

Chapter 4

China

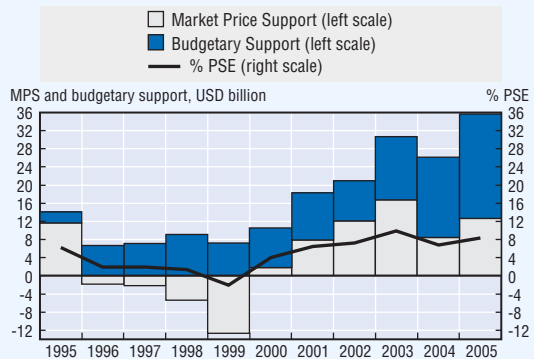
Evaluation of policy developments

- A rural-urban divide with large and growing income disparity further accentuated by differences in access to education, health care, pensions and other social benefits, has been a striking feature of China's impressive economic growth.
- Benefiting from continued strong economic growth and a relatively good fiscal position, China's government has been allocating more budgetary resources to rural areas, including to agriculture. The rural tax reform implemented between 2000 and 2006 is also intended to help increase farmers' disposable incomes.
- The level of support to agricultural producers (the PSE) remains low compared to the OECD average. It tended to increase, in particular at the beginning of the 2000s, but then stabilised between 2003 and 2005.
- While the level of support to agriculture is low, its structure is dominated by market price support and input subsidies, the least efficient and most trade distorting ways of providing agricultural assistance. Only a small part of this type of support is effectively received by producers.
- China has progressively reduced import tariffs on agro-food products, but for selected commodities state trading still plays an important role in driving a wedge between domestic and world prices. In particular, export-import decisions for grains are still made by the government and driven by the level of strategic stocks and expected production trends of various grains rather than by prospects of profits based on price differentials. This can lead to a situation, for example, where wheat is imported when domestic prices are lower and maize exported when domestic prices are higher than those on the world markets.
- China's increasing focus on development of rural infrastructure and on improving access to basic public services in rural areas such as education, the health care system and social security addresses the core of the rural-urban divide and in the mid-term should contribute to more balanced development of the Chinese economy. However, as grain security remains a key policy objective there is a risk that a disproportionate part of support will be diverted to grain producers instead of the rural population at large.
- The dominating top-down decision making process undermines local initiatives and leads to conflict situations. Chinese farmers should be able to organise themselves on the basis of autonomous large scale peasant organisations to communicate and protect their own interests, for example in terms of land tenure rights, provision of public goods and marketing of agricultural commodities.

Description of support

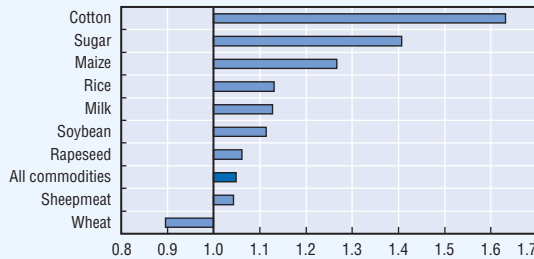
- Support to producers (%PSE) increased from 3% in 1995-97 to 8% in 2003-05. This compares with the OECD average of 30% in 2003-05.
- Market Price Support (MPS) accounted for 41% of the PSE in 2003-05 compared to 32% in 1995-97.
- Despite an almost three-fold real increase in budgetary support to producers, its relative importance has declined.
- Prices received by producers were on average 5% higher than those received in the world markets in 2003-05 (i.e. the NPC was 1.05) and for such commodities as cotton, sugar, and maize even more than 20% higher. In contrast, producer prices for wheat were almost 10% lower than on the world markets.
- The cost to consumers, as measured by the %CSE, increased slightly from 2% in 1995-97 to 4% in 2003-05.
- Support provided to general services for agriculture almost doubled in real terms between 1995-97 and 2003-05, but its share in the TSE fell from 47% to 35%.
- The total cost of agricultural support to the economy (%TSE) increased from 1.89% in 1995-97 to 2.45% in 2003-05 and was higher than the OECD average of 1.14% in 2003-05.

Figure 4.1. PSE level and composition over time



StatLink <http://dx.doi.org/10.1787/067614886283>

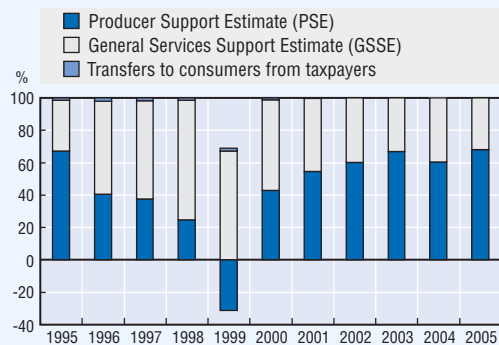
Figure 4.2. Producer NPC by commodity, 2003-05 average



NPC was equal to 1 for eggs, poultry, pigmeat, beef and veal, apples and peanuts.

StatLink <http://dx.doi.org/10.1787/182533641284>

Figure 4.3. TSE composition over time



StatLink <http://dx.doi.org/10.1787/535777324850>

Source: OECD, PSE/CSE database, 2006.


Table 4.1. **China: Estimates of support to agriculture**

CNY million

	1995-97	2003-05	2003	2004	2005
Total value of production (at farm gate)	1 996 250	2 921 510	2 440 890	3 031 220	3 292 420
<i>of which share of MPS commodities (%)</i>	<i>75</i>	<i>60</i>	<i>61</i>	<i>60</i>	<i>58</i>
Total value of consumption (at farm gate)	1 997 135	3 067 174	2 698 029	3 208 958	3 294 534
Producer Support Estimate (PSE)	66 521	253 998	254 158	216 058	291 777
Market Price Support (MPS)	21 353	104 148	139 042	69 994	103 407
<i>of which MPS commodities</i>	<i>17 841</i>	<i>62 270</i>	<i>84 951</i>	<i>42 155</i>	<i>59 706</i>
Payments based on output	0	0	0	0	0
Payments based on area planted/animal numbers	0	8 267	0	11 600	13 200
Payments based on historical entitlements	0	0	0	0	0
Payments based on input use	31 830	64 130	44 976	57 550	89 863
Payments based on input constraints	3 471	51 414	46 862	51 994	55 386
Payments based on overall farming income	9 866	26 040	23 278	24 920	29 922
Miscellaneous payments	0	0	0	0	0
Percentage PSE	3	8	10	7	8
Producer NPC	1.01	1.05	1.08	1.03	1.04
Producer NAC	1.04	1.09	1.11	1.07	1.09
General Services Support Estimate (GSSE)	60 013	134 156	124 829	140 616	137 021
Research and development	3 813	4 112	3 626	4 032	4 679
Agricultural schools	3 170	12 771	11 417	13 003	13 893
Inspection services	2 214	4 611	3 802	4 743	5 288
Infrastructure	21 432	56 632	53 720	56 760	59 417
Marketing and promotion	0	0	0	0	0
Public stockholding	29 384	56 029	52 264	62 079	53 746
Miscellaneous	0	0	0	0	0
GSSE as a share of TSE (%)	46.7	34.6	32.9	39.4	31.9
Consumer Support Estimate (CSE)	-29 397	-126 824	-191 029	-60 789	-128 654
Transfers to producers from consumers	-13 533	-124 821	-172 565	-75 019	-126 881
Other transfers from consumers	-12 223	-17 188	-39 837	7 613	-19 339
Transfers to consumers from taxpayers	2 101	116	128	128	93
Excess feed cost	-5 743	15 069	21 245	6 489	17 473
Percentage CSE	-2	-4	-7	-2	-4
Consumer NPC	1.02	1.05	1.09	1.02	1.05
Consumer NAC	1.02	1.05	1.08	1.02	1.04
Total Support Estimate (TSE)	128 635	388 270	379 115	356 802	428 892
Transfers from consumers	25 755	142 009	212 402	67 405	146 220
Transfers from taxpayers	115 102	263 448	206 550	281 783	302 011
Budget revenues	-12 223	-17 188	-39 837	7 613	-19 339
Percentage TSE (expressed as share of GDP)	1.90	2.46	2.79	2.23	2.34
GDP deflator 1995-97 = 100	100	115	108	116	120

For the definition of OECD indicators of support to agriculture, see Annex A.1. NPC: Nominal Protection Coefficient. NAC: Nominal Assistance Coefficient. Market price support is net of producer levies and excess feed costs. MPS commodities for China are: wheat, maize, rice, rapeseed, soybean, peanuts, sugar, apple, cotton, milk, beef and veal, sheepmeat, pigmeat, poultry and eggs.

