



# Study on the Future Opportunities and Challenges of EU-China Trade and Investment Relations

## Study 6: Agriculture

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A project implemented by:



*"This report was commissioned and financed by the Commission of the European Communities. The views expressed herein are those of the Consultant, and do not represent any official view of the Commission."*

## EXECUTIVE SUMMARY

This study analyses potential future opportunities and challenges of EU-China trade and investment relations with regard to agricultural products. In addition to looking at agricultural products as an aggregate, particular focus is given to the cereals, meat, milk, and wine and spirits sub-sectors. After a short description of supply and demand characteristics in each of these markets, specific trade and investments potentials and obstacles are discussed. In addition, the competitive situation of EU and Chinese products in third-country markets is considered.

The EU is one of the world's largest agricultural producers, as well as one of the world's largest exporters of some agricultural products. China became a net food importer in 2004<sup>1</sup> and a further increase in imports of land-intensive farm products is widely expected. EU-Chinese bilateral agricultural trade is currently characterised by an EU trade deficit.

### Competitive Strengths and Market Opportunities

As the world economy becomes more globalised and integrated, each country/region will be forced to better exploit its respective comparative and competitive advantages. Europe traditionally had a distinct comparative advantage in the production of a large number of agricultural commodities and processed food products. More recently, it has also gained first-hand experience in sustainable rural land management, organic production methods, agro-tourism and regional food marketing (i.e. certified geographical labels). As a provider of high quality agricultural products and services, Europe has built a strong competitive basis on which it can draw for further continuous innovation and specialisation.

If current trends continue, China will follow the growth path of other Asian economies and its consumers will eventually become as quality-, health- and environment-conscious as those in Japan, South Korea, Singapore, etc. The expected income growth of the Chinese population and higher urbanisation rates will accelerate this trend. An expected fall in Chinese self-sufficiency in commodities such as feed for the domestic meat industry, grains and perhaps vegetables suggest increased EU exports to China. Furthermore, given the Chinese government's aim for substantially upgrading modern agriculture by promoting non-polluting, green, and organic agricultural products and given Europe's substantial experience in organic production and sustainable land management,

increased opportunities in exports of agricultural services (advice, education, research assistance, etc.) to China may materialise in the future.

While much of the import needs and development support will come from countries within Asia, America and elsewhere, Europe may play a role too, provided that it maximises its competitive advantages. Given China's enormous size and catch-up potential, and Europe's experience and skill base, the mutual gains for both China and Europe can be significant.

### Obstacles to trade and investment

The main market obstacles for European agricultural exports and investments are non-tariff measures such as sanitary and phytosanitary (SPS) regulations, insufficient logistics for transport to and from as well as storage in China, and insufficient protection of intellectual property rights for some branded, high-value agricultural products. In addition, weak Chinese land-use rights can lead to poor sustainable land management and pollution problems thus having a negative impact on agribusiness-related investments.

Competition between EU and Chinese agricultural exports in third-party markets may occur with regard to some labour-intensive goods such as horticultural produce and processed food items. While China may have a competitive edge in the ASEAN market due to lower transport costs and lower local quality standards, in the USA however, quality-certificated EU products are preferred.

The quantification of market access obstacles undertaken in this study reveals that as a result of tariff and non-tariff barriers to trade, the costs to the European food processing industry<sup>2</sup> are up to \$750 million in lost business opportunities.

### Policy Recommendations

- 1) Improve transport links and other logistics infrastructure to China.
- 2) Improve capacity building and support for EU exporters to China and EU investors in China.
- 3) Market opportunities for agricultural commodities and food products in China must be systematically identified and exploited through the provision of market intelligence and extended academic research by European authorities.
- 4) Improve IPR protection for highly innovative food industries.
- 5) Increase EU coordination and negotiation capacities, especially in the meat sector.

- 6) Lobby to phase out the Chinese designated cereal trader system.
- 7) With regard to dairy exports, focus on negotiating improved market access for durable and value-added products such as whole milk powder and cheese. Lobby to adjust the recent national standard on labelling in particular with regard to reconstituted milk.
- 8) Protect European intellectual property in wine and spirits by ensuring China's commitment to enforce IPR.

#### **Recommendations for Competitiveness**

- 1) European producers should concentrate on targeting new niche markets in China associated with the growth in disposable incomes and hyper/supermarkets.
- 2) Consider investing in production facilities in China for the domestic and greater Asian markets to make use of China's low-cost production advantages.
- 3) European companies with substantial experience in organic production and sustainable land management should seek to increase exports in agricultural services (advice, education, research assistance, etc.) to China.
- 4) Continue strong development of geographical indications (GIs) and high value-added food processing whilst ensuring these are recognised and enforced by the Chinese authorities.
- 5) China-based executives should build and maintain relationships with regulatory bodies. This will facilitate clarification of related issues and ensure that information provided in official notifications is not misinterpreted.
- 6) Effective cooperation should be developed between businesses across sub-sectors and EU authorities to allow sub-sector industries to speak with one voice to the Chinese government.

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## ABBREVIATIONS

3PL	Third-party Logistics Providers
AI	Avian Influenza
AQSIQ	Administration of Quality Supervision Inspection and Quarantine
BSE	Bovine Spongiform Encephalopathy
CAP	Common Agricultural Policy
CEPS	European Spirits Organization
C.I.F	Cost, Insurance, Freight
CNCA	China National Regulatory Commission for Certification and Accreditation
DDA	Doha Development Agenda
EC	European Communities
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
FIE	Foreign Invested Enterprises
GATS	General Agreement on Trade and Services
GI	Geographical Indications
HPAI	Highly Pathogenic Avian Influenza
IFSP	International Federation of Spirits Producers
IPR	Intellectual Property Rights
JV	Joint Venture
MFN	Most Favoured Nation
MOA	Ministry of Agriculture
MOH	Ministry of Health
MOFCOM	Ministry of Commerce
MOFTEC	Ministry of Foreign Trade and Economic Cooperation
MoU	Memorandum of Understanding
NDRC	National and Development Reform Commission
OIE	World Organisation for Animal Health
OIV	International Organization of Vine and Wine
PE	Partial Equilibrium
PRA	Pest Risk Analysis Management Regulation
QIP	Quarantine Import Permits
SMP	Skim Milk Powder
SOE	State Owned Enterprise
SPS	Sanitary and Phytosanitary
STE	State Trading Enterprise
TRQ	Tariff Rate Quota
TVE	Township and Village Enterprises
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
VAT	Value Added Tax
WFOE	Wholly Foreign Owned Enterprises
WMP	Whole Milk Powder

## 1. INTRODUCTION

Europe is one of the leading agricultural production areas in the world and is also a significant net exporter of many commodities such as pig meat, poultry, cereals, dairy products, wine, and spirits. China is fast becoming one of the world's largest food markets. Its increasing population, combined with rapid economic growth and urbanisation, are bringing about profound changes in demand for agricultural products as well as in the country's ability to meet this demand through domestic agricultural industries. Overall food consumption in China is rising and there are marked changes in the composition of diets. Additionally, there is evidence of stress on China's production resource base associated with water scarcity and land degradation. Production of cereals is particularly water-intensive, and leads to land degradation. Consequently, it is expected that China will turn to imports to meet its consumption needs in the future. These developments offer significant opportunities for EU exporters and investors in the agricultural sector seeking to operate in China.

China recently issued its 11<sup>th</sup> Five Year Programme for National Economic and Social Development which places emphasis on substantially upgrading existing production structures to an industrialised operation of agriculture. Priorities fall in the field of non-polluting, green, organic agricultural products and include the development of tourism and leisure functions of agricultural areas. This raises the question as to whether Europe's modern and efficient yet environmental sustainability-oriented agricultural production system could serve as a model for Chinese rural transformation ambitions.

This study analyses potential future opportunities and challenges of EU-China trade and investment relations with regard to agricultural products. It should be noted that the term "agricultural products" does not only cover basic agricultural commodities such as wheat, milk and live animals, but the primary-processed products derived from them such as flour, butter and meat, as well as all secondary-processed products such as ready-to-eat meals, bread, sausages, chocolate, wines, spirits etc.

In addition to looking at agricultural products as an aggregate, particular focus is given to the cereals, meat, dairy, and wine and spirits sub-sectors as these are areas where the EU has the most potential towards the Chinese market. The study begins with an overview of the Chinese agricultural industry, including a short introduction on the Chinese economy followed by the role of agriculture in the

Chinese economy in **Section 2**. This is followed by an examination of trends in production, trade, and domestic demand of agricultural products of the Chinese market which will provide the basis for **Section 3**, opportunities for EU exporters and investors in China. This is followed by market access obstacles in the Chinese market (**Section 4**). Two scenarios are developed in **Section 6** using the information discussed in previous sections as well as the survey performed in the framework of this study. Finally, the synthesis section contains conclusions and recommendations.

## 2. CHINESE AGRICULTURAL INDUSTRY

To understand the current status of China's agriculture industry, and the market for agricultural goods it is important to understand the economic changes that have been occurring in China over the past few decades. Since 1978, China has gradually transformed its economy from a highly centralised planned economy to a more market-oriented economy. Today, China is one of the world's largest economies with GDP in 2005 equal to \$224 bn. Economic growth is progressing rapidly at around 10% per annum. A number of important underlying factors have contributed to this growth. These include transfers of resources from low productivity state enterprises to higher productivity private activities, high levels of investment, preparedness to adopt improved technologies, a strong trend towards urbanisation and a gradually increasing population. These factors appear likely to set China on a path of sustained economic growth of around 7% to 8% per annum, driving growth in private consumption. Though these reforms have fuelled the growth of China's economy and generated impressive economic development, they have also contributed to a marked disparity between urban and rural populations. Furthermore, the sheer size of the population results in a low per capita wealth of around \$1700 per annum. China's rapid economic growth and gradual transition toward a market economy have brought about significant changes in production and consumption patterns and trade behaviour in agriculture; these trends will be discussed in the following sections.

### 2.1 Domestic (Chinese) agricultural industry

Agriculture has always played a significant role in China's economy, however since the start of reforms it is evident that the role of agriculture is slowly changing and its contributions in terms of employment, gross value added, capital accumulation, urban

welfare, poverty alleviation, and foreign exchange earnings are declining.

Although not experiencing the double digit growth rates of other parts of the economy, the Chinese agriculture sector's has expanded at an impressive growth rate of around 5% per annum throughout China's reform period. This has meant, however, that the relative importance of agriculture to China's economy has diminished. Prior to 1980, agriculture accounted for more than 30% of total GDP and around half of its export earnings. By the 1990s, the share of agriculture in the economy fell to below 20%. Today agriculture's contribution to the economy stands at around 13% of GDP. These trends are also reflected in terms of employment: in 1970, 81% of China's labour force was employed in the agricultural sector, in 2000 the figure declined to 50%, and in 2004 to 45%.<sup>3</sup> These trends illustrate China's transformation from a rural- to an urban-based society since the start of the reform era.

#### 2.1.1 Production

For the past 25 years, the annual growth rate of agricultural production was about four times higher than the population growth rate.<sup>4</sup> Furthermore, the agricultural sector in China has been highly flexible in allocating available resources to meet the increasing demand for food and for more varied types of food. Broadly, the main changes have seen a major shift in production away from land intensive products such as cereals, toward higher value labour intensive products such as meat, fruit, vegetables, eggs, and dairy products.

However, there has been a slowdown in the rate of production growth since the late 1990s. In addition to the downward trends China is experiencing in absolute grain production, the rates of increase in

production of fruit, oilseeds, meat and eggs (which had been rapid throughout the 1990s due partly to the relaxation of measures that, in the past, resulted in farmers producing grains rather than other crops, and partly to a changing structure of production favouring crops other than grains) has begun to slow down. There have however been some exceptions to this trend. Milk production for example has been small relative to other agricultural pursuits until recent years. Today, milk production has risen significantly. In 2004, farming accounted for 50.1% of total agricultural production, while livestock contributed 33.6% and fisheries 10%.<sup>5</sup> **Table 1** provides an overview of the trends in agricultural production growth in China.

Therefore, although China has been able to maintain approximate self sufficiency in agricultural products, high input levels in many Chinese regions and diminishing marginal returns mean greater difficulty may be encountered in the future. Factors that are likely to limit the growth of agricultural production in China include a limited arable land base, increasing pressures on water quality and availability, environmental concerns, and urban encroachment. Alternatively, factors that could spark growth of Chinese production include research and development and structural change (towards more specialised, larger and efficient enterprises). The following sections will explore production in relevant sub-sectors in greater detail:

#### *Meat*

China is the largest livestock producer in the world. Driven by strong domestic demand, fast growth has taken place in the livestock sector since 2000. China is strongest in the production of pork, which comprises over half of the world's total pork production and around two-thirds of domestic production.

**Table 1: Annual average compound rates of agricultural growth in China**

	Between 1990-92 and 1996-98 %	Between 1996-98 and 2001-03 %
Total grain	2	-2.9
Cotton	-1.6	2.5
Sugar cane	2.5	2.1
Sugar beet	-0.4	-7.8
Oilseeds (excl. soybeans)	5.4	5.1
Soybeans	5.5	1.9
Tubers	3.1	1.5
Fruit	15.2	6.8
Meat	8.5	4.9
Milk	5.6	15.1
Eggs	13	4.7
Wool	2.5	2.5

Source: National Bureau of Statistics China, 2004

Pig meat production in China has increased more than fourfold since 1980, and is expected to reach 52 million tonnes at the fiscal year ending 2006. Speed of growth in pig production has slowed slightly accompanied by a strong expansion in both the beef and poultry industries.

China is the third largest producer of beef in the world; beef production has increased dramatically from 1.3 million tonnes in 1990, to an expected 7.7 million tonnes in 2006. Furthermore, in the period of 1990 to 2004, cattle numbers increased from 101 million to around 135 million.

As a result of China's booming economic growth, greater investment in the meat industry (particularly cattle and beef) has taken place. As such, the rapid structural change toward larger and more commercial and intensive production systems has become a feature of China's livestock sector. However, the expansion of the meat industry will not be sustainable unless China has sufficient feed for its livestock.

#### ***Dairy products***

The centre of primary production in China is located in the Northern provinces while both Northern and Eastern provinces dominate in milk processing. In the past, China's dairy industry was dominated by small scale producers (mainly small family farms serving the local area) and characterised by low levels of investment in mechanisation, small herds of low yielding dairy animals and high on-farm consumption. These small scale and less efficient production methods resulted in higher costs of production. More recently however, the number of (small) township and village enterprises (TVEs) is constantly decreasing as they are either banding together to form cooperative milking facilities or being taken over by large dairy groups such as Yili and Mengniu. Consequently, the scale of China's dairy operations is increasing. While production costs are rising, fierce price competition has led to increased rivalry in Chinese dairy markets (See **Box 1** for selected comments regarding the Chinese dairy industry).<sup>6</sup>

By the fiscal year end of 2006, it is expected that dairy farmers in China will produce around 34.9 million tonnes of raw milk with a cow inventory of 11.5 million heads. Though there has been an increase in production, annual rates of growth have been declining (32% in 2003 to a forecasted 20% in 2006).<sup>7</sup> As yields are not likely to improve much, dairy herd expansion is expected to be the main driver of production growth. It remains unclear whether domestic production can satisfy the growing demand for dairy products in China as its dairy farmers face severe environmental problems including pollution, desertification and deterioration of grasslands.<sup>8</sup> The pace of growth is estimated to decrease by 2.9% for total processed milk due to higher production cost and a smaller pace of increase in consumption.<sup>9</sup>

#### ***Cereals***

China has been almost self sufficient in the grain sector. Since the early 1980s, China's production of grain has risen rapidly; over the period 1980-81 to 1999, grain production increased by around 60% to 512 million tonnes. Through the absolute planted area fell slightly over this period, growth was driven almost entirely by high yields and partially by government policies aimed at achieving grain self sufficiency. Since late 1997 however, cereal production has fallen sharply, reflecting a reduction in the area sown and virtually no growth in yields. The area sown to wheat for example fell from 30 million hectares in 1997 to around 22 million hectares in 2004. Over the same period wheat production fell by nearly 30 percent to around 87 million. It should be noted that due to external factors such as scarcity of arable land as well as high prices, many Chinese farmers have since switched from growing grain to other crops such as vegetables. From 1997 to 2003, the area sown to vegetables almost tripled from 6 million hectares to 17.4 million hectares.

#### **Box 1: Industry survey comments regarding Chinese dairy industry**

"The largest domestic dairies in China are heavily acquiring production capacity. The dairy industry is rapidly consolidating in order to safeguard raw milk supply. Experts are very interested in this development, as clearing up the fragmented and thus inefficient sector is well in the sense of the Chinese economy. Some find it questionable if equity allows for granting further credits. International stakeholders should keep a close eye on liabilities as the practise of issuing credits may represent an implicit subsidy."

"Today, the Chinese market is characterised by rapid consolidation with Chinese "giants", swallowing smaller dairies. Economies of scale will lead to further cost advantages of large Chinese dairy firms. Therefore, competition by Chinese operators is expected to intensify in the Chinese market, eventually in the ASEAN market as well, but not in the US."

