

Asia-Pacific Research and Training Network on Trade Working Paper Series, No. 15, June 2006

# Chinese Agricultural Reform, the WTO and FTA Negotiations

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\*Shunli Yao is the Manager of Beijing Agricultural Trade Policy Dialogue, China. Cao Lijuan provided excellent research assistance for this study. The views presented in this paper are those of the author and do not necessarily reflect the views of ARTNeT members, partners and the United Nations. This study was conducted as part of the ARTNeT Regional Study on Agricultural Trade Liberalization and carried out with the aid of a grant from the International Development Research Centre, Ottawa, Canada and AusAID China Australia Governance Program. This paper benefits from discussions with Colin Carter and by participants at the annual Beijing Agricultural Trade Policy Dialogue commenced in September 2003 shortly after the WTO Cancun Ministerial Meeting. The technical support of the United Nations Economic and Social Commission for Asia and the Pacific is gratefully acknowledged. The authors are very grateful to Mia Mikic, Zhong Funing, Zhu Jing and an anonymous for their valuable comments. Any remaining errors are the responsibility of the author. The author may be contacted at <u>slyao@ccer.edu.cn</u>

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## Abstract

China's early industrialization created distortions. This paper identifies major distortions in the Chinese economy in the pre-reform era and brings agricultural distortions into perspective. Comparison is made of the reform experiences in Chinese industry and agriculture. It suggests that with limited arable land, it is difficult to align Chinese agricultural production fully with its comparative advantage without also reforming China's grain policy. Reform has substantially freed up agricultural production but border distortions serve as one of a few remaining effective measures to ensure the grain self-sufficiency target. Unlike agricultural protections in rich countries, China's grain self-sufficiency policy has much weaker institutional underpinnings and is susceptible to the influence of interest groups. The patterns of Chinese agricultural trade explain its ambiguous positions in WTO agriculture negotiations. In terms of grain sectoral adjustment, a possible comprehensive China-Australia FTA is consistent with the multilateral process, while the China-ASEAN FTA is not. There is no evidence that the China-ASEAN FTA helps with the WTO agriculture negotiations, particularly when rice is excluded from the deal; but China-Australia FTA could generate competitive liberalization in grain trade, and thus help with the global agricultural liberalization.

### Introduction

As a WTO member, China<sup>1</sup> has become part of the multilateral trade negotiations. At the regional level, China has also entered negotiations with the Association of Southeast Asian Nations (ASEAN), Australia, New Zealand and Chile for free trade agreements (FTA). Agriculture is a contentious issue in all those talks. As the largest developing member and a key trader in agricultural products, China's positions in and their implications for WTO agriculture negotiations and regional FTA talks have received much attention. To understand all those issues, one has to understand the role of Chinese agriculture in its national economic development, as well as economic and political factors that help shape Chinese agricultural trade policy. This paper first reviews Chinese industrialization process and identifies major distortions under central planning in Section 2. Section 3 compares Chinese agricultural and industrial reforms with a focus on agricultural trade. Section 4 discusses the political economy of Chinese agricultural trade policy and speculates about its future development. Section 5 explains Chinese negotiation positions on agricultural issues in the WTO and evaluates the China-ASEAN FTA. Section 6 concludes.

# Distortions in the pre-reform Chinese economy

At the mid 20th century when People's Republic was founded, China was an agrarian economy with an under-developed industrial sector. Eager to catch up with the Western powers, like most developing countries at that time, China adopted a strategy that emphasized the development of industrial sectors<sup>2</sup>. Agriculture was only in a position to serve this development strategy. Nationalization of the fledging industrial and commercial enterprises together with collectivization of the rural economy made it possible for the Government to effectively carry out this strategy, following the Soviet model of central planning in its management of the national economy. Except for the early 1950s when the country received aid from the former Soviet Union, China was isolated from rest of the world until 1979. As a result, China's early industrialization had to be internally financed. In addition to budget outlay bulk of which went to industrial investment, the Government set low wage for industrial workers, high price for industrial and low price for agricultural products as an implicit tax to divert agricultural revenues and private savings into industrial sectors. As such, agricultural sector was depressed.

<sup>&</sup>lt;sup>1</sup> Throughout this paper, China refers to mainland China excluding Hong Kong and Macao, as a customs entity. Hong Kong, Macao and Taiwan, Province of China are identified as independent customs entities.

<sup>&</sup>lt;sup>2</sup> For a thorough analysis of this "catch up" strategy, see Lin, Cai and Li (2003).

To develop industrial infrastructure at the expense of agriculture was a common practice in most post World War II developing countries. But in China, it was not just a matter of economic policy or development strategy. At play was also the way political status was granted to various social groups. According to Chinese Constitution, it is not peasants but workers in mostly state-own industrial sector who are given the leading class status in the Chinese political establishment. It was customary for communist countries to regard proletariat workers as the vanguard of the regimes, because most revolutions took place in cities and the industrial workers formed the backbone of the communist military forces. Therefore, orthodox communist ideology commends proletariat workers. In China, however, it was peasants who supported the rural-based Chinese Communist Party in the Civil War against city-based Nationalists. In light of this, Chinese Constitution surprisingly put proletariat workers above peasants in Chinese political life. But it could be understood as a convenient way for the Government to lend its political support for the industrialization campaign and at the same time align itself with orthodox communist ideology.

Wages for Chinese workers were low by international standards but enviable in the eye of peasants. Workers in state-own enterprises (SOEs) also enjoyed free housing, free health care and guaranteed job security. Later in the reform era when laid-off workers typically lose those perks, outcry pours in and the pace of SOEs reform has to be slowed down. In contrast, the under-represented Chinese peasants have never received the same treatment. Among examples of anecdotal evidence, in one incident, a rural housewife had to resort to the personal intervention of the Chinese Prime Minister through an accidental encounter to help her husband, a migrant worker at an urban construction site, to get back his (and million others') long overdue wage payment. The Chinese legal system itself should have been able to handle this case, but obviously it did not live up to the expectation of "justice for all", including the under-represented.

