 | 0 | 49 216 | 161 155 | 41 424 |
| Peru | Value | 0 | 0 | 50 | 214 | 50 |
| Acceptable | Volume | 0 | 0 | 7 386 | 3 800 | 13 274 |
| Australia | Value | 0 | 0 | 16 | 11 | 35 |
| Dekisten | Volume | 2 650 | 990 | 0 | 2 768 | 3 724 |
| Pakistan | Value | 3 | 2 | 0 | 6 | 8 |
| Viet Nam | Volume | 1 438 200 | 3 242 319 | 0 | 0 | 0 |
| viet nam | Value | 471 | 1 087 | 0 | 0 | 0 |
| Malayaia | Volume | 110 948 | 0 | 0 | 360 | 0 |
| Malaysia | Value | 133 | 0 | 0 | 2 | 0 |

Watermelon

The volume of per capita watermelon consumption in China is far above the international average. Watermelon, which grows in temperate regions, is widely produced in China and imports have only increased marginally in recent years. The table below shows the top four watermelon exporters to China.

China produces about 63 million tons of watermelon per year and has numerous varieties, with Black Beauty (Hei Mei Ren) and Jing Xin the most popular. According to the Ministry of Agriculture, in Northern China, Shandong Province is the main watermelon-producing area, while in the South, Hainan Province is the main watermelon-producing area. The Black Beauty variety is sold for RMB 1.2/Kg (USD\$0.18/kg) and Jing Xin is sold for RMB 1.8/Kg (USD\$0.27/kg).

The Black Beauty variety is a long, oval fruit with deep green black skin, red juicy pulp and an average weight per piece of 2.5 kg. It has a sugar content of up to 14-15 °C Brix. Black Beauty is smaller in size than Jing Xin, which is a fruit with thin skin, juicy red pulp and an average weight per piece of 6kg to 7.5kg.

Interestingly, in recent years, more and more families have shown a preference for smaller watermelons. This appears linked to the reduction in household size, which stands at an average of 2.89 people in Beijing according to the Bureau of Statistics, and the desire of consumers to avoid wastage.

Table 15: Watermelon imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| World | Volume | 132 191 232 | 144 345 024 | 167 017 072 | 222 739 344 | 263 670 064 |
| vvolid | Value | 17 341 | 24 502 | 23 523 | 26 984 | 32 344 |
| Viot Nam | Volume | 132 018 464 | 142 714 208 | 163 097 680 | 121 593 192 | 135 544 544 |
| Viet Nam | Value | 17 269 | 23 823 | 23 124 | 22 009 | 25 776 |
| Myonmor | Volume | 0 | 0 | 3 112 500 | 99 095 912 | 124 379 592 |
| Myanmar | Value | 0 | 0 | 128 | 4 202 | 5 935 |
| Lao People's | Volume | 0 | 0 | 0 | 0 | 2 340 000 |
| Democratic Republic | Value | 0 | 0 | 0 | 0 | 86 |
| Malayaia | Volume | 172 680 | 1 630 797 | 806 894 | 2 050 237 | 1 405 923 |
| Malaysia | Value | 73 | 679 | 270 | 773 | 547 |

Guava

The most popular variety of guava is Green Apple (Psidium guajava), which usually is 4cm to 12 cm long with an average weight of 380g to 550g. The fruits are oval shaped with a rough skin and usually are green before maturity, turning yellow, maroon or green when ripe.

Table 16: Guava imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|--------------|---------|---------|--------|--------|---------|
| M/o alal | Volume | 166 763 | 111 301 | 56 729 | 76 940 | 207 865 |
| World | Value | 118 | 106 | 49 | 53 | 175 |
| | Volume | 165 638 | 106 922 | 56 717 | 76 670 | 204 754 |
| Chinese Taipei | Value | 115 | 99 | 49 | 52 | 170 |
| Theiland | Volume | 1 125 | 3 755 | 0 | 270 | 3 111 |
| Thailand | Value | 3 | 4 | 0 | 1 | 5 |
| Volume | Volume | 0 | 624 | 0 | 0 | 0 |
| Malaysia | Value | 0 | 4 | 0 | 0 | 0 |

Pineapple

Some common varieties include Sugarloaf, Golden Pineapple and Cayenne, which is relatively large and cone-shaped, and its yellow flesh has plenty of acid and sugar. Queen is an old miniature variety grown in

South Africa, and has a rich yellow flesh, a milder flavour, with a sweet edible core. It is less acidic than other pineapples. Other excellent modern varieties include the Natal Queen and the Variegated, which is a variety that has 'albino' white coloured skin and flesh and is sweet as honey. The Red Spanish, which is square-shaped with a tough shell, comes from the Caribbean. It has a spicy, acidic flavour and is usually eaten fresh. This larger variety is the principal one grown for the canning industry

According to the information gathering from ITC interviews, pineapple is imported mainly from August to December, and most importers said Bali pineapple (a type of the Queen variety) from Malaysia is the most appreciated in China. This type of pineapple also can be grown in the Xuwen Xian region in China in Guangdong. In the past few years, the Chinese government has funded and supported the improvement of production in Xuwen Xian.

The Bali pineapple from Xuwen Xian weighs 400g to 1500g per piece and has a dark yellow pulp, with a high level of juice and a high Brix level (or amount of sugar in the fruit).

Table 17: Pineapple imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|--------------------------|--------------|---------|-----------|-----------|------------|------------|
| World | Volume | 663 304 | 4 012 356 | 8 890 593 | 10 830 212 | 12 117 100 |
| VVOIIG | Value | 333 | 1 815 | 4 704 | 6 369 | 7 473 |
| Dhilinnings | Volume | 501 274 | 3 287 790 | 8 773 796 | 10 701 347 | 11 337 898 |
| Philippines | Value | 176 | 1 330 | 4 621 | 6 221 | 6 804 |
| Chinasa Tainai | Volume | 158 103 | 137 642 | 93 332 | 90 625 | 736 266 |
| Chinese Taipei | Value | 148 | 123 | 59 | 66 | 484 |
| The - 11 - 11 - 11 | Volume | 3 730 | 583 755 | 22 919 | 37 568 | 42 576 |
| Thailand | Value | 9 | 323 | 24 | 78 | 182 |
| 0 | Volume | 0 | 403 | 96 | 312 | 360 |
| Germany | Value | 0 | 3 | 1 | 2 | 2 |
| United States of America | Volume | 0 | 1 551 | 0 | 0 | 0 |
| Tillolloa | Value | 0 | 32 | 0 | 0 | 0 |

Banana

According to importers (Sumifru China Co., Ltd., ShenZhen), the most popular banana variety is Cavendish followed by Pisanmas (Baby banana). Due to weather and geography, the Philippines is the main exporter to China, as shown in the table below, with the volume of imports from the Philippines representing 72% of the total volume imported into China.

Cavendish bananas range from 15cm-25 cm in length, have partially green skin before maturity and turn yellow when ripe. When overripe, the skin turns black and the flesh becomes mushy. Pisanmas bananas are about 10 cm in length with thin skin and are seedless. They have golden brown skin when ripe and taste sweet.

Table 18: Banana imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|---------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| World | Volume | 355 697 856 | 387 827 904 | 331 955 648 | 362 325 376 | 491 338 560 |
| vvorid | Value | 99 675 | 116 248 | 110 830 | 138 597 | 179 016 |
| Dhilinnings | Volume | 303 827 008 | 343 415 424 | 303 836 320 | 317 774 176 | 352 117 888 |
| Philippines | Value | 89 387 | 108 614 | 103 628 | 127 937 | 154 421 |
| Myonmor | Volume | 0 | 0 | 0 | 4 398 239 | 94 308 088 |
| Myanmar | Value | 0 | 0 | 0 | 545 | 10 487 |
| Viet Nam | Volume | 26 787 490 | 29 246 492 | 9 969 068 | 21 683 520 | 19 204 408 |
| viet nam | Value | 1 961 | 2 186 | 780 | 2 116 | 2 247 |
| Thailand | Volume | 9 638 130 | 14 101 039 | 13 809 162 | 15 209 225 | 17 632 316 |
| Thalland | Value | 3 207 | 4 864 | 4 932 | 6 695 | 8 529 |
| Farradas | Volume | 15 431 819 | 36 400 | 4 189 731 | 2 960 841 | 6 983 327 |
| Ecuador | Value | 5 111 | 11 | 1 479 | 1 255 | 3 116 |
| Lao People's | Volume | 0 | 0 | 150 000 | 299 000 | 1 036 591 |
| Democratic Republic | Value | 0 | 0 | 10 | 47 | 182 |
| Chinaga Tainai | Volume | 13 206 | 296 355 | 1 333 | 0 | 21 685 |
| Chinese Taipei | Value | 9 | 236 | 2 | 0 | 9 |
| Conto Dina | Volume | 0 | 1 587 | 0 | 0 | 18 550 |
| Costa Rica | Value | 0 | 4 | 0 | 0 | 12 |
| Indonesia | Volume | 0 | 725 202 | 0 | 0 | 15 400 |
| muonesia | Value | 0 | 308 | 0 | 0 | 9 |
| Cormony | Volume | 0 | 375 | 0 | 336 | 270 |
| Germany | Value | 0 | 2 | 0 | 2 | 2 |

Papaya

Papaya was previously imported from Malaysia and the Philippines in large volumes. Since 2006, import quantities from these two countries have decreased annually by 70% and 25%, respectively. An expert at the Research Institute of Tropical Eco-agricultural Sciences attributed this to the successful domestic introduction of new papaya types. The most popular new type of papaya is Dole, which is produced in the Philippines. In recent years, Dole papaya has faced strong competition from the papaya (Chaenomeles speciosa Nakal) produced in Hainan in China, which is cheaper.

Chaenomeles speciosa Nakal papaya has an oval shape, is 15cm to 20cm in length, with deep yellow skin, orange red flesh and black seeds inside. It tastes sweet and juicy and weighs about 400g to 500g.