### ***Wine and Spirits***

China's annual wine production stood at only 3 million hectolitres (hl) of wine before 1990. With 11 million hl of wine produced in 2002, China now ranks 6th among the top wine producing countries<sup>10</sup>. Between 1978 and 1998, China's wine production grew at an average annual rate of 17%. Today, China has by far the largest winemaking sector in Asia.<sup>11</sup> From 2000 to 2002, areas of wine production in China have increased by 58%<sup>12</sup>. Major grape-growing areas are in Shandong, Henan, Hebei, Beijing and Tianjin in the east and Xinjiang, a very dry area in the north-west.

Wine quality in the past has been affected by problems such as low yields and diseases which have often led to poor raw materials. However, projects to improve grape quality have now been established in China. Due to the implementation of revised production standards and the introduction of foreign production technology and expertise, wine quality has dramatically improved. Wine-making equipment, some of local design, some imported, is almost of international quality. Today, most wineries contract grape-growers in order to meet their quality requirements<sup>13</sup>.

As for spirits, China produces distilled spirits for the local market in great quantities. More recently however, the Chinese government has begun encouraging the consumption of other beverages such as wine due to health reasons. Maotai, the most famous Chinese spirit has a 55% alcohol concentration and is made from wheat and sorghum. Domestically produced spirits like Maotai are part of Chinese tradition, but today it is mainly consumed by older generations as younger generations are more inclined towards imported spirits and other alcoholic beverages. The Chinese spirits market is large and competitive with well over a thousand traditional Chinese spirit producers competing for consumers whose preferences are changing. It is evident today that the domestic spirits industry is attempting to tap into the middle-upper class segments of society by producing more luxury lines in addition to their cheaper products.

#### ***2.1.2 International trade in agricultural products***

As was previously mentioned, continuous strong economic growth is bringing about profound changes to China's agricultural industries and has the potential to markedly affect future trade. This is already evident as the contribution of agriculture to total trade has been steadily declining since 2000. Even though the real values of agricultural imports

and exports increased from 2000 to 2004, their shares fell from around 8.7% to 7.4% for imports and 6.6% to 4.1% for exports, reflecting an expansion of trade in other products. China has been a significant exporter, primarily of processed agricultural products, with such exports reflecting its comparative advantage in these products.

After being a net food exporter up to 2003, China became a net food importer in 2004. Imports of agricultural goods have been increasing since 2001, but especially in 2003 and 2004, when imports exploded at around 39.5% and 39.7% respectively. The Chinese government has had a policy of agricultural self sufficiency, although there are periods where it has had to rely on imports to make up for periodic production shortfalls, especially of wheat, and to supplement domestically produced supplies of products such as wool. Imports of cereals such as maize, rice and wheat (mainly wheat in 2004), oil bearing crops (mainly soybeans), and cotton have shown the highest rates of growth. This is in line with the expectation that reduced protectionism in agriculture would lead to an increase in imports of land-intensive farm products and that national self-sufficiency would decrease slightly, while exports of labour-intensive farm products, in which China has a comparative advantage, could increase. For instance, exports of fruit have doubled in value since 2000, accounting for 2.4% of agriculture exports in 2004, up from 1.4% in 2003. Exports of fish products have also increased since 2000, as have exports of meat.<sup>14</sup> Recent statistics for agricultural imports show that China's import of agricultural products amounted to \$25 billion in 2004 and 2005, making China the fourth-largest agricultural importer in the world after the EU, United States, and Japan.

### **2.2 Chinese agricultural market**

The rapid economic growth and urbanisation that has occurred in China over the past number of decades has brought about profound changes in the demand for food. The question has been raised as to whether China will be able to feed its nation in the future. There has been a strong trend away from traditional diets that are heavily oriented toward starchy staples (characteristic of low income developing countries) to one that is characteristic of more developed countries. In particular, there has been a change toward more varied diets incorporating markedly increasing quantities of animal products (meats and fat), fruit and vegetables, vegetable oils and dairy products but lower quantities of food grains (See **Table 2**). Furthermore, with

**Table 2: Food type per person in urban households in China, 1990-2004**

Item		1990	1995	1999	2000	2003	2004
Grain	(kg)	130.72	97.00	84.91	82.31	79.52	78.18
Fresh Vegetables	(kg)	138.70	116.47	114.94	114.74	118.34	122.32
Edible Vegetable Oil	(kg)	6.40	7.11	7.78	8.16	9.20	9.29
Pork	(kg)	18.46	17.24	16.91	16.73	20.43	19.19
Beef and Mutton	(kg)	3.28	2.44	3.09	3.33	3.31	3.66
Poultry	(kg)	3.42	3.97	4.92	5.44	9.20	6.37
Fresh Eggs	(kg)	7.25	9.74	10.92	11.21	11.19	10.35
Aquatic Products	(kg)	7.69	9.20	10.34	11.74	13.35	12.48
Milk	(kg)	4.63	4.62	7.88	9.94	18.62	18.83
Fresh Fruits	(kg)	41.11	44.96	54.21	57.48	57.79	56.45

Source: China Statistical Yearbook, 2005

increasing incomes, aggregate food intake in terms of calories per person has been increasing. Per-capita food availability rose from 2,300 kcal per day in 1980 to almost 3,000 kcal per day in 2002.

It should be noted that the higher income of urban people and a greater access to a wider variety of foods is reflected in the different levels and patterns of food consumption between urban and rural populations. The main difference between rural and urban consumption patterns in China is that far higher amounts of grains and a generally lower variety of foods are consumed in rural areas. However, since 1995, the increase in the urban population has been accompanied by an absolute decline in the rural population. As such, the continuing trend toward urbanisation is expected to be accompanied by further reductions in consumption of grains per person and increases in consumption of fruit, edible oils, meats, eggs, dairy products, and wine and spirits.

These changes in Chinese eating habits and consumer preferences makes China the world's most dynamic market for agricultural products, and perhaps the most important driver in world agricultural trade as the sheer size of the population means that changes in the Chinese market could have repercussions in global agricultural markets. Farmers and agricultural and food-related businesses that can keep up with the rapid pace of change will be the best prepared to make further inroads in the Chinese market. Specific changes in demand and consumer preference are discussed in the following subsections:

#### **Meats**

In China, as for the rest of Asia, strong growth in animal fats and protein consumption is associated with a corresponding growth of real wages.<sup>15</sup>

Currently, pork products comprise the majority (around 68%) of the animal protein in the Chinese diet. Consumption of poultry is second highest at around 23%. However in recent years there seems to have been a consumption shift from poultry to red meats such as beef and mutton because of health concerns of Chinese consumers due to the persistent presence of highly pathogenic avian influenza (HPAI) in China and other countries. China is a major consumer (and export destination) of many offal products and by-products. Products that are traded and popular in China are mainly derived from pigs such as pork hearts, stomachs, feet and ears. In terms of bovine offal, beef stomachs and tripe are popular.

It should be noted that there is a marked disparity between amounts of meat consumed in rural areas as compared to urban areas. Rural households consume a significantly smaller amount of animal proteins and total consumption of meat per person by rural households was 19.5 kilograms in 2003 compared with 32.9 kilograms per person for urban households.

#### **Dairy products**

Milk and milk products are largely considered "new products" as the traditional Chinese diet is mainly based on soy and vegetable products.<sup>16</sup> However, the Chinese increasingly view dairy products as healthy nutritious foods with consumption mainly hindered by high price and low supply due to logistical constraints rather than consumer preference. Dairy products availability is limited in many areas due to a lack of infrastructure for the transport, storage and distribution of dairy products in certain areas of China. This leads to a higher price for dairy products in China.

In the 1980s, milk powder dominated the market for dairy products, while in the 90s UHT-milk and related products were introduced. As a result of logistical and supply factors, the pattern of China's dairy product consumption is concentrated in urban areas where consumer incomes are typically higher and infrastructure is more developed. For example, in 2003 rural household consumption of dairy products was 1.7 kilograms as compared to 18.6 kilograms in urban areas.<sup>17</sup>

However, economic changes and urbanisation are bringing about solutions to the price problem such as refrigerated transport, increase in household ownership of refrigerators, etc. Consequently, since 2000, yoghurt, ice-cream, cheese and fermented liquid products have become increasingly popular with Chinese consumers and have shown the highest growth rates.

### **Cereals**

Between the early 1980s and late 1990s, total consumption of cereals in China increased by 30%. Per capita consumption of grains was already very high by the early 1980s for both rural and urban consumers. Wheat has been the main staple food grain consumed in the north eastern and central provinces, while rice is the main staple consumed in the coastal and southern provinces. However, the amount of cereals consumed in China has slowed as a result of rapid developments in the food market. The FAO estimated that cereal consumption per person declined by 21 per cent from the mid-1980s to 167 kilograms in 2002. It should be noted that demand in cereals has shifted as different uses for them emerge. For example wheat (which is normally used in traditional foods such as steamed dumpling) is still a staple but it is a different type of wheat (with medium gluten levels) that is used for breads, cakes and processed foods which is now in demand.

### **Wine and Spirits**

Wine consumption in China is low with 0.2 litres consumed per capita in 2003. However, consumption had grown rapidly during the 1990s<sup>18</sup>. Consumer preferences have somewhat changed recently; while before 1995 the Chinese traditionally consumed sweet wines (non-full-juice), they tend to now prefer medium-sweet and dry varieties.<sup>19</sup> Additionally, the Chinese Government has encouraged consumption of wine rather than grain based spirits for health reasons. Today, dry wines are the fastest growing segment in the wine industry. Red wine is preferred due to its proclaimed health benefits whilst white wine is mainly

consumed by women as it has a "lighter" image<sup>20</sup>. Low-priced wines (under 30 RMB) capture a large market share in China, but mid-priced wines (30 – 60 RMB) are beginning to acquire an increasing share of the market. In 2003, for example, sales of red wine in the lower price range decreased to 33% and sales of mid-range wines increased to 45%.<sup>21</sup>

Wine consumption is expected to rise partly due to its positive image associated with sophisticated western customs, the social elite, and health.<sup>22</sup> Wine is often purchased as a gift item or for consumption on special occasions such as Chinese New Year where French wines are in most demand due to their superior reputation<sup>23</sup>. With the highest disposable incomes, Beijing, Shanghai, Tianjin and their surrounding satellite cities represent the most important markets for international wines.<sup>24</sup> Unlike Europe, drinking styles include iced red wine and mixing white wine with lemon in order to enhance sweetness. At banquet dinners red wine is sometimes used in competitive drinking as a shot<sup>25</sup>.

Spirits account for a large share of alcohol consumption in China. Consumption of pure alcohol has more than doubled since the mid-eighties with up to 3 litres per head consumed in 1999<sup>26</sup>. In 1999, Chinese females (older than 15) drank 1.5 litres and males 10.1 litres of pure alcohol. By comparison, alcohol consumption in France is estimated to be 1.0 litre per capita<sup>27</sup>. Traditional Chinese alcoholic beverages including high alcohol varieties like "white liquor" (distilled from fermented grains), and products with alcoholic contents from 10% to 20% like yellow wine (grain-based, non-distilled), rice wine, and medicinal liquor from traditional herbs, are the drink of choice among the Chinese population.<sup>28</sup> However, this is starting to change as a younger more affluent sector of society emerges with a preference for high-end foreign spirits such as whisky. These changes in preference and consumption are already evident in China's coastal areas.

## **3. EU EXPORT AND INVESTMENT POTENTIAL IN CHINA**

### **3.1 EU agricultural industry and market overview**

The EU's (EU-15) agricultural industry contributed 1.6% of the total EU GDP in 2004 while the share of agricultural employment in the civilian labour force was about 3.8%. The EU is one of the world's largest agricultural producers, accounting for large shares of world production (20% or more in 2001) of several agricultural commodities such as milk, pork and rapeseed.<sup>29</sup> The EU agricultural industry is dominated by grains, dairy and

other livestock, and fruits and vegetables. In 2003, cereals accounted for 32% of the EU-25's utilised agricultural area, followed by oilseeds (6.1%).<sup>30</sup> Europe also has long-standing and extensive experience with organic farming techniques and agro-tourism. For example, in 2002 more than 44% of world-wide organic farms and more than 22% of the world's total area under organic management was situated in Europe<sup>31</sup>.

As for trade, EU agricultural products accounted for nearly 20% of global exports in the period 1996-2000. Today, the EU is a world-leading exporter of barley, olive oil, wine, dairy products and pig meat. As a high-income region, the EU is also a large importer of high-value products, including oils, meat, wine and fruit & vegetables. EU countries import a large share of world trade in oilseeds, soybeans and soybean meal and over 20% of the world trade in wine, tobacco and fruit and vegetables.<sup>32</sup>

### **3.2 Production**

#### ***Meats***

The medium-term production outlooks for the EU meat sector are positive for poultry and pig meat markets, while beef meat production is expected to decline as a consequence of the Common Agricultural Policy (CAP) reform and strong competition from the world market. It should be acknowledged that these relatively positive projections for the meat markets do not take into account any effects of HPAI since December 2005 nor the potential dramatic impact that an HPAI outbreak in the EU could have on the EU markets. An outbreak could lead to disrupted production and consumption patterns, trade flows and a pronounced effect on market prices. The latest available trade figures have lowered expectations of beef and poultry exports but raised the level of pig meat exports foreseen over the medium term.

#### ***Dairy products***

With a quarter of the worldwide output, the EU is the largest milk supplier in the world. EU-25 milk production recovered in 2005 by 0.7% following the drought-affected reduction in 2004. Nevertheless, exportable supplies of major dairy commodities were reduced sharply as a result of the growing consumption of cheese. Since EU milk production is held in check by production quotas, the growth of cheese consumption and cheese production has been at the expense of surplus fluid milk that would traditionally be channelled into the production of Whole Milk Powder (WMP), and to a lesser extent to non-fat dry milk and butter.<sup>33</sup>

#### ***Cereals***

Cereals, used for both direct human consumption and animal feed, have traditionally had an important place in European agriculture. Cereals are produced almost everywhere in Europe taking up an area roughly two thirds of the arable crop land resources, and make up approximately 12% of agriculture production. The most commonly produced cereals include wheat, barley, maize and durum wheat. The total production of EU cereals has followed an erratic trend in recent years due to external factors such as exceptional weather conditions and lower mandatory set-asides. Latest figures from 2004 estimate a total cereal production of 285 million tonnes.

#### ***Wine and Spirits***

The EU-25's wine production in 2004 was 180.9 million hectolitres (hl), accounting for almost 60% of the world's production quantity<sup>34</sup>. The main producer countries are Spain, France, Italy, Portugal, Greece, Germany and Austria. Italy, France and Spain alone provide a share of 51% of world production<sup>35</sup>. Europe is also home to 45% of the world's wine growing area.

### **3.3 EU - China trade in agricultural products**

EU-25 trade in agricultural products with China has risen steadily since 2001. Latest figures show that agricultural imports from China rose from € 2.9 billion in 2001 to € 3.4 billion in 2005 accounting for 2.2% of total imports from China in 2005. Exports in EU agricultural products to China also rose during that period with € 963 million in 2001 rising to € 1.5 billion in 2005 accounting for 2.8% of all exports to China in 2005. Though gaining in share of total trade, a trade deficit of € 1.9 billion still remained. Among total imports from China, agricultural products rank fifth in importance and they are the sixth most important goods exported to China. Overall, after the US, China has become the EU's second largest source of imports and the fourth most important export destination after the US, Switzerland and Russia.<sup>36</sup> More than 90% of the agricultural trade with China used to be concentrated in raw products. It is interesting to note that the share of raw materials in EU exports is declining fast, and that value added goods are showing a high growth rate as China's buying power increases. The EU agricultural trade balance with China has been fluctuating but has been traditionally characterised by a trade deficit.

### 3.3.1 Meat and livestock

While EU exports to China of live cattle, beef and veal were negligible during the past three years (only Austria exported 14 tonnes of beef and veal to China), exports of pig and poultry meat were quite significant. As for pigs and pig meat, France and Denmark were the only countries exporting small amounts of live swine to China (together in one year not more than 1,000 pigs), while the largest amount of European exports of pork came from Denmark. In 2003, Denmark's pig meat exports to China peaked at a level of 37,500 tonnes. However, in the following years, the export quantities declined to 17,000 tons in 2004 and 5,000 tonnes in 2005. In the case of France, French exports of pork accounted for about 500 tonnes in 2005. With regard to poultry, for the first time since 2003, in 2005 China directly imported 1,203 tonnes of French broiler meat, while the remainder were Hong Kong re-exports of French broiler meat to China (605 tonnes in 2005). Chinese imports of European by-products of broiler meat production (i.e., chicken paws) amounted to only 131 tonnes in 2005 (by France). However, most of these products were imported from the US and Brazil.

In terms of edible offal, the EU-25 is the second largest exporter to China, after the US. Total exports in 2005 amounted to \$160,558,627, with Denmark, France, and the Netherlands exporting the most out of all EU countries (see **Table 3**).

**Table 3: Edible offal – Top 5 Exporters to China (2005)**

Country	Value
USA	\$246,818,865
EU-25	\$160,558,627
Brazil	\$133,259,973
Canada	\$47,704,742
New Zealand	\$37,673,514
<b>Total imports (world)</b>	<b>\$606,730,120</b>

Source: Comtrade (SITC Rev.3)

### 3.3.2 Dairy products

China's net imports of dairy products in 2004 were worth € 430 million.<sup>37</sup> In the first half of 2005, China's total imports of dairy products were 14% lower than over the same period in 2004, totalling US\$ 308 million.<sup>38</sup> Bulk milk is a low cost good that is only to a certain extent worth transporting. As for fresh dairy products, due to problems in transportation and short storage life, imports from the EU of these products are likely to remain insignificant as airfreight is economically not

viable. China's whey imports have risen by 280% from 2003 to 2005, in spite of increasing international prices, mainly due to the strong growth in domestic livestock husbandry and limited feed resources.<sup>39</sup> With whey imports accounting for over 50% of China's total dairy imports in volume, and over 30% in value,<sup>40</sup> the segment has potential to maintain a key interest for EU exporters. However, the EU faces strong competition by the US dairy industry which is currently the largest whey supplier to China<sup>41</sup>.