Biased resource allocation at the national level between agriculture and manufacturing was only one of many distortions pervasive in China's central planning system at that time. Within manufacturing sector, priority was given to heavy industries that produce investment goods, over light industries that produce consumer goods; within agricultural sector, grain production was emphasized to ensure adequate food supply for the country.

Normally, the catch-up strategy would also require an import substitution trade policy that effectively prevents a country from engaging in international trade to its fullest potential. In China's case, the US-led UN embargo against the new communist regime in the 1950s forced the country to make "self-reliance and self-sufficiency" the cornerstone of its foreign trade policy. In agriculture, policy-induced 1958-60 famine further reinforced the conviction of the Chinese

leadership that "grain self-sufficiency" should become the principle of utmost importance in agricultural trade policy making.

For the purpose of building up an industrial infrastructure in a short period of time, this development strategy had its own merit. However, for a country with scarce capital and land resource but abundant labor supply, the strategy was against its comparative advantage and only viable when foreign trade was restricted.

Emphasis on heavy industries and grain production did help boost productions, though apparently far below their potentials.<sup>3</sup> However, intrinsic flaws of central planning also created severe problems, such as structural imbalance of the national economy and lack of incentives on the part of producers. By the end of the 1970s, the economy was such a shambles that it prompted the government to embark on reform that has profoundly transformed the Chinese economy forever.

## Chinese reform and agricultural trade

Chinese reform has been a gradual process. At the beginning, the reform aimed to improve the efficiency of the system within the central planning framework, and market elements were introduced as supplements. Since early 1990s, market has been increasingly gaining legitimacy in the official reform blueprint and bold initiatives were introduced to correct various distortions. The reform has resulted in economic growth in both agricultural and industrial sectors.

Agricultural reform resembles industry reform in many aspects. Household responsibility system was first introduced in early 1980s to boost farmers' incentives in agricultural production, and similar responsibility system was later applied to enterprises. As a *quasi* privatization measure, land tenure system was instituted to ensure farmers of the rights to keep the land for 20 years, while in enterprises reform, share-holding system gave workers stakes in firms' production performance. Most commodity prices were freed up, subject only to market forces. Grain production was still the priority in agriculture. But instead of mandatory production quota sold to the government at lower than market price (the procurement practice during most of the reform years), price support program has been put in place to encourage grain production, though most of the time, market prices are higher than the minimal procurement prices. For Chinese peasants, this change in procurement policy helps transfer grain revenue from grain marketing bureaus to grain growers, and is a positive move as far as peasant's income is concerned.

Liberalization has unleashed the potentials of labor-intensive production in both agriculture and industry. In agriculture, development of horticulture, poultry, dairy

<sup>&</sup>lt;sup>3</sup> High growth rate under central planning was mainly due to more input use but often came with low productivity gain, a point that has been made popular by Krugman (1994).

and animal husbandry sectors has helped diversify the diet of the population, and also increased peasants' income. In industry, development of consumer goods sectors and integration with the international production chain through foreign trade, particularly under the processing trade regime, has changed the Chinese industrial make-up. As a result, within both agriculture and industry, distortions due to over-emphasis of grain production and heavy industry in pre-reform era have been substantially reduced, though more needs to be done to the factor markets.

However, despite of much liberalization of the Chinese economy throughout the reform era, the patterns that tax agriculture to subsidize industry did not change until as recently as this year (i.e. 2006). Despite overall economic growth, the rural-urban divide has further increased (the urban-rural per capita income ratio reached over 3:1 in 2005!). To correct this disparity, China's Eleventh Five-Year Plan has included "New Rural Development (NRD)" program into its platform, which aims to give rural development a higher priority. One immediate policy reform is to abolish all fees and taxes associated with agricultural production. This is a very significant move, because it is the first time in several thousand years' Chinese history that no tax and fees are imposed on peasants. This reflects the determination of the Chinese leadership to deal with the rural backwardness, which is a long overdue task. But it remains to be seen how far this campaign can go, as the NRD campaign comes as a top-down approach. It is not initiated, monitored or run by rural residents, the potential beneficiaries and therefore may deviate from its original objectives along the course of implementation. After all, NRD supporters have to compete for resources with other more politically powerful constituencies.

In China, arable land is scarce and so is capital. But unlike arable land, capital can be borrowed from abroad. This simple fact explains the different ways in which structural adjustment has been achieved in both agriculture and industry. In agriculture, with a slight increase in total sown area, additional land use for horticulture has been met mainly by a smaller sown area for grain (Figure 1), a reflection of China's changing policy on "grain self-sufficiency" (from 100% down to 95%). The declining grain acreage has been met by productivity gain at the same time. The Household Responsibility System gave a once for all boost for grain production in the early 1980s. Agricultural R&D investment, made mostly in grain sector and some in the pre-reform era, started to show its impact in the reform years. However, since the 1990s, grain yield has been mainly fueled by more inputs rather than by productivity improvement, a reflection of the grain sector fatigue.