Table 19: Papaya imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|--------------|-----------|-----------|-----------|---------|---------|
| World | Volume | 3 671 186 | 4 169 073 | 1 411 024 | 619 375 | 447 537 |
| VVOIId | Value | 2 940 | 3 248 | 1 126 | 561 | 453 |
| Dhilinnings | Volume | 307 362 | 1 017 457 | 783 114 | 419 100 | 301 054 |
| Philippines | Value | 234 | 734 | 621 | 413 | 312 |
| Chinaga Tainai | Volume | 37 024 | 37 600 | 22 009 | 16 742 | 81 192 |
| Chinese Taipei | Value | 49 | 47 | 21 | 17 | 105 |

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------|--------------|-----------|-----------|---------|---------|--------|
| Malaysia | Volume | 3 322 801 | 2 839 627 | 595 830 | 173 159 | 58 923 |
| | Value | 2 651 | 2 269 | 476 | 123 | 30 |
| Thailand | Volume | 3 999 | 274 389 | 10 071 | 10 374 | 6 368 |
| malianu | Value | 6 | 199 | 8 | 9 | 6 |

Lemons and limes, fresh or dried

Lemon and lime imports (categorized together in customs figures) consist mostly of lemons, as shown in table below; the United States is the biggest exporter to China with a market share of 98.7%. According to industry experts and importers, limes are still not regularly purchased or consumed in China. In terms of domestic output, the lemon varieties Lisbon and Eureka are the most popular. In Anyue in Sichuan Province, there is a large production plantation, accounting for 70% of the output of Anyue lemons (Eureka variety).

The Eureka, or Anyue, lemon grows all year and abundantly, and is usually sold through supermarkets. It Is oval in shape with thick yellow coarse skin when ripe, about 8cm-12cm in length, weighs on average 150g per piece, and has an acid content of 6.0g to 7.5g per 100ml and sugar of 1.48 per 100ml. The Lisbon variety is a good quality bitter lemon with high juice and acid levels, and is very similar to the Eureka variety. Its vigorous and productive trees are very thorny, particularly when young.

Table 20: Lemon and lime imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------|--------------|-----------|-----------|-----------|-----------|-----------|
| World | Volume | 5 274 784 | 4 570 451 | 6 007 741 | 5 307 323 | 8 987 818 |
| vvond | Value | 4 841 | 3 972 | 5 197 | 6 253 | 10 078 |
| United States of | Volume | 3 521 934 | 3 298 987 | 1 697 850 | 2 141 161 | 8 868 016 |
| America | Value | 3 183 | 2 873 | 1 672 | 2 977 | 9 938 |
| Thailand | Volume | 87 370 | 118 816 | 52 640 | 65 520 | 59 500 |
| Thalland | Value | 52 | 72 | 37 | 95 | 70 |
| Henduck | Volume | 0 | 99 199 | 1 237 909 | 2 807 766 | 25 118 |
| Uruguay | Value | 0 | 86 | 1 007 | 2 872 | 23 |
| Chinaga Tainai | Volume | 15 497 | 11 139 | 9 958 | 114 354 | 24 122 |
| Chinese Taipei | Value | 14 | 13 | 12 | 52 | 23 |
| New Zealand | Volume | 1 403 499 | 984 600 | 2 786 095 | 0 | 9 367 |
| New Zealand | Value | 1 293 | 822 | 2 218 | 0 | 13 |
| C | Volume | 9 858 | 8 122 | 6 109 | 2 306 | 1 525 |
| Germany | Value | 74 | 62 | 47 | 20 | 10 |
| Turkov | Volume | 0 | 0 | 0 | 136 | 170 |
| Turkey | Value | 0 | 0 | 0 | 2 | 2 |
| Avacation | Volume | 46 620 | 0 | 0 | 0 | 0 |
| Argentina | Value | 44 | 0 | 0 | 0 | 0 |
| South Africa | Volume | 189 780 | 49 588 | 216 380 | 176 080 | 0 |
| South Affica | Value | 180 | 45 | 193 | 235 | 0 |

Oranges, fresh or dried

Many importers said American oranges are more popular than African ones, as the American varieties exported taste sweeter. The import season for American oranges is from April to June, and the African import season runs from July to September.

There are three general orange varieties: common orange, navel orange and blood orange. In addition, there are more than 400 different varieties worldwide. One of the most popular varieties is the navel orange. These are primarily used for eating, as the skin is thicker and easier to peel than a common orange, they are less juicy, and bitterness from limonin during processing renders them less satisfactory for juice. They are very popular because of their use as an eating orange, their widespread distribution, and their long growing season. In the United States, they are available from November through April, with peak supplies in January, February and March.

Table 21: Orange imports by origin (kilograms / thousands US\$)

| Exporters | (kg/US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------|-----------|------------|------------|------------|------------|------------|
| \\/I -I | Volume | 50 328 000 | 63 433 000 | 35 790 000 | 58 182 000 | 66 143 000 |
| World | Value | 35 460 | 42 246 | 29 977 | 47 365 | 47 670 |
| United States of | Volume | 31 447 000 | 48 294 000 | 27 569 000 | 48 186 000 | 59 686 000 |
| America | Value | 22 434 | 32 194 | 23 612 | 39 288 | 42 528 |
| 0 11 11: | Volume | 10 976 000 | 4 828 000 | 3 488 000 | 4 190 000 | 4 714 000 |
| South Africa | Value | 7 417 | 3 284 | 2 715 | 3 939 | 3 631 |
| Chinasa Tainai | Volume | 23 000 | 58 000 | 1 303 000 | 775 000 | 1 509 000 |
| Chinese Taipei | Value | 11 | 49 | 920 | 623 | 1 329 |
| Faunt | Volume | 0 | 0 | 220 000 | 291 000 | 131 000 |
| Egypt | Value | 0 | 0 | 73 | 203 | 101 |
| Australia | Volume | 0 | 23 000 | 242 000 | 204 000 | 50 000 |
| Australia | Value | 0 | 16 | 170 | 190 | 40 |
| Argontino | Volume | 270 000 | 792 000 | 816 000 | 1 201 000 | 49 000 |
| Argentina | Value | 207 | 533 | 617 | 961 | 38 |
| Molovojo | Volume | 0 | 0 | 0 | 0 | 3 000 |
| Malaysia | Value | 0 | 0 | 0 | 0 | 2 |
| Drozil | Volume | 2 000 | 8 000 | 18 000 | 14 000 | 0 |
| Brazil | Value | 2 | 7 | 18 | 14 | 0 |
| Chile | Volume | 34 000 | 0 | 0 | 0 | 0 |
| Chile | Value | 28 | 0 | 0 | 0 | 0 |
| Israel | Volume | 0 | 0 | 19 000 | 0 | 0 |
| isiaei | Value | 0 | 0 | 18 | 0 | 0 |
| New Zealand | Volume | 7 299 000 | 8 515 000 | 340 000 | 0 | 0 |
| New Zealand | Value | 5 150 | 5 542 | 238 | 0 | 0 |
| Spain | Volume | 0 | 0 | 0 | 46 000 | 0 |
| Spain | Value | 0 | 0 | 0 | 35 | 0 |
| Thailand | Volume | 102 000 | 865 000 | 235 000 | 0 | 0 |
| malianu | Value | 75 | 584 | 200 | 0 | 0 |
| Uruguay | Volume | 175 000 | 50 000 | 1 540 000 | 3 277 000 | 0 |
| Uruguay | Value | 136 | 36 | 1 396 | 2 112 | 0 |

Manioc (cassava)

Dried manioc is mainly imported into China from Thailand and Viet Nam, with import volumes that were extremely volatile between 2008 and 2009. China's need for new energy sources has led to increased processing of dried manioc for use in biofuels, expanding the domestic demand among Chinese industry. Starch production in the food industry also increased the market demand for dried manioc. Consumption of dried manioc in the retail market remains limited, however.

According to some importers, there are 100 varieties of manioc worldwide, which are classified as sweet or bitter depending on the level of toxic cyanogenic glucosides. The cassava root is long and tapered, with a firm homogeneous flesh encased in a detachable peel, about 1mm thick, rough and brown on the outside. Commercial varieties can be 5cm-10 cm in diameter at the top, and around 15cm-30cm long. The flesh can be chalk-white or yellowish.

Importers interviewed said manioc is largely imported from Thailand in August, and the sweet varieties of manioc are the most popular.

Table 22: Manioc imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|------------------------|--------------|---------------|---------------|---------------|---------------|---------------|
| World | Volume | 3 325 599 232 | 4 944 488 960 | 4 619 080 704 | 1 950 461 568 | 6 019 426 816 |
| vvorid | Value | 420 682 | 620 331 | 659 846 | 389 923 | 886 108 |
| Thailand | Volume | 2 695 576 320 | 3 864 203 520 | 3 202 647 040 | 1 247 512 576 | 3 862 662 656 |
| mailand | Value | 341 252 | 479 992 | 455 837 | 252 343 | 581 126 |
| Viat Name | Volume | 401 757 600 | 935 328 000 | 1 273 238 272 | 584 724 992 | 2 010 560 512 |
| Viet Nam | Value | 50 230 | 120 309 | 179 855 | 115 531 | 280 389 |
| lo de ocie | Volume | 228 265 360 | 144 783 600 | 139 123 856 | 110 820 224 | 143 073 936 |
| Indonesia | Value | 29 200 | 20 005 | 23 766 | 21 088 | 24 272 |
| Lao People's | Volume | 0 | 0 | 3 408 740 | 6 360 846 | 2 842 654 |
| Democratic Republic | Value | 0 | 0 | 308 | 843 | 291 |
| Myonmor | Volume | 0 | 0 | 650 000 | 987 648 | 286 900 |
| Myanmar | Value | 0 | 0 | 68 | 109 | 29 |
| Cambodia | Volume | 0 | 0 | 0 | 0 | 300 |
| Cambodia | Value | 0 | 0 | 0 | 0 | 1 |
| Malayaia | Volume | 0 | 0 | 13 000 | 0 | 0 |
| Malaysia | Value | 0 | 0 | 12 | 0 | 0 |
| Nigorio | Volume | 0 | 174 000 | 0 | 55 300 | 0 |
| Nigeria | Value | 0 | 26 | 0 | 9 | 0 |

Ginger

Ginger imported from Myanmar is made up of two types: dried turmeric (the same as commonly used Chinese ginger also known as curcuma) and wild Myanmar ginger (called *Shajiang* in Chinese and also known as kaempferia galanga). Dried turmeric is a seasoning used in the food industry, and is cheaper than domestically grown ginger. Wild Myanmar ginger is used in production of Chinese medicines.

Ginger imported from Thailand is mainly salted Thai ginger (different from Chinese ginger); it is mainly processed into pickled ginger and then exported to Japan. While all three types of imported ginger are included in China Customs' figures for imported ginger in the table below, it should be noted that the 'real' root ginger refers primarily to the ginger species imported from Thailand.