### 3.3.3 Cereals

Already among the main players in world cereal markets, China's role is likely to become even more important in future years. Having reduced its large stocks dramatically over the past five years, it will have to *source* its growing demand for cereals. Grain demand consists of five items: direct grain consumption (approximately 30% of own production), feed grain (approximately 70% of own production), seed (requirement for grain as an industrial input), and post-harvest loss - either from rebounding domestic production (which would occur only if a GM grain that needs less water is developed) or from substantial purchases on international markets.

China is forecasted to import 1.3 million tonnes of wheat in 2006 after imports of over 7 million tonnes in 2004. In 2004, EU countries held a share of about 10% of total China wheat imports with France being to the fore (only Italy exported a 'small' amount of wheat to China in 2004/2005). As for corn, France played a minor role (3 tonnes) in 2004 to 2005. Finally, according to China Customs data of 2004 and 2005, barley was exported to China by France (155 thousand tonnes) and the Netherlands (1,000 tonnes). Overall in 2005, the EU-25 together was the fourth largest exporter of cereals to China. France was the leading individual exporter of cereals from the EU (see **Table 4**).

**Table 4: Cereals – Top 5 Exporters to China (2005)**

Country	Value
Canada	\$478,105,997
Australia	\$430,904,627
Thailand	\$187,753,789
EU-25	\$106,518,755
USA	\$104,026,234
<b>Total imports (world)</b>	<b>\$1,393,780,229</b>

Source: Comtrade (HS2002)

### 3.3.4 Wine and spirits

China's bulk wine market (containers of over 2 litres) was strongly dominated by Spain and Italy in 2000. Today – only four years later – Chile accounts for around 80% of Chinese bulk wine imports. Bulk wine is "mostly mixed with and sold as Chinese wine"<sup>42</sup>. With low production costs, the wine industry of the EU's new member states could be a key factor for winning back market share in bulk wine. Overall in 2005, EU member states dominated the wine export market to China, with France, Spain in top position (see **Table 5**).

**Table 5: Wine – Top 5 Exporters to China (2005)**

Country	Value
France	\$21,495,134
Spain	\$13,361,555
Chile	\$12,542,407
Australia	\$11,465,446
Italy	\$4,378,164
World (total)	\$75,136,009

Source: Comtrade (HS2002)

In 2004, China consumed 1.1 million cases of foreign spirits, nearly doubling the figure from 1999<sup>43</sup>, indicating enormous growth potential. Some EU member states rely heavily on China as a destination for spirit exports. For instance, the UK supplies huge amounts of spirits (mainly whisky which is also the country's most important export product) to China. In 2005, EU member states made up four of the five top exporters of spirits to China (see **Table 6**).

**Table 6: Spirits – Top 5 Exporters to China (2005)**

Country	Value
France	\$154,256,229
United Kingdom	\$90,209,357
USA	\$9,833,438
Spain	\$5,950,069
Sweden	\$2,972,304
Total imports (world)	\$276,681,479

Source: Comtrade (HS2002)

### 3.4 Market opportunities for EU exporters and investors

China's demand for agricultural products has so far been met predominantly from domestic sources. However, there is clearly a potential for increased demand for some products, especially meat, dairy products and cereals

(both for human consumption and feed). Whether Chinese agriculture, with its already stretched resources of land and water, can continue to meet the expected further increases in demand is open to question, and greater reliance on imports is likely. As one of the leading agricultural production areas in the world, Europe has much to offer China in terms of exports as well as in-depth know-how regarding various agricultural technologies and techniques (See **Box 2** for comments from the industry survey regarding future opportunities for EU agricultural products in the Chinese market).

China's craving for meat products has increased dramatically over the years, more prominently in urban areas but consumption is also beginning to increase in rural areas. Currently, China is self-sufficient in its meat supply, but questions remain as to whether domestic production will be sufficient to cover future demand. Constraints on China increasing the productivity of its meat industry include a lack of graze land, and more importantly a shortage of feed grains. In principle, China's increasing demand for meat can be met in three different ways. First, China's agricultural industry may increase its feed grain production in synchronisation with the increasing demand for feed grains by the livestock sector (in this case without any accompanying increase in imports of grains). Second, in the case that livestock sector's feed grain demand would not be met by an increase in production within China, the required feed grains may be imported from the world market. Finally, an increase in meat demand could be met just through direct imports of meat. The second and third alternatives imply potential export opportunities for EU meat and cereal producers and traders. Furthermore, as most meat consumed in the EU consists of muscle meats, all of what would be considered 'inferior' in domestic markets could be exported to China where demand and consumer preference for edible offal is very high.

China's per capita consumption of dairy products is expected to continue to grow in coming years as the benefits of dairy consumption become more widely recognised throughout the population. Government programmes in China such as the 'Milk for Students' campaign aim to improve health through greater consumption of dairy products. Programmes such as this — together with increasingly westernised diets — are expected to raise acceptance of milk and dairy products in China and contribute to increased consumer demand.

## Box 2: Industry comments - opportunities for EU agricultural products in the Chinese market

"The future development of our business opportunities is promising because consumption is increasing as a consequence of income development."

"Future growth options include new markets such as products for the food industry. Moreover, the main goal is not only to address the demands of urban consumers, but the rural population as well."

Furthermore, as income grows and urbanisation continues, a larger portion of the population will have increased access (i.e. improved logistics) to dairy products and the necessary storage facilities to buy them. China currently is almost self sufficient in raw milk, however, there is a growing demand for processed dairy products such as ice cream and yoghurt, as well as preserved milk products such as milk powders, cheese and infant formula.

The extent to which domestic dairy production will meet future demand is currently unclear, as demand is still quite low compared with other nations and it also depends on consumer preferences. If demand does increase substantially, dairy herd expansion is expected to be the main driver of production. This could be a problem as China is facing environmental issues such as deterioration of grasslands which could prevent the expansion of the dairy industry. The export potential for the EU is not in raw milk, as its location does not favour transport of perishable goods. Opportunities lie in the export of preserved dairy products to China as well as possible local production of dairy products such as cheeses, yoghurts, ice creams, and other dairy-based drinks. As one industry representative has said "Some companies are currently considering local production (mainly cheese products) to *serve the Chinese market in the form of a cooperation or licensing agreement.*"

As for cereals as a whole, China's limited production area, water resource constraints, and modest yield potentials are expected to keep production well below total domestic use for the coming years, thus making it a significant net importer. China is also expected to become a significant net importer of coarse grains as supplies from stock sales decline, demand from livestock industries increases, and the traditional self-sufficiency policy is relaxed (particularly for feed grains). China's demand for cereals, particularly to feed its livestock industry, creates great potential for EU exports of cereals as these products are produced successfully throughout the EU.

Furthermore, as urban demand for traditional wheat products (i.e. *mantou*, a steamed bread) declines in favour of convenience foods, including instant noodles, biscuits and bakery products, wheat quality is becoming

more important especially for millers. In contrast to flour for traditional homemade or home-style Chinese food products, flour for processed food items requires specialised gluten content and consistent quality. China's small-scale farmers often cannot supply this. Therefore, the milling industry's import demand for consistent quality wheat, both hard and soft varieties, is expected to rise in the coming years.<sup>44</sup>

As incomes grow, the wine market will expand driven by demand from the emerging middle class. Though China produces a significant amount of wine, domestic brands are not often thought of as products of high quality. Furthermore, domestic producers are facing problems such as low yields and diseases which have often led to poor raw materials and thus a poor quality end-product. However projects to improve grape quality have now been established and, due to the implementation of revised production standards and the introduction of foreign production technology and expertise, wine quality has dramatically improved. Wine-making equipment, some of local design, some imported, is almost at the international level. Today, most wineries contract grape-growers in order to meet their quality requirements<sup>45</sup>. As the wine market in China develops, opportunities for European wines therefore lie in well-priced and high-quality varieties as well. French and Italian wine are the most highly recognised mainly due to marketing advantages as French wine has been heavily promoted for more than a decade<sup>46</sup>.

Spirits make up a large share of total alcoholic beverage consumption in China. Traditionally, domestically produced, and highly alcoholic spirits like Maotai have been the drink of choice among the Chinese population. This is starting to change however, with the government encouraging (mainly for health reason) the consumption of other alcoholic drinks such as red wine. Additionally, the emergence of a largemiddle class along with greater urbanisation and westernisation (particularly in coastal regions) has increased the demand for foreign spirits such as whisky. As currently there are no domestic companies that are producing such spirits at a quality and taste level equal to foreign products - and as the EU is the leading producer and exporter of spirit drinks

worldwide - export potential for EU spirit industry to China is quite high.

Finally, improving the income of the rural population is one of the main aims of the Chinese government as laid out in the 11<sup>th</sup> 5 year programme for National Economic and Social Development. Other aims include "to substantially upgrade modern agriculture" by promoting "non-polluting, green, organic agricultural products" and "tourism and leisure" agriculture. In addition, the most direct way to "increase agricultural productivity [in China] is through investments in agricultural research".<sup>47</sup>

Europe has long-standing and extensive experience with organic farming techniques and agro-tourism. For example, in 2002 more than 44% of world-wide organic farms and more than 22% of the world's total area under organic management were situated in Europe<sup>48</sup>. As a result, in-depth know-how of sustainable farming technologies, rural infrastructure management and organic production methods exists which could successfully be exported to China through investment and mergers. Also, given Europe's large agricultural research industry, knowledge transfer in agricultural research methods and practices with China could also potentially be intensified.

### **3.5 Challenges of operating in China**

China's size makes it difficult to make generalisations about the entire national market and cultural and linguistic barriers make gathering information more difficult. As some European companies are relative latecomers to China, those companies are also faced with rigid competition from foreign companies that have already invested in the country. Company representative interviewed in the frame of this study mentioned that even large US investment banks have now entered the Chinese meat market, looking for lucrative investment opportunities reducing the number of remaining "easy pickings" for European companies. The following section will look at challenges of operating in China in more detail.

#### *Understanding local context*

Often, foreign companies operating in China have learned the importance of having a localisation strategy the hard way. Some early investors and exporters in/to China were forced to make a premature withdrawal, even after having prepared for a period of strategic losses. The reason for failure in China is often the result of a self-contained

attitude when it comes to culture and technology. Foreign companies are now starting to realise that localisation holds the key to forming core competitiveness and lasting strength in the Chinese market. China is a large and diverse country where changes occur at widely varying rates from place to place. It is essential for foreign companies that want to operate in China to understand the local context of the country as well as its people. Furthermore, understanding the language is a plus, as most promulgated laws and regulations as well as certain procedures are done in the local language.

#### *Logistics*

Transport to China is a major constraint for EU agribusinesses aiming at entering and serving the Chinese market. As compared to the US, Australia and New Zealand, Europe's maritime shipping connections to China are unfavourable. Low-cost maritime transport is particularly important for shippable bulk agricultural commodities such as cereals and beef. So far, given that globalisation and liberalisation of national economies has led to a sharp increase in trade and transport between Asia and Europe, most of the traffic has been following maritime routes. However, governments and international organisations have started to look at Euro-Asian land transport links as possible alternatives to the existing sea routes. The United Nations Economic Commission for Europe (UNECE) and the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) have initiated activities with regard to the identification of the most appropriate Euro-Asian inland transport routes and the conditions for their development. Other activities planned are aimed at removing border-crossing obstacles and hindrances, implementation of major international transport agreements and conventions and formulation and implementation of national action plans<sup>49</sup>.

Transport within China is another constraint for foreign businesses; the Chinese Academy of Social Sciences estimates that transportation and logistics account for 20% of the retail prices of goods in China (and even higher for perishable products). Cold storage capacity is believed to be only 20-30% of growing cargo demand, and spoilage losses of up to 33% of perishable freight are common. Most of China's food is still transported by rail, but lack of temperature-controlled equipment and logistical problems make transport costly, particularly for frozen and perishable foods.<sup>50</sup>

**Box 3: Selected comments from industry regarding logistical issues in China:**

“With regard to the 11<sup>th</sup> 5 Year Programme, especially the optimised **infrastructure** will offer opportunities to get better access to the Chinese market. However, in many cases, there is a trade-off between growth and sustainability.”

“China’s **11th Five Year Programme** is expected to solve problems currently encountered in transportation and infrastructure.”

This holds true particularly for the dairy companies, where quality-related problems are among the foremost concerns. Challenges for such companies mainly include management of the cool chain, transportation and infrastructure.

China’s lack of electricity and its inadequate infrastructure also have indirect impacts on food demand. In rural areas only a fraction of households (12% in 2000) own a refrigerator.<sup>51</sup> Refrigerator ownership enables Chinese consumers to purchase more frozen and perishable foods and spend more at supermarkets. As rural incomes increase, refrigerator ownership will rise and this together with the increase in spending power will contribute to the change in food consumption. At the moment however, low refrigerator ownership levels in more rural areas leaves limited potential for cold storage goods in non-urban areas<sup>52</sup>.

A solution to logistics issues within China would be the use of third-party logistics providers (3PLs) which are generally used in Europe for handling the logistics needs of consumer-goods companies. 3PLs are essentially supply chain managers who sub-contract some of their logistics requirements to container lines, trucking firms and airfreight companies. Many own assets such as distribution centres, warehouses and trucking fleets, and a growing number of providers are expanding to offer across-the-board services. Although 3PLs control a small share of the overall logistics market in China, they are growing in importance for multinational companies and organisations looking to set up or expand operations in China. According to Morgan Stanley, while 3PLs currently handle just 16% of final products in China, more foreign and local 3PLs will enter the market in the near future. For consumer goods companies looking to move their product into or around China, outsourcing to a 3PL can mean lower supply chain costs.<sup>53</sup>

While most European companies in the food industry are medium-sized (this is true for most meat companies as well), their amount of information (official data on Chinese customer structures and preferences and information about supplier networks is patchy) and other resources helping to operate on the Chinese market are limited.

#### 4. MARKET ACCESS OBSTACLES

**Table 7: Overview of Market Access Obstacles**

Section	Topic
4.1	Tariffs and tariff-rate quotas
4.2	Regulatory barriers
4.3	Informal barriers

##### 4.1 Tariffs and tariff-rate quotas

###### 4.1.2 Tariffs

Tariffs for many products were introduced in China in the early 1990s, although many of those products were subject to state planning control. Starting in 1999, the government began to substantially reduce tariff protection for agricultural products through a series of tariff cuts. China’s implemented tariff reduction and exemption measures are the Chinese government’s attempt to achieve a range of policy objectives, as goods that are given exemption include those imported under inward processing programmes; domestic- or foreign-funded projects encouraged by the government; articles for scientific research, for educational purposes, and for assisting people with disabilities. As a result, the average level of tariff protection provided to Chinese agricultural products today is around one third the average tariff levels of 1992. Currently in most cases, tariffs are no longer a substantial market access obstacle for foreign agricultural products entering the Chinese market.

###### 4.1.2 Tariff-rate quota

Tariff-rate quotas (TRQs) which are adopted by China and many other importing nations are an important barrier to trade. They involve charging tariffs on quantities up to specified quota quantity limits that are less than the tariffs that may be applied on imports above the quota limits. China’s TRQ system - unlike the TRQ system many countries have under WTO rules - includes criteria for allocating the import quotas to State Trading Enterprises (STEs) and to non-STEs. TRQs can be classified as tariff barriers as they impede trade through the application of tariffs. However, TRQs also have non-tariff elements in that the quota quantities and administrative arrangements can influence the timing and extent of quota imports. Prior to 1993, the State Planning Commission was responsible for determining and allocating quotas according to state needs. Today, the State Planning Commission continues to

determine quotas. However, the process of allocation and reallocation of quotas is managed by the National Development and Reform Commission (NDRC) and the Ministry of Commerce (MOFCOM). For agricultural products, the NDRC is responsible for TRQs for grains and cotton, while MOFCOM manages sugar and vegetable oils. To be eligible, companies must meet a number of criteria set by the NDRC or MOFCOM such as having no record of violating import regulations in the areas of customs, foreign exchange, industry and commerce, taxation, or quality inspection. For in-quota imports, the quota is distributed between the STEs and private enterprises, with STEs continuing to control major shares for key products such as wheat, maize, rice, cotton, and sugar. Out-of quota tariffs on the other hand, are particularly high in China and in many cases block access completely due to their tariff level.

The issues that arise in China regarding TRQ administration include a general lack of transparency, the role of the government in the reallocation of unused quota at the end of each year; whether state trading enterprises will respond to market signals or trade according to politically determined levels of imports and exports; and whether imports that are designated as inputs into re-exported products can comprise a set portion of the tariff quota.