Source: OECD, PSE/CSE database, 2006.

StatLink  <http://dx.doi.org/10.1787/743210713104>

Summary of key policy developments

Rural development became China's priority in recent years. However, while the rural-urban divide is of major concern, grain security remains a key factor having a strong impact on policy measures applied. In 2004, the government introduced minimum prices for selected grains, initiated direct payments to grain producers, and applied subsidies for the purchase of higher quality grain and soybean seeds and selected machinery. These policy measures were also applied in 2005 and 2006. To support farmers' incomes, agricultural tax reform was gradually implemented and declared as completed at the beginning of 2006.

Policy context

Agriculture is an important sector of China's economy, but while its share in total employment is high at 39.5%, its contribution to GDP is much lower at 12.5%. This indicates a large gap in labour productivity between agriculture and the rest of economy. Agriculture is also less integrated with global markets than other sectors of China's economy as indicated by its just 3.6% share in China's total exports and 4.3% share in imports. The share of food in total living expenditures has been falling as real incomes continue to grow at high rates, but was still high at 37% for urban households and at 46% for rural households in 2005.

Macroeconomic situation

China's GDP expanded by 10.2% in 2005, with growth in 2006 accelerating to about 10.5%, despite measures designed to cool the economy. China's GDP reached USD 2.2 trillion in 2005 making the country the world's fourth-largest economy, behind the USA, Japan and Germany.

Consumer price inflation slowed from 3.9% in 2004 to 1.8% in 2005 and to just 1.4% in 2006, partly due to stronger food output. Real incomes continued to grow rapidly in 2005 with a rise of 9.6% per head in urban households and 6.2% in rural households.

In July 2005, China adopted a new exchange rate regime for the Yuan (CNY), scrapping its peg to the USD and replacing it with a managed float against a basket of currencies. The Yuan appreciated initially from CNY 8.28 to CNY 8.11 per USD and then to CNY 7.87 per USD by November 2006.

China's fiscal position remains strong with the fiscal deficit at 1.2% of GDP, both in 2005 and 2006. The current account surplus widened to about USD 205 billion in 2006, driven mostly by the trade surplus, and foreign-exchange reserves increased to almost USD 1 000 billion by October 2006, equivalent of about 16 months of imports (EIU, 2007).

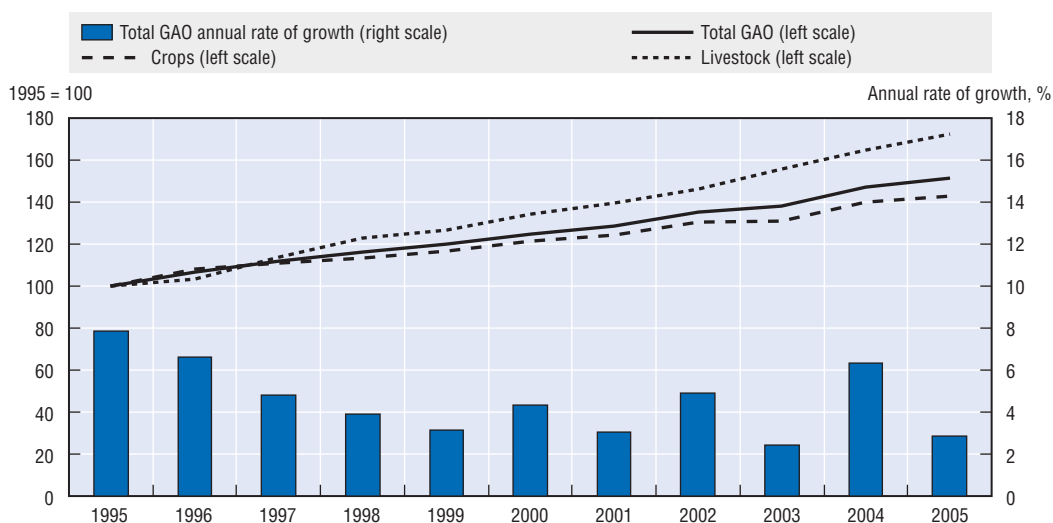
Despite impressive economic performance, China's policy makers face major challenges such as the growing rural-urban divide, strong inter-regional differences in economic development, growing pressures on environment, ageing of the population, and growing dependence on energy imports.

Agriculture and agri-food situation


Output

In 2005 China recorded sound growth of Gross Agricultural Output (GAO) at 2.9%, of which crop output increased by 2.1% and livestock output by 4.6% (Figure 4.4). The rates slowed compared to 2004 when rising agricultural output prices (13.1%) accelerated overall output growth to 6.4%, including that for crops by 6.7% and for livestock products by 5.7%. In 2005, output prices increased by just 1.4% indicating that commodity prices in China

Figure 4.4. **Evolution and annual changes of agricultural output in China, 1995-2005**



Source: FAO, FAOSTAT database, 2006.

StatLink  <http://dx.doi.org/10.1787/411165452330>

stabilised after sharp increases at the end of 2003 and in 2004. The 2005 increase in output prices compares unfavourably with the increase in input prices of 8.3%.

Crops

In 2005, China's grain production increased for the second consecutive year. This was the result of stronger grain prices in the preceding two years and a set of new policy measures applied by the government in response to a fall in grain production between 1998 and 2003 and a corresponding decline in grain stocks. Total grain production increased by 3.9% to 428 million tonnes (484 million tonnes in line with Chinese definition of grains which includes beans and tubers). Area sown to grains increased by 3.5% in 2004 and again by 3.9% in 2005 to a total of 82.9 million hectares, reversing the falling tendency between 1997 and 2003.

While vegetable and fruit production continued to increase at high rates, the performance of other crops was weaker, partly in line with longer term readjustment of Chinese agriculture. Cotton production declined by 9.6% in 2005, largely due to a fall in area sown by 11.1%. The fall in production to 5.7 million tonnes combined with a strong demand from the textile industry, contributed to a record import of cotton at 2.7 million tonnes in 2005. Sugar cane and sugar beet production decreased by 1.3% and oilseeds production remained at the 2004 level.

Livestock

Driven by strong demand, livestock production continues to develop rapidly. Total meat production amounted to 77.4 million tonnes, up 6.9% over the 2004 level. Milk production was low in the past, but since the end of the 1990s has doubled every 3-4 years. In 2005, it grew by 21% reaching 28.7 million tonnes.

Pork remains the key meat produced, but reflecting changes in consumer preferences, its share in total meat production dropped to 65%, while the share of poultry meat

increased to 20% and that of beef and sheepmeat to 15%. Regional specialisation strengthened with pig production dominating along the middle-and-low valley of the Yangtze River, beef in central and Northeast China, sheep in Northwest prairie and central and Southwest China, and poultry in developed eastern coastal regions.