Figure 1: Sown Area of Major Crops in China 1990 - 2002

Source: China Statistics Yearbook and FAO Database, various years

Correction of distortions within industry takes a different route. While many small SOEs have been privatized, medium and large SOEs are mostly intact and keep receiving generous state subsidies. Without substantial reform in SOEs, Chinese industrial make-up has been transformed by the emergence of a vibrant non-state sector that includes private, collective and foreign funded industrial enterprises. While the private and collective enterprises are struggling to raise money for their operations, foreign funded enterprises have brought in huge amounts of capital in the form of foreign direct investment (FDI). As of today, China is the top recipient of FDI in the world. Of course, release of rural surplus labor has also contributed to the development of labor-intensive industries. As a result, in 2005, SOEs contributed only 1/3 to the total industrial GDP in China. In contrast, because agricultural production solely relies on local factors (land and labor, etc), its structural make-up has not changed very much compared to industrial production. The share of grain and other land intensive crops (soy and cotton) still make up as much as 70% of Chinese sown areas in 2002.<sup>4</sup>

How far has the correctional process gone in Chinese agriculture? To answer this question, let's make some international comparison with Brazil, a country with similar size but quite different labor/land endowment ratio. As discussed in Jales *et al* (2005), in the past thirty years, reduction of state intervention, market deregulation and trade liberalization combined with R&D investment and macro stabilization have helped modernize Brazilian agriculture and agribusiness. Now Brazil has one of the most liberalized agricultural trade regimes in the world (Table 1). China is also quite liberalized as far as tariffs are concerned, but its agricultural trade patterns are also determined by other factors, as will be discussed later.

<sup>&</sup>lt;sup>4</sup> If measured by actual arable areas, this number will be smaller, as sown areas in the Chinese statistics are based on single cropping for horticulture but multiple cropping for grain.

	BRAZIL (2003)	<b>CHINA</b> (2002)	<b>USA</b> (2003)	<b>EU</b> (2003)	<b>INDIA</b> (2002)
Mean	10.2	15.3	12.3	29.3	36.9
Median	10.0	13.0	4.4	14.4	30.0
Standard deviation	6.0	11.5	29.6	40.2	25.8
Variation coefficient	0.58	0.75	2.40	1.37	0.70
Maximum tariff	55.0	71.0	350.0	277.2	182.0
# of tariff lines	959	1044	1829	2091	690
# of tariff lines = 0	79	80	388	403	17
# of tarif lines > 30%	4	130	167	633	108

Table 1: Applied Tariff Structures for Brazil, China and Other Countries

China has 154.6 million hectare arable land compared to 54.5 million hectare in At the same time, China's total employment is 737.1 million v.s. Brazil's Brazil. 66.2 million (Jales et al, 2005). Those numbers suggest that if Chinese agriculture were sufficiently open to international trade, production of its labor-intensive versus land-intensive agricultural products should have exhibited a pattern that is in sharp contrast with that of Brazil. In fact, Figure 2, which depicts the composition of total Brazilian and Chinese planted area in 2002, shows striking similarities in farmland composition for land- versus labor-intensive crops (7:3 for cereal and oil-bearing crops versus horticulture, etc.) in the two countries. This simple comparison suggests that Chinese agriculture has not been fully integrated into the world economy. Barriers to trade in various forms, policy-induced or natural ones are to blame. Chinese agriculture mostly consists of smallholders on subsistence farming who have not been brought into domestic market. Obviously, there is still a long way to go to completely integrate Chinese agriculture into domestic and international markets.

Sources: MDIC-Brazil, USITC, TARIC-EU and WTO, cited in Jales et al (2005) page 10





Source: Brazilian Institute of Geography and Statistics (IBGE), China Statistics Yearbook, and Food and Agriculture Organization (FAO) as cited in Jales et al (2005) page 22

The different ways the government supports grain sector and SOEs do have ramification for trade reform. With a broad tax base including non-state sector (and until recently agriculture) and the dwindling share of SOEs in the national economy, it is financially manageable for the government to subsidize SOEs through easy loans and enable them to survive competitions from non-state sectors as well as imports. Trade liberalization in manufacture sectors can make the life of SOEs miserable but does not necessarily threaten their existence. In contrast, the viability of the price support program that has been instituted to ensure "grain self-sufficiency" and the "grain self-sufficiency" target itself require a protectionist grain trade policy. The economic logic is that liberalizing border measures (improved market access in China's case) would make it financially infeasible to maintain the price support program, given the large size of the Chinese grain sector and very limited budget for agricultural domestic support (This is especially true when the inefficient SOEs keep siphoning off financial resources from banks and state budget).

It is true that, as far as tariff is concerned, Chinese agricultural trade is also quite liberalized as illustrated in Table 1. But key Chinese agricultural imports, including grain are also subject to tariff rate quota (TRQ) restriction (Table 2). While TRQs are expanding over years, it is observed that:

"The implementation of China's TRQ commitments, however, has proved to be rather problematic. Those who export to China express concerns as to the lack of transparency in the quota allocation process, since no information on the quantities and destinies of the TRQs is provided. Another problem reported is that TRQs allocated to some commodities are too small to be commercially viable. A potential importer holding a quota for a few thousand metric tons of grains has to pool the quota with other shipments in order to fill a large grain cargo ship (which generally holds between 10 and 55 thousand tons).<sup>5</sup> Such practice adds transaction costs

<sup>&</sup>lt;sup>5</sup> Lohmar and Skully (2003)

and could be further complicated if the government imposes restrictions on pooling." (Jales *et al*, 2005, page 11)

Obviously, Chinese TRQs are more binding on imports than they are meant to be.