Table 23: Ginger imports by origin (kilograms / thousands US\$)

| Exporters | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------------------|--------------|-----------|---------|--------|--------|---------|
| \\\ - | Volume | 2 670 952 | 146 284 | 62 499 | 78 941 | 781 481 |
| World | Value | 1 062 | 152 | 144 | 75 | 341 |
| NA. common | Volume | 21 000 | 0 | 0 | 56 500 | 504 080 |
| Myanmar | Value | 13 | 0 | 0 | 8 | 85 |
| Theiland | Volume | 7 992 | 98 111 | 1 300 | 561 | 252 817 |
| Thailand | Value | 5 | 83 | 3 | 2 | 187 |
| lanan | Volume | 6 706 | 2 306 | 4 625 | 4 042 | 4 224 |
| Japan | Value | 40 | 15 | 40 | 47 | 55 |
| United States of | Volume | 262 | 0 | 30 399 | 4 309 | 2 614 |
| America | Value | 7 | 0 | 14 | 2 | 1 |
| Hong Kong CAD | Volume | 22 360 | 1 220 | 0 | 1 840 | 2 120 |
| Hong Kong SAR | Value | 12 | 2 | 0 | 3 | 4 |
| larad | Volume | 0 | 0 | 0 | 0 | 1 332 |
| Israel | Value | 0 | 0 | 0 | 0 | 1 |
| Malayaia | Volume | 660 | 1 360 | 700 | 900 | 400 |
| Malaysia | Value | 2 | 5 | 3 | 4 | 2 |
| The Philippines | Volume | 1 103 606 | 0 | 0 | 0 | 0 |
| The Philippines | Value | 386 | 0 | 0 | 0 | 0 |
| Indonesia | Volume | 1 238 277 | 21 000 | 0 | 0 | 0 |
| muonesia | Value | 466 | 8 | 0 | 0 | 0 |
| Republic of Korea | Volume | 0 | 0 | 600 | 650 | 0 |
| Republic of Rolea | Value | 0 | 0 | 3 | 2 | 0 |
| Canada | Volume | 210 | 0 | 0 | 0 | 0 |
| Cariada | Value | 2 | 0 | 0 | 0 | 0 |
| Chinese Taipei | Volume | 89 623 | 0 | 0 | 0 | 0 |
| Chinese raipei | Value | 36 | 0 | 0 | 0 | 0 |
| Nigorio | Volume | 168 882 | 0 | 0 | 0 | 0 |
| Nigeria | Value | 76 | 0 | 0 | 0 | 0 |
| India | Volume | 11 289 | 286 | 850 | 100 | 0 |
| iliula | Value | 15 | 4 | 7 | 2 | 0 |

3.5. Export evolution

Table 24: Export destinations (kilograms / thousands US\$)

| | | | Mango | | | |
|-------------------|--------------|-----------|-----------|-----------|---------|-----------|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
| World | Volume | 9 856 577 | 8 142 932 | 5 167 979 | 259 914 | 6 641 824 |
| VVOIId | Value | 1 799 | 1 343 | 991 | 112 | 1 953 |
| Viet Nam | Volume | 7 317 050 | 6 033 750 | 3 375 000 | 15 000 | 6 064 334 |
| Viet ivaiii | Value | 1 420 | 827 | 569 | 9 | 1 650 |
| Thailand | Volume | 0 | 0 | 0 | 432 | 219 194 |
| Thalland | Value | 0 | 0 | 0 | 4 | 105 |
| Russian | Volume | 39 187 | 140 033 | 216 889 | 66 750 | 199 648 |
| Federation | Value | 28 | 82 | 112 | 24 | 96 |
| Massa (CADC) | Volume | 199 359 | 121 932 | 140 868 | 170 259 | 147 891 |
| Macao (SARC) | Value | 35 | 37 | 45 | 54 | 51 |
| Hong Kong CAD | Volume | 2 253 660 | 1 578 447 | 1 297 962 | 7 083 | 8 160 |
| Hong Kong SAR | Value | 297 | 221 | 189 | 16 | 1 |
| United States of | Volume | 0 | 5 094 | 0 | 390 | 2 382 |
| America | Value | 0 | 17 | 0 | 5 | 45 |
| Singaporo | Volume | 0 | 0 | 0 | 0 | 200 |
| Singapore | Value | 0 | 0 | 0 | 0 | 5 |
| Indonesia | Volume | 0 | 856 | 5 850 | 0 | 0 |
| indonesia | Value | 0 | 1 | 11 | 0 | 0 |
| lanan | Volume | 9 300 | 72 000 | 0 | 0 | 0 |
| Japan | Value | 7 | 74 | 0 | 0 | 0 |
| Danublia of Karaa | Volume | 15 000 | 0 | 1 440 | 0 | 0 |
| Republic of Korea | Value | 5 | 0 | 38 | 0 | 0 |
| Chinasa Tainai | Volume | 0 | 800 | 0 | 0 | 0 |
| Chinese Taipei | Value | 0 | 3 | 0 | 0 | 0 |
| Malayaia | Volume | 23 016 | 119 000 | 0 | 0 | 0 |
| Malaysia | Value | 6 | 13 | 0 | 0 | 0 |
| Myanmar | Volume | 0 | 0 | 128 000 | 0 | 0 |
| Myanmar | Value | 0 | 0 | 25 | 0 | 0 |

Table 25: Export destinations – Watermelon (kilograms / thousands US\$)

| | | | Watermelon | | | |
|----------------------------------|--------------|------------|------------|------------|------------|------------|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
| \\/ - | Volume | 35 631 136 | 36 416 184 | 36 660 348 | 33 441 452 | 57 840 348 |
| World | Value | 5 030 | 7 305 | 7 597 | 9 279 | 15 125 |
| Hong Kong | Volume | 26 469 200 | 25 307 980 | 23 928 738 | 24 089 550 | 33 695 200 |
| SAR | Value | 3 754 | 5 354 | 5 546 | 6 667 | 8 406 |
| Viet Nam | Volume | 241 000 | 666 000 | 1 706 000 | 3 889 000 | 17 345 504 |
| viet ivam | Value | 18 | 145 | 223 | 1 135 | 4 992 |
| | Volume | 3 599 930 | 3 335 043 | 3 719 964 | 3 620 121 | 3 453 114 |
| Macao SAR | Value | 318 | 362 | 415 | 753 | 649 |
| Russian | Volume | 1 849 206 | 2 929 010 | 2 510 097 | 1 508 251 | 1 890 380 |
| Federation | Value | 644 | 1 090 | 1 022 | 653 | 917 |
| Mangalia | Volume | 3 470 000 | 3 973 000 | 4 711 000 | 302 000 | 1 409 300 |
| Mongolia | Value | 296 | 330 | 377 | 60 | 139 |
| Democratic | Volume | 0 | 192 000 | 80 000 | 32 530 | 12 050 |
| People's Republic of Korea | Value | 0 | 22 | 9 | 11 | 8 |
| Delieter | Volume | 0 | 12 000 | 0 | 0 | 0 |
| Pakistan | Value | 0 | 1 | 0 | 0 | 0 |
| Malayaia | Volume | 0 | 0 | 4 550 | 0 | 0 |
| Malaysia | Value | 0 | 0 | 3 | 0 | 0 |

Table 26: Export destinations – Guava (kilograms / thousands US\$)

| | Guava | | | | | | | | |
|-------------|--------------|-----------|-----------|-----------|---------|---------|--|--|--|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 | | | |
| 'World | Volume | 6 786 222 | 4 802 745 | 7 347 591 | 628 465 | 550 186 | | | |
| VVOIIG | Value | 1 045 | 767 | 1 116 | 216 | 189 | | | |
| Macao SAR | Volume | 499 300 | 486 801 | 612 236 | 532 834 | 496 308 | | | |
| Macao SAR | Value | 84 | 80 | 92 | 126 | 123 | | | |
| Malayaia | Volume | 0 | 229 760 | 403 482 | 10 130 | 26 026 | | | |
| Malaysia | Value | 0 | 33 | 56 | 16 | 36 | | | |
| Viet Nam | Volume | 0 | 0 | 0 | 0 | 15 000 | | | |
| Viet Nam | Value | 0 | 0 | 0 | 0 | 4 | | | |
| lonon | Volume | 19 497 | 4 420 | 0 | 2 010 | 9 319 | | | |
| Japan | Value | 30 | 6 | 0 | 4 | 19 | | | |
| Hong Kong | Volume | 6 225 763 | 3 936 650 | 6 127 800 | 6 700 | 2 533 | | | |
| SAR | Value | 912 | 583 | 911 | 12 | 5 | | | |
| United Arab | Volume | 0 | 40 353 | 0 | 0 | 0 | | | |
| Emirates | Value | 0 | 20 | 0 | 0 | 0 | | | |
| Kyrayzetan | Volume | 6 000 | 0 | 0 | 32 000 | 0 | | | |
| Kyrgyzstan | Value | 3 | 0 | 0 | 26 | 0 | | | |

| | Guava | | | | | | | | |
|--------------|--------------|--------|--------|---------|--------|------|--|--|--|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 | | | |
| Cormany | Volume | 0 | 0 | 6 900 | 4 000 | 0 | | | |
| Germany | Value | 0 | 0 | 13 | 7 | 0 | | | |
| Thailand | Volume | 0 | 94 014 | 4 148 | 6 710 | 0 | | | |
| maiianu | Value | 0 | 42 | 5 | 9 | 0 | | | |
| Cin man a ma | Volume | 0 | 0 | 193 025 | 0 | 0 | | | |
| Singapore | Value | 0 | 0 | 39 | 0 | 0 | | | |
| Indonesia | Volume | 0 | 0 | 0 | 7 000 | 0 | | | |
| Indonesia | Value | 0 | 0 | 0 | 2 | 0 | | | |
| Russian | Volume | 34 222 | 0 | 0 | 27 081 | 0 | | | |
| Federation | Value | 15 | 0 | 0 | 13 | 0 | | | |

 Table 27:
 Export destinations – Pineapple (kilograms / thousands US\$)

| | | | Pineapple | | | |
|----------------------------------|--------------|-----------|-----------|-----------|-----------|-----------|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
| World | Volume | 5 394 832 | 3 685 045 | 3 716 790 | 1 830 125 | 2 507 245 |
| vvoria | Value | 1 278 | 1 808 | 1 543 | 1 026 | 1 477 |
| Russian | Volume | 1 629 804 | 1 420 692 | 1 604 532 | 1 327 345 | 1 846 993 |
| Federation | Value | 594 | 589 | 770 | 721 | 1 084 |
| Kazakhstan | Volume | 6 750 | 50 900 | 200 498 | 305 970 | 303 150 |
| Kazakiistaii | Value | 2 | 18 | 85 | 103 | 163 |
| Macao (SARC) | Volume | 152 668 | 122 174 | 97 600 | 91 030 | 150 444 |
| Macao (SARC) | Value | 24 | 22 | 20 | 23 | 33 |
| Kurauzatan | Volume | 121 649 | 608 253 | 64 350 | 17 100 | 110 750 |
| Kyrgyzstan | Value | 56 | 351 | 51 | 9 | 61 |
| United Arab | Volume | 0 | 3 780 | 0 | 0 | 32 020 |
| Emirates | Value | 0 | 1 | 0 | 0 | 7 |
| Republic of | Volume | 0 | 120 120 | 532 915 | 62 200 | 31 000 |
| Korea | Value | 0 | 30 | 220 | 25 | 13 |
| lordon | Volume | 0 | 0 | 0 | 16 000 | 18 900 |
| Jordan | Value | 0 | 0 | 0 | 4 | 2 |
| United States of | Volume | 2 000 | 3 705 | 3 599 | 4 279 | 5 859 |
| America | Value | 29 | 76 | 73 | 81 | 87 |
| Democratic | Volume | 4 288 | 0 | 0 | 2 180 | 3 540 |
| People's Republic of Korea | Value | 1 | 0 | 0 | 1 | 2 |
| I | Volume | 253 870 | 106 100 | 167 901 | 0 | 0 |
| Japan - | Value | 105 | 28 | 74 | 0 | 0 |
| Hong Kong | Volume | 3 223 700 | 1 183 727 | 1 042 937 | 0 | 0 |
| SAR | Value | 465 | 647 | 222 | 0 | 0 |