Structures

Agricultural production structures are dominated by small-scale farming. There are about 200 million farm households with an average land allocation of just 0.6 ha per household. While crop production remains fragmented, livestock production has become more concentrated with large-scale commercial operations accounting for 38% of total pigmeat, 58% of milk, 30% of beef, 44% of sheepmeat, and 53% of egg production in 2004 (*China Livestock Yearbook*, 2005).

Farmland is *de facto* owned by village collectives, which extend land lease contracts to individual households. Farmers' land use rights have been strengthened with the extension of land lease contracts up to 30 years, but there is still a large scope for conflict situations between farmers and various layers of authority (OECD, 2005). In particular, low compensation for lost access to land has become one of the main reasons for peasants' discontent. As urbanisation and industrialisation advance, the total number of farmers who lost access to land could amount to 40-50 million (Zhao, 2005). Surveys indicate that farmers receive just 5%-10% of the final price of land transferred for other uses, local government 20%-30%, various enterprises 40%-50%, and village committees 25%-30% (Zhang Y., 2006). To protect farmers' economic interests, many legislative initiatives were undertaken by the government over recent years, but their implementation has been weak.

Concerns over the need to maintain a high level of self-sufficiency in food production, in particular of grains, motivate the government to protect the so called "basic farmland" area, which according to the 11th Five Year Plan should not fall below 120 million hectares by 2010 from the current 122 million. This leads to various measures to tighten the control over the conversion of basic farmland for non agricultural uses in particular for commercial, industrial or residential development purposes.

Inputs

Scarce land and abundant labour motivate farmers to maximise land productivity through intensive use of labour and variable inputs, in particular fertilisers, pesticides and water. As capital remains scarce, the level of mechanisation is in general low. The average use of chemical fertilisers in active substance per hectare of sown area increased to 302 kg in 2004, which is one of the highest in the world and makes agriculture one of the key water polluters (Box 4.1).

China's WTO accession and lower tariffs on imports eased access to high quality imported inputs and stronger competition had led to a fall in input prices by 2003. Moreover, new marketing channels for input supplies developed in addition to the earlier existing Chinese Supply and Marketing Co-operative system. However, both in 2004 and in 2005 input prices increased as input producers benefited from stronger output prices while fast growing oil prices on global markets were transmitted to fuel and fertiliser prices. To curb the rise in input prices, the government took measures in 2005 to stimulate domestic production of inputs (especially of fertilisers), to increase imports and to discourage exports of fertilisers.

Box 4.1. Why do Chinese farmers overuse chemicals?

Application rates of chemical fertilisers have increased almost four-fold since 1980 and China now ranks among countries with the highest intensity of fertiliser use in the world. Pesticide use has increased even more rapidly. While growing use of chemicals has played an important role in increasing agricultural production, it can also increase production costs, augment the risk of certain food quality and food safety problems, and contribute to environmental pollution. In fact, agriculture has become the main source of non-point water pollution in China. In turn, water pollution contributes to water shortages and increases the cost of water provision for agriculture.

Several recent studies have shown that chemical fertilisers are now over-applied at rates between 20% and 50%. For pesticides, the over application rate appears to be even higher, at between 40% and 55%. In research currently underway, the Centre for Chinese Agricultural Policy in Beijing has found that there were no significant yield losses on plots where fertiliser use was reduced by 25% to 35%. A number of hypotheses may explain this phenomenon. It may be that for some farmers the over application of inputs is part of a risk management strategy. There is also some circumstantial evidence that land tenure and migration play a role in the pattern of excess application of chemicals. When migrant workers return home, they often apply inputs “all at once” rather than in optimal amounts at critical times in the growing cycle because the time they have during their home visits is limited. But the study also shows that there is even more evidence that the government, scientific community, plant breeders, extension agents, and input suppliers have convinced farmers that “if a little is good, a lot is better”.

While these findings are tentative, they suggest that incentives within the existing research, extension, education, and agricultural input suppliers need to be re-examined. In particular, they suggest that the information farmers receive is biased due to the vested interests of input suppliers. It is not counterbalanced by adequate information about the merits of reducing input use, both in terms of increasing farmers’ income and of decreasing environmental damage. Such information should be provided through research, education, and extension services.

Source: Huang *et al.*, 2006 and OECD, 2006.

Food industry

The food industry expanded by 26.9% and accounted for 8.2% of China’s industry output in 2005. Its profits increased by nearly 30%. The industry ranks first in world production of such products as edible oil, beverages and beer.

The industry is still very fragmented with some reports suggesting that the total number of food processing enterprises is around 0.9 million (Taylor, 2005). This compares with only about 20 thousand medium and large enterprises with annual sales in excess of CNY 5 million each (USD 0.6 million; NBSC, 2005). The industry is undergoing intensive restructuring with many enterprises expanding their activities and improving efficiency. However, high value added processing is still rare.

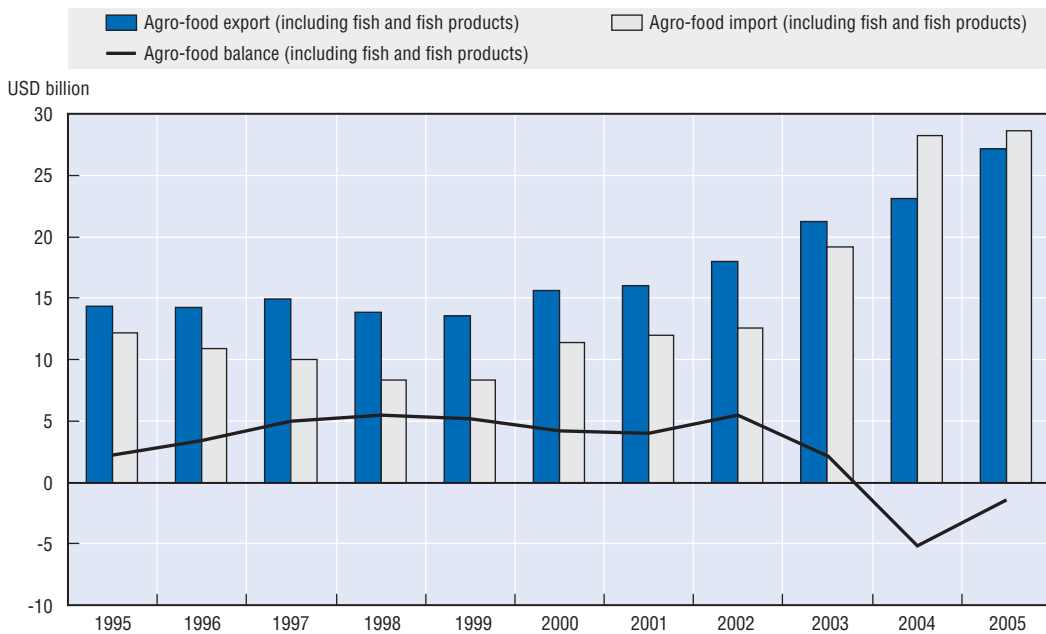
Food processing enterprises play a key role in the commercialisation of production by small-scale farmers, contribute to the development of the local economy and absorb part of rural surplus labour, particularly in the central and western provinces. The so called “company plus farmers” model is becoming more and more popular, which is one of the newly developing downstream channels. On the basis of a contract, the company provides

seeds, advice and technology while farmers deliver raw commodities in line with the company's requirements.