Agricultural product	Initial quota quantity (million MT)	Final quota quantity (million MT)	Date reaching final quota quantity	In-quota tariff (percent)	Out-of-quota tariff (percent)	Schedule for increasing TRQ quantity (million MT)
Wheat (6 products)	7.884	9.636	2004	1-10 (depending on product)	74 (accession); 65 (final)	2002: 8.468 2003: 9.052 2004: 9.636
Com (5 products)	5.175	7.2	2004	1-10 (depending on product)	64 (accession); 51 (final)	2002: 5.85 2003: 6.525 2004: 7.2
Rice-short & medium grain (7 products)	1.6625	2.66	2004	1-9 (depending on product)	57 (accession); 46 (final)	2002: 1.995 2003: 2.3275 2004: 2.66
Rice-long grain (7products)	1.6625	2.66	2004	1-9 (depending on product)	57 (accession); 46 (final)	2002: 1.995 2003: 2.3275 2004: 2.66
Soybean oil (2 products)	2.118	3.5871	2005	9	63.3 (accession); 9 (final by 2006)	2002: 2.518 2003: 2.818 2004: 3.118 2005: 3.5871
Palm oil (2 products)	2.1	3.168	2005	9	63.3 (accession); 9 (final by 2006)	2002:2.4 2003: 2.6 2004: 2.7 2005: 3.168
Rapeseed oil (2products)	0.7392	1.243	2005	9	63.3 (accession); 9 (final by 2006)	2002: 0.8789 2003: 1.0186 2004:1.1266 2005: 1.243
Sugar (6 products)	1.68	1.945	2004	20 (initial); 15 (final)	68.8 (accession); 50 (final)	2002: 1.764 2003: 1.852 2004: 1.945
Wool (6 products)	0.25325	0.287	2004	1	38 (accession); 38 (final)	2002: 0.2645 2003: 0.27575 2004:0.287
Cotton (2 products)	0.78075	0.894	2004	1	61.6 (accession); 40 (final)	2002: 0.8185 2003: 0.85625 2004: 0.894

Table 2: China's TRQ Commitments for Agricultural Products

Source: United States General Accounting Office, "Report to Congressional Committees: Analysis of China's Commitments to Other Members," GAO-03-04 (October 2002), via Jales *et al* (2005) page 12. Note: TRQs on soybean oil, palm oil, and rapeseed oil were planned for elimination on 1 January 2006.

Thanks in part to the protectionist grain trade policy, different patterns exist in Chinese foreign trade in agriculture and manufacture. Figure 3 shows that while Chinese overall foreign trade is growing at an exponential rate, its agricultural trade remains flat. While share of agriculture in world trade is declining over the past decade, it still accounts for as much as 9% of world trade in total and 11% for developing countries in 2003. In comparison, agricultural share in Chinese foreign trade is below 4% for the same year. More striking is the fact that the global

agricultural GDP share has fallen to one-thirtieth today and 1.8% for developed countries, while in China the share is as high as 14.5% in 2002. In terms of agricultural share in total employment, the comparison is even sharper: 43.4% for China versus less than 2% in developed countries.<sup>6</sup>



Figure 3: Agriculture in Total Trade, in billion \$.

Source: China Customs Statistics, various years, author's calculation

Contrary to a widely circulated graph showing that Chinese agricultural trade is expanding in a significant way along the line of its comparative advantage, e.g., in Rosen *et al* (2004) (Figure 3.1 on page 38), when trade data are carefully grouped into various agricultural products, it is shown that Chinese agricultural trade patterns have not changed very much in the past 10 years as far as trade balance is concerned, except for a sharp rise in soy and cotton imports in recent years (Figure 4)<sup>7</sup> which will be discussed in the next section. Histogram analysis over a time span of 18 years (1980-1997) finds stronger evidence of persistent trade patterns in agriculture than in manufacture and primary products (Carter and Li, 2002). Of course, in addition to protectionist grain trade policy in China, barriers to Chinese horticultural exports, often disguised protectionism in the forms of sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) measures, also contribute to the slow improvement in Chinese agricultural trade patterns along the line of its comparative advantage, despite the fact that through intra- and inter-sectoral adjustment, much domestic market liberalization has occurred in Chinese agricultural sector.

<sup>&</sup>lt;sup>6</sup> Agricultural products are defined in the Annex to the Uruguay Round Agreement on Agriculture, hereafter. Except for China, all numbers in this paragraph come from Anderson and Martin (2005).

<sup>&</sup>lt;sup>7</sup> A graph of this kind first appears in Carter and Li (2002) using inflation adjusted data for 1980 - 1997.



Figure 4: Chinese Agricultural Trade Balance 1992 – 2003, in billion \$

Source: China Customs Statistics, various years, author's calculation

As part of its WTO accession commitment, China is opening up its grain trade through lowering the tariffs and expansion of the TRQs over years until 2006. But in the first years after the accession, bad weather in North America reduced grain exports to China, and at the same time, grain reserve that was built up during the late 1990s started to be released to domestic and even international markets. Those incidents helped buffer the pressure of grain import. As a result, we did not see a surge in grain import until 2005, when import pressure began to be felt.

Poor transport infrastructure has often been cited as a reason for the lack of integrated domestic agricultural market. Cotton producers in Chinese northwestern Xinjiang autonomous region have difficulties shipping their produce to the textile and clothing factories in the eastern region and transportation subsidies they received have become a controversial issue in the WTO agriculture negotiations. Similarly, soybeans produced in Chinese northeastern provinces have a hard time reaching the coastal oil crushing facilities. Needless to say, the weak transport infrastructure also serves as a natural barrier to the expansion of Chinese agricultural trade. So do the grain reserve system and the low degree of marketization in Chinese agriculture.

# The political economy of Chinese agricultural trade policy

Differing patterns of agricultural protections in rich and poor countries can be explained based on economics as well as countries' unique political systems. Rich countries, such as US, EU and Japan, have a small number of farmers compared to the total population, and it is easier for them to form a united front to lobby for agricultural protection. Fluctuations of agricultural harvest due to weather dependence, incidents of food shortage or famine in recent history, and not-so-justifiable "multi-functionality" argument<sup>8</sup> all help draw public sympathy for

<sup>&</sup>lt;sup>8</sup> Anderson (2000) refutes the claim that agriculture deserves more price support and import protection

farmers and put in place protectionist agricultural policies and support programs in those countries. Total expenditure to subsidize agriculture may not be small, but is much more affordable for rich countries, given relatively small shares of agriculture in the economy and of farmers in the total population. Though taxpayers and consumers have to foot the bill, they are generally tolerant with the small *per capita* burden imposed on them (Anderson, 1995). Political systems also play a role. For example, the US electoral system makes farmers over-represented in the Congress and helps perpetuate its farm support programs.