Table 28: Export destinations – Banana (kilograms / thousands US\$)

| | | | Banana | | | |
|----------------------------------|--------------|------------|------------|------------|------------|------------|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|) | Volume | 23 550 152 | 22 807 892 | 20 878 462 | 15 077 783 | 13 170 413 |
| World | Value | 7 492 | 7 228 | 6 779 | 6 841 | 6 665 |
| Russian | Volume | 10 050 350 | 13 203 764 | 10 656 096 | 13 390 217 | 9 446 325 |
| Federation | Value | 4 286 | 4 864 | 3 805 | 5 568 | 4 441 |
| NA | Volume | 215 000 | 358 000 | 375 000 | 84 700 | 1 800 950 |
| Mongolia | Value | 65 | 93 | 113 | 25 | 604 |
| | Volume | 2 874 687 | 1 585 944 | 2 249 946 | 800 497 | 725 424 |
| Japan | Value | 1 686 | 1 074 | 1 510 | 638 | 579 |
| Marara CAD | Volume | 1 017 675 | 974 445 | 1 006 345 | 686 785 | 702 297 |
| Macao SAR | Value | 86 | 95 | 96 | 115 | 98 |
| IZlib-t | Volume | 3 100 | 142 259 | 74 075 | 0 | 181 716 |
| Kazakhstan | Value | 1 | 58 | 30 | 0 | 116 |
| Iran (Islamic | Volume | 0 | 0 | 0 | 0 | 100 710 |
| Republic of) | Value | 0 | 0 | 0 | 0 | 48 |
| United States of | Volume | 1 005 | 21 416 | 24 734 | 51 903 | 59 464 |
| America | Value | 7 | 118 | 182 | 423 | 509 |
| Caudi Arabia | Volume | 0 | 0 | 0 | 0 | 41 040 |
| Saudi Arabia | Value | 0 | 0 | 0 | 0 | 30 |
| United Arab | Volume | 0 | 0 | 0 | 0 | 39 000 |
| Emirates | Value | 0 | 0 | 0 | 0 | 26 |
| Democratic | Volume | 24 225 | 21 343 | 11 700 | 40 910 | 37 820 |
| People's Republic of Korea | Value | 9 | 5 | 2 | 16 | 23 |
| \" (\ \) | Volume | 0 | 0 | 71 034 | 0 | 0 |
| Viet Nam | Value | 0 | 0 | 39 | 0 | 0 |
| | Volume | 0 | 1 024 020 | 379 350 | 0 | 0 |
| Malaysia | Value | 0 | 106 | 48 | 0 | 0 |
| Hong Kong | Volume | 9 361 650 | 5 451 797 | 6 006 140 | 0 | 0 |
| SAR | Value | 1 349 | 789 | 949 | 0 | 0 |
| K. man mat = = | Volume | 0 | 19 500 | 23 800 | 19 500 | 0 |
| Kyrgyzstan | Value | 0 | 10 | 4 | 18 | 0 |

Table 29: Export destinations – Papaya (kilograms / thousands US\$)

| Рарауа | | | | | | | | |
|--------------|--------------|-----------|-----------|-----------|---------|---------|--|--|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 | | |
| World | Volume | 6 706 248 | 4 012 833 | 9 778 854 | 336 429 | 418 224 | | |
| VVOIId | Value | 981 | 727 | 2 041 | 78 | 103 | | |
| Massa (SARC) | Volume | 816 206 | 538 418 | 582 699 | 308 291 | 407 427 | | |
| Macao (SARC) | Value | 142 | 113 | 120 | 63 | 89 | | |
| Malayaia | Volume | 0 | 217 000 | 924 200 | 0 | 9 287 | | |
| Malaysia | Value | 0 | 160 | 654 | 0 | 12 | | |
| Canada | Volume | 0 | 3 900 | 10 918 | 28 138 | 1 510 | | |
| Canada | Value | 0 | 1 | 14 | 15 | 2 | | |
| Cinganara | Volume | 0 | 0 | 32 517 | 0 | 0 | | |
| Singapore | Value | 0 | 0 | 4 | 0 | 0 | | |
| Hong Kong | Volume | 5 890 000 | 3 253 500 | 8 228 500 | 0 | 0 | | |
| SAR | Value | 839 | 454 | 1 249 | 0 | 0 | | |

Table 30: Export destinations – Lemons and limes (kilograms / thousands US\$)

| Lemons and limes, fresh or dried | | | | | | | | |
|----------------------------------|--------------|--------|--------|-----------|-----------|-----------|--|--|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 | | |
| World | Volume | 84 777 | 89 471 | 3 515 664 | 9 400 227 | 4 719 784 | | |
| vvorid | Value | 80 | 42 | 1 209 | 3 294 | 3 277 | | |
| Russian | Volume | 16 291 | 3 506 | 496 861 | 3 399 987 | 2 525 560 | | |
| Federation | Value | 6 | 1 | 232 | 1 444 | 1 312 | | |
| Malaysia | Volume | 0 | 0 | 752 202 | 683 527 | 737 682 | | |
| ivialaysia | Value | 0 | 0 | 601 | 373 | 726 | | |
| Hong Kong CAD | Volume | 63 500 | 48 000 | 2 105 100 | 4 381 000 | 430 500 | | |
| Hong Kong SAR | Value | 8 | 6 | 271 | 865 | 221 | | |
| Kazakhstan | Volume | 0 | 0 | 0 | 23 270 | 252 330 | | |
| Nazakiistaii | Value | 0 | 0 | 0 | 32 | 221 | | |
| United Arab | Volume | 0 | 25 000 | 24 000 | 164 415 | 238 500 | | |
| Emirates | Value | 0 | 5 | 21 | 169 | 199 | | |
| Indonesia | Volume | 0 | 0 | 41 980 | 238 300 | 173 550 | | |
| muonesia | Value | 0 | 0 | 23 | 188 | 188 | | |
| Kuwait | Volume | 0 | 0 | 0 | 0 | 103 950 | | |
| Nuwaii | Value | 0 | 0 | 0 | 0 | 99 | | |
| Iran (Islamic | Volume | 0 | 0 | 0 | 0 | 79 215 | | |
| Republic of) | Value | 0 | 0 | 0 | 0 | 91 | | |
| Kurau zatan | Volume | 0 | 0 | 0 | 0 | 51 000 | | |
| Kyrgyzstan | Value | 0 | 0 | 0 | 0 | 83 | | |
| Saudi Arabia | Volume | 0 | 0 | 0 | 0 | 47 600 | | |
| Saudi Afabia | Value | 0 | 0 | 0 | 0 | 41 | | |
| Singapore | Volume | 0 | 0 | 61 600 | 376 922 | 36 500 | | |

| Lemons and limes, fresh or dried | | | | | | | | |
|----------------------------------|--------------|-------|-------|--------|--------|--------|--|--|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 | | |
| | Value | 0 | 0 | 31 | 127 | 24 | | |
| Dhilippingo | Volume | 0 | 0 | 18 000 | 8 400 | 22 650 | | |
| Philippines | Value | 0 | 0 | 3 | 10 | 33 | | |
| Massa (CARC) | Volume | 1 120 | 5 683 | 13 191 | 40 246 | 18 610 | | |
| Macao (SARC) | Value | 1 | 3 | 7 | 11 | 7 | | |
| lonon | Volume | 1 148 | 1 403 | 2 730 | 0 | 1 187 | | |
| Japan | Value | 60 | 11 | 21 | 0 | 31 | | |
| | Volume | 0 | 0 | 0 | 60 160 | 750 | | |
| Thailand | Value | 0 | 0 | 0 | 48 | 1 | | |

Table 31: Export destinations – Manioc (cassava) (kilograms / thousands US\$)

| Manioc (cassava) | | | | | | |
|-------------------|--------------|-------|--------|-------|---------|------|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
| World | Volume | 2 250 | 61 340 | 1 754 | 154 600 | 0 |
| | Value | 3 | 26 | 5 | 20 | 0 |
| Republic of Korea | Volume | 0 | 60 340 | 0 | 0 | 0 |
| | Value | 0 | 24 | 0 | 0 | 0 |
| Chinese Taipei | Volume | 0 | 0 | 504 | 154 600 | 0 |
| | Value | 0 | 0 | 3 | 20 | 0 |
| Australia | Volume | 2 250 | 1 000 | 1 250 | 0 | 0 |
| | Value | 3 | 2 | 2 | 0 | 0 |