Agro-food trade flows

For the first time since the late 1970s, China's agro-food trade balance changed from a net export to a net import position in 2004. Rising grain prices on domestic markets in the last quarter of 2003 and in 2004 led the government to buy 7 million tonnes of soft and durum wheat to replenish strategic stocks. Sharply increasing wheat imports combined with fast growth in imports of soybeans and cotton contributed to net imports of agro-food products at USD 5.1 billion, while agro-food exports reached a record value of USD 23 billion. In 2005, China remained a net importer of agro-food products but the deficit shrank to USD 1.5 billion as exports continued to grow at high rates and imports stabilised (Figure 4.5).

Figure 4.5. **Agro-food trade in China, 1995-2005**



Source: UN, UN Comtrade database, 2006.

StatLink  <http://dx.doi.org/10.1787/731002823370>

The fall in the net trade deficit was driven mainly by changes in grain trade flows. Following much stronger grain crops in 2004 and 2005, China resumed large-scale exports of grains which more than doubled in 2005 to a total of 10.1 million tonnes. In particular, exports of maize almost tripled amounting to 8.6 million tonnes. Imports of grains, mostly of wheat and barley, were still high at 6.3 million tonnes, but less than the 9.8 million tonnes imported in 2004. As a result, China's net imports of grains of 5 million tonnes in 2004 turned to net exports of 3.9 million tonnes in 2005.

Imports of soybean and cotton reached record levels in 2005, amounting to 26.6 million and 2.7 million tonnes, up by 31% and 35%, respectively. Sugar imports amounted to 1.4 million tonnes, up by 15%. Currently, China is the biggest buyer of soybeans, cotton and wool in the world. Exports of fruits and vegetables continued to grow

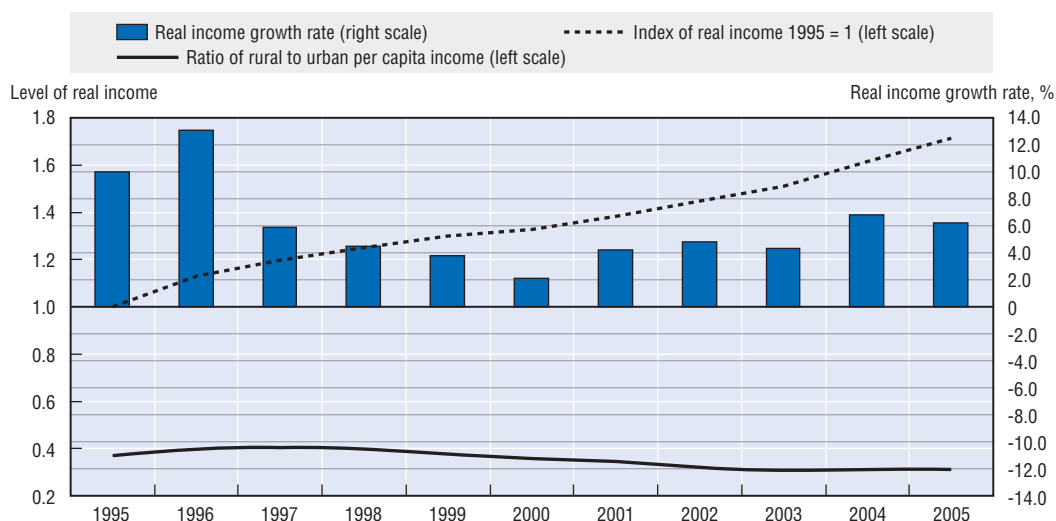
rapidly, confirming earlier observed tendencies for China to specialise in exports of labour intensive products and to import land intensive products, in particular soybeans (OECD, 2005).

Exports to Asia in 2005 constituted 67% of China's agro-food exports. Japan remains the largest single export market for China, accounting for 29% of the total, followed by the USA, South Korea, Hong Kong and Germany. The largest single supplier is the USA accounting for 23% of China's agro-food imports in 2005, followed by Brazil and Argentina. These three countries are the main soybean exporters to China. The USA is also a key supplier of cotton, accounting for around one-half of China's cotton imports in 2005. Australia is the main provider of livestock products and wool and Malaysia of palm oil and rubber.

Rural – urban divide

Real rural incomes rose more than three-fold between 1980 and 2000, representing an annual rate of about 6%. This led to a remarkable fall in the number of people living below the absolute poverty line (World Bank definition of USD 1 per day per person at the purchasing power rate) from about 490 million at the end of the 1970s to 88 million in 2002. However, of those defined as poor, some 99% live in rural areas (OECD, 2005). At the end of the 1990s and at the beginning of the 2000s, the rate of growth slowed to below 5% and as urban incomes continued to grow at higher rates, the rural-urban income gap increased (Figure 4.6). In 2004 and 2005, the rates of rural income growth accelerated to 6.8% and 6.2%, respectively, which was just sufficient to stabilise the level of the gap. The rural-urban income divide is further emphasised by strong differences in access to education, health and social security systems, finance institutions, and even drinking water and basic sanitary facilities.

Figure 4.6. Rural household income per person in China, 1995-2005



Source: China Statistical Yearbook, NBSC, various editions.

StatLink  <http://dx.doi.org/10.1787/417078174560>

Domestic agricultural policies

Grain security, farmers' income and rural sustainable development are major concerns of China's government in recent years. For the three consecutive years of 2004-06,

“No. 1 Documents”, the top priority documents adopted jointly at the beginning of each year by the Central Committee of the Communist Party and the government, concentrated on agriculture and the countryside. The document for 2004 focused on “boosting growth in farmers’ income”, for 2005 on “strengthening comprehensive production capacity of agriculture” and for 2006 on the construction of the “new socialist countryside” (Box 4.2).

Box 4.2. Construction of the new socialist countryside in China

Document No. 1 for 2006 outlined a new rural development strategy. As the publication of this document coincided with the first year of the 11th Five Year Plan, the priorities set there were further developed in the plan and their implementation will be extended until 2010. The plan sets three important objectives: ensure adequate supply of grains and other agricultural products; steady increase of farmers’ income; and the harmonious development of rural society. The following measures are envisaged to achieve these objectives:

First, speeding up the development of rural infrastructure such as roads, electricity and water supply, water conservancy, communication, rural schools and clinics, and sanitation systems. In particular, it is planned that the problem of unsafe drinking water for 100 million rural habitants will be resolved and that 1.2 million kilometres of roads will be constructed or renovated by 2010.

Second, improving access to basic public services in rural areas through the gradual extension of 9-year compulsory education and the development of a cooperative healthcare system. In addition, a social security system for farmers would be established to include poverty relief and assistance and a rural pension system for elderly people. From 2006, 9-year compulsory education in western rural areas has been exempted from tuition and free compulsory education in all rural areas is to be achieved by 2010. In 2006, both central- and local-governments increased substantially subsidies for medical care in rural areas. Currently, a rural cooperative healthcare system covers 40% of the rural population and it is planned that by 2010 the system will cover the whole rural population.

Third, making efforts to raise farmers’ incomes. This will include enhancements for the development of agricultural production capacity, encouraging the development of village and township enterprises, and speeding up the migration of rural labour to urban areas. The plan assumes a 5% yearly growth rate of real farmer income and a transfer of 25 million rural workers to urban areas.

Fourth, improving capacity for increased grain production. Hard goals to be achieved by 2010 include grain output of 500 million tonnes (including soybeans) and not less than 103.3 million hectares sown to grains. For this purpose, the government will enhance the direct subsidy policies for grain producers and reinforce the construction of farmland water conservancy, drainage and irrigation systems.