China's case is just the opposite. The large peasant population makes it virtually impossible to overcome the free-rider problem in forming a farm lobby and it is just financially infeasible to subsidize agriculture, which currently has over 40% of China's total employment. Economics aside, traditionally, China's official ideology favors proletariat workers in the SOEs over peasants simply because the latter as private citizens own properties or means of production. Furthermore, China does not have a law that legitimizes nationwide independent trade union and any trade associations have to be affiliated with a government agency. Farmers' union or association is no exception. As a result, Chinese peasants have very limited influence on agricultural trade policy making. Unlike agricultural protections in the US that have been deeply embedded into its economic and political establishments, "grain self-sufficiency" policy, the cornerstone of Chinese agricultural policy, has much weaker institutional underpinnings and is susceptible to the influence of many interest groups.

The official attitude toward private ownership is changing and to own a property is less politically incorrect than before. The most significant change in official ideology toward private ownership is the "Three Represents Theory", the masterpiece of the former Communist Party Secretary General Jiang Zemin under which successful private businessmen are welcome to join the ruling party and business interests are given a bigger say in policy making.

The "grain self-sufficiency" policy was the product of the Cold War Era which was punctuated by embargo and famine for China. Now China has a whole new international environment and the "grain self-sufficiency" doctrine is facing challenges from both within and outside China. Chinese policy community is debating whether or not it is justifiable to pursue this costly doctrine. However, because the embargo and famine are all too near in memory, it takes time for the leadership to change their perception of the evolving "grain security" issue.

Domestic liberalization has left market as the sole regulator of grain production, but WTO accession commitments have opened the door (up to TRQ limits) for imports that makes it difficult to maintain sufficiently high domestic grain prices. To

than other sectors because of the non-marketed externalities and public goods it produces jointly with marketable food and fibre (agriculture's so-called 'multifunctionality').

boost grain production through farm subsidies, though allowed under China's accession protocol, is not a financially viable option, given its sheer size and the large number of farmers engaging in grain production. Water shortage in China's grain-belt and over-use of farm chemicals also raise the environmental concerns of grain production (Murphy, 2004).

Chinese peasants are in no position to influence the agricultural policy making in the same way as their US and EU counterparts do. But the urban-rural divide and the plight of the Chinese peasants do pose a threat to social stability, which is the overwhelming concern for the leadership. Also out of the need to create a rural market for the demand-driven economic growth, the Chinese leadership is taking rural development as a serious matter in an unprecedented manner by including the NRD into the platform of the Eleventh Five Year Plan. The NRD program will certainly inject more investment into rural area and agricultural sector, but its impact on grain production would be ambiguous. First of all, the NRD program may have positive effects on grain production by helping improve the rural infrastructure, but funds available to the ambitious program will be limited. The politically powerful SOEs still receive huge amount of subsidies through easy loans and from state budget that leaves the government with little room for financial maneuver. FDI has played a vital role in Chinese urban and industrial development, but as a commercial operation, little has gone and will go to the rural area. Secondly, the NRD program consists of a long list of projects that will compete for funds with the already shoe-string operation of grain production subsidies, such as investment projects for rural infrastructure, health care and education, among others. Finally, with better infrastructure, health care and education services, factor mobility will be improved, which will accelerate the process of factor (and product) market integration and production adjustment away from grain production (Zhong et al, 2006). Therefore, the net effects of NRD on grain production would be undetermined.

To raise farmers' income is a key goal of the NRD program. Given limited resources, one feasible approach is to correct remaining distortions within agriculture. This includes equal opportunities to credit, inputs, R&D funds and logistic support, etc, for all agricultural productions, in addition to price liberalization. Resources devoted to grain price support program should be re-directed to more productive or profitable use in agriculture. This will certainly boost horticultural and other labor-intensive production and draw resources from the grain sector, as the correction progresses. Since Chinese agricultural liberalization has come along in this direction, this intra agricultural correction alone may not suffice to raise farmers' income in a significant way. From a global point of view, Chinese farmers could benefit enormously from the expansion of labor-intensive production, notably, horticulture, where lies its comparative advantage. But the comparative advantage of Chinese agriculture can not be exploited to its fullest potential unless land and other resources,

which are limited, are released from the grain sector. This is possible only if and when grain trade is liberalized.<sup>9</sup>

Chinese population (particularly city dwellers) with rising living standard is asking for more processed and convenient, better packaged, and quality food over raw farm products. In response, food processing industries and agribusinesses are flourishing. At the same time, global trade liberalization in manufactures creates plenty of room for the expansion of Chinese textile and clothing sector that uses cotton as the major input. In some cases, however, their interests may not be consistent with those of domestic producers of primary agricultural inputs.

Soy was once among the strategic commodities whose self-sufficiency was encouraged. Chinese Ministry of Science and Technology also made huge investment in R&D in genetic modification (GM) technology to boost soy production. To meet the rising domestic demand for quality cooking oil, many crushing facilities had been established in China's coastal region by the late 1990s. Unable to access domestic soy, most of which are produced in Northeastern China, the oil crushing industry successfully lobbied the government to open up soy imports in 2001, despite of oppositions from domestic stake-holders. A similar idea is floating around as to whether or not to open up import of corn feed to meet the demand of animal, dairy and meat industries.

Another strategic commodity is cotton. Chinese negotiators worked very hard to secure a quota limit to protect cotton sector in the accession negotiations, but China's textile and clothing industry was under expansion in anticipation of the expiry of the Multi-fibre Arrangement by 2004 and in need of cheap cotton, a key input for the industry. As a result, the National Development and Reform Commission allowed the import of cotton well above the quota limit at the in-quota tariff rate starting 2003.