#### **4.2 Regulatory barriers**

China has made significant progress in reforming its trade policies, particularly in reducing the tariff barriers to trade. While tariff measures overall may not hamper EU exports of agricultural and food exports to China, in contrast, certain non-tariff barriers still impede trade to China. Unreasonable sanitary and health requirements in particular, create barriers and hamper exports to China. Furthermore, Chinese national standards often differ significantly from international standards, the application of laws is often not uniform and regional variations in customs procedures are common. As a result, European agricultural exporters and investors are facing an increasing number of unjustifiable non-tariff barriers in the form of product certification, labelling standards, import approval requirements and customs clearance delays.

##### *4.2.1 Trading rights and import licensing registration procedures*

The right to trade was restricted to some 35,000 qualifying Chinese enterprises at the time of China's accession to the WTO. The qualification criteria included, *inter alia*, a minimum registered capital requirement of

RMB 5 million at the time of accession. Foreign-invested enterprises were permitted to export and import; but only those products used in their own production and for export. Under its Protocol of Accession agreement, China agreed to phase out these restrictions within three years. The phase-out included a gradual reduction in the minimum registered capital requirement for Chinese companies over three years at the end of which the requirement and the examination and approval system were eliminated. China also undertook initiatives to progressively liberalise the scope and availability of trading rights for foreign-invested enterprises over three years.<sup>54</sup> However, the granting of trading rights to all enterprises in China did not entitle importers to distribute goods within China. Any liberalisation in distribution services is to be carried out in accordance with China's schedule of specific commitments in the GATS.<sup>55</sup>

All importers are required to obtain an import license. Automatic import licensing is used to monitor imports, while non-automatic import licences are used to fulfil China's obligations under international conventions. Agricultural imports subject to automatic licences (33 tariff lines at the HS eight-digit level) include mainly chicken, spirits and tobacco. Non-automatic licences apply to five tariff lines, including a few plants used, *inter alia*, to make pharmaceuticals, perfumes, and insecticides (three lines at the HS eight-digit level).<sup>56</sup> A general import prohibition maintained under WTO, applies to a few products, such as opium and ivory with four additional products subject to import prohibition under processing trade.<sup>57</sup> The licensing procedure in China for import licenses is often lengthy and arbitrary with processing times ranging from two weeks to four months. Alternatively the importers have the option of employing the services of a registered foreign trade operator who would clear the goods through customs and quarantine and who would distribute them via Chinese affiliates. However, this service would impose additional costs on exporters and might deny them the best available distributional options.

##### *4.2.2 Sanitary and phytosanitary measures*

From the date of China's accession to the WTO, China has established a SPS notification authority and a SPS enquiry point. China has committed to comply with the WTO's SPS Agreement and ensure conformity with all its laws, regulations, decrees, requirements and procedures relating to SPS measures. The WTO requires that SPS protocols must not be trade discriminating and must be consistent with internationally accepted scientific practices. Any SPS

measures that do not meet these conditions could be considered a non-tariff barrier.

The China National Regulatory Commission for Certification and Accreditation (CNCA) is responsible for the unified management and supervision of the hygiene registration assessment of manufacturing and processing establishments for the import and export of food, and the actual registration thereof. Under the Administration of the Registration of Foreign Producers of Imported Foodstuffs Provisions, CNCA is authorised to register foreign enterprises that produce, process or store foodstuffs destined for importation to China. Foreign food enterprises exporting food listed on the Imported Food Catalogue for Enterprise Registration must apply for registration with CNCA. Unregistered foreign exporters of food listed on the catalogue are not allowed to export to China.<sup>58</sup> Although SPS measures are intended to protect domestic consumers from dangerous foreign products, in China they continue to act as barriers to trade. SPS measures in China are sometimes implemented in a non-transparent manner and not in accordance with internationally accepted scientific protocols and standards. Varying interpretations of SPS standards can be burdensome and leads to different (often high) compliance costs being borne by exporters as well as delays for business. This ultimately impacts on companies' ability to sell on the Chinese market, affecting EU small and medium-sized enterprises in particular. China and the EU's SPS regimes are asymmetrical, and the current status of China's SPS measures has raised significant national preferential treatment concerns. For the sectors in consideration, some of the most problematic of SPS measures include:

#### *Zero tolerance for pathogens*

Currently, the Chinese government enforces zero tolerance standards for pathogens in food products stating that "it is forbidden to produce, distribute or use foods containing

pathogenic parasites and micro-organisms, or micro-organisms with toxins exceeding tolerances regulated by the state". These standards, developed by the Ministry of Health (MOH) and enforced by AQSIQ, have resulted in the delisting of several foreign meat and poultry facilities. There are several problems relating to this standard; firstly it does not appear that Chinese authorities apply these standards equally to domestic products, and secondly in some cases zero tolerance is unattainable because certain pathogen levels (that do not put consumers at risk) are unavoidable. The non-transparent enforcement of these standards has the potential to result in export disruptions. Thus, it is essential that the EU and other trade partners continue to advise China to revise the current standard based on sound science and to adopt up-to-date testing methodologies.

#### *Tightened Import Policy Change According to BSE*

As a result of BSE outbreaks in meat producing countries worldwide, China banned imports of various cattle, beef and processed beef products from infected countries. Furthermore, China also banned imports of low-risk bovine products, such as bovine semen and embryos, protein-free tallow and non-ruminant feeds and fats, offering no information on the basic regulatory framework under which it made its decision. During its annual meeting in 2005, the World Organisation for Animal Health (OIE) made significant changes to the OIE Terrestrial Animal Health Code chapter on BSE. Based on scientific information provided by world experts, the OIE Code Commission had recommended that de-boned skeletal muscle meat be included in the list of commodities which, under certain conditions, "...could be safely traded regardless of the BSE status of the exporting country."<sup>59</sup> In spite of these developments, China has not implemented these new OIE recommendations.

#### **Box 4: Example of the effect of zero tolerance for pathogens standard on EU exporters**

In China's current system of approval of EU facilities, China requests for an inspection mission to take place for every EU establishment.<sup>60</sup> There have been reported instances where it has been claimed that the Chinese SPS protocols have not complied with the WTO SPS provisions. For example, on the basis of a single finding in April 2002 of chloramphenicol in casing from The Netherlands, China banned all imports of animal based products from The Netherlands (with a six-week grace period for shipments underway). Following a Chinese inspection mission to the Netherlands, the ban was lifted in July 2003 on a provisional basis. For this measure, the Commission services considered that China's action was not "...based on an appropriate risk assessment, and is more trade-restrictive than required to achieve the appropriate level of protection. It should therefore be lifted."<sup>61</sup> Since then, the Commission's delegation in Beijing has been continuously in contact with AQSIQ and the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) on the issue.

### *Pest Risk Analysis*

The term Pest Risk Analysis (PRA) was coined by the phyto-sanitary community to distinguish the type of risk analysis done to support official decision making for the application of phyto-sanitary measures. PRA consists of a set of activities ranging from the assessment of the probability and severity of impact of a particular pest, to the evaluation of a means to reduce it. A fundamental tenet of these activities is that the measures taken are based on international standards and sound science. The outcome is the identification of exotic pests and the implementation of quarantine security measures to guard against their accidental importation with a minimum impact on trade. The PRA process as described in the International Standards for Phyto-sanitary Measures is divided into three phases, namely pest risk initiation, assessment, and management. As the principle of transparency in the process is vital, more recent PRA reports have expanded the phases to include a fourth stage, pest risk communication and documentation.

While prohibiting the import of certain agricultural goods may be an effective method of excluding foreign pests, it runs the risk of being perceived as a trade barrier unless justified by a risk analysis and unless the process is transparent. The PRA procedures in China are quite lengthy and can range from a period of 5 to 8 years. The problem with PRA measures for EU exporters is that each individual exporting member state (even when exporting the same product) must undergo the procedure, compounding the already lengthy processing procedure.

### *Standard on the Upper Limit on Higher Alcohols in Spirits*

A Chinese standard dating from 1981 limits the total concentration of naturally occurring substances in spirits known as higher alcohols ('fusel oils'). However, it has been established by the international bodies that such higher alcohols are safe for human consumption.<sup>62</sup> If implemented rigorously, this limit would prevent certain EU spirit products, notably some whiskies and cognacs (as fusel oils are part of their flavour profile) from entering the Chinese market.<sup>63</sup> CEPS has announced the elimination of the standard to be the most important issue in spirit trade with China as it has the potential to prevent many EU spirits from being marketed in China<sup>64</sup>. Additionally, CEPS suggests clarifying the issue in a study on higher alcohols in distilled spirits aiming at a

revision of the standard. Some survey respondents have indicated that "*The technical standard regarding fusel oils are the second-most important subject of concern with the threat of enforcing them being a "sword of Damocles" (a constant peril) for the industry.*"

### *Food additive standards*

China's overly restrictive food additive standards are another problematic area that continues to block foreign products from entering the Chinese market. China bans certain food additives that are widely used in other countries and have been approved by the World Health Organisation (WHO). In the most recent case, China proposed its *Hygienic Standard for Uses of Food Additive* for comment at the WTO. In addition to being long and extensive, the proposed regulation employed domestic nomenclature rather than internationally recognised technical terms.

### *Cereals*

In the grain sector, SPS problems hampering trade have occurred in at least two cases<sup>65</sup>:

- China's arbitrary application of maximum residue levels (i.e. for a fungus called vomitoxin in wheat or levels of TCK smut) are more stringent than international standards and has threatened cereal imports.
- Corn imports will eventually require a bio-safety certificate from MOA and quarantine permits from AQSIQ from early 2006 from importers who have not yet filed for a quarantine permit. In the past and as a comparable case, in order to import new commodities a so called "Pest Risk Analysis Management Regulation" (PRA) became effective in 2003. At that time, AQSIQ initially indicated that Chinese importers could not acquire a quarantine permit because there was no PRA for corn. Informally, AQSIQ communicated that the application procedure for a corn quarantine permit would be the same as for soybean and wheat so there would be no PRA requirement. How the situation evolves in this case remains to be seen.

### *4.2.3 Quarantine*

With the large increase in China's import of agricultural products, China has set up a science-based quarantine control and risk management mechanism to prevent any disastrous attack of exotic infectious diseases.<sup>66</sup> China's inspection and quarantine agency, the State Administration of Quality

#### Box 5: Summary of issues relating to implementation of Chinese import inspection protocols

- Non-adoption of international standards by Chinese authorities
- Use of differing standards for different countries
- Use of different standards for domestic goods relative to foreign goods
- Lack of transparency
- Lack of advanced testing facilities.

Supervision and Inspection and Quarantine (AQSIQ) is an administrative organ of the State council involved in the field of quality, metrology, entry-exit commodities inspection, entry-exit health, animal and plant quarantine, and certification, accreditation and standardisation procedures of commodities. Quarantine and inspection practices are common in many countries; however, these mandatory requirements can prove to be market access obstacles if procedures are not transparent or conform to international norms. In China, arbitrary practices by customs and quarantine officials often delays or halts foreign shipments of agricultural products into the country, ultimately generating further costs for exporting countries.

AQSIQ has imposed several inspection and quarantine-related requirements that has led to restrictions on imports of some of the EU's agricultural goods. Of particular concern are the measures that require importers (of nearly all traded agricultural commodities) to obtain a Quarantine Inspection Permit (QIP) prior to signing purchase contracts. Currently, QIPs are one of the most important trade policy issues affecting the China's agricultural trading partners. AQSIQ has blanket authority to annul or voided QIPs without notifying traders in advance or explaining its reasons, resulting in substantial commercial uncertainty for foreign companies. Furthermore, the commercial necessity to contract for commodity shipments when prices are low, combined with the inherent delays in QIPs issuance, results in many cargoes of agricultural products (i.e. soybeans, meat, and poultry) arriving in Chinese ports without QIPs. Consequently, there are delays in product discharge as well as unnecessary demurrage bills. Additionally, shipment quantities are sometimes often closely scrutinized and are at risk for disapproval if considered over the size/weight limit.

#### 4.2.4 Statutory Inspections

An issue which has caused and continues to cause concern and disruption – as well as additional costs to importers – is mandatory inspection. This generally involves a requirement for certain strategic or sensitive imports to be subjected to sampling and

testing by Chinese authorities (AQSIQ), prior to acceptance. While China has agreed as part of its WTO commitments, to adopt international standards for product assessment and conformity, there are many examples where this is still seemingly not the case. In many instances, Chinese domestic standards have precedence over international standards, resulting in delivery delays, quality claims and accusations of corrupt payments to officials for release of goods. There are also continuing arguments about inconsistencies between Chinese domestic testing standards and international standards, and between central and provincial agencies on import requirements. Much of this appears to be the result of administrative problems, such as inappropriate technical capacity and delays in standardising testing facilities.

#### 4.2.5 Value added tax

Prior to 1994, marketing and processing of agricultural products was subject to the business (product) tax. This tax was later replaced under the 1994 taxation reforms by the Value Added Tax (VAT). VAT is a form of consumption tax imposed on the sale, import and processing of goods. In China, VAT is an important source of government revenue. In 2002, VAT accounted for almost half of central government revenue. As a principle, VAT is equitable and neutral, though there are indications that the application of VAT in China impedes imports into the country and is not applied with equal force on domestic producers. As such, VAT can be classified as a non-tariff barrier.

VAT restricts trade to China as a result of its associated complexity. The VAT is generally applied at a rate of 13% for relatively unprocessed agricultural goods, while goods that are more refined are typically levied at 17%. Domestic taxpayers are also liable for VAT (calculated as the value of sales multiplied by the appropriate VAT rate, less the VAT paid on inputs) however, VAT liability is calculated differently for small taxpayers (i.e. turnover less than 1 million RMB) or wholesales (i.e. turnover less than 1.8 million RMB). VAT that is applied to importers is equivalent to the CIF price plus relevant import duties and other domestic taxes multiplied by the appropriate VAT rate. The different methods of calculating VAT obligations for domestic and imported goods

provide an additional level of protection to some domestic producers as VAT liability on domestic agricultural products may be significantly lower than for imports.

An additional means by which the government guides import decisions is through selective reduction of VAT rates to 0% which occurred during the 1990s and early 2000s. Application of exemption of VAT on any product can significantly alter the price and competitiveness of those imports. The removal of VAT exemption on grain imports in 1999 illustrates this point. China at that time had a domestic oversupply of grain, by effectively removing the VAT exemption on grain imports, the price of imported grains increased as did the relative competitiveness of domestic grains. VAT applied to imports has been and is still an effective component of Chinese border protection for domestic producers.<sup>67</sup>

#### 4.2.6 Labelling

Labelling requirements are maintained under the Standardisation Law and the Food Hygiene Law adopted on 30 October 1995 and the Law on Product Quality, adopted on 22 February 1993 and amended on 8 July 2000. Further labelling regulations have been announced within Decree of AQSIQ, the Chinese quarantine agency. Under these laws, all products (imported or domestically produced) sold in China must have Chinese language labels. The label should state, *inter alia*, name and trade mark of the product, type of food, the manufacturer's name and address, country of origin, ingredients in descending order by weight or volume, net weight and solid content, date of manufacture, best before or expiry date, usage instructions, batch number and the relevant standard code. Information may also be provided in a foreign language, although the details must correspond to the information provided in Chinese.<sup>68</sup> While these types of measures are virtually universally employed by importing countries, the way in which they are employed can adversely affect trade in certain instances due to increased costs and an inability to comply. Furthermore, China's requirements go beyond those of any other country and many feel that some requirements are inappropriate.

The new Chinese standard concerning the labelling requirements for agricultural commodities (i.e. foodstuffs) such as ingredient listing, labelling of gift boxes, production year etc. on outer packaging present many problems for those wishing to export to the Chinese market. The case of distilled spirits in the wine and spirits sector illustrates this point. In China, distilled spirits are required to have product labels that

include a bottling date. However, under international practise relating to wines and spirits, the date of manufacture is not required. The difficulty in providing a date of manufacture is due to the fact that many spirits products consist of a blend of spirits that are aged for varying periods, rendering the identification of a single date of manufacture impossible to specify. Finally, China maintains typeface and translation specifications that are inconsistent with international standards. Even when companies are able to comply with such strict labelling standards, compliance leads to further costs.

#### 4.2.7 Restrictions on investments

##### Land Use

One of the main issues for agriculture-based investments is land use. All land in the People's Republic of China is state-owned. Use of land by enterprises and individuals is subject to the following maximum term limitations<sup>69</sup>:

- 70 years for residential purposes;
- 50 years for industrial purposes;
- 50 years for the purpose of education, science, culture, public health and physical education; and
- 40 years for commercial, tourist and recreational purposes.

Agricultural land tenure is based on a household contract system. Farmland is owned by the village collectives, which extend contracts to individual households - currently 30 years for tillable land, 30 to 50 years for grassland and 30 to 70 years for forestland. The household has the right to use the land, "reap the yields" and transfer the rights granted by the contract, but cannot sell the land.<sup>70</sup>

Weak land-use rights have an adverse impact on investment and the development of a rural credit system. Moreover, if farmers have full ownership of the land, they are likely to care more about preserving land fertility and productivity, controlling soil and water erosion, and reducing pollution. The creation of well functioning land and labour markets would facilitate the structural adjustment process of the sector.<sup>71</sup>

##### General Agreement on Trade and Services (GATS)-Related Restrictions

China's sector-specific commitments in the GATS<sup>72</sup> with regard to different sectors are:<sup>73</sup>

- *Services incidental to agriculture, forestry, hunting and fishing*: No market access limitations for modes 1 (cross border delivery) and 2 (consumption abroad). Mode 3 (commercial presence) investments only through joint ventures, with foreign majority ownership

permitted. Mode 4 (presence of natural persons) investments are unbound except for horizontal commitments.