Fifth, deepening institutional reforms in rural areas. These will include setting up of rural self-governance mechanisms, and development of farmers’ autonomous organisations such as cooperative economic organisations and professional associations.

Price and income support policy

Minimum purchase price

Before 2004, state pricing accompanied by a state procurement system was in place for major agricultural commodities. From 2004, centrally set state pricing only applies to

tobacco, which remains under a state monopoly. Moreover, minimum purchase prices are applied to selected grains.

In May 2004, China allowed qualified non-state firms to buy and sell grains on the opened market. Private firms which meet certain criteria were also permitted to engage in grain processing and storing activities (OECD, 2005). The government regulates the grain market through national grain stocks, state trading enterprises (see below) and minimum purchase prices. The minimum prices were first announced in 2004 for early indica rice and japonica rice at CNY 1 400 (USD 169) and CNY 1 500 (USD 181) per tonne, respectively. The same level of prices was maintained in 2005, but the coverage was extended to include middle and late indica rice. However, as market prices in both years were in general above the minimum level, there was no government intervention in 2004 and in 2005 the intervention was limited to early indica rice.

In 2006, new minimum prices were announced and the coverage was further extended to include wheat. The level of prices per tonne was as follows: CNY 1 440 (USD 180) for white wheat, CNY 1 380 (USD 173) for red wheat, CNY 1 400 (USD 175) for early indica rice, CNY 1 440 (USD 180) for middle and late indica rice, CNY 1 500 (USD 188) for japonica rice. As wheat market prices fell below the minimum levels, China's government designated state-owned warehouses in six major wheat producing provinces to buy wheat at minimum prices. According to China's State Grain Administration, these purchases amounted to 41 million tonnes up to the end of September which accounted for over 80% of farmers' total sales and about 40% of total wheat production in 2006. Intervention purchases of early indica rice were much smaller at below 4 million tonnes which compares with total rice production of about 181 million tonnes in 2006 (eFeedLink).

Direct payments

Grain producer subsidies based on planted area were introduced nationally in 2004, usually at the rate CNY 10 (USD 1.2) per *mu* (1/15 ha) of area sown to rice, wheat or maize. In total, funding of CNY 11.6 billion (USD 1.4 billion) was appropriated from the state grain risk fund for this purpose. To ensure that farmers benefit from the government subsidies, the sub-national governments are required to publicise all details about the use of the grain risk fund monies and penalties are in place for inappropriate use of those funds. The system was continued in 2005 and 2006 at the total cost of CNY 13.2 billion (USD 1.6 billion) and CNY 14.2 billion (USD 1.8 billion), respectively.

While politically popular, the role of these subsidies in supporting farm incomes is minor. It is estimated that of the total increase in rural incomes of 6.8% in 2004, direct subsidies accounted for only around 5%; 49% was attributed to increased product sales and 43% to non-farm income sources (Gale *et al.*, 2005).

Elimination of agricultural taxes

Until the beginning of the 2000s, Chinese farmers paid different formal and informal taxes, charges and fees. In 2000, officially recorded agriculture-related taxes (agricultural tax, animal husbandry tax, tax on special agricultural products, tax on the use of cultivated land, and contract tax) amounted to CNY 46.5 billion (USD 5.6 billion). However, farmers also paid contributions to the township government (*Five Tongchou*) amounting to CNY 26.8 billion (USD 3.2 billion) and to the village committee (*Three Tiliu*) amounting to CNY 35.2 billion (USD 4.3 billion) as well as various fees estimated at around CNY 90 billion (USD 10.9 billion). If all these payments are also taken into account, the taxation shouldered by farmers, known

as the “peasant burden”, would be as high as between CNY 180 billion (USD 21.7 billion) and CNY 220 billion (USD 26.6 billion), or more than 10% of farmers’ net annual income (Aubert and Li, 2002).

The rural tax reform, initiated in 2000, and progressively implemented from 2003, attempts to address the issue of the high tax burden on farmers. It started from incorporating most agricultural taxes, fees and charges into one tax and then capped the tax at a maximum rate (8.4%) relative to the annual grain-equivalent value of agricultural output for the previous years. Reform included the removal of the Animal Slaughter Tax and of the Special Agricultural Tax on all products except tobacco. In addition, the government announced in 2004 that the Agricultural Tax would be phased out over five years, beginning in 2004. In March 2005, the government announced that agricultural tax reform should be further accelerated with the aim of phasing out all national farm taxes in 2006. In 2005, 28 provinces exempted farmers from agricultural taxes and at the beginning of 2006 China totally eliminated national agricultural taxes that had been implemented for 2 600 years.

While rural tax reform provides more transparency and helps increase farmers’ disposable income, there are two main threats to its sustainability. First, the success of reform depends on continued tax revenue transfers from the central government to provinces and counties as compensation for lower sub-national tax revenues. Second, the official value of the “peasant burden” seems to be underestimated, which means that transfers from the central government will not fully compensate for various payments imposed on farmers by townships and village committees. Thus, it is rather unlikely that local authorities will discontinue collecting miscellaneous informal fees, levies and fines, in particular as farmers remain poorly organised and are weak partners *vis-à-vis* heavy and largely unreformed local administrations.

Input subsidies

To lower prices of chemical fertilisers, fertiliser producers have been given access to lower priced inputs, such as electricity. The rates are differentiated across provinces but for example in 2002 fertiliser producers paid between 10% and 30% less per kilowatt hour than other industrial enterprises (OECD, 2005). In 2004, the price for chemical fertilisers increased by 12.8% which absorbed part of the producer price increase. To avoid such a situation in 2005, the government undertook three measures. First, export taxes were increased to curb exports. For the period from 1 June to 31 October 2005 (a peak period for the utilisation of fertilisers), the tax was at 30% and then from 1 November to 31 December 2005 at 15%. Second, a cap on the sale price of chemical fertilisers in the domestic market was set. Third, to encourage production, fertiliser producers were temporarily exempted from VAT. Despite these measures, fertiliser prices increased by another 12.8% in 2005 (NBSC, 2006).

Since 2002, farmers have benefited from subsidies for purchasing improved quality soybean seeds. In 2004 and 2005, this scheme was extended to cover improved seeds of wheat, maize and rice. The budgetary allocations for this purpose amounted to CNY 2.85 billion (USD 0.3 billion) in 2004 and CNY 3.87 billion (USD 0.5 billion) in 2005 (RDI, 2006).

The government provides a small subsidy for the purchase of farm machinery. This subsidy mainly assists a small number of large farms of sufficient scale to warrant mechanisation. Benefits of this subsidy may accrue indirectly to the small-holders through reduced costs faced by farm service providers, such as harvesting companies.

According to official estimates, Chinese farmers' benefits from the cancellation of special product tax, reduced agricultural tax, direct payments to grain producers, subsidies paid to improved seeds and for agricultural machinery amounted to CNY 45 billion (USD 5.4 billion) in 2004 and to CNY 70 billion (USD 8.5 billion) in 2005 (Chen, 2006). In April 2006, the government announced CNY 12.5 billion (USD 1.5 billion) worth of additional subsidies for grain producers to offset the rising cost of diesel fuel and fertilisers (*People's Daily*, 12 April 2006).

Preferential credit

Until the end of the 1990s, preferential loans were provided mostly to state marketing organisations to fund the purchase and storage of key agricultural products, in particular grains. In the 2000s, most of these programmes were discontinued. In February 2006, the Agricultural Development Bank of China (ADBC), the so called "policy bank" implementing government programmes, announced that commercial rates will also be applied to the grain marketing enterprises.