Table 32: Export destinations – Guava (kilograms / thousands US\$)

| | | | Ginger | | | |
|----------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| Importers | (kg / US\$) | 2005 | 2006 | 2007 | 2008 | 2009 |
|) | Volume | 239 934 608 | 280 368 160 | 273 252 160 | 265 741 152 | 339 939 136 |
| World | Value | 218 967 | 168 155 | 153 234 | 211 974 | 281 195 |
| lanas | Volume | 71 459 496 | 68 722 888 | 44 627 904 | 44 913 312 | 40 953 264 |
| Japan | Value | 74 156 | 53 752 | 37 647 | 55 499 | 48 624 |
| Pakistan | Volume | 27 354 476 | 49 819 928 | 50 861 696 | 36 860 404 | 37 145 208 |
| Pakisian | Value | 24 040 | 24 831 | 21 849 | 23 616 | 31 759 |
| Developed | Volume | 7 935 670 | 13 874 184 | 14 523 400 | 17 212 200 | 35 705 796 |
| Bangladesh | Value | 6 058 | 5 608 | 5 496 | 10 980 | 26 425 |
| Moleveie | Volume | 22 094 000 | 28 192 164 | 34 859 488 | 22 852 380 | 35 100 440 |
| Malaysia - | Value | 15 037 | 11 463 | 15 336 | 13 339 | 24 104 |
| United States of | Volume | 26 528 278 | 29 921 192 | 28 772 022 | 23 986 824 | 33 985 820 |
| America | Value | 27 003 | 19 736 | 17 919 | 20 959 | 29 905 |
| United Arab | Volume | 13 432 699 | 16 344 290 | 19 092 992 | 19 846 568 | 23 924 264 |
| Emirates | Value | 11 893 | 8 395 | 9 080 | 12 226 | 19 385 |
| Caudi Arabia | Volume | 10 999 325 | 14 146 300 | 18 054 310 | 18 326 538 | 19 131 324 |
| Saudi Arabia | Value | 8 809 | 6 103 | 7 482 | 10 504 | 12 988 |
| Linite di Kinggalana | Volume | 10 088 907 | 9 614 090 | 6 655 757 | 10 793 349 | 14 250 003 |
| United Kingdom | Value | 8 600 | 5 292 | 3 494 | 8 721 | 11 867 |
| Nothernords | Volume | 5 389 858 | 7 249 061 | 5 768 219 | 8 414 771 | 13 676 748 |
| Netherlands | Value | 5 452 | 4 740 | 3 253 | 7 207 | 12 953 |
| Republic of | Volume | 15 097 112 | 8 128 992 | 14 573 337 | 9 290 814 | 12 928 850 |
| Korea | Value | 7 884 | 3 153 | 5 221 | 5 220 | 4 856 |
| Viet Nam | Volume | 2 167 030 | 1 476 000 | 1 710 640 | 11 121 992 | 11 589 450 |
| Viet Nam | Value | 492 | 752 | 889 | 3 426 | 3 531 |
| Canada | Volume | 7 017 315 | 8 183 114 | 6 680 143 | 8 381 055 | 9 580 081 |
| Canada | Value | 5 898 | 4 523 | 3 972 | 6 737 | 8 260 |

4. Tariff structure

4.1. Tariff table for target fruits and vegetable products (2009)

 Table 33:
 Fruits and vegetables (aggregated applied ad valorem tariff)

| Trade regime | Mango | Water- melon | Guava | Pineapple | Banana | Papaws | Lemons | Orange | Manioc | Ginger |
|--|--------|-----------------|-------|-----------|--------|--------|--------|--------|--------|--------|
| MFN duties* (Applied) | 15% | 25% | 15% | 12% | 10% | 25% | 11% | 11% | 5% | 15% |
| Non-MFN tariff | 80% | 70% | 80% | 80% | 40% | 70% | 100% | 100% | 30% | 50% |
| Regional tariff preference (ASEAN) for Brunei | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Indonesia | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Myanmar | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Malaysia | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Philippines | 0% | 5% | 0% | 0% | 0% | 5% | 5% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Singapore | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Thailand | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 5% |
| Regional tariff preference (ASEAN) for Viet Nam | 0% | 0% | 0% | 0% | 0% | 0% | 5% | 0% | 0% | 5% |
| Preferential tariff for APTA countries | 10.60% | 12.50% | 7.50% | 7.90% | 6.90% | 5% | 5.50% | 11% | 0% | 7.50% |

| Trade regime | Mango | Water- melon | Guava | Pineapple | Banana | Papaws | Lemons | Orange | Manioc | Ginger |
|-------------------------------------|-------|-----------------|-------|-----------|--------|--------|--------|--------|--------|--------|
| Preferential tariff for Pakistan | 0% | 12.50% | 0% | 0% | 6.90% | 16% | 0% | 0% | 1.20% | 7.50% |
| Preferential tariff for Chile | 3% | 5% | 3% | 2.40% | 6% | 13% | 6.60% | 5.50% | 0% | 3% |
| Preferential tariff for New Zealand | 9% | 16% | 9% | 7.20% | 6% | 0% | 8.60% | 7.30% | 0% | 9% |
| Value added tax | 13% | 13% | 13% | 13% | 13% | 25% | 13% | 13% | 13% | 13% |
| Consumption tax | 0% | 0% | 0% | 0% | 0% | 70% | 0% | 0% | 0% | 0% |

Note: Lao People's Democratic Republic also enjoys a regional tariff preference (ASEAN) for bananas and ginger of 0%. Singapore also enjoys a regional tariff preference (ASEAN) for ginger of 5%.

These countries are: Benin, Burundi, the Central African Republic, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Guinea, Guinea Bissau, Lesotho, Liberia, Madagascar, Mali, Mauritania, Mozambique, Rwanda, Sierra Leone, Sudan, the United Republic of Tanzania, Togo, Uganda, Zambia, Chad, the Comoros, the Democratic Republic of Congo, Malawi, Angola, Cape Verde, Niger, Somalia and Senegal.

^{*}There are 31 LDCs in Africa that enjoy Most Favoured Nation (MFN) status with China and are therefore subject to the respective lower import duties listed in the first line of the table above.

4.2. Zero Tariff Policy

Prior to July 2010 no African countries were subject to Special Preferential Tariff Agreements for the nine selected products in this report.

Under to new Special Preferential Tariff Agreements that took effect in July 2010, some African countries have zero tariff treatment for the following products: mango (08045020), pineapple (08043000), banana (08030000), manioc (cassava, 07141020), ginger (09101000), papaws (papaya, 08072000) and lemons and limes (08055000). These countries include all those with MFN treatment in the above table, with the exception of five countries; Angola, Cape Verde, Niger, Somalia and Senegal.

There is no special tariff treatment for African exports of watermelon (08071100) and guava (08045010) to China.

5. Non-tariff requirements

5.1. Import regulations

These key import laws, regulations, and measures must be followed by any importer seeking to import fruits and vegetables into China:

- Laws and regulations: Law of the People's Republic of China on the Entry and Exit Animal and Plant Quarantine, Law of the People's Republic of China on Import and Export Commodity Inspection, Food Hygiene Law of the People's Republic of China, Regulations for the Implementation of the Law of the People's Republic of China on the Entry and Exit Animal and Plant Quarantine, Regulations for the Implementation of the Law of the People's Republic of China on Import and Export Commodity Inspection.
- Administrative measures: General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) Decree No. 68, 2005, Promulgating the Measures for Implementation of Inspection, Quarantine and Supervision of Entry Fruits, issued on 5 July 2005.

5.2. Customs procedures

Importers must follow these procedures when importing fruit and vegetables into China:

- Importers should ensure China allows the products to be imported from the exporting countries.
 For fruits, importers can refer to the 'China to allow entry of fruit types and exporting countries / regions directory' from the AQSIQ.
- 2. Importers should determine the port in China which allows the product to be imported, as only seven ports in total are permitted to import fruits and vegetables.
- 3. Importers need to obtain certain related licences and certifications. Regarding fruits and vegetables, these are: 'the Official Phytosanitary Certificate' (including hygienic licence), "Certificate of Origin" (needed when importers apply for preferential tariffs or import by sea) and "Wood Packing Certificate" (specific to exporting countries and regions of which China needs to control certain pests and diseases). Such certificates should be obtained from relevant departments in the exporting countries. In addition, it is necessary to obtain a "Permit to Import Quarantine Material into the PRC" (specific to fruits and not applicable for vegetables). Normally, it takes six weeks from the time an application is submitted to receipt of the permit.
- 4. Importer and local buyer sign a sales contract, after which the products can be transported to China.

- 5. The animal and plant quarantine office at the port of entry in China will quarantine the product upon its entry. The process is as follows:
 - Apply for quarantine inspection,
 - The application is accepted, customs is cleared
 - The quarantine inspection takes place
 - The "Quarantine Release Notice" will be issued if the product passes the quarantine inspection
 - The product is released.

Three to five days are needed to complete this process; however, there is a 'green channel' that importers of fruits and vegetables can apply for at their port of entry that reduces the guarantine period.

6. Customs declaration formalities, for which the following are needed: "Quarantine Release Notice", customs declaration forms, invoice for products, contracts, agency power of attorney (if the importer uses a customs clearance agent) and some other related documents (with respect to specific custom declaration, according to actual state of the entry products, subject to on-site customs' requirements).

5.3. Packaging and labelling requirements

The following are required on all packaging for fruits and vegetables:

- The origin should be clearly labelled and be consistent with other accompanying documentation.
- Fruit and vegetable names, production origins, and names or codes of packaging factories should be clearly identified on the packaging.
- Imported fruits should be in accordance with the permission granted by the various licences. Quantities should be within the maximum permitted. Fruits that are not examined and approved may not be concealed within the packaging.
- Soil, stems, leaves, pests and weeds should not be attached to fruits and vegetables.
- Occurrence of pesticides and toxic substances, such as heavy metals should be in line with China national standards.
- Provide the Phytosanitary Certificate from exporting countries or areas; if shipping with containers, provide the relevant information for tracking the containers; the consignee to the certifications, the consignee in "the Licence for Quarantine of Entry Animals and Plants" and the signer of the contract should be consistent; any special requirements regarding bilateral agreements should be formally declared and followed.

5.4. Limitations on imports from Africa

The Special Preferential Tariff Agreements related to the nine selected products imported from Africa by China mentioned in Section 4.2 "Zero Tariff Policy," ensure all the fruits or vegetables may legally be imported to China from Africa. The State General Administration of the PRC for Quality Supervision and Inspection and Quarantine issues a list of fruits and vegetables that may be exported to China.

Currently, only two non LDC countries from Africa have permission to export fruits to China, according to the latest version of the Permit to Import Quarantined Materials into the PRC; they are: citrus (including tangerines, oranges, shaddocks, lemons, Citrus Paradisi) and grapes from South Africa; citrus (including tangerines, oranges, shaddocks, lemons, Citrus Paradisi) from Egypt (last updated March 11, 2010).

African governments, other than South Africa or Egypt, must submit applications to the Chinese government before domestic exporters may import any fruits to China.

Among the eight fruit importers interviewed, six imported either oranges, grapes, or both from South Africa, while only one company imported oranges from Egypt. Several respondents indicated that for exporters located in Africa, other than Egypt or South Africa, to export any type of fruit or vegetable to China, the Chinese government would first need to repeal the limitations listed above. This would need to be done at

the national government level and therefore likely would require lobbying by the government of the exporting country.

6. Consumer trends

6.1. Current consumption trends

According to fruit importers, imported pineapples, mangoes and watermelons are more popular in China than the other four fruits covered in this report. Imported watermelons are most popular in winter in China, when there is limited domestic production.

Importers and wholesalers were unable to provide detailed comments on consumer trends regarding manioc and ginger because these are purchased fresh or dried and then sold as processed products, not directly to consumers.