- *Commission agent and wholesale trade services* (excluding salt and tobacco): Market access unbound for mode 1; no limitations for mode 2. Market access under mode 3 permits foreign-service suppliers to establish joint ventures one year after accession. A list of activities they may engage in is provided. Foreign majority ownership to be permitted within two years from accession and no geographic or quantitative restrictions to apply.
- *Retailing services* (excl. tobacco): Limitations on market access unbound for mode 1 and no limitations for mode 2. Limitations on market access for mode 3. Market access for mode 4 unbound except for horizontal commitments.
- *Management or consulting services*: No market access limitations for modes 1 and 2. Mode 3 only through joint ventures with foreign majority ownership permitted; no limitations within six years of accession. Mode 4 unbound except for horizontal commitments.
- *Educational services*: market access and national treatment limitations unbound for mode 1; no limitations for mode 2. Market access under mode 3 limited to joint schools, with foreign majority ownership permitted. Mode 4 unbound except for horizontal commitments and other limitations.

As a result, trade and investments in agriculture-related services, *de jure* at least, are not subject to major restrictions.

### 4.3 Informal barriers

#### 4.3.1 Transparency

After China's accession to the WTO, the Chinese government attached much importance to further enhancing transparency. The MOFCOM has set up a special agency in charge of consultation and notification. The responsibilities of the agency include fulfilling more than 100 kinds of notification obligations required by the WTO, giving authoritative answers to other WTO members' enquiries on China's trade policies, and providing consultation services on WTO-related foreign trade issues.<sup>74</sup>

Nevertheless, a lack of transparency in the regulatory environment remains one of the largest cross-cutting obstacles to doing business in China. For example, it is not uncommon for drafts of new laws and

regulations to be circulated only to Chinese partners of JVs or select companies that are given very short timeframes to reply. In addition, the time span between publishing new legislation and implementation is often too short to allow for timely compliance. A lack of transparency was for example, cited by the meat and livestock industry representative as a factor that keeps them from operating in China.

#### 4.3.2 Intellectual property rights (IPR)

China regards the protection of IPRs as an important component of its reform and opening policies as well as an important component of legal construction. Since the 1980s, China has promulgated and amended several laws and regulations for IPR protection. Based on these laws, a comprehensive IPR legal framework has been preliminarily established. Since its accession to the WTO in November 2001, China has placed a high priority on IPR in conformity with its obligations as a member of the WTO. More stringent penalties for intellectual property infringement have been implemented together with a large-scale campaign against piracy and counterfeiting. While making great efforts to improve the domestic legal framework for IPR protection, China has also engaged actively in activities of related international organisations and strengthened cooperation and exchange with the EU and other nations in the field of IPR protection.<sup>75</sup>

The WTO has recently expressed that with regard to agriculture in general, China has tried to improve the investment climate through developing impressive legislation for IPR protection. However, in terms of enforcement, the main obstacles that fail to deter IPR violations include:<sup>76</sup>

- lack of a strong coordinating authority at central level and of a clear strategy
- local protectionism of infringing industries and corruption.
- lack of trained officials at all levels (i.e. legislators, customs officials, judges, police)
- ineffective custom controls for export.
- insufficient public awareness on the problem.
- no deterrent punishments for infringers.
- lack of implementation of basic tools to aid the infringed rights owners (i.e. enforcement of the demand to apply a manufacturing address on all Chinese domestically produced products)

Consequently, IPR protection remains a major challenge for food and agricultural companies operating in the Chinese market. See **Box 6** for selected industry survey comments regarding IPR in China. Successful products are said to be quickly counterfeited and innovative processes may be stolen. Counterfeiting is very lucrative in this sector as European products are highly reputed and mostly range in the upper-price band. Counterfeiting of alcoholic beverages is a particularly big problem in China. As more and more European operators invest and export to China, IPRs regarding such issues as production techniques and recipes will become issues of growing importance. Counterfeiting of agricultural products is particularly worrying not only because of the financial damages and the loss of consumer confidence that may occur but also the threat it potentially poses to health as well.

**Box 6: Selected comments from industry regarding IPR issues in China**

**'Counterfeiting** is our main problem today with related costs estimated at 25% of sales (not including loss of brand equity). It is yet unclear, whether this situation will change since future costs of IPR violations will largely depend on China's commitment to enforce IPR.'

'In order to **address counterfeiting**, we feel that direct contact between the affected industries and the Chinese authorities may be more effective. European officials could serve as contact makers and mediators.'

An example of the seriousness of IP infringement in this sector pertains to spirits and wines. The International Federation of Spirits Producers (IFSP) estimated the worldwide loss through counterfeiting of spirit drinks to between €600 and €900 million per annum.<sup>77</sup> Furthermore, two-thirds of foreign labelled wines in the Chinese market were counterfeit.<sup>78</sup> This relates to branded items as much as to Geographical Indications (GIs) on wines and on spirits such as whisky or brandy. Since wines and spirits account for 80% of EU exports of products with GIs, protection of IPRs is of crucial concern for the sector. Counterfeiting is also a problem for other value-added products carrying GI's, such as cheeses, and other dairy products.<sup>79</sup>

Given the number of complaints from EU manufacturers and traders regarding IPR protection in China, the EU commission in Beijing has taken initiatives to extend and strengthen the existing structures (i.e. IPR helpdesk and the network of European Information Centres) to further provide training and advice on protecting and defending European IPR in China. Though efforts have been made on both fronts, it is important to keep in mind that IPR may be of

even more relevance in the future when branded food products will enter the Chinese market to serve a population that prefers western-style food items.

Formal and informal barriers such as those just mentioned, still negatively affect exports of agricultural products to China. While many of these issues and obstacles will be eventually overcome, exporters must face the prospect of continuing bureaucracy and intervention on the part of Chinese authorities, some of which might be the basis of legitimate concerns and some of which might be regarded as disguised protection. Resolving these issues would greatly increase European access to the Chinese market.

**4.3.3 State trading enterprises**

The gradual liberalisation of China's foreign trade regime has somewhat diminished the influence of STEs. However, the government still retains some influence on imports and exports of key commodities through the state-trading system. STEs are able to restrict China's imports of certain agricultural goods through their exclusive rights to import a large proportion of China's total imports of particular products.

Under China's Protocol of Accession agreement, agricultural products subject to import by STEs are: grain (including maize, rice, and wheat), vegetable oil, sugar, tobacco, and cotton. China maintains state trading to, *inter alia*, ensure the stable supply and price of these products. While the share of vegetable oils (palm, rapeseed, and soybean) imported by STEs is relatively low, STEs continue to control major shares of maize, cotton, rice, sugar, and wheat imports.<sup>80</sup> Imports of tobacco remain under state monopoly.<sup>81</sup>

STEs set the import prices, which are "usually" based on the c.i.f. price plus tariff and other charges.<sup>82</sup> Where China's import prices are controlled by STEs, they may also be able to exert market power as a purchaser on the world market for commodities where China is a significant importer. That is, if the Chinese STE restricts its imports to maintain high domestic prices, then the decrease in import demand could also reduce the prices it pays for imports in the global market.

**Table 8: Quantification of Market Access Obstacles**

<b>Food Processing (HS10-24)</b>		
Current Conditions	China Imports from EU-25 <sup>(1)</sup>	\$6.8 billion
	Domestic Production Output <sup>(1)</sup>	\$97.5 billion
Conditions Under a Liberalised Trading Regime <sup>(2)</sup>	Welfare Improvements <sup>(4)</sup>	4.22% increase
	Change in Domestic Output	1.08% decrease
Cost of Lost Business Opportunities of EU Companies Exporting to China.	<b>Estimated Total Cost</b>	<b>\$750 million</b>
	<b>Cost of NTBs Alone</b>	<b>\$96 million</b>
<b>Notes:</b> <sup>(1)</sup> China imports from the EU-25 and production data uses 2004 figures <sup>(2)</sup> A "liberalised" regime here denotes a 100% cut in tariffs and non-tariff barriers across sectors covered in the partial equilibrium model and which is applied equally to all major trading partners. <sup>(4)</sup> Economic welfare is measured by changes in absorption (total consumption) by sector		
<small>Source: UN Comtrade; World Bank; China Industry Annual (Various Years); Author's own calculations</small>		

#### 4.4 Quantification of Market Access Obstacles

To establish the quantitative impact of market access obstacles on EU-China trade, a partial equilibrium (PE) model was applied by the wider study's quantitative analysis experts (please refer to the separate **Technical Appendix**). Inputs for the model were based on assumptions derived from the qualitative analysis discussed above, with estimates for the impact of non-tariff barriers to trade (NTBs) and regulatory restrictions calculated in consultation with trade experts and industry representatives, and compared to existing datasets on *ad valorem* NTBs from the World Bank. The PE model was then used to make several sets of calculations, each assuming a different outlook scenario. Finally, the quantitative impact of these market obstacles was then derived by comparing the current situation with the liberalised trade scenario.<sup>83</sup> Due to the limited availability of World Bank data for the overall agricultural sector, the model for the this sector study was limited to exploring the impact on the Food Processing sub-sector (HS codes 10-24).

The key quantification results from the model for the agriculture sector (food processing) are outlined in **Table 8**. The model compared current conditions with a scenario where tariffs and NTBs are eliminated. Under the liberal trading regime overall economic welfare increased by 4.22% whereas local production would almost not be affected, decreasing by 1.08%. In addition, the European-based agriculture industry exports to China increased by \$750 million. The cost in lost business opportunities resulting from NTBs alone amounted to \$96 million.

**Annex 4** provides a visual summary of both market driven competitive forces as well as those derived from NTBs

#### 5. CHINESE COMPETITION IN THIRD MARKETS

##### 5.1 Competitive Overview

China's agricultural exports are largely labour-intensive agricultural products such as horticultural produce (vegetables), pig and poultry meat, fish and processed foods. With some of these products, the EU and China compete in third-party export markets.

In the EU, agricultural production and food processing is still a comparatively small-scale economic activity (as compared to the US, Australia, New Zealand, Brazil etc.), resulting in above-average production costs compared to the economies listed above. In addition, since most EU agricultural production is partly highly subsidised (i.e. sugar, milk, cereals, beef), EU prices are above world market levels and those of major competitors. While export subsidies are available, which compensates the difference between the world and the EU domestic price, EU export prices are still higher as compared to those of low cost producers (i.e. those offering prices lower than world averages). Furthermore, EU food processing in general is a quality-controlled, capital-intensive manufacturing activity with costs accruing to machinery, R&D and advertisements. This results in a high quality, marketing-intensive sector and thus, relatively high-priced food products tailored to the needs and wants of demanding EU consumers. For example, organic foods and traditional products with certified geographical labels, while still being small in overall importance, have experienced strong growth during the last years.

Chinese agricultural products, in contrast, are generally low cost and produced by abundant low-skill labour in rural areas. However, Chinese food products are also often of low quality, in the sense that they experience difficulties in meeting the high-quality standards of developed markets.<sup>84</sup>

In ASEAN countries, Chinese products may have competitive advantages relative to EU products for at least two reasons. First, China is closer in geographical and cultural terms, resulting in lower transport and marketing costs such as market research and the adaptation of consumer-packaged food products to local preferences. Second, quality standards of ASEAN countries are still lower than in many western economies.

In the US market, the cost advantage of some Chinese products as compared to EU products may be important, in particular for intermediate commodities designated for further processing or in unbranded fresh produce markets (fruits and vegetables, meat etc.). Since the geographical distances from China and the EU to the US are roughly the same, transport costs matter less and price differences are determined by production costs. In the branded, quality-oriented consumer-packaged market, EU food products may have a competitive edge over Chinese ones due to quality advantages. However, direct competition between these products in practice may be low since they are typically bought by different consumer segments. The following sections explore Chinese competitiveness with regard to specific products:

### **5.2 Meat and Livestock**

For the US market as well as for the ASEAN markets, China's meat exports are marginal and thus represent a low threat to competitors. China's small meat and livestock export volume is due to the fact that with a high demand in their domestic market which frequently outstrips supply, Chinese enterprises are preoccupied with meeting this demand. Furthermore, the absence of low price feedstuffs in China results in higher costs for meat producers leading to a loss in their competitive position in third country markets.

In the future, China may export, though to a limited extent, labour-intensive meat and meat products such as pork and poultry meat as opposed to meat from more land-intensive livestock. With some of these products, China will compete with EU producers on its export markets. It might be expected that some of these markets will be the developed countries in East Asia, such as Japan and Korea. However, it will be a challenge for China to improve the quality of its products in order to meet high quality standards in these countries.<sup>85</sup> A stakeholder interviewed for the industry survey conducted in the frame of the study concluded that 'The threat of Chinese enterprises operating in the meat sector in third-country markets is low. This is because China has to first, try to meet the demand of its home markets, where the demand for

meat domestically is higher than their supply. In addition, China is not equipped with low price feedstuffs. This results in high cost for meat products and thus losing its competitiveness to third-country markets'.

### **5.3 Dairy**

China has established a framework agreement with ASEAN extending its bilateral trade preferences to the member states<sup>86</sup>. Apart from Japan, Taiwan and China's special administrative regions of Macau and Hong Kong, the ASEAN countries represent the main destination for China's exports of dairy products. Within the region, Myanmar and Malaysia play a major role for China with 78 million consumers' exhibiting emerging demand for (reconstituted) milk products<sup>87</sup>. With 8% of the world's population living in ASEAN member states and average GDP growth rates of 4% per year, further consumption potential is high. If its production capabilities will allow for it, China may be able to increase exports to ASEAN. The US total net imports of dairy products amounted to € 210 million in 2005<sup>88</sup>. Due to its low self-sufficiency, and the distance between the two countries, China's exports of dairy products to the US are minimal.

### **5.4 Cereals**

Overall, for total grain exports, China is not a significant competitor. Since most of China's wheat and flour products are sold to Asian countries within the region (i.e. North and South Korea, the Philippines and Indonesia), wheat exports for fiscal year 2005/2006 are estimated at 0.8 million tonnes<sup>89</sup>. Albeit under export support<sup>90</sup>, Chinese corn exports are limited by rising domestic demand for corn for feed and industrial use and the scarcity of farmland. For rice exports, the government has tightened controls since 2004. While China exported about two million tonnes per annum from the years 2000 to 2003, most of those exports were low quality (i.e. indica rice) exports to Africa. In addition, some highly profitable small amounts of rice (i.e. japonica varieties) were exported to Japan, Russia and South Korea. However, total rice exports in fiscal year 2005/2006 are estimated at only 0.8 million tonnes. Thus, and in reference to grains in general, China cannot be seen as a significant threat for EU exporters in third markets. For cereal products, China can be viewed as an international supplier of ethnic food products (i.e. instant noodles as well as plain and flavoured rice). Companies like the Ting Hsin International Group are becoming more internationalised and serve to meet sophisticated western consumer tastes. However, those companies are acting in a different market segment than European companies do and therefore real competition

between the processed cereal products of Chinese and European companies can be assumed to be small.

### 5.5 Wine and Spirits

With less than 0.3 litres in 2001, per capita wine consumption in Southeast Asia was still at a very low level<sup>91</sup>. Growth in the Asia-Pacific market has become increasingly strong, despite there not being any considerable wine production activities in the region<sup>92</sup>. As far as spirits are concerned, little information on production, consumption and trade is available. The CEPS have tried to assess whether the EU faces trade-related obstacles in the region. Worldwide, the CEPS identified six top-priority markets where either basic customs duty is extremely high or where EU exporters face a competitive disadvantage. Both, Malaysia and Thailand were on that short list<sup>93</sup>. The interviewee for the sector survey highlights the competitive position of their Chinese counterparts in stating that: except for counterfeit products, they faced no competition by Chinese companies as the quality of Chinese products is generally considered to be very low. Chinese competitors do not export mentionable amounts of spirits into the ASEAN nations and US and are not expected to do so in future.

Chinese wine exports to the US are insignificant in size, while European wine exports averaged 3.5 million hl per year over the period 2000 to 2003, representing a share of almost 30% of total EU wine exports<sup>94</sup>. The Chinese wine making sector is still in the early stages of development with very few companies able to match the high quality demanded by the US. The same is true for Chinese spirits as western consumers in general find traditional Chinese spirits distasteful and China yet lacks production and marketing skills in a spirit business that is largely dominated by branded products. Moreover, since the "Zero for Zero" agreement, EU spirits are granted tariff-free access to the US, further enhancing its strong position<sup>95</sup>.

## 6. SCENARIOS

This section constructs two basic scenarios (pessimistic and optimistic) to highlight the different ways and degrees EU agricultural products and services to China will develop under a certain set of conditions. The intention is to point out the relationship between the factors that can affect supply and demand of agricultural products in China and highlights the importance for China to maintain a liberal and fair trade regime regarding the agricultural industry in particular. The major variables that

contribute to an outward shift in the demand curve in China that are taken into consideration include income growth, changes in urbanisation rates, and changes in preference (i.e. adoption of a more western-style diet); the major variables that are likely to shift the supply curve outward include improvements in agricultural productivity such as farming technology progress, irrigation system investments, expansion of agricultural research, and the evolution of environmental stress.