WTO negotiations are across sectoral in nature and agricultural trade agreements are often linked with the negotiation outcomes in other areas. When presented with a possible trade deal, the top leadership will weigh the agricultural interests against other more powerful constituencies, for example, those in telecom, banking and insurance sectors, if a trade-off has to be made.

Pressure to liberalize grain trade can also be felt from outside China. The Uruguay Round Agreement on Agriculture has a built-in agenda for trade talks on the three pillars of agricultural support, namely, market access, domestic support and export assistance. At the Hong Kong Ministerial Meeting, significant progress in modality talks on the last two issues was achieved and negotiations on market access

<sup>&</sup>lt;sup>9</sup> Increase in horticultural production may result in domestic price decline or terms of trade deterioration, but this problem could be solved by upgrading the products for high-end domestic or international markets. Again, this requires other inputs, not just unskilled labor.

are ongoing. Among the three pillars, China has no export assistance and almost zero, if not negative,<sup>10</sup> domestic support. Market access is the only defense interest for China in the negotiations. Among the Five Interested Parties that lead the agriculture negotiations, US, Brazil and Australia all have an ambitious agenda in market access, and the US and Australia are the top source countries of Chinese grain imports. In ongoing China-Australia FTA talks, Australia insists to have a comprehensive FTA, i.e., free trade for all commodities with no exception to wheat, barley and other grain products. Pressure to import more rice from ASEAN exists, though China has successfully have rice excluded from the China-ASEAN FTA agreement.

# China in the WTO and FTA negotiations

Having brought Chinese agricultural trade policy into perspective, we now turn to the Chinese foreign trade relations with a focus on agriculture, followed by discussions on Chinese positions in WTO agriculture negotiations and on China's free trade agreements (FTA) talks with ASEAN and Australia.

#### Agriculture in Chinese foreign trade relations

Chinese agricultural trade relations can be well understood from the viewpoints of labor/land endowment, climate, geography and cultural proximity with its neighbors. Figure 5 shows the distribution of Chinese agricultural imports by region. North America (US and Canada) has been the traditional top source country of Chinese agricultural imports, followed by Latin America, ASEAN, Australia and New Zealand, EU and Sub-Sahara Africa in 2003. There has been a sharp rise in imports from Latin America since 2000, largely because China opened up its soy imports in 2001 and Brazil and Argentina have been major soy exporters to China. This policy alone has brought Latin America to the rank of second-largest source of agricultural imports, following closely first-ranked North America.

<sup>&</sup>lt;sup>10</sup> Because of various fees and taxes imposed on farmers, Chinese agriculture in fact was receiving negative overall support for years until recently, according to Sun Dongsheng in his presentation at the conference on "Globalization, Market Integration, Agricultural Support Policy and Smallholders," Nanjing, China, November 8-9, 2004.



Figure 5: Chinese Agricultural Imports by Region 2003, in billion \$

Source: China Customs Statistics, author's calculation, data in Appendix

On the export side, Japan is the top destination, followed by ASEAN, Hong Kong, China, South Korea, EU and North America in 2003 (Figure 6). In the case of Hong Kong, one has to be aware of the problem that it is a gateway for Chinese exports to the world and goods recorded as exports to Hong Kong may actually be destined for a third country. Since 1993, the Chinese Customs has been trying to identify the final destinations of Chinese exports but the work can not be exhaustive because Chinese exporters and even the Hong Kong traders who run the re-export business really don't know the final destination when the goods clear the Chinese customs as exports and clear the Hong Kong customs as imports. Only when goods are further processed in Hong Kong and sorting is done there, can Hong Kong traders know where exactly goods will be eventually shipped to. That's why the Hong Kong import data does not have information on final destination and only re-export data has (Feenstra *et al*, 1998). This fact gives us confidence that ASEAN occupies a solid second place among China's agricultural export destinations.

Comparing Figures 5 and 6, we see that they are in sharp contrast and that except with ASEAN, China has imbalanced trade with all other major agricultural trading partners, importing mainly from North and Latin Americas and exporting mainly to Asian neighboring countries.



Figure 6: Chinese Agricultural Exports by Region 2003, in billion \$.

Source: China Customs Statistics, author's calculation, data in Appendix

Chinese agricultural trade relations shown in Figures 5 and 6 can be easily understood by resource endowments in China and those countries. China is labor abundant but land scarce relative to North and Latin Americas and this explains Chinese imports of wheat, barley, maize, soy and cotton from there. If comparison is made between labor/land and capital, China certainly has comparative advantages in agriculture and that's why China exports mainly agricultural products (as well as labor-intensive manufacturing goods) to Japan, Hong Kong and South Korea (and imports capital- and technology-intensive industrial goods from those countries in return).

ASEAN is the only region that has a balanced agricultural trade with China. These two regions do not differ distinctly in relative factor endowments. Rather, climate makes a difference in determining bilateral agricultural trade patterns. China exports temperate horticultural products and grains (except rice), soy and cotton to ASEAN, while it imports mostly tropical products and rice from ASEAN.

Geographical proximity makes it easier for China to export perishable horticultural products to its neighbors. Historically, those countries have been influenced by Chinese culture and some even have a large ethnic Chinese population. China-made agricultural products are particularly in demand in these regions. Finally, stringent SPS rules in the EU and the US turn Chinese agricultural exports nowhere but to its neighboring developing countries. The success of Chinese horticultural production and processing, which helps improve the quality of Chinese exports to Japan and meet its stringent SPS requirements (Wu Huang, 2002).

#### China in WTO agriculture negotiations

Since China started to participate in the WTO agriculture negotiations, a lot of attention in the international trade policy area has been on China, the largest developing member, as to what role it would play in the agriculture negotiations. Interests in China have intensified after China joined the G20 at the Cancun WTO Ministerial Meeting in September 2003. So far China has left an impression that it is a low-key player and lacks a clear position. True as it is, this subsection tries to explain why China chose to take a low profile, in comparison to Brazil, the leader of the G20 and one of the Five Interested Parties that dominates the agriculture negotiations<sup>11</sup>.