Dragon fruit, kiwi, durian, mangosteen, jackfruit, grapes, apples and cherries are the best selling fruits imported into China. Consumers in the northern and central regions of China generally prefer sweet tasting tropical fruits. In southern China, however, a wider range of fruits is eaten, including guava and carambola (star fruit). In recent years, a growing segment of the population has started to accept fruit with distinctive smells such as durian and jackfruit.

Most imported fruits are sold during the winter, generally from December to February, when domestic fresh tropical fruits cannot be grown outside of southern China. Consumers generally prefer the taste of fresh fruit, so in the summer, they have a preference for domestic fruits that are fresher and cheaper. In the winter, however, domestic fruits cannot be grown or sold, so consumers (especially those in the middle and upper classes) tend to buy imported fruit, particularly tropical fruit.

In the periods around China's National Day in October and Labour Day in May, there is a peak in fruit consumption, especially tropical fruits, as people give fruit as gifts.

South African oranges are the only fruit commonly imported and sold from Africa and tend to be somewhat cheaper than American Sunkist oranges, although several importers noted that South African oranges do not sell as well as American ones because they are sourer. The number of varieties of fruits that the Chinese government currently allows to be imported from Africa is relatively small.

Organic fruits are mostly grown and sold locally in China and are becoming more popular, but supply is relatively small and prices are higher (1 to 2 renminbis more per kilogram).

6.2. Future consumption trends

Based on interviews with retailers, importers and wholesalers, the market for fruit, including tropical fruit, is expected to continue to grow in China.

Among imported fruits, significant growth is in consumption is likely for durian, mangosteen and jackfruit, due to increasing standards of living and the ability to afford more expensive imported fruit, as well as growing availability of imported fruits at supermarkets and independent fruit shops.

Among the seven selected fruits, banana and papaya are the most popular imported fruits in China; the importers interviewed expect faster import growth for these two products in the near future. There were few other predictions on popularity and market size offered by the respondents, however.

7. Distribution

7.1. Origin of imports

Tropical fruits are mainly imported from Southeast Asian countries followed by the Americas, Oceania and Africa. Oranges are the primary import from Africa; limited fruit is imported from Europe. Dried manioc and ginger are imported from Southeast Asia.

Overall, importers consider fruit quality (including the appearance of the fruit's surface), long-term stability of supply and price the most important factors when considering where to import products from. For tropical fruits, large importers have long-term, stable suppliers, but say they would consider importing fruits from Africa under several conditions:

- If China's policy were amended to allow the import of multiple types of fruits from Africa (other than oranges and grapes) from countries other than South Africa and Egypt.
- If African countries offered a stable supply of good quality fruit.

Several industry experts and importers also mention that the distance to market is an obstacle to importing fruits from Africa, as the associated transportation costs decrease the competitive advantage African suppliers may have in pricing. The long distance to market also affects the quality of the fruit, as it is more likely to be damaged and less fresh. Therefore, potential importers say sturdy packaging should be used to protect the fruit during long distance shipping.

China produces a large volume of vegetables, and therefore does not require a large quantity of vegetable imports.

Southeast Asia is the main area from which China imports tropical fruits. There are three main reasons for this: Southeast Asia has a climate where tropical fruits grow in abundance; the distance between Southeast Asia and China is minimal, reducing transportation costs; and 90% of products traded between ASEAN countries and China have a zero tariff rate.

7.2. Type of importers

Importers of fruits and tropical fruits (including the seven selected fruits) are usually medium to large sized import trading companies that deal in several types of fruit rather a single product. Among the importers interviewed, the largest imports about 30,000 tons of fruit per year while the smallest imports about 2,000 tons per year (all fruits, not only tropical fruit). Several of the importers interviewed also have retail shops and sell fruit directly to consumers; others sell to wholesalers via wholesale markets located throughout China. One importer from Ningbo said his was the only company with the rights to import fruit into Ningbo port, which is the latest port allowing the import of fruits.

Regarding vegetables, dried manioc is usually imported by large chemical factories and food processing plants that import the maximum allowed volume, which is used only internally.

Ginger from Thailand is generally imported by food processing companies, often together with other food flavouring ingredients.

7.3. Supplier selection

Several ways to select suppliers

Suppliers are found in exporting countries mainly through the following methods: recommendations from agriculture associations or embassies in exporting countries; participation in international agricultural trade fairs; recommendations from peers; and customs data purchased from target countries.

Use of internationally focused domestic fruit associations for supplier searches

Currently there are no Chinese associations solely dedicated to facilitating contact between Chinese importers and wholesalers and foreign exporters of fruits and vegetables. China does have several international trade associations that provide a general forum for importers and foreign exporters to meet and interact, including the China Chamber of Commerce for Import and Export of Foodstuffs, Native Produce and Animal By-Products.

In addition to nationwide associations, most provinces on China's east coast have provincial level associations aimed at fostering relationships and cooperation between importers and foreign exporters. These too tend to be aimed at the general market without focusing solely on fruit. The one exception is the Guangdong Fruit Association, which aims to develop international cooperation with foreign and domestic fruit importers and exporters and organizes fruit trade fairs. Guangdong is also the location of the Guangzhou Jiangnan Fruit and Vegetable Wholesale Market, and therefore this association may be an interesting contact for foreign exporters.

Selection process

According to several fruit importers, new fruit suppliers are selected through the following process:

- Face-to- face negotiations between the supplier and importer;
- Potential suppliers provide product brochures and fruit samples, when possible;
- Staff are sent to exporting countries for on-site investigations;
- Cooperation starts with a small volume of goods;
- If both sides are satisfied, the new suppliers will be on the path of establishing a long-term relationship with the buyer.

The final decision makers are usually the import company's senior sales management.

7.4. Payment and contract terms

Payment terms

Payment terms that importers generally use with foreign suppliers are:

Imported fruits: cash on delivery
 Imported ginger: cash on delivery
 Imported Manioc: letter of credit

Contract terms

In most cases, the contract terms an importer or large wholesaler has with a foreign fruit or vegetable supplier include key items such as payment terms, agreed International Commerce terms (Incoterms), price, delivery time and volume. Most suppliers require a minimum delivery of one 40-foot container. The importers are usually required to cover all costs assessed in China, including unloading, customs inspection, VAT, storage and agency fees where applicable. The supplier must pay for the freight, but the importer pays insurance (depending on the Incoterms chosen).

In addition, most importers require that suppliers deliver fruits to the port located nearest to their centre of operations.

7.5. Key distribution channels

There are seven ports in China that are authorized by the national government to receive imported fruit. They are Ningbo, Xiamen, Nanjing, Qingdao, Guangzhou, Tianji, and Shanghai. Guangzhou is the largest destination for imported fruits, accounting for approximately 70% of China's imported fruit.

Key players in the distribution of the seven target fruits after reaching the China market are: importers (see Annex II), wholesalers (Shuili Market), supermarkets (such as Lotus, Carrefour, Tesco, RT-Mart, Wal-Mart

and local supermarkets), hotels (such as Shangri-la Hotel and others), restaurants and fruit shops (including chain fruit shops, see Annex III).

Key players in the market for the two selected vegetables are: importers (see Annex II), wholesalers, chemical factories, pharmaceutical factories (such as QinDao XinDun ShuCai Co.), food processing factories (LvXin. Co.) and restaurants (such as Shangri-la Restaurant).

Some fruit and vegetable importers said they have various types of clients, including second tier wholesalers, fruit and vegetable outlets, fruit and vegetable retailers, supermarkets, hotels and restaurants. In addition, they sell their imported fruits and vegetables to some large wholesalers, such as Shuili Market, which is located in Foshan city, Guangdong Province and has up to 50% of the Chinese fruit and vegetable market. The Shuili Market has two sources for importing fruits – its dealers or agencies around the world and certain local fruit importers.

Besides importers known already by ITC (and listed in annex II), according to ChinaNews, Kunming in Yunnan Province is expected to become the main distribution centre for tropical fruits through the founding of the 'China-Thailand International fruit-processing centre'. Mr Chen, commercial secretary of China Thailand, said this project could integrate the advantages of two countries, not only to build a platform for the fruit business, but also to bring together talented and skilled people, adding value to the supply chain and improving the industry's development.

7.6. Retail structure

Retail structure for the majority of fruits and vegetables

The figure below illustrates the typical retail structure in China for most fruits and vegetables, including those selected for this survey:



Figure 2: Retail structure for the majority of fruits and vegetables

Generally, the large fruit and vegetable wholesale markets are where importers and local wholesalers meet. The two largest wholesale markets in China are the Shanghai Longwu Road Fruit and Vegetable Wholesale Market and the Guangzhou Jiangnan Fruit and Vegetable Wholesale Market.

Fruits and vegetables are usually bought for these markets in 40-foot containers and driven off the lot directly to the wholesalers' locations in regional wholesale markets. The owners of the wholesale markets manage the market and transportation services for sellers and buyers, and charge a fee for transporting goods. Usually, the fruits and vegetables are then brought to local wholesale markets (Suzhou city, with roughly 2 million people has three large wholesale markets) and from there sold to supermarkets, fruit and

vegetable shops, hotels and restaurants either by the pallet or in smaller boxes before being purchased by the consumer.

Guangzhou Jiangnan Fruit and Vegetable Wholesale Market

Website: www.jnmarket.net

The Guangzhou Jiangnan Fruit and Vegetable Wholesale Market was established in 1994, and underwent a RMB 500 million upgrade in 2002. Currently it is the largest fruit and vegetable wholesale market in China and was the first to use e-commerce to facilitate business and logistics between wholesalers and customers in China. In 2009, the throughput volume for fruits and vegetables in the market was approximately 4,310,000 tons, more than 6% higher than 2008 and valued at approximately RMB 17.6 billion. The daily throughput volume for fruits and vegetables is about 11.820 tons.

The market covers an area of 400,000m² and caters to suppliers and customers of about 1,000 types of fruits and vegetables.

The vegetable trading area is 180,000m² for more than 500 wholesalers. The daily average throughput volume is approximately 7,000 tons of vegetables, and can reach 10,000 tons during peak periods. The vegetable throughput in this market accounted for 80% of all vegetables sold in Guangzhou in 2010.

The fruit trading area is 180,000m² with more than 100 imported fruit wholesalers in this market. The daily throughput volume of imported fruits currently accounts for 70-80% of the total imported fruit sales volume in China.

Retail structure for dried manioc

Dried manioc is mainly used as a material in the chemical and food processing industries, rather than sold directly to consumer. It consists of:

- Importers and end-users: large scale chemical factories that produce biofuels and conduct self-run imports; large scale food processing factories that produce Cassava starch and also have self-run imports; and import/export trading companies.
- End-users: middle-to-small scale chemical factories and food processing factories that purchase dried manioc from trading companies.