Preferential rates are now applied for loans targeting rural development and poverty alleviation. In 2006, the rates were just above half the commercial rates. However, there is evidence that loan funds are diverted to supplement sub-provincial government budgets and that loans are made to industrial enterprises and not necessarily benefiting the poor (OECD, 2005).

Payments for returning farmland to forests

The so-called "grain for green project" and officially titled the Returning Farmland to Forests Programme was launched in 1999. Under this programme, cultivated lands in environmentally fragile areas are "retired" from crop production and converted to pasture or forest. Participating farmers are provided with grains and cash subsidies according to the area of damage-susceptible land they "retire". For each *mu* retired, farmers in the upstream regions of the Yellow River basin in northern China received yearly 100 kg of grains and CNY 20 (USD 2.4) in cash; and in the upstream regions of the Yangtze River basin they received 150 kg of grains and CNY 20 (USD 2.4) in cash. In 2004, the grain allocation was converted to a cash equivalent. The period for which "retired" land is subsidised is set at two years for land returned to pasture, five years for land converted to "economic" forests and eight years for land converted to "ecological" forests. Free seedlings are also made available for afforestation (OECD, 2005).

Between 1999 and 2005, within this programme trees were planted on about 9 million hectares of cultivated land at a total cost born by the central government of CNY 103 billion (USD 12.4 billion; State Forestry Administration, 2006). Sharp increases in grain prices and concerns over grain security led to a significant slow down in the implementation of the programme in 2004 from a planned 3.3 million hectares to 0.7 million hectares. In 2005, the converted area was still small but increased to 0.86 million hectares. In line with the 11th Five Year Plan, CNY 137.7 billion (USD 17.3 billion) will be allocated for this programme between 2006 and 2010.

Biofuel policies

China is planning to increase its biofuel production, including fuel ethanol and biodiesel, from around 1 million tonne in 2005 to nearly 4 million tonnes in 2010 and to 12 million tonnes in 2020 which should then satisfy up to 15% of its transportation energy

needs. China's stated objectives of biofuel development are: to improve the welfare of rural citizens; to strengthen energy security and reduce oil dependence; and to mitigate emissions harmful to the environment.

Biofuel development is subject to strict central government regulation and control. The National Development and Reform Commission (NDRC) regulates both supply of and demand for biofuels. To ensure adequate control, only state-owned enterprises are used to develop biofuel production. Fuel ethanol producers benefit from a number of financial incentives which include: refund of value added taxes; exemption from 5% consumption tax; profit guarantee of CNY 100 (USD 12.5) per tonne; preferential supplies of grain stocks; and compensations of losses due to adjustment, transportation or sales. In 2006, the subsidy per tonne of fuel ethanol amounted to CNY 1 373 (USD 172) at a total budgetary cost of CNY 1.5 billion (USD 188 million) (Latner *et al.*, 2006).

While so far all financial incentives were limited to fuel ethanol, in May 2006, the Ministry of Finance outlined the creation of a special fund to encourage the development of renewable energy resources, including biomass energy which has been extended beyond fuel ethanol to also include biodiesel.

However, food security concerns may become a limiting factor for the development of biofuels. Currently, fuel ethanol is produced mostly from maize (80% of fuel ethanol production in 2005), but in the future, inputs (feedstock sources) will also include sugar, oilseeds, sweet sorghum, wheat and cassava. While the NDRC asserts that the targeted biofuel production will not threaten China's grain security, it will affect production mix and, most likely, will contribute to increased imports of the above-mentioned inputs (Latner *et al.*, 2006).

Overall budgetary support to agriculture

Under the Chinese budgetary accounting system, government expenditures for agriculture consist of four major items, namely expenditures on rural production, rural capital construction, agricultural science and technology promotion, and rural relief funds. In 2005, these expenditures amounted to CNY 245 billion (USD 29.9 billion), of which those on rural production accounted for 73% of the total, rural capital construction for 21%, science and technology promotion funds for 1%, and rural relief funds for 5%. While overall expenditures for agriculture increased by 5% compared to 2004, their share in the total budgetary expenditures in China fell to 7.2% from 9.7% in 2004 (NBSC, 2006).

The growing expenditures, at least in nominal terms, seem to confirm the government's commitment to allocate more resources to rural areas, but it is difficult to assess the actual level of budgetary support to rural development, including to agriculture. While all budgetary expenditures from various government bodies should be included in the data provided by the Ministry of Finance, it is difficult to verify if it is the case as a large part of expenditures comes from various special funds being under the responsibility of various ministries and government institutions. They include the NDRC, Ministry of Finance, Ministry of Science and Technology, Ministry of Water Conservancy, Ministry of Agriculture, State Administration of Forestry, China Meteorological Bureau, Ministry of Land Resources, State Council Poverty Alleviation Office, State Office for Preventing Flood and Drought, Ministry of Communication, Ministry of Health, Ministry of Culture and Ministry of Civil Affairs. Moreover, each ministry has its own system of channelling funds from the centre to the village level (Zhang X., 2006).

Another difficulty is linked with the Chinese concept of three *nongs* (agriculture, farmer and countryside), which can be defined in various ways thus resulting in various estimates of total budgetary allocations to support agricultural (in fact rural) development. Moreover, information on budgetary expenditures is very aggregated and in many cases the coverage of payments within a given programme is so large that it is impossible to separate payments which address farmers directly, payments to services provided collectively to agriculture (general services) and payments to support the development of rural areas in general, including for non-agricultural activities in rural areas (OECD, 2005).

Agro-food trade policies

Import policy

In line with its WTO commitments, China has progressively reduced import tariffs on agricultural products. Applied tariff rates are very close to the bound rates. In 2005, all tariffs applied to agricultural goods, with very few exceptions, were *ad valorem*. The fall in the applied MFN tariffs on agricultural products (WTO definition) was differentiated across various commodities but on average they fell from 23.1% in 2001 to 15.3% in 2005, which compares with an overall average rate of 9.7% in 2005 (WTO, 2006).

Tariff dispersion declined from a range of 0% to 121.6% in 2001, to from 0% to 65% in 2005. In particular, tariffs on grains were reduced from 51.9% to 33.9% and on oilseeds from 32% to 11.1%. Tariffs on dairy products declined from 35.9% in 2001 to 12.1% in 2005. Nevertheless, grains, and other traditionally highly protected agricultural commodities, such as sugar (29.9% in 2005) and tobacco (25.4% in 2005), still benefit from higher than average protection. Some of the lowest tariffs apply to oilseeds, a sector that was previously highly protected. For example, tariffs levied on soybeans fell from 114% (out-of-quota rate) in 1997 to 0-3% as of 2002. Lower tariffs apply also to subsectors in which China has a comparative advantage, such as horticultural and animal products.

Imports of agricultural goods are subject to VAT. The rate for agricultural products is 13%, 4 percentage points below the rate generally applied to other products. Depending on the market situation, VAT exemptions have been applied, sporadically, to a wide range of agriculture-related imports, such as grains, seeds, breeding animals, fertilisers and pesticides, some feed components and cotton. However, if there is a domestic oversupply of a given commodity, the VAT exemption on imports is removed.

Tariff rate quotas (TRQs) apply to major agricultural products, such as wheat, maize, rice, soybean oil, palm oil, rape oil, sugar, wool, wool tops, cotton, and chemical fertilisers. The National Development and Reform Commission (NDRC) and Ministry of Commerce (MOFCOM) are jointly responsible for administering TRQs for rice, maize, wheat, and cotton, and MOFCOM is solely responsible for fertilisers, oils, sugar, wool, and wool tops. The size of the annual quota is based on China's commitments at the time of accession to the WTO. MOFCOM announced the elimination of the TRQ on vegetable oils from the beginning of 2006, implementing a tariff-only arrangement instead.