An assumption common to both scenarios is that China will face shortages of arable land and water. China's per capita arable land, which dropped from 0.095 hectares in 2003 to 0.093 hectares in 2005<sup>96</sup>, is expected to continue falling gradually over the duration of the scenarios (2006-2020). The availability of clean water sources will also become an increasing problem as China's per capita water resources quota is expected to be only 1,700 cubic meters - a generally acknowledged danger limit, by 2030, when its population is expected to reach 1.6 billion<sup>97</sup>. These factors are expected to put increasing pressure on China's ability to meet its food needs from domestic supplies. The estimates in these scenarios below have been loosely based from Van Tongeren and Huang's (2004) study which applies a partial equilibrium growth model. The conclusions reached in these scenarios are the editors' own.

### 6.1 Scenario 1 – Pessimistic Scenario

This moderately pessimistic scenario is characterised by basic Chinese self-sufficiency in agricultural products and no significant improvements in market access obstacles. Consequently, the more discouraging aspects of EU export and investment potential in China are highlighted. Assumptions pertaining to the pessimistic scenario include:

- 1) China experiences a relative slow-down in the growth of its economy, but is likely to hold at around **7% p.a.** making further radical reforms beyond current WTO-commitments unfeasible<sup>98</sup>. This would result in rural income growth of between 4 and 4.5% p.a. while urban income continues to see stronger growth at between 4.5% and 5.5% p.a. leading to income disparity between the two remaining relatively high.
- 2) China experiences an annual urbanisation increase rate of less than 1.5 percentage points. Around 50% of China's population will be urbanised by 2020.
- 3) China's domestic agricultural productivity remains the same with little investment

growth in agricultural research (around 4.7% or less of GDP p.a.) or technological developments.

- 4) A lack of funds due to slower GDP growth means agendas for infrastructure developments under the 11<sup>th</sup> FYP do not reach full potential. Infrastructure, particularly in terms of transport within China remains a constraint and cold-storage capacity in particular remains low compared to actual cargo demand.
- 5) China's **non-transparent SPS regime continues** to be trade discriminating, more lenient on domestic producers, and inconsistent with internationally accepted scientific practices and standards.
- 6) A general **lack of transparency in China's arbitrary regulatory regime** continues, particularly for TRQ allocations, VAT, technical standards (i.e. labelling requirements), import licensing procedures, etc. Furthermore, the level of government protectionism for the domestic agriculture sector remains high.
- 7) Faster rules and procedures for the **approval process** of foreign agricultural products are not followed through, and implantation remains slow in practise.
- 8) Continued **lack of enforcement of IP legislation**.

*Impacts of supply and demand of agricultural products:*

- 1) Per capita demand for meat is forecasted to increase moderately throughout the projection period. Excluding pork, the consumption of meat in both rural and urban areas will increase by around 60-80% by 2020. In the same period, per capita pork consumption will see a more moderate increase of between 25% and 35%. This relatively lower growth of per capita pork consumption is due to the high consumption level of pork already present. Despite the high growth rate of other meats, proportionately pork will remain by far the most dominant meat, even by 2020.
- 2) Under this scenario, China will remain largely self-sufficient in meat as government policy will be directed towards expanding production rather than rely on imports of meat products. For European exporters, limited opportunities do exist in exporting edible offal at a discount due to low demand for this product in Europe compared to China. EU exporters will still face logistical problems in the export of frozen meat

products as well as obstacles in terms of China's arbitrary SPS regime.

- 3) Demand for dairy products will increase slightly, though mainly in urban areas where access and household storage facilities are more accessible. As agriculture in China is characterised by scarce land and capital required for dairy produce, domestic production of dairy will have some difficulties in satisfying demand. This scenario estimates a relatively low drop to 87% self-sufficiency by 2020. Relatively low income growth would narrow trade opportunities for Europe's dairy businesses. Moreover, continued lax IPR enforcement will hinder the EU dairy industry from setting up production bases within China.
- 4) The national average of China's per capita food grain consumption will decline, but the trends differ between rural and urban areas. For rural consumers, per capita food grain consumption will remain the same until 2010, while for urban dwellers this has been declining since the mid-1980s and will continue to decline. The decline of per capita grain consumption in urban areas combined with continuing urbanisation will result in a moderate decrease in the national average per capita consumption. For food grains, baseline projections therefore result in net imports being minimal in the future. Therefore, taking the government's protectionist stance (i.e. high out-of quota tariffs) regarding the cereals sector long-standing policy of grain self-reliance into account, the potential for EU cereal exports to China seem to be quite moderate.
- 5) Wine consumption remains modest although is expected to increase moderately, while consumption of domestic spirits is expected to remain high. The current trend in the market of competition on price, and technical standards such as labelling requirements, are expected to limit market potential for European wine producers. Furthermore, the quantity as well as the quality of foreign investment in the wine and spirits industry will be further held back by a lack of sufficient IP protection. China's self-sufficiency in wine and spirits is expected to be around 85% in 2010.
- 6) In the medium to long term, EU agricultural exports and investment potential in China would be limited. A lack of a solid institutional framework, particularly in the field of SPS and IP related issues, and excessive state

intervention means that there is no competitive level-playing field for EU exporters and investors. Additionally, this creates limitations on projects with foreign participation and does not facilitate synergistic trade relationships between the EU and China. This scenario can have repercussions in other areas such as the environment, as China's self-sufficiency policy can lead to additional strains on its already vulnerable environment.

Under this scenario, the Commission's agricultural trade policy should focus on market access related to cereals, in particular livestock feed, and edible meat offal. Exports from the dairy sectors as well as wines and spirits will see relatively small growth with demand limited to urban areas largely met from local or regional sources. Some opportunities might emerge for dairy and wine producers willing to invest in China. However this is likely to be slow until a more favourable investment environment emerges, particularly in terms of IP protection.

## 6.2 Scenario 2 – Optimistic Scenario

Scenario 2 depicts a more optimistic situation where the Chinese government implements a proactive agenda of economic reforms, while significant improvements in market access are realised which go beyond mere WTO compliance. Furthermore, the Chinese government addresses the problem of its unsustainable self-sufficiency policy, allowing synergistic trade and investment relations to develop between the EU and China. Assumptions for this scenario include:

- 1) China's economy avoids overheating, makes a soft landing and is able to sustain growth **rates above 7% p.a.** Rural income is expected to grow 5.5% to 6.5% while urban income remains to see stronger growth at between 6.5% to 7%. Moreover, **income disparity between rural and urban areas decreases.**
- 2) China's annual urbanisation increase rate continues at 1.5 percentage points per annum or more and the total urbanised share of the population reaches slightly over 60% by 2020.
- 3) China's domestic agricultural productivity improves slightly with more growth in investments in agricultural research (around 5% or more p.a.) or technological developments.
- 4) Under the 11<sup>th</sup> FYP, rural infrastructure in China improves substantially. Transport routes improve, as does cold-storage

capacity. Furthermore, as China continues to open up, foreign and local 3PLs will enter the market, handling the logistics needs of consumer-goods companies.

- 5) China continues to develop its SPS regime (i.e. improved laboratory facilities) and adheres to international standards based on a sound scientific backing.
- 6) Regulatory and technical market access restrictions like TRQs, VAT, import licensing registration, labelling requirements etc, become more transparent and the Chinese government becomes more flexible regarding **rules and procedures** that pertain to foreign agricultural industries wishing to export or invest in China.
- 7) As government capacity increases, rules and procedures for the **approval process** of foreign agricultural products mature, and implementation speeds up.
- 8) Enforcement of IP legislation in China shows tangible progress.

*Impacts of supply and demand of agricultural products:*

- 1) Increased incomes and lower disparity between rural and urban areas will translate to meat demand being about 10% higher than that projected for the pessimistic scenario. As China will not be able to meet all of its demand domestically, China will look to imports from other trading partners. This presents significant opportunities for the EU. China's pork self-sufficiency level in 2020 would change from 105% under the pessimistic scenario to 99% and thus leads to **China changing from being a major pork exporter to a pork importer.** A similar result can be expected in the poultry sector. For other livestock products such as beef and mutton, higher income growth will result in higher imports as China was never initially a big producer of such meats. Opportunities for the EU lie in the export of pork, edible offal, and frozen meat products as logistics such as cold storage improve. Furthermore, increased exports can be expected with the relaxation of China's stringent SPS regime.
- 2) Under this scenario, the drop in China's self-sufficiency in dairy will be far sharper than in the moderately pessimistic scenario, decreasing to 73% in 202<sup>99</sup> and generating ever larger opportunities for international exports to China. In addition, it can be expected that with further urbanisation and income growth, Chinese

consumers will begin to demand more Western products that are thought to be of high quality or healthier, such as yoghurt. Although export potential for raw milk will remain constrained by geographical limitations, European exporters will be able to take advantage of a larger market for reconstituted milk products, infant formula, and possibly, cheese. As the EU has developed extensive technical and managerial expertise in producing and marketing various dairy products, **better IP protection in this scenario could allow EU exporters play a growing role in the development of the dairy industry in China.** This applies particularly to the segment of the market that requires quality products such as ice-cream, yoghurt, cheeses, and other fermented dairy-based drinks. FDI in this sector could also increase export opportunities. For example, the export from the EU of other ingredients for dairy products and equipment for dairy product production.

- 3) High economic and income growth assumptions have minimal impacts on grain production, consumption and trade.<sup>100</sup> Additional growth in income does not lead to any major changes in food grain demand and this should be expected as income elasticities are either almost zero or negative in the projection period. **In fact, a boost in urban consumers' income would result in a decline in food grain demand.** Additionally, while per capita food grain consumption will increase with higher income growth in rural areas, changes are negligible. However, a higher growth of meat demand would lead to higher feed demand. Consequently, the grain supply and demand balance could worsen leading to a strong rise in grain imports, even though traditional food grain demand would not increase. As a result projected growth rates for European grain traders exporting coarse grains (i.e. used for feed) would be quite high. China's accession will further open possibilities with expected quantitative changes for EU exports to China for coarse grains of 44% from 2001-2005, 49% from 2005-2010, 102% from 2010-2015 and 93% from 2015-2020<sup>101</sup>. In terms of cereals for human consumption, opportunities for European companies lies in exporting higher quality cereals as demand for processed food items and western products like certain baked goods increases.

- 4) Consumption of non-domestic spirits, but also wine, grows at about 7.8% annually from now until 2010 as predicted by some studies<sup>102</sup>. By 2010, China could consume up to 766.26 million litres of wine under this scenario. High value products registered as geographical indicators in particular would benefit as an emerging large middle class consumer base is willing to spend more money on products that are associated with luxury and class such as European wines and spirits, thus reversing current market trends. Great opportunities lie in exporting wines and spirits to China, as well as in investing in local production facilities. As IP protection in China improves, EU companies will have more incentive to invest in China's alcoholic beverage industry, particularly for wines.

In the medium to long term, EU agricultural export and investment opportunities in China would be quite substantial. A better institutional framework, particularly in the field of SPS and IP related issues, and a decrease in state intervention will make China an optimum location for investing in operations. Additionally, this will increase FDI from the EU and synergistic trade and investment relationships between the EU and China can be forged such as in offal export from the EU to China and meat export from China to the EU.

Under this scenario, the Commission's agricultural trade policy should focus on market access related to cereals (in particular livestock feed and quality cereal products), meat, and edible meat offal. Exports from the dairy, wines and spirits sector will see strong growth in demand as well, and demand will be geared towards foreign products as a large middle class will emerge in China. Relaxed regulatory barriers will facilitate many EU products from entering the market. Opportunities will emerge for dairy and wine producers willing to invest in China, particularly as a more favourable investment environment emerges with IP protection (including GIs) strengthening.

## 7. SYNTHESIS

### 7.1 Conclusions

As the world economy becomes more globalised and integrated, each country and region will be forced to better exploit its respective comparative and competitive advantages. Europe has unique comparative advantages in the production of a large number of agricultural commodities and processed food products. In addition, many

of Europe's advantages are synergistic with the needs of the Chinese market. Europe has first-hand experience in sustainable rural land management, organic production methods, agro-tourism and regional food marketing (i.e. certified geographical labels). As a provider of high quality agricultural products and services, Europe has built a strong competitive base, on which it can draw for further innovation and specialisation.

As has been mentioned, China will follow the growth path of other Asian economies before and its consumers will eventually become as quality-, health- and environmentally-conscious as those in Japan, South Korea, Singapore, etc. While much of the development support and import needs will be delivered by countries within Asia, America and elsewhere, Europe will provide its fair share, provided that it is sufficiently diligent and makes use of its particular competitive advantages. Given China's enormous size and catch-up potential, and Europe's experience and skill base, the mutual gains for both China and Europe are expected to be significant.

As domestic demand for livestock products grows in the coming years, China will continue to increase both its own meat production and its imports of meat products. Low per capita incomes and consumer preferences for freshly slaughtered meat currently limit the potential market for meat imports to low-value cuts and variety meats. However, rapidly increasing incomes in large cities, the growing popularity of supermarkets and urbanisation are likely to generate future opportunities for imports of high-value cuts. In the future, China might specialise in labour-intensive processing of meat and meat products and may import more raw materials (such as feed grains) and livestock for breeding. These trends are reflected in the developments of EU exports to China.

Exports of cheese and whey may remain to be profitable as demand is growing and whey prices continue to increase. While EU production quotas and reduced government subsidies may limit export options, FDI may be an opportunity with increasing relevance for European operators. Demand for fresh products such as yoghurt, fresh milk and cheese is growing and will receive further impetus as more households buy refrigerators. FDI will be necessary to satisfy China's growing demand for these perishable products. Despite the increasing processing capacities of China's dairy industry, domestic raw milk production lags behind. European dairy companies urgently need to secure raw milk supply. However, in order to maintain quality, heavy initial investments in milk

collection are a drawback for potential investors. Moreover, when producing basic commodities such as dry milk products or UHT milk, intense price competition by local processors can be expected. One opportunity for the EU would be to relocate processing facilities to China, and domestically produce dairy products such as yoghurts, ice cream, etc. This will only be possible on a large scale, however, if China strengthens its IPR regime. Organic products from the EU may offer export potential as a decade of over-fertilisation, extensive use of pesticides and industrial contamination make it difficult for Chinese farmers to produce food with moderate contaminant loadings. Exports of organic products, both processed and non-processed, could thus be a key interest for Europe in the future.

Animal husbandry in China faces severe problems including the loss of arable land through soil erosion and desertification, pollution-caused contamination of farmland and water, poor genetic potential and inefficient production techniques. Since European companies have dealt with these problems in the past, China's inefficiency may offer substantial opportunities for EU operators. These mainly relate to equipping Chinese livestock farmers with environmentally sound production technologies and genetic material, but could also include agricultural counselling services. With regard to technology transfer, no strong negative impact on Europe's trade activities can be expected with regard to fresh products since no significant EU exports of these products exist. Likewise, Europe is unlikely to face obstacles imposed by the Chinese authorities as China has a strong interest in the more efficient utilisation of its resources. In the cereal sub-sector, the relaxation of China's self-sufficiency policy, a changing structure of production favouring crops other than grains, and China's relatively scarce land resources will be the key drivers on the supply side assessing European's future potential to export cereals to China. China's increasing urbanisation has resulted in a shift in demand for grain, moving from food to feed. This is due to increased demand for meat, higher food quality and a more varied diet, leading to a drop in consumption of grain by consumers. China however may yet begin to import cereals (especially corn) and cereal products in large quantities for feed purposes. Relaxed tariffs and the introduction of high TRQs after WTO accession serve to encourage these developments. However, major uncertainties exist regarding Chinese grain stocks. Still, non-tariff barriers such as significant governmental intervention, a fragmented grain marketing chain, difficult transport and

SPS measures hamper grain exports to China. While income growth will not significantly change the total demand for grains, projected growth rates for exporting coarse grains (corn, barley, rye etc.) are quite high.

China's net imports of wines and spirits are rising. The market will continue to grow as incomes increase. However, Europe is currently positioned predominantly in the high-priced segments and products are affordable only to a tiny minority of Chinese customers. Unit values of imports decrease as the American companies are quickly taking over Europe's share in Chinese imports. Extending focus to a broader customer base will be a challenge for European stakeholders. As the investment climate has dramatically improved, opening local production facilities could be an option to avoid taxation and lengthy customs procedures. Counterfeiting and related loss of brand equity is the most severe problem for foreign producers. In the future, international competition by Chinese wine producers may increase in the very low-priced segment due to cost advantages in labour-intensive activities, and the significant improvement in domestic wine quality.

## 7.2 Recommendations

On the basis of the previously discussed findings, the following recommendations are made aiming at facilitating further EU-China trade and investment relations in the agriculture sector.