China is a net importer of cotton and soy, and a potential net importer of grain. These products are subsidized in the US, which is the major source of Chinese imports. Subsidized exports benefit China as a whole and are very much welcomed by China's textile and clothing industry and oil crushing industry. But they run against its grain self-sufficiency policy, which has been the primary reason for Chinese opposition to agricultural subsidies in developed countries. China's ambiguity in agriculture negotiations reflects this dilemma and this raises the question as to whether China, as a net grain importer, will stay in G20, a question we will turn to at the end of this subsection.

As for market access, one of the three pillars in agriculture negotiations, grain sector has most of China's defense interest, which is limited but sensitive. Its offense interest lies in horticultural exports. Though there is room for further tariff reduction in export markets, barriers of the first order to Chinese horticultural exports are not tariffs, but disguised protectionism in the forms of SPS and TBT, which are not on the negotiation agenda of the Doha Round. As a result, there is indeed no strong incentive for China to push for liberalization in market access. Of course, as a new member, weak negotiating capacity is also a reason why China is not pushing for agricultural trade reform as hard as Brazil.

In contrast, Brazil is the net exporter of many agricultural products and is in direct competition with US and EU exporters. Subsidies in developed countries hurt Brazilian soy, cotton, sugar and beef industries. Furthermore, the European Union, which zealously guards its domestic market through various border measures, is the top destination of Brazilian agricultural exports. As such, Brazil has every reason to push very hard for liberalization in all three pillars of agriculture negotiations, which will unambiguously benefit Brazilian agriculture as well as its national economy as a whole.

Will China stay in the G20? While it would be possible in theory to have all Chinese sectors benefit from foreign-subsidized grain imports through a carefully-defined taxation and transfer payment scheme, it would be politically

<sup>&</sup>lt;sup>11</sup> For a comparative study on the Brazilian and Chinese agricultures, see Jales *et al* (2005).

infeasible for the Ministry of Agriculture, which is in charge of agriculture negotiations, to give concessions to foreign countries and seek concessions from other Chinese ministries. After all, negotiations at home are the most difficult part of the whole trade negotiations, a sentiment shared by many negotiators. For this reason, this author believes that China will choose to stay in the G20.

#### China in free trade agreements negotiations

Immediately after China entered the WTO in 2001, the Government of the Hong Kong Special Administrative Region proposed to establish a Closer Economic Partnership Arrangement (CEPA) with China. Shortly after that, the Government of Macao Special Administrative Region made a similar proposal. Those proposals received lukewarm reactions from Beijing at the beginning. But in 2003 when the region was hit by SARS crisis, the Central Government moved to seal the deals with Hong Kong and Macao as a confidence building measure. The two CEPAs are the first FTAs for China.

The idea for a China-Japan-Korea FTA has long been entertained among scholars but has never entered into the negotiation phase. Political tension between China and Japan is an often cited reason why no progress is made so far. But protectionist agricultural trade policies in Korea and Japan are also to blame. On the other hand, substantial progress has been made in China's FTA talks with ASEAN, Australia, New Zealand and Chile.

This subsection explores the relationship between FTA and the WTO multilateral negotiations with particular reference to China-ASEAN and China-Australia FTAs. One frequently asked question on this issue is whether the former helps the latter, or whether a FTA is a building block or stumbling block to multilateral negotiations. Literature on this topic is abundant but there is no definite answer (Winters 1996). Instead of attempting to answer such a general question, I pose two specific questions as follows:

- 1. Will FTA-induced production adjustment in grain sector be consistent with that potentially induced by future multilateral liberalization?
- 2. Will the China-Japan rivalry in their FTA negotiations with ASEAN or a possible China-Australia FTA generate any positive dynamics for WTO agriculture negotiations?

In subsequent discussions on the second question, I use Figure 7 to illustrate the trade patterns of key grains among China, ASEAN, Australia, Japan and the US.

#### Figure 7 Rice versus Wheat Triangle



#### China-ASEAN FTA

As discussed in Section 5.1, ASEAN is the only trading partner of China that has significant agricultural trade in both imports and exports. China-ASEAN FTA, which entered into force on July 1, 2003, is designed to eliminate 99% of tariffs and is considered as one of a few quality FTAs characterized by comprehensive market access liberalization and manageable provisions on rules of origin (Cheong, 2006). In this regard, it is only second to the Australia-New Zealand Closer Economic Relations, the only FTA in the world in which all tariffs and quantitative restrictions on trade in goods are eliminated. Indeed, unlike many other FTAs negotiated in recent years that normally excluded agriculture, agriculture was negotiated upfront in China-ASEAN FTA and is the key component of its Early Harvest Program. Most agricultural trade, except a few sensitive ones such as ASEAN rice exports to China, has been granted duty free access in China (Pasadilla, 2005).

To the first question, the answer is no. In relation with ASEAN, China has a regional comparative advantage in non-rice grain but a global disadvantage in the same agricultural products. Chinese exports of non-rice grain to ASEAN will expand as a result of the FTA. But if breakthrough is made in the WTO agriculture negotiations in the area of market access, China would certainly import more grain which will depress China's grain production. The opposite movement of resources in the grain sector represents the elements in the China-ASEAN FTA that are not consistent with the multilateral liberalization.<sup>12</sup>

As for the second question, I focus on rice, which is the only crop sensitive for WTO talks and at the same time significant for all three parties involved. In this sense, rice is the only agricultural product that, if liberalization is achieved in FTA talks, would have a positive impact on the multilateral negotiations. As shown in

<sup>&</sup>lt;sup>12</sup> A similar case for Viet Nam can be found in World Bank (2005), Box 6.2, p132.