Retail structure for ginger

Ginger imported from Thailand:

- Importers and end-users: food processing factories with self-run import rights mainly centralized in Shandong Province import salted ginger to produce pickled ginger, which is then exported to Japan. All suppliers from Thailand are selected by the Japanese customers. In addition, trading companies that import fresh ginger from Thailand sell it directly to Thai food restaurants in China.
- End-users: Japanese markets and Japanese restaurants in China (pickled ginger) and Thai food restaurants in China (fresh ginger)

7.7. Survey of Chinese importers and retailers of tropical fruits

Several importers and wholesalers of tropical fruit were interviewed to gain insight into the import and distribution process in China's fruit market. These companies were primarily focused on import and sale of fruits and had turnover ranging from US\$ 10 million to US\$ 100 million. Those that had retail operations generally sold to middle and high-end consumers, the primary consumers of imported fruit in China. Most of the companies sell products within their local regions and several have operations throughout China, but it can be assumed that the majority of consumers are located in China's most developed cities (tier-1 and tier-2) in the eastern part of the country.

These importers purchased a wide variety of tropical fruits, mainly from Southeast Asia, because of China's preferential tariff agreements with ASEAN countries. In general, the importers and wholesalers that purchase fruit from developing countries such as Indonesia, the Philippines, or Viet Nam stated that the

quality of the fruit purchased is good and the prices are competitive. None of the companies interviewed had experience purchasing from LDCs.

Most importers and wholesalers were reluctant to reveal pricing information for the fruits they purchased. However, three importers did provide examples:

- Beijing Shengbaotai Fruit Co., Ltd. South African oranges: US\$ 0.6/kg
- Sumifru China Co., Ltd. Philippine bananas: US\$ 1/kg
- Shanghai Fruit Co., Ltd. Vietnamese pitaya: US\$ 5/kg

Similarly, the importers and wholesalers were reluctant to reveal details related to costs associated with importing fruits. Most stated that the supplier is responsible for all shipping costs while the importer is responsible for insurance, unloading, customs inspection, VAT, warehouse storage and any agency fees, depending what was negotiated on a one-to-one basis with the buyer and the Incoterms chosen for the sale.

Most importers have Import departments with staff able to communicate in English with potential suppliers. Most large size wholesalers also have employees capable of communicating in English in writing if not verbally.

8. Recommendations

8.1. Current situation for importers from LDCs in Africa

Only two African countries are currently permitted to export fruits (oranges and grapes) to China, although several importers spoke favourably about their long-term cooperation with African suppliers of grapes and oranges.

Regarding vegetables, few of the interviewed importers of dried manioc or ginger had previous contact with any African suppliers, though several mentioned that a large volume of manioc is grown and consumed in Africa. Importers would consider importing dried manioc from Africa if a sufficient, stable volume could be guaranteed, and the export infrastructure was more mature.

8.2. Target markets

According to industry experts, importers, and retailers, demand for mangosteens, durians, and jackfruits will grow quicker than the fruits surveyed. These fruits, however, are not widely grown in Africa. Among the seven selected fruits, imported mangoes, bananas, and papayas are most commonly consumed in China.

Between the two selected vegetables, there is high demand for dried manioc. Importers believe this could have future market potential.

The typical consumers of imported tropical fruits are urban, middle to upper class adults and families, located mainly in China's most developed cities in the eastern coastal part of the country.

Consumption of tropical fruits is most common in southern China. Consumption of imported tropical fruits mainly takes place in the coastal regions and central China, including the Yangtze River Delta. In north China, main consumption is of domestically grown fruits, with relatively little tropical fruit consumed.

8.3. Recommendations for LDC exporters

According to suggestions from importers, LDC exporters should first satisfy the basic requirement mentioned in Section 5 of this report, "Non-tariff requirements". Secondly, LDC exporters should choose suitable fruits and vegetables for which demand is increasing. Thirdly, LDC exporters should seek to offer more competitive prices than other exporters to China's market (taking into consideration transportation costs) while maintaining a high level of quality.

None of the importers or wholesalers interviewed had ever done business directly with an exporter from an African LDC, primarily due to Chinese government restrictions on imports of tropical fruits and vegetables from most African countries (see section 5.4, "Limitations on imports from Africa"). These companies, however, were able to provide general advice regarding the qualities they look for in an exporter as well more specific advice for exporters located in African LDCs.

The most important factor mentioned was the need for exporters to ensure a stable supply of high quality products and abide by the contract signed with importers. Several mentioned previous experiences in which exporters signed a contract outlining product quality level, price and delivery time, but the products delivered were either lower quality, higher in price or late, with the exporter refusing to honour the original contract. In several such situations, the business relationship was terminated due to the supplier's unwillingness to abide by the original contract. Respondents therefore advised any potential suppliers to ensure the quality of the fruit and honour all contract terms.

In addition, the respondents underlined the need for potential exporters to conduct due diligence regarding which fruits and vegetables may be exported to China and from which countries. The regulations and limitations change quite frequently, making it necessary for exporters to verify regularly that the fruit or vegetable they are exporting can legally be imported into China. In addition, tariffs on fruits and vegetables are subject to frequent change, so these should be confirmed prior to signing a contract.

One way to facilitate the import process is to cooperate with a local Chinese import agent or trading company. This can ease the customs entry procedure by using a local agent more familiar with the technical aspects of the Chinese import market.

Overall, importers had few requirements regarding the location of their fruit or vegetable suppliers. The main concern several importers expressed regarding imports from Africa was potential problems with long delivery times and products being damaged during shipping.

8.4. Next steps

As indicated earlier in this report, the major impediment fruit and vegetable exporters from African LDCs will encounter when attempting to enter the Chinese market are restrictions China places on origins of imported fruits and vegetables. It is therefore recommended that the following steps be taken by prospective exporters:

- Contact relevant internationally focused associations in the exporter's home country to discuss the
 possibility of allowing export of relevant fruits and vegetables to China and the measures that must
 be taken to open such trade.
- If possible, the exporter should directly encourage their national government to negotiate with China's government to allow the export of fruits and vegetables into China's market.
- Seek out and maintain contact with Chinese fruit importers. These importers have English speaking staff in their Import Departments and can provide current information regarding the Chinese government's latest tariff agreements with select countries and information on changes to the restrictions related to fruit or vegetable imports from African LDCs.
- If China allows the import of select fruits and vegetables, the supplier could negotiate with a Chinese importer to facilitate the import process and ensure a smooth entry through China's customs.
- While these steps will not guarantee the opening of the Chinese market for imports of fruits and vegetables from African LDCs, they will at least initiate a discussion on the future possibility of opening trade.

Annex I Visits with local fruit retailers

Three local fruit retailers were visited onsite, and salespeople and managers in the relevant departments were interviewed to gain greater insight into consumer demand, retailers' selection process and overall trends in the market for imported fruits. The three retailers visited included a Taiwanese owned supermarket – RT-Mart; a French owned supermarket – Carrefour; and a local retailer with a chain of fruit shops – Returned Customer Fruit Market .

Each of the surveyed retailers generally purchases tropical fruit from importers based in the nearby cities of Shanghai or Wuxi, or from wholesale markets in Suzhou, Jiading (south of Shanghai) or Jiaxing, Zhejiang Province; none import the fruit themselves. Most of the tropical fruit sold originates in Southeast Asia or the United States, with smaller volumes imported from Australia, New Zealand, Chile, South Africa and Japan.

Table 34: Origin of imported fruits on sale at local retailers

| Origin country | Fruit | RT-Mart | Carrefour | Returned Customer |
|-----------------------------|---------------------------|---------|-----------|----------------------|
| Australia | Orange | √ | | |
| Chile | Red/green delicious apple | √ | | V |
| Japan | Apple | | | V |
| New Zealand | Kiwifruit | V | √ | √ |
| Dhilingings | Pineapple | √ | | |
| Philippines | Banana | | √ | |
| South Africa | Orange | | | √ |
| Taiwan | Carambola | V | | |
| Taiwan | Pomelo | | | √ |
| | Durian | √ | √ | |
| Thailand | Longan | | √ | |
| Inaliand | Mango | | | √ |
| | Pomelo | V | | |
| | Red grape | V | √ | √ |
| | Grapefruit | V | | |
| United States of America | Red apple | | √ | √ |
| , anono | Lemon | | √ | V |
| | Orange | V | √ | |
| Viet Nam | Pitaya | V | √ | √ |

Each store sells between US\$ 7,500 and US\$ 45,000 of tropical fruit a month. The supply lines are generally stable, though the interviewee at Carrefour cited past disruptions with oranges imported from South Africa.

The interviewees mentioned few preferences regarding seasonal trends, taste trends or other influences affecting consumers' purchases of tropical fruits. They said apples, oranges and bananas are the most popular fruits among consumers in Suzhou, possibly because these fruits are traditionally common in the

Chinese market and are not considered 'foreign'. Additional qualities most Chinese consumers consider when purchasing fruit are pricing, nutritional value and the appearance of the fruit (bruising, cuts, etc.).

When retailers introduce a new variety of fruit, the store will typically provide free samples for consumers to try, with the goal of increasing awareness of the new fruit. Retailers say that after customers try new fruits, such as the pitaya, for free, they become more likely to purchase it in the future.

There is limited competition between domestically grown fruit and imports, primarily because imported fruit varies both in type and quality from domestically grown fruit. Imported fruit tends to be more expensive and the primary consumers are middle to high-end consumers.

Small fruit retailers are not considered by supermarkets to be direct competitors because supermarkets purchase larger volumes of imported fruit directly from importers and can therefore sell it at lower prices than small-scale retailers that purchase from wholesalers. In addition, the turnover of imported fruit is quicker in supermarkets, so the fruit is generally fresher and comes in greater varieties. One interviewee also said that some small retailers label domestically grown fruit as imported to charge higher prices, leading to distrust among consumers for fruit sold by smaller retailers.