In general, imports under TRQ were differentiated and ranged from very low for rice (fill rate 11% in 2005) and maize (less than 1% in 2005) to particularly high for cotton (nearly 300% in 2005). The fill rate for cotton reached 100% by 2002. Since 2003, quota levels for cotton have been increased and actual imports substantially exceeded the original quota specified in China's Protocol of Accession to WTO (Table 4.2). According to the Chinese

Table 4.2. **Tariff quota utilisation in China, selected commodities,¹ 2002-05**

		2002	2003	2004	2005
Wheat	Quota level ('000 tonnes)	8 468.0	9 052.0	9 636.0	9 636.0
	In-quota imports ('000 tonnes)	632	450	7 260.0	3 538
	Utilisation rate ² (%)	7.5	5.0	75.3	36.7
	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
Maize	Quota level ('000 tonnes)	5 850.0	6 525.0	7 200.0	7 200.0
	In-quota imports ('000 tonnes)	10	< 5	< 5	< 5
	Utilisation rate ² (%)	0.2	0.1	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
Rice	Quota level ('000 tonnes)	3 990.0	4 655.0	5 320.0	4 767.0
	In-quota imports ('000 tonnes)	237	260	770	522
	Utilisation rate ² (%)	5.9	5.6	14.5	11.0
	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
Soybean oil	Quota level ('000 tonnes)	2 518.0	2 818.0	3 587.1	3 587.0
	In-quota imports ('000 tonnes)	870	1 880	2 520	1 694
	Utilisation rate ² (%)	34.6	66.7	80.8	47.2
	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
Palm oil	Quota level ('000 tonnes)	2 400.0	2 600.0	3 168.0	3 170
	In-quota imports ('000 tonnes)	1 695	2 330	2 390	4 320
	Utilisation rate ² (%)	70.6	89.6	88.5	136.3
	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
Rapeseed oil	Quota level ('000 tonnes)	878.9	1 018.6	1 243.0	1 243.0
	In-quota imports ('000 tonnes)	78	150	350	178
	Utilisation rate ² (%)	8.9	14.7	31.1	14.3
	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
Sugar	Quota level ('000 tonnes)	1 764.0	1 852.0	1 945.0	1 945.0
	In-quota imports ('000 tonnes)	1 183	780	1 210	1 390
	Utilisation rate ² (%)	67.1	42.1	62.2	71.5
	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
Cotton	Quota level ('000 tonnes)	818.5	856.3 + 500	894.0 + 1 000	894.0 + 1 400
	In-quota imports ('000 tonnes)	177	870	1 910	2 654
	Utilisation rate ² (%)	21.6	101.6	213.6	296.9
	State-trading share (%)	33.0	33.0	33.0	33.0
	In-quota MFN tariff rate (%)	1.0	1.0	1.0	1.0
	Out-of-quota MFN tariff rate (%)	54.4	47.2	40.0	40.0

1. Other commodities covered by TRQs in China include wool, wool tops, and fertilisers (urea, NPK and diammonium phosphate).

2. Utilisation rate refers to in-quota imports divided by quota level. Quota levels for cotton were increased during 2003-05.

Source: WTO, 2006. 2005 import data from China's Customs Statistics. Utilisation rate in 2005 calculated by the OECD Secretariat.

authorities, all cotton imports during 2002-05, including those in excess of the quota, were charged the in-quota tariff rate.

China's government still controls imports (and exports) of key commodities through State Trading Enterprises (STEs). Under China's WTO accession agreements, agricultural products subject to import by STEs are: grains (maize, rice, and wheat), vegetable oils, sugar, tobacco, and cotton. STEs set import prices, which are "usually" based on the c.i.f. price plus tariff and other charges such as VAT and other taxes, port charges, inspection fees, and domestic transportation charges. China's TRQ system includes criteria for allocating the import quotas to STEs and private enterprises. STEs continue to control the majority of wheat, maize, rice and sugar imports. Their role in imports of vegetable oils (palm, rapeseed, and soybean) and cotton is much lower (Table 4.2). In addition, imports of tobacco remain under state monopoly (WTO, 2006).

Export measures

China has notified to the WTO that during 2002-04 it did not subsidise its agricultural exports. Under its WTO accession agreements, China maintains the right to apply export taxes, but in 2005 such taxes were not applied with very few exceptions, such as a 20% tax on exports of raw hides and skins of goats.

Exporters of agricultural products are entitled to a VAT rebate at the time of exportation. Rebates vary across commodities and thus appear to have been used to manage exports of certain products, including agricultural products. With few exceptions, the rebate rates are lower than the VAT rates actually paid, mainly for budgetary reasons. In general, for goods subject to a 17% VAT rate, the rebate rates are 17% or 13%; for goods subject to a 13% VAT rate the rebate rates are 11%, 8%, or 5%. The difference between the rates of VAT actually charged and the rate rebated constitutes a levy on exports (WTO, 2006).

State trading is used for the export of rice, maize, cotton, silk, and tobacco. As of 1 January 2005, state trading was eliminated for silkworm cocoons and silk products. The continued use of state trading to export selected commodities allows the government to influence their domestic (and export) prices.

China imposes export quotas that are both global (*i.e.* irrespective of destination) and destination-specific. In 2004, global export quotas applied to exports subject to state and "designated" trading such as cotton, grains, silk, and tea. As of 1 January 2005, export quotas and licensing for silk and silk products were eliminated. In 2004 and 2005, destination-specific quotas applied to, *inter alia*, live cattle, live swine and live chicken to be exported to the Special Administrative Regions (SARs) of Hong Kong and Macao. Non-automatic licences are used to manage these export quotas. Other exports, including meat products are subject to automatic licensing for statistical purposes (WTO, 2006).

Bibliography

- Aubert, Claude and Xiande Li (2002), "Peasant Burden': Taxes and Levies Imposed on Chinese Farmers", *Agricultural Policies in China after WTO Accession*, OECD, Paris.
- Chen, Xiwen (2006), *Current Issues on Agriculture, Countryside and Farmers in China*, www.snzg.cn/shownews.asp?newsid=17172.
- Cheng, Guoqiang (2006), "Updates for OECD PSE Database", Report submitted to OECD.
- China Livestock Yearbook (2005), Agricultural Press.

- The Economist Intelligence Unit (EIU, 2007), *Country Report, China*, 26 Red Lion Square, London WC1R 4HQ, United Kingdom, January.
- Efeedlink (2006), "China Buys 41.3 Million Tonnes Local Wheat to Support Farmers", *eFeedLink eNewsletter*, 16 November.
- Gale, Fred, Bryan Lohmar and Francis Tuan (2005), *China's New Farm Subsidies*, Economic Research Service/USDA, Washington, DC, www.ers.usda.gov/publications/WRS0501/WRS0501.pdf.
- Huang, Jikun, Hu Ruifa, Cao Jianmin and Scott Rozelle (2006), "Non-Point Source of Agricultural Pollution: Issues and Implications", *Environment, Water Resources and Agricultural Policies. Lessons from China and OECD Countries*, OECD, Paris.
- Latner, Kevin, Caleb O'Kray, Junyang Jiang (2006), *People's Republic of China: Bio-fuels, an Alternative Future for Agriculture*, USDA Foreign Agricultural Service, GAIN Report CH6049, August 8.
- Li, Xiande (2006), "Report on Main Policy Developments in China", Report submitted to OECD.
- NBSC (National Bureau of Statistics of China) (2005 and 2006), *China Statistical Yearbook*.
- OECD (2005), *OECD Review of Agricultural Policies: China*, Paris.
- OECD (2006), *Environment, Water Resources and Agricultural Policies: Lessons from China and OECD Countries*, Paris.
- People's Daily*, 12 April 2006.
- State Forestry Administration (2006), Press Release for the Plan of the "Grain for Green" in the 11th Five Year Plan, www.forestry.gov.cn/swhm/xwfb/04.asp.
- Taylor, Daniel (2005), *People's Republic of China: Food Processing Ingredients Sector*, USDA Foreign Agricultural Service, GAIN Report CH5607, June 16.
- WTO (2006), *Trade Policy Review, Report by the Secretariat, People's Republic of China*, WT/TPR/S/161, 28 February.
- Zhang, Xiaoshan (2006), *Deep Reform to Promote New Countryside Construction*, the Eighth European Conference on Agriculture and Rural Development in China (ECARDC), Yiwu, Zhejiang, China, 31 August to 2 September.
- Zhang, Yinghong (2006), "The Land Requisition Reform During the Socialist New Countryside Construction", *Search (Qiusuo)*, No. 4.
- Zhao, Beibei (2005), "How to Resolve the Lost-Land Farmers", Interview with Han Jun, *People's Daily*, 9 December.