Figure 7, in the rice triangle, China and Japan are on defense, while ASEAN is on offense.

However, in the China-ASEAN FTA deal, rice is exempt from liberalization. Then, with this precedence on the part of China, it is not a surprise to see Japan has also excluded rice in its FTA with Thailand. For the same reason, it is very unlikely that Japan would make any concessions in rice market access in FTA negotiations with ASEAN in order to compete with China.

On the other hand, trade diversion for Japan as a result of China-ASEAN FTA may pressure Japan to seal its FTA deal with ASEAN as soon as possible, but there is no indication that Japan has to resort to rice liberalization to woo ASEAN. In fact, ASEAN6 exports to Japan twice as much as it does to China, and Japan has enough chips in its hand in the talks.

Furthermore, a swift FTA deal between China and ASEAN benefits from the fact that the two regions have quite similar economic structure. Both are emerging markets with a significant agricultural sector and a mostly labor-intensive manufacturing sector. Therefore, politically sensitive products are very few and the FTA negotiations encountered little domestic opposition. But Japan and ASEAN have quite different or more complementary economic structures and therefore more contentious issues would come up in the negotiations. For example, in addition to rice, Japanese luxury cars are also a sensitive issue for Thailand, which has been excluded from the deal, as noted in Pasadilla (2005). Trade talks are about reciprocity. In light of this, rice liberalization could hardly be brought onto the agenda in the Japan-ASEAN FTA talks before many other sticking points are cleared. In short, with rice as an untouchable issue, China-Japan rivalry in their FTA negotiations.

#### China-Australia FTA

The proposed China-Australia FTA is significant for both countries. For China, it is the first FTA with a developed country. Since China's accession to the WTO, anti-dumping investigations of Chinese products in the US and EU have often been conducted with invocation of the non-market economy status clause in China's accession protocol. To seek recognition of its market economy status has been a top priority in Chinese foreign trade diplomacy, and is also part of the FTA deal with Australia. To strengthen the trade relations with Australia also conforms to China's need for secured energy supply to fuel its fast growing economy.

To have unfettered access to Chinese market is the primary motivation for the FTA on the part of Australia, and this is particularly important for Australian minerals, energy and agricultural exports. Talks with China have gained momentum since

Australia reached an FTA agreement with the United States in February 2004, partly in response to criticism at home that a FTA with US would isolate Australia from booming East Asian economies.<sup>13</sup>

Given the enormous economic benefit from a potential FTA (Mai *et al*, 2005) and the strategic importance of mutual engagement between the two large countries in the Asian Pacific region, the FTA initiative enjoys high level political support in the two Governments. However, negotiations have been stalled over the treatment of Australian grain exports to China: while Australia aims for a comprehensive FTA, China insists that grain should be exempt as sensitive products from liberalization. It is beyond the scope of this paper to speculate on the negotiation outcomes, but I will offer some analysis of the grain issue in a possible comprehensive China-Australia FTA, in an attempt to answer the two questions raised in the early part of this sub-section.

To the first question, the answer is yes. A comprehensive FTA with Australia will increase Chinese grain imports, as Australia has a comparative advantage in grain production in relation with China. From a global perspective, Chinese agriculture does not have a comparative advantage in grain production, and with the progress in agricultural market access negotiations at the WTO, China will certainly increase grain imports. Adjustment in Chinese grain production in response to trade liberalization induced by a comprehensive China-Australia FTA will be an intermediate step towards multilateral liberalization in agriculture.

Again referring to Figure 7, a comprehensive China-Australia FTA would give Australia a preferential margin over the US in access to Chinese grain market. Given the credentials as the champion for global agricultural trade reform, Australia will not stop pushing for the multilateral process at the WTO. On the other hand, the US would be disadvantaged in its grain exports to China. To form a US-China FTA is almost impossible in the near future, and a comprehensive China-Australia FTA will only pressure the US to more actively pursue agricultural reform at the WTO, particularly in market access, the area most critical to the WTO agriculture negotiations.

<sup>&</sup>lt;sup>13</sup> For example, Ross Garnaut, a prominent critic of the Australia-US FTA and politically allied with the opposition party, often uses the "stumbling block" concept (Bhagwati, 1993) in formulating his argument in popular media.

# Conclusion

Chinese agricultural reform has made much progress in the past but there is still a long way to go to fully integrate with the world trading system. Analysis of the political economy of Chinese agricultural trade policy indicates that, though a strongly held belief, the "grain security" perception is changing as a result of evolving political and economic environment both at home and abroad. China's unique trade patterns and its emphasis on "grain self-sufficiency" can explain the ambiguity of its positions in the WTO agriculture negotiations. There is no clear indication whether or not China-ASEAN FTA will help with the multilateral progress but the FTA deal does result in the movement of resources into China's grain sector (except rice), which is not in the same direction as the multilateral liberalization would lead to. However, the China-Australia FTA, if a comprehensive one, would have a different impact in terms of grain production adjustment and it would also generate pressure to speed up the WTO agriculture negotiations.

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# Appendix

Chinese Agricultural	Import and	Export by	Region.	2003.	in million	US\$
	<b>r</b> · · · · ·	<b>r</b> · · · <b>,</b>	- 0 - ,	,		

Origin/Destination	Import	Export
Australia and New Zealand (ANZ)	1,687	163
ASEAN	2,530	2,089
Eastern Europe and Former Soviet Union (EEFSU)	233	852
EU	1,097	1,543
Hong Kong	28	2,063
Japan	167	3,889
Latin America (LAm)	4,554	209
Middle East and North Africa (MEastNAfrica)	110	808
North America (NAm)	5,229	1,176
Rest of the World (ROW)	115	383
South Asia (S Asia)	98	324
South Korea (S Korea)	103	1,811
SubSaharan Africa (SSAfri)	428	438
Taiwan	83	224

Source: China Customs Statistics, author's calculation