Annex II Major importers and exporters

Top 10 importers for four of the selected products (ranked by 2009 import volume):

 Table 35:
 Banana importers (including plantains, fresh or dried)

| No. | English Names | Imported volume (kg) | Website |
|-----|--|----------------------|--|
| 1 | Dalian Kangjian Trading Co., Ltd | 84 692 753 | - |
| 2 | Dole (Shanghai) Fruits & Vegetables Trading Co., Ltd. | 82 963 149 | http://www.dole.com/#/home |
| 3 | Shenzhen Zhuheng Fruits & Vegetables Trading Co., Ltd. | 63 203 851 | http://china.alibaba.com/company/detail/contact/lxysimonltd.html |
| 4 | Jintu Fruits (Shanghai) Trading Co., Ltd. | 36 781 263 | http://china.alibaba.com/company/detail/contact/yangsan8888.html |
| 5 | Dalian Zhenao Imp. & Exp. Co., Ltd. | 30 793 879 | www.zhen-ao.com |
| 6 | Hebei Jintu Agriculture Development Co., Ltd. | 28 035 815 | = |
| 7 | Ruili Lvyuan Biological Development Co., Ltd. | 27 295 036 | http://www.yneh.net/indexpic/?type=detail&id=19 |
| 8 | Jinghongjunjun Planting Co., Ltd. | 17 180 000 | - |
| 9 | Yingjiang Hongxing Trading Co., Ltd. | 17 104 050 | - |
| 10 | Jinghonglihua Fruits Co., Ltd. | 15 130 000 | - |

 Table 36:
 Lemon and lime importers (fresh or dried)

| No. | English Names | Imported volume (kg) | Website |
|-----|---|----------------------|---|
| 1 | Foshan Huitong Trading Co., Ltd. | 1 812 663 | http://www.china-commerce.com.cn/news.asp?classid=86&id=744 |
| 2 | Shanghai New Long March International Trading Co., Ltd. | 1 731 317 | http://www.09635.com/company/1882407.aspx |
| 3 | Shantou Longfuchangqing Trading Co., Ltd. | 1 240 145 | - |
| 4 | Guangdong Baoli Foreign Trading Co., Ltd. | 1 029 844 | - |
| 5 | Shenzhen Tailiangda Imp. & Exp. Co., Ltd. | 906 280 | - |
| 6 | Shenzhen Wanxinlai Imp. & Exp. Co., Ltd. | 557 550 | http://www.cnmeat.net/noshinecompany/index.asp?id=301313 |
| 7 | Guangdong Hongli Foreign Investment & Development Co., Ltd. | 512 064 | http://www.71ab.com/view_4562708.html |
| 8 | Guangdong Aoben Trading Co., Ltd. | 301 914 | http://www.waimaoqiye.com/YP/guangzhou/740294241112.html |
| 9 | Guangzhou Jiangdao Trading Co., Ltd. | 289 491 | - |
| 10 | Dalian Yida Trading Co., Ltd. | 162 474 | http://www.wmtag.cn/content.php?id=80616 |

 Table 37:
 Manioc importers (cassava, fresh or dried)

| No. | English Names | Imported volume (kg) | Website |
|-----|---|----------------------|---|
| 1 | Rizhao Hongwei Trading Co., Ltd. | 593 343 662 | www.rzjhsh.com |
| 2 | Shandong Jinyimeng Group Co., Ltd. | 520 609 557 | www.goldym.com |
| 3 | Jiangsu Huating Winery Co., Ltd. | 412 720 870 | www.htjy.cn |
| 4 | Ningbo Yilong International Trade Co., Ltd. | 395 136 023 | www.yltrade.cn |
| 5 | Rizhao Hengxin Trading Co., Ltd. | 324 836 975 | http://china.alibaba.com/company/detail/contact/victoria_she.html |
| 6 | Jiangsu Huihong International Group Local Specialty Importing & Exporting Co., Ltd. | 268 946 132 | www.jnp.com.cn |
| 7 | Sinochem (Qingdao) Co., Ltd. | 214 957 050 | www.sinochemqingdao.com |
| 8 | Guangdong Material Imp & Exp. Corp. | 190 189 419 | www.wzonline.net.cn |
| 9 | Rizhao Hongda Imp. & Exp. Co., Ltd. | 187 105 433 | http://sdrzhd.com/news-5-1.html |
| 10 | Rizhao Tianqiao Trading Co., Ltd. | 159 428 104 | www.rzjhsh.com |

Table 38: Ginger importers

| No. | English Names | Imported volume (kg) | Website |
|-----|--|----------------------|--|
| 1 | Ruili Jinxing Co., Ltd | 345 430 | http://www.ynzp.com/com/156154/index.html |
| 2 | Zhucheng Fuwei Foods Co., Ltd | 175 500 | http://www.agronet.com.cn/Company/Detail 11206.aspx |
| 3 | Ruili JIngrun Trading Co., Ltd. | 131 150 | http://www.dhaic.gov.cn/BVNews/shownews.asp?newsid=10057 |
| 4 | Santong Foods (Weifang) Co., Ltd. | 67 500 | - |
| 5 | Ruili Darui Pharmacy Co., Ltd | 27 500 | http://shop27687.zyctd.com/ |
| 6 | Liangjia metals and plastic products Co., Ltd | 16 313 | = |
| 7 | Rixing (Xiamen) Imp. & Exp. Co., Ltd. | 8 103 | http://china.alibaba.com/company/offerlist/rixingthailand.html |
| 8 | Shanghai Rifen Foods Co., Ltd. | | - |
| 9 | Zhuhai Yixing Foods Co., Ltd. | | - |
| 10 | Qingdao Hengyejia International Trading Co., Ltd | | - |

Table 39: Large fruit trading companies

| No. | English Name | Website |
|-----|---|---|
| 1 | Beijing Fruit Co., Ltd. | http://www.zggp.com.cn/PKFruitCl/com_home.asp?action=home |
| 2 | Beijing Jujia Fruits Trading Co., Ltd. | http://www.newhoffruit.com/main.php?optionid=7 |
| 3 | Shengbaotai Fruit Co., Ltd. | http://www.bjshengbaotai.com/jinchukouyewu.htm |
| 4 | Beijing Dekai Fruits & Vegetables Sales Center | http://dkgs.chinaec.net/1200001851 69 0 2 2.html |
| 5 | Shanghai Fruit Co., Ltd. | http://www.shec.gov.cn/introduce/shsgp/index.htm |
| 6 | Shanghai Zelun Fruits Trading Co., Ltd. | http://www.magicsee.net/qiye/2AB1F64058DD80C4546F5DD405A33945/ |
| 7 | Shanghai Daimengdi International Trading Co., Ltd. | http://www.magicsee.net/qiye/18E63D34B1D3BA413CD2590E23CF8E7A/ |
| 8 | Hangzhou Qunfeng Fruit Chain Co., Ltd. | http://www.qunfengdaguoyuan.com/index.asp |
| 9 | Hangzhou Penglai Fruit Co., Ltd. | http://www.hnnysp.com/yellowpage/qy1/more.asp?classvalue=00&code=plai |
| 10 | Ganglong Fruit Co., Ltd. | http://www.cnfruit.net/category.php?id=6 |
| 11 | Guangzhou Fruit & Food Co., Ltd | http://www.lnsg.com/gzgp/Index.shtml |
| 12 | Guangdong Zhongxinglvfeng Co., Ltd. | http://zhxing.com/cn/about.asp?id=15 |
| 13 | Guangdong Luhong Agriculture Products Trading Co., Ltd. | http://www.86xc.com/1273614.html |
| 14 | Jinguo Trading Co., Ltd. | http://www.magicsee.net/qiye/1B7328D7C4A51F64AAA08082C2E952B3/ |

Annex III List of interviews to importers

| No. | Company Name | Interviewee | Contact No. | Website |
|-----|--|-------------|---|---|
| 1 | Hangzhou Qunfeng Fruit Chain Co., Ltd. | Mr Fang | +86 571 8828 0388 Cell phone: +86 150 6818 8886 | www.qunfeng.net |
| 2 | Beijing Shengbaotai Fruit Co., Ltd. | Mr Zhong | +86 10 6421 7876 Cell phone: +86 136 9921 2687 | www.bjshengbaotai.com |
| 3 | Shanghai Diamond International Trade Co., Ltd. | Mr Zhang | +86 21 3404 0399 Fax: +86 21 6434 2897 | www.diamond-fruits.cn; www.Milliare.cn.alibaba.com |
| 4 | Sumifru China Co., Ltd. | Mr Zhang | +86 755 8826 4692 Fax: +86 755 8826 4682 | http://www.0356.com/company.asp?id=14750 |
| 5 | Guangdong Luhong Agriculture Production Trading Co., Ltd. | Mr Wang | +86 20 8179 7621 Cell phone: +86 137 0298 8461 | www.taoguo.net www.86xc.com/1273614.html |
| 6 | Ningbo Free Trade Zone Ganglong Fruit Co., Ltd. | Mr Shi | +86 574 8735 2851 Cell phone: +86 137 8000 5459 | www.nbgl.com.cn |
| 7 | Shanghai Fruit Co., Ltd. | Mr Liu | +86 21 6318 5418 | www.shec.gov.cn |
| 8 | Shanghai New Long March International Trading Co., Ltd. | Mr Cao | +86 21 3404 0382 | http://www.0356.com/waimao/shanghaishi/40841.html |
| 9 | Association of happy farmhouse of China | Mr Lu | +86 187 7711 5929 | http://www.zgnjlxhw.com/ |
| 10 | Guangxi Qinzhou Shi Qing zhou shan zhuang | Mr Zhou | +86 139 7777 9881 | http://www.ChinaBxg.com |
| 11 | KunMing JinMa ZhengChang fruit market | Mr Xiong | +86 871-8061266 | http://special.yunnan.cn/feature3/node_19641.htm |
| 12 | Beijing Nanyue Dadi Co., Ltd. | Mr Lu | 400 678 2903 +86 10 8371 0048 Cell phone: +86 131 4656 6581 | http://nanyuedadi0512.cn.alibaba.com/ |
| 13 | Huitong Economic Trade Ltd. Foshan | Ms Yang | +86 20136 3238 4400 | http://www.86xc.com/1528625.html |
| 14 | Jianxi XinFeng Reemoon Agriculture Development Co., Ltd | Ms Guo | +86 797 333 8899 | http://www.reemoon-sehan.com/ |
| 15 | Hebei Jiahua Agriculture Product Co. ,Ltd. | Mr Ma | +86 311 489 8143 | http://www.sjzzx.heagri.gov.cn/default3.aspx?id=46752 |

Annex IV Photos of fruit retailers

Exterior of Suzhou Returned Customer Fruit Market



Interior of Suzhou Returned Customer Fruit Market's imported fruit selection



Interior of Suzhou Returned Customer Fruit Market's imported fruit selection





Interior of Suzhou Returned Customer Fruit Market (American red grapes on sale)



Interior of Suzhou Returned Customer Fruit Market (apples and lemons from the United States on sale)

Suzhou RT-Mart's imported fruit cooler



Suzhou RT-Mart's imported fruit cooler



Suzhou RT-Mart's apple selection on display





Suzhou RT-Mart's imported New Zealand kiwifruit



Suzhou RT-Mart's Philippine pineapple



Suzhou RT-Mart's Thai pomelos

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