### 7.2.1 Policy Recommendations

1. Improve transport links and other logistics infrastructure to China. Agricultural commodities are bulky and food products are often perishable. Transport and storage logistics matter. Given Europe's unfavourable transport links to China, strong efforts should be made to facilitate physical access to the Chinese market. Within China, infrastructure in rural areas, in particular in southern and western China, needs much improvement. As the distribution/logistics sector within China is closed to foreign capital, Chinese legislation should be changed to allow foreign distribution operations which would alleviate problems relating to infrastructure and logistics.
2. Sanitary and phytosanitary measures or certification procedures and health certificates hinder trade in particular of fresh, dairy, and meat products, confectionery products and distilled spirits. These SPS measures are a serious obstacle for European exporters. Exporters need better access to information on SPS measures and on third country import guidelines. An improved administration of the European market access database, which among other issues refers to SPS measures in third countries, would help exporters and investors alike.
3. Market opportunities for agricultural commodities and food products in China must be systematically identified and exploited. While large EU food multinationals have the financial means to buy private market intelligence, the mainly small- and medium-sized agricultural and food sector companies may not. A good example of how EU agribusiness exporters and investors may be supported by providing public market information is through establishing a support platform such as an online resource to provide extensive and highly specific market information free of charge. In addition, academic research of the Chinese agricultural market should also be strengthened.
4. Improve capacity building for EU exporters and investors to/ in China. The reform of the Common Agricultural Policy (CAP) and upcoming WTO obligations to further open up the EU market to foreign competitors means that EU farmers and agribusinesses have to increasingly compete in free-market conditions. Specifically developed technical-assistance "tool boxes" providing support to EU exporters and investors may be useful.
5. Intellectual property rights infringements are a huge concern to the agricultural industry, as brands are copied (e.g. spirits or confectionery products), and counterfeit products carry a large potential of sanitary or qualitative problems. This not only creates a threat to property rights but also to the health of consumers. IPR protection for agricultural products, and in particular, highly innovative food industries needs to be strengthened. Innovative EU agri-food companies will only start exporting to/ investing in China on a significant scale if product counterfeiting and illegal process imitation is effectively under control. This is in particular true for high-value, branded food products, such as confectionary, yoghurt and other functional foods, and wine and spirits.<sup>103</sup>
6. Increase EU coordination and negotiation capacities, especially in the meat sector. So far, each individual EU member-state negotiates separately with China and there does not exist any institution that centrally communicates with the competent Chinese authorities in this sector. With the MoU in cooperation with

the Chinese AQSIQ, a first step has been taken. In the future, combined efforts are necessary to strengthen EU-China bilateral communication and co-operation.

7. Lobby to phase out the Chinese designated cereal trader system. Abolishing the system would be a positive move as end-users and processors are much more likely to receive the goods and materials which they need for processing them efficiently into high quality products. Uncertainty leads to higher risks in doing business and higher risks will be reflected in higher prices. EU exporters as well as Chinese importers would win, as domestic customers would pay less for their purchases while the costs of doing business for suppliers would be lower. The EU should work multilaterally with other exporting nations, as change will be difficult to initiate without a large backing.
8. With regard to dairy exports, the negotiation of market access improvements in particular for durable and value-added products such as whole milk powder and cheese should be focused upon. Lobby to adjust the recent national standard on labelling in particular with regard to reconstituted milk.
9. Protect European intellectual property in wine and spirits by ensuring China's commitment to the enforcement of related legislation. In addition, make use of promotional campaigns to tackle counterfeiting of Geographical Indications (GIs) by educating consumers which are to a large extent unaware of European product categories such as Cognac, Champagne and Port wine. Establish direct contacts between the affected industries and the Chinese authorities and negotiate a legally binding list of protected GIs for wine and spirits.

#### *7.2.2 Recommendations for Competitiveness*

1. As Chinese self-sufficiency in agricultural products begins to fall from 100%, European producers should concentrate on targeting new niche markets for export associated with the growth in disposable incomes and hyper/supermarkets. This includes products such as high-value meat cuts, organic products, and to a lesser extent cereals.
2. Opportunities exist for European producers to leverage China's low-cost production advantages. With demand for perishable dairy products expected to rise and obstacles to trade in the wine and spirits sub-sector, it is reasonable for European producers to consider investing in production facilities in China for the domestic and greater Asian markets.
3. Given the Chinese government's aim of substantially upgrading modern agriculture by promoting non-polluting, green, organic agricultural products as well as tourism and leisure, European companies with substantial experience in organic production and sustainable land management, should seek to increase exports in agricultural services (advice, education, research assistance, etc.) to China.
4. European producers should develop value-added products building on their technological, quality and marketing strengths. For example, continuing a strong development of geographical indications (GIs) and high value added food processing. GIs in particular enable SMEs access to third-country markets and strengthen monitoring on IP infringements by collaboration through industry associations.
5. China based executives should build and maintain relationships with regulatory bodies. This will facilitate clarification of related issues and ensure that information provided in official notifications is not misinterpreted.
6. Effective cooperation should be developed between businesses across sub-sectors and EU authorities to allow sub-sector industries to speak with one voice to the Chinese government.

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## ANNEX 1: TARIFF AND QUOTA TABLES

Table 1. EU-25 exports of agricultural products to China and China's MFN tariff, 2005

	EU-25 exports to China in €million, 2005	No. of lines <sup>a</sup>	MFN 2005	
			Average (%)	Range (%)
<b>Total</b>	30,600,00	7,550	9.7	0-65
<i>By WTO definition</i>				
<b>Agricultural products</b>	1,457	1,082	15.3	0-65
<b>Live animals and products thereof</b>	61.7	152	13.7	0-25
<b>Dairy products</b>	83.2	20	12.1	6-20
<b>Coffee and tea, cocoa, sugar, etc.</b>	27.8	162	20.2	0-65
<b>Cut flowers and plants</b>	31.7	84	8.6	0-23
<b>Fruit and vegetables</b>	19.9	266	16.0	0-30
<b>Grains</b>	85.8	28	33.9	0-65
<b>Oils seeds, fats, oil and their products</b>	40.1	94	11.1	0-30
<b>Beverages and spirits</b>	190.9	48	20.3	0-65
<b>Tobacco</b>	13.1	11	25.4	10-57
<b>Other agricultural products, n.e.s.</b>	707.8	217	12.4	0-40
<b>Fish and fishery products</b>	195	180	10.5	0-23.3
<i>By sector<sup>b</sup></i>				
<b>Agriculture and fisheries</b>	—	528	11.1	0-65

a Number of lines corresponds to the 2005 tariff schedule.

b ISIC (Rev.2) classification.

Source: WTO (2006) and Eurostat (2006).

Table 2: Tariffs (in %) on dairy products (effective January 1 2005)

	Product	MFN	General	V.A.T	Effective rate (MFN & VAT)					
<b>Fluid milk</b>	0401.1000	15.0	40.0	17.0	34.89					
<b>Powdered milk</b>	0402.1000 0402.2100 0402.2900	10.0	40.0	17.0	29.89					
	0402.9100 0402.9900		90.0							
<b>Yogurt</b>	0403.1000	10.0	90.0	17.0	29.89					
	0403.9000	20.0			39.89					
<b>Whey</b>	0404.1000	6.0	30.0	17.0	25.89					
	0404.9000	20.0	90.0		39.89					
<b>Butter spreads &amp; dairy</b>	0405.1000 0405.2000 0405.9000	10.0	90.0	17.0	29.89					
	<b>Cheese</b>					0406.1000 0406.2000 0406.3000 0406.9000	12.0	90.0	17.0	31.89
						0406.4000				

Source: modified from USDA, 2005a

Table 3. Tariffs and VAT duties (in %) on most important product categories of cattle and beef, hogs and pork, and or frozen chicken products, effective January 1 2006.

	General	MFN	V.A.T.	Effective Rate (mfn+vat)
Cattle, breeding	0	0	13	13.0
Cattle, other	30	10	13	24.3
Fresh or chilled carcass & half-carcass	70	20	13	35.6
Fresh or chilled other cuts with bone in	70	12	13	26.6
Fresh or chilled cuts, boneless	70	12	13	26.6
Frozen carcass & half-carcass	70	25	13	41.3
Other frozen cuts with bone in	70	12	13	26.6
Frozen cuts, boneless	70	12	13	26.6
Breeding Swine	0	0	13	13.0
Other swine, less than 10 kg	50	10	13	24.3
Other swine, 10 kg or more, but less than 50 kg	50	10	13	24.3
Other swine, 50 kg or more	50	10	13	24.3
Fresh or chilled sucking pig	70	20	13	35.6
Other	70	20	13	35.6
Fresh or chilled hams, shoulders and cuts with bones in	70	20	13	35.6
Other	70	20	13	35.6
Frozen sucking pig	70	12	13	26.6
Other	70	12	13	26.6
Frozen hams, shoulders and cuts with bones	70	12	13	26.6
Other	70	12	13	26.6
Frozen whole broiler		1.3		
Frozen broiler cuts with bones		0.6		
Frozen broiler cuts, boneless		1.0		
Frozen broiler wings		0.8		
Frozen chicken wingtips, livers		0.5		
Broiler gizzard		1.3		

Note: 2005 data covering all tariffs are available on: <http://www.fas.usda.gov/gainfiles/200512/146131683.pdf>  
 Source: USDA FAS, 2006; China Customs.

Table 4 China's tariffs and other duties (in %) on wine, 2004

	bottled wine	bulk wine
Import tax rate	14	20
Consumptions tax rate	10	–
VAT rate	17	–
Total compound import tax rate	48.2	56

Source: modified from USDA, 2005b.

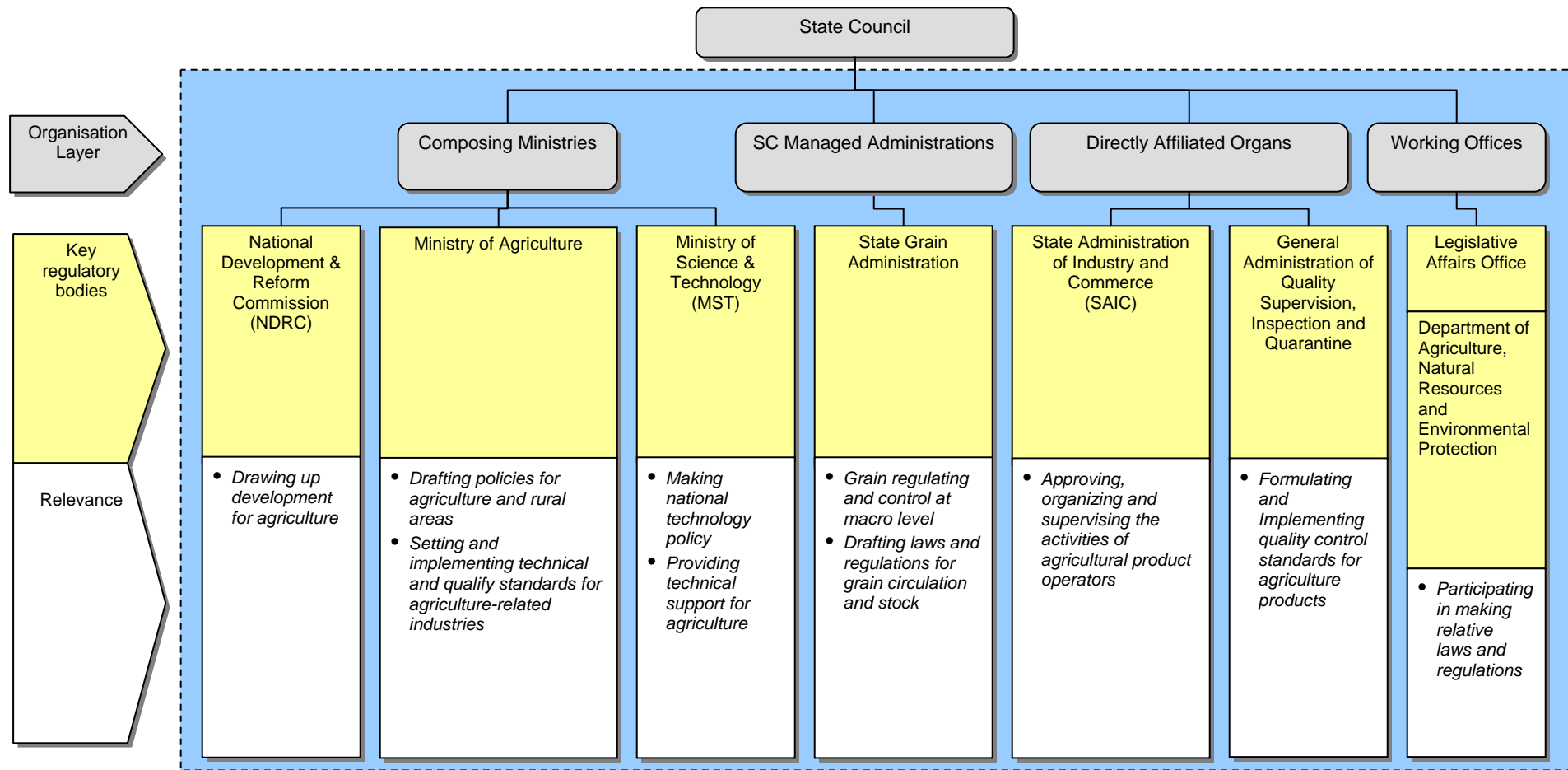
**Table 5. Tariff quota utilisation in China for selected commodities, 2002-05**

		2002	2003	2004	2005
<b>Wheat</b>	Quota level ('000 tons)	8,468.0	9,052.0	9,636.0	9,636.0
	Out-of-quota imports ('000 tons)	..	..	..	..
	In-quota imports ('000 tons)	632	450	7,260.0	..
	Utilisation rate <sup>a</sup> (%)	7.5	5.0	75.3	..
	State-trading share	90.0	90.0	90.0	90.0
	In-quota MFN tariff rate (%)	1-10	1-10	1-10	1-10
	Out-of-quota MFN tariff rate (%)	71.0	68	65	65
<b>Corn</b>	Quota level ('000 tons)	5,850.0	6,525.0	7,200.0	7,200.0
	Out-of-quota imports ('000 tons)	..	..	..	..
	In-quota imports ('000 tons)	10	<5	<5	..
	Utilisation rate <sup>a</sup> (%)	0.2	0.1	0.1	..
	State-trading share	68.0	64.0	60.0	60.0
	In-quota MFN tariff rate (%)	1-10	1-10	1-10	1-10
	Out-of-quota MFN tariff rate (%)	28-71	24-68	20-65	20-65
<b>Rice</b>	Quota level ('000 tons)	3,990.0	4,655.0	5,320.0	4,767.0
	Out-of-quota imports ('000 tons)	..	..	..	..
	In-quota imports ('000 tons)	237	260	770	..
	Utilisation rate <sup>a</sup> (%)	5.9	5.6	14.5	..
	State-trading share	50.0	50.0	50.0	50.0
	In-quota MFN tariff rate (%)	1-9	1-9	1-9	1-9
	Out-of-quota MFN tariff rate (%)	22-71	16-68	10-65	10-65
<b>Rape seed oil</b>	Quota level ('000 tons)	878.9	1,018.6	1,243.0	1,243.0
	Out-of-quota imports ('000 tons)	..	..	..	..
	In-quota imports ('000 tons)	78	150	350	..
	Utilisation rate <sup>a</sup> (%)	8.9	14.7	31.1	..
	State-trading share	34.0	26.0	18.0	10.0
	In-quota MFN tariff rate (%)	9.0	9.0	9.0	9.0
	Out-of-quota MFN tariff rate (%)	52.4	41.6	30.7	19.9
<b>Sugar</b>	Quota level ('000 tons)	1,764.0	1,852.0	1,945.0	1,945.0
	Out-of-quota imports ('000 tons)	..	..	..	..
	In-quota imports ('000 tons)	1,183	780	1,210	..
	Utilisation rate <sup>a</sup> (%)	67.1	42.1	62.2	..
	State-trading share	70.0	70.0	70.0	70.0
	In-quota MFN tariff rate (%)	20.0	20.0	15.0	15.0
	Out-of-quota MFN tariff rate (%)	65.9	58.0	50.0	50.0

Note: .. not available

<sup>a</sup> Utilisation rate refers to in-quota imports divided by quota level.

**ANNEX 2: GOVERNMENT STRUCTURE AGRICULTURE**



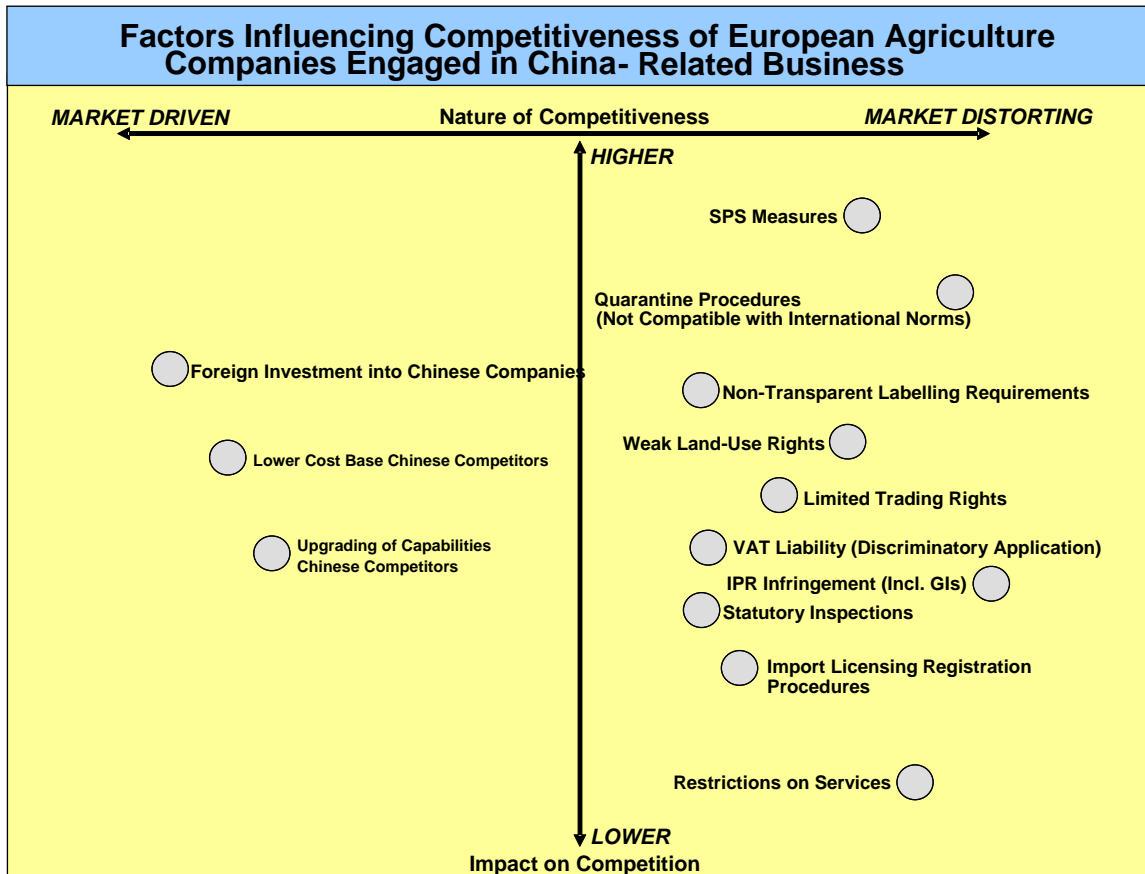
**ANNEX 3: TABLE OF KEY LAWS AND REGULATIONS PERTAINING TO THE AGRICULTURAL SECTOR**

Sub-Sector	Key Laws and Regulations
All	People's Republic of China (PRC) Animal and Plant Quarantine Law, 1992
I) Livestock and Meat	Implementing Details on People's Republic of China (PRC) Animal and Plant Quarantine Law, 1997
II) Milk and Dairy Products	The Law of the People's Republic of China on the Entry and Exit Animal and Plant Quarantine, adopted at the 22nd Meeting of the Standing Committee of the Seventh National People's Congress on October 30, 1991, is now promulgated, and shall enter into force as of April 1, 1992.
III) Cereals	
IV) Wines and Spirits	<p>PRC Health Quarantine Law 1986, 1992 Implementing Details on Health Quarantine Law 1989, 1997</p> <p>PRC Plant Quarantine Regulations, 1983, 1992 Implementing Details on Plant Quarantine Regulations (Agricultural part) 1983, 1995 Implementing Details on Plant Quarantine Law (Forestry part) 1984, 1994</p> <p>The PRC Animal Epidemic Prevention Law, 1998</p> <p>PRC Livestock and Fowls Prevention Regulation, 1985 Implementing Details on PRC Livestock and Fowls Prevention Regulation, 1985, 1992</p> <p>Agriculture GMO Safety Management Regulation, 2001</p> <p>PRC Wildlife Protection Law, 1989 Implementation Regulations on Protecting Terrestrial Wild Animals, 1992</p> <p>The Law on Land Contract in Rural Areas, 1 March 2003.</p> <p>"Interim Measures on Administration of Tariff Rate Quota for Importation of Agricultural Products" (issued by MOFCOM and the NDRC); and the "Interim Measures on the Administration of Tariff Rate Quota for Importation of Fertilizers" (issued by the former SETC and the General Administration of Customs) - Annual announcements to administer TRQs published by the NDRC and MOFCOM</p> <p>Agricultural Law 2002-12-28</p> <p>The Measures for the Examination and Approval of Agricultural Genetically Modified Organisms Processing 2006-1-27; Administrative Provisions on Document Making of Forestry Administrative Punishment Cases 2005-5-27;</p>

**ANNEX 4: FACTORS INFLUENCING COMPETITIVENESS IN THE CHINESE MARKET**

In addition to the genuine market driven competitive threats posed by Chinese operators in this sector, European companies also face competitive forces as a result of non-tariff or 'behind the border' barriers. Those NTBs which are deemed to result from strong Chinese government intervention are plotted on the right of the horizontal axis while those derived from

genuine competition are plotted to the left. The author has indicated the relative importance of these competitive forces in terms of their position on the vertical axis with those nearer the top deemed as the most significant. The graph is designed as a guide only to give some perspective to the descriptions of competitive forces in this sector.



## **ANNEX 5: INTERVIEWS WITH INDUSTRY REPRESENTATIVES**

### **Meat and Livestock Sector**

The interviewee was a person in charge for the China business of a large European meat and meat products company with more than 250 employees worldwide. The company has been exporting livestock, cuts of meat and meat products to China since more than ten years and owns production facilities in China. Today, China contributes a small share to the total company's turnover (on the given scale reaching from one (little importance) to five (utmost importance), a "3" was specified). However, China as an export market plays a large role for specific product categories like edible offal. In the future, sales are expected to grow. The company sees major advantages in its consistent delivery of high quality, superior know-how and access to raw materials that are limited in China.

More specific statements include:

- China-based production serves to supply EU and US markets. Labour-intensive processing of imported raw materials benefit from China's comparative advantage in this field.
- The future development of business opportunities is promising because consumption is increasing as a consequence of income development.
- Currently, China is still quite a difficult location for an investment destination (especially to establish joint ventures).
- The main current obstacles preventing the company from expanding further in the Chinese market are SPS measures and generally low market transparency. The Chinese government and its institutions seem to sometimes link problems together and for exporters it is not always clear what really is the basis for made decisions. In the next five years the situation may even become worse. Technical barriers to trade combined with increasing demand for food safety are likely to complicate meat trade with China in the future.
- With regard to the 11<sup>th</sup> five year programme, especially the optimised infrastructure will offer opportunities to get better access to the Chinese market. However, in many cases, there is a trade-off between growth and sustainability.
- Originally, exclusively state-owned enterprises (SOEs) were dominating the meat markets in China. Today, the market is still dominated by Chinese companies (former SOEs), but some of which are now strengthened by foreign investors' capital (e.g., a large US investment bank seems to be interested in investing in a meat company in China). Since China is also an exporter as well as an importer, competing in the same market becomes an obstacle. So, as an exporter to China, one has to act as cautiously as possible. One problem in entering in competition with Chinese companies is that they are clients at the same time. So, as an exporter to China, you have to act as gently as possible.
- The threat of Chinese enterprises operating in the meat sector in third-country markets is low. This is because China has to first, try to meet the demand of its home markets, where the demand for meat domestically is higher than their supply. In addition, China is not equipped with low price feedstuffs. This results in high cost for meat products and thus losing its competitiveness to third-country markets.

### **Dairy Sector**

The interviewee was the person in charge of the China business of a large European dairy company with more than 250 employees worldwide. The company has been exporting cheese, butter and cream to China for a few years. Today, China contributes a very small share to the total turnover, but is to play a larger role in the future with sales expected to triple within 5 years. The company sees its major advantages in its innovative capacity,

ability to identify and serve market niches and superior know-how. Moreover, the image of European products is considered a real benefit.

More specific statements include:

- Future growth options include new markets such as products for the food industry. Moreover, the main goal is to not only address the demands of urban consumers, but the rural population as well.
- The company is currently considering local production (mainly cheese products) to serve the Chinese market in the form of a cooperation or licensing agreement.
- Market access is considered a problem. However, market obstacles are less problematic for exports, but hindering FDI. Main problems lie in the area of raw milk supply (quality and costs of collection) and are further due to high costs of brand building and the necessity to set up a foreign base. China's 11th 5 year programme is expected to solve problems currently encountered in transportation and infrastructure.
- Today, the Chinese market is characterised by rapid consolidation with Chinese "giants", swallowing smaller dairies. Economies of scale will lead to further cost advantages of large Chinese dairy firms. Therefore, competition by Chinese operators is expected to intensify in the Chinese market, eventually in ASEAN market as well, but not in the US.
- The largest domestic dairies in China are heavily acquiring production capacity. The dairy industry is rapidly consolidating in order to safeguard raw milk supply. Experts are very interested in this development, as clearing up the fragmented and thus inefficient sector is well in the sense of the Chinese economy. Some find it questionable if equity allows for granting further credits. International stakeholders should keep a close eye on liabilities as the practise of issuing credits may represent an implicit subsidy.

### **Wine and Spirits Sector**

The interviewee for wine and spirits represented a large European exporter of spirits and wine to China. Ahead of the US, China is its most important export market and will continue to be in the future as annual double-digit growth in the past is expected to continue. Strong brands, marketing expertise and a modern image of the product categories differentiate the company's products from traditional Chinese spirits. More specific statements include:

- The company sees China as a rather important investment destination because Chinese authorities prefer investments over exports. Additionally, low labour costs boost FDI.
- Counterfeiting is the company's main problem today with related costs estimated at 25% of sales (not including loss of brand equity). It is yet unclear, whether this situation will change since future costs of IPR violations will largely depend on China's commitment to enforce IPR.
- The company moreover claims a higher level of recognition of Geographical Indications for products such as Cognac, Scotch, Champagne and wine by the Chinese state including enforcement if necessary.
- In order to address counterfeiting, the company feels that direct contact between the affected industries and the Chinese authorities may be more effective. European officials could serve as contact makers and mediators.
- The technical standard regarding fusel oils (see section 6.3.2.1 below) are the second-most important subject of concern with the threat of enforcing them being a "sword of Damocles" for the industry.

Except for counterfeit products, the company faces no competition by Chinese companies as the quality of Chinese products is generally considered to very low. Chinese competitors do not export mentionable amounts of spirits into the ASEAN nations and US and are not expected to do so in future.

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- <sup>1</sup> OECD (2005b)
- <sup>2</sup> Due to the limited availability of World Bank data for the overall agricultural sector, the model for the Agricultural sector study was limited to exploring the impact on the Food Processing sub-sector (HS codes 10-24)
- <sup>3</sup> OECD, 2005b
- <sup>4</sup> Van Tongeren and Huang, 2004
- <sup>5</sup> WTO, 2006
- <sup>6</sup> USDA, 2005a
- <sup>7</sup> USDA, 2005a
- <sup>8</sup> OECD/FAO, 2005, A recent report, China's second white paper on environmental protection, published by the Information Office of the State Council describes the situation as "grave". The document, titled "Environmental Protection in China (1996-2005)" estimates the total costs of pollution in China to US\$ 200 billion which equals little less than 10% of Chinas GDP (China daily, 2006).
- <sup>9</sup> USDA, 2005a
- <sup>10</sup> OIV, 2004
- <sup>11</sup> Findlay et al., 2004
- <sup>12</sup> DG AGRI, 2006
- <sup>13</sup> USDA FAS, 2005a
- <sup>14</sup> WTO, 2006
- <sup>15</sup> Flassbeck, Dullien and Geiger, 2005
- <sup>16</sup> OECD/FAO, 2005
- <sup>17</sup> ABRARE, 2006
- <sup>18</sup> Findlay et al., 2004
- <sup>19</sup> USDA, 2005b
- <sup>20</sup> USDA, 2005b
- <sup>21</sup> ABRARE, 2006
- <sup>22</sup> USDA, 2005b
- <sup>23</sup> USDA, 2005b
- <sup>24</sup> USDA, 2005b
- <sup>25</sup> USDA, 2005b
- <sup>26</sup> Commodity Board for the Distilled Spirits Industry, 2000
- <sup>27</sup> World Health Organization, 2004
- <sup>28</sup> World Health Organization, 2004
- <sup>29</sup> EUCTP, 2006
- <sup>30</sup> EU Commission, 2006b
- <sup>31</sup> IFOAM, 2003
- <sup>32</sup> USDA, 2004
- <sup>33</sup> EU Commission, 2006a
- <sup>34</sup> OIV, 2005
- <sup>35</sup> DG AGRI, 2006
- <sup>36</sup> EU Commission, 2006c
- <sup>37</sup> FAOSTAT, 2006
- <sup>38</sup> USDA, 2005a
- <sup>39</sup> USDA, 2005a
- <sup>40</sup> USDA, 2005a
- <sup>41</sup> USDA, 2005a
- <sup>42</sup> USDA, 2005b
- <sup>43</sup> The European Spirits Organisation, 2006a
- <sup>44</sup> USDA, 2006f
- <sup>45</sup> USDA FAS, 2005a
- <sup>46</sup> USDA, 2005b
- <sup>47</sup> USDA, 2002, p. 48
- <sup>48</sup> IFOAM, 2003
- <sup>49</sup> See [www.unece.org/trans/main/eatl/intro.html](http://www.unece.org/trans/main/eatl/intro.html) for more details
- <sup>50</sup> USDA, 2002
- <sup>51</sup> USDA, 2002
- <sup>52</sup> Agra-Europe, 2006
- <sup>53</sup> USDA, 2003
- <sup>54</sup> The progressive liberalisation would take place in the following manner: one year after accession, joint-venture enterprises with minority foreign shareholding would be granted full rights to trade; beginning two years after accession joint ventures with a majority foreign shareholding would be granted full rights to trade; and within three years of accession all enterprises would be granted the right to trade except for in products reserved for import and export by state-trading enterprises.
- <sup>55</sup> WTO, 2006
- <sup>56</sup> The other two lines concern vegetable soaps and extracts used in pesticides and essential oils other than of citrus fruit.
- <sup>57</sup> These are frozen offal of chicken (HS 02071429), edible bird's nests (HS 0410.0010), pilose antlers and powder thereof (HS 0507.9020), and American ginseng, fresh or dried (HS 1211.2010).

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- <sup>58</sup> DFAT, 2005
- <sup>59</sup> WTO, 2005, p. 2
- <sup>60</sup> WTO 2005, p. 2
- <sup>61</sup> DG Trade, 2006
- <sup>62</sup> Personal correspondence with EUCTP, 2006
- <sup>63</sup> The European Spirits Organisation, 2006a
- <sup>64</sup> The European Spirits Organisation, 2006a
- <sup>65</sup> USDA, 2006f, p. 10
- <sup>66</sup> DFAT, 2005
- <sup>67</sup> OECD, 2005b
- <sup>68</sup> WTO, 2006
- <sup>69</sup> DFAT, 2005
- <sup>70</sup> WTO, 2006
- <sup>71</sup> WTO, 2006
- <sup>72</sup> GATS: General Agreement on Trade in Services. Mode 1: cross border supply; mode 2: consumption abroad; mode 3: commercial presence; mode 4: presence of natural persons.
- <sup>73</sup> WTO, 2006
- <sup>74</sup> DFAT, 2005
- <sup>75</sup> DFAT, 2005
- <sup>76</sup> WTO, 2006
- <sup>77</sup> The European Spirits Organisation, 2005
- <sup>78</sup> Findlay et al., 2004
- <sup>79</sup> EUCTP, 2006
- <sup>80</sup> In 2005, 90% of the wheat quota was reserved for STEs; the STE reserved portion of the quota for maize was 60%, for rice 50%, for sugar 70%, for cotton 33%, and for vegetable oils 10%. The STE reserved portion for fertilisers' ranges from 70% to 90%, depending on the type of fertiliser.
- <sup>81</sup> WTO, 2006
- <sup>82</sup> These include VAT and other taxes, port charges, inspection fees, and domestic transportation charges.
- <sup>83</sup> Further details regarding the methodology for deriving the partial equilibrium model can be found in the qualitative analysis technical supplement.
- <sup>84</sup> Van Tongeren and Huang, 2004, p. 190
- <sup>85</sup> Van Tongeren and Huang, 2004, p. 190
- <sup>86</sup> WTO, 2006
- <sup>87</sup> USDA, 2005a
- <sup>88</sup> AOSTAT, 2006
- <sup>89</sup> USDA, 2006F, p. 8
- <sup>90</sup> China National Cereals, Oils and Foodstuffs Corporation (COFCO) and Jilin Grain Group are eligible to export corn. In order to receive governmental export support the exporter must be exporting under an export quota. This export quota is determined by the National Development & Reform Commission, the State Grain Administration, the Ministry of Finance and the Agricultural Development Bank (as well as the transportation subsidy). Export support for corn consists of a VAT rebate and a transportation subsidy. In November 2005, the government issued 4 million tons of corn export quota, valid through February 2006 (USDA 2006f, pp. 5).
- <sup>91</sup> Findlay et al., 2004
- <sup>92</sup> Findlay et al, 2004
- <sup>93</sup> The European Spirits Organisation, 2005
- <sup>94</sup> DG AGRI, 2006
- <sup>95</sup> The European Spirits Organisation, 2005
- <sup>96</sup> <http://www.chinagate.com.cn/english/48046.htm>
- <sup>97</sup> People's Daily [http://english.people.com.cn/200111/16/eng20011116\\_84668.shtml](http://english.people.com.cn/200111/16/eng20011116_84668.shtml)
- <sup>98</sup> Economists at a leading European Bank have suggested that if GDP growth rate slips under 7% any further reforms would become increasingly politically unsustainable as this rate of growth will not be able to compensate for increased short-term unemployment resulting from such reforms and might therefore cause a relapse in conservatism.
- <sup>99</sup> Huang, J. et al., 2004
- <sup>100</sup> van Tongeren and Huang, 2004
- <sup>101</sup> van Tongeren and Huang, 2004, p. 192
- <sup>102</sup> Vinexpo (2005)
- <sup>103</sup> Personal correspondence with EUCTP, 2006