Table of Contents

List of Acronyms and Abbreviations	11
Executive Summary	13
Chapter 1. Overview	15
Agriculture in the economy	16
Policy context	21
Evaluation of support	25
Policy observations and recommendations	32
Chapter 2. Brazil	35
Summary of key policy developments	38
Policy context	38
Domestic agricultural policies	41
Agro-food trade policies	47
Bibliography	48
Chapter 3. Bulgaria	49
Summary of key policy developments	52
Policy context	52
Domestic agricultural policies	55
Agro-food trade policies	61
Bibliography	62
Chapter 4. China	63
Summary of key policy developments	66
Policy context	66
Domestic agricultural policies	71
Agro-food trade policies	77
Bibliography	79
Chapter 5. India	81
Policy context	82
Domestic agricultural policies	87
Agro-food trade policies	92
Bibliography	94
Chapter 6. Romania	97
Summary of key policy developments	100
Policy context	100
Domestic agricultural policies	103
Agro-food trade policies	109
Bibliography	110

Chapter 7. Russia	111
Summary of key policy developments.....	114
Policy context	114
Domestic agricultural policies.....	120
Agro-food trade policies	124
Bibliography.....	127
Chapter 8. South Africa	129
Summary of key policy developments.....	132
Policy context.....	132
Domestic agricultural policies.....	137
Agro-food trade policies	138
Bibliography.....	141
Chapter 9. Ukraine	143
Summary of key policy developments.....	146
Policy context	146
Domestic agricultural policies.....	151
Agro-food trade policies	153
Bibliography.....	156
Annex A. Measuring Agricultural Support	157
1. Definitions of the OECD indicators of agricultural support	158
2. Recent developments in the OECD producer support estimates	159
3. Agricultural support in non-OECD economies: some measurement issues	164
Annex B. Statistical Annex	173
Boxes	
1.1. Land reforms	23
1.2. Measuring agricultural support	26
1.3. Evaluating policies in non-OECD countries	28
3.1. The EU SAPARD in Bulgaria.....	59
3.2. Introducing the Common Agricultural Policy in Bulgaria.....	60
3.3. Bulgaria's trade agreements.....	62
4.1. Why do Chinese farmers overuse chemicals?.....	69
4.2. Construction of the new socialist countryside in China	72
5.1. India: the transition to the Eleventh Five Year Plan, (2007-12)	91
5.2. India's recent trade agreements	93
6.1. The EU SAPARD in Romania.....	107
6.2. Introducing the Common Agricultural Policy in Romania.....	109
6.3. Romania's trade agreements	110
7.1. National Priority Project for Development of Agro-Industrial Complex: Russia	122
7.2. Russia's regional and bilateral trade relations	126
8.1. South Africa's trade agreements	140
9.1. Ukraine's trade agreements	155
A.1. Previous classification of PSE and related support indicators	160
A.2. Definitions of categories in the current PSE classification	161
A.3. New PSE classification.....	162
A.4. Definitions of categories in the new PSE classification.....	163
A.5. Agricultural debt rescheduling in Brazil and Russia.....	168
A.6. Programmes combining social assistance and agricultural support.....	170

Tables

2.1. Brazil: Estimates of support to agriculture.....	37
2.2. Brazil: Volume of purchases of agricultural commodities, by instrument, 2003-06.....	43
3.1. Bulgaria: Estimates of support to agriculture.....	51
4.1. China: Estimates of support to agriculture.....	65
4.2. Tariff quota utilisation in China, selected commodities, 2002-05.....	78
6.1. Romania: Estimates of support to agriculture.....	99
6.2. Evolution of payment rates in Romania, 2001-06.....	104
6.3. Use of SAPARD funds in Romania by March 2005.....	108
7.1. Russia: Estimates of support to agriculture.....	113
7.2. Share of top 100 producers in livestock production in Russia.....	117
7.3. Consolidated budgetary expenditures on agriculture in Russia in 2001-06.....	123
7.4. Russia's meat import quotas in 2005-09.....	124
8.1. South Africa: Estimates of support to agriculture.....	131
8.2. Land transferred within the process of land reform in South Africa.....	138
9.1. Ukraine: Estimates of support to agriculture.....	145
B.1. Population, mid-year estimates.....	174
B.2. Share of agriculture in total employment.....	174
B.3. GDP growth.....	174
B.4. Share of agriculture in GDP.....	175
B.5. Inflation, end year changes in consumer prices.....	175
B.6. Agricultural input price index.....	175
B.7. Agricultural output price index.....	176
B.8. Retail food price index.....	176
B.9. Exchange rate, annual average.....	176
B.10. Merchandise trade balance.....	177
B.11. Agriculture and food trade balance.....	177
B.12. Agriculture and food exports.....	177
B.13. Agriculture and food imports.....	178
B.14. Share of agriculture and food exports in total exports.....	178
B.15. Share of agriculture and food imports in total imports.....	178
B.16. Top five agro-food export commodities by country.....	179
B.17. Top five agro-food import commodities by country.....	181
B.18. Top five export destinations.....	183
B.19. Top five import origin countries.....	185
B.20. Gross Agricultural Output, total.....	187
B.21. Gross Agricultural Output, crops.....	187
B.22. Gross Agricultural Output, livestock.....	187
B.23. Total cereal production.....	188
B.24. Wheat production.....	188
B.25. Coarse grain production.....	188
B.26. Total meat production.....	189
B.27. Beef and veal production.....	189
B.28. Pigmear production.....	189
B.29. Milk production.....	190
B.30. Production of selected commodities.....	191
B.31. Average share of household income spent on food.....	193
B.32. Daily food consumption.....	193
B.33. Annual consumption of grain and grain products.....	193

B.34. Annual consumption of meat and meat products.....	194
B.35. Annual consumption of milk and dairy products.....	194
B.36. Total area sown, crops	194
B.37. Grain sown areas	195
B.38. All cattle inventories	195
B.39. Pig inventories.....	195

Figures

1.1. Agriculture's share of total employment against GDP per capita, 2003-05 average.....	17
1.2. Agriculture's share of GDP against GDP per capita, 2003-05 average.....	17
1.3. Share of agriculture in total employment.....	18
1.4. Share of agriculture in GDP	18
1.5. Gross Agricultural Output.....	19
1.6. Evolution of GDP	19
1.7. Agricultural and food trade balance	20
1.8. Share of agriculture and food exports in total exports	20
1.9. Share of agriculture and food imports in total imports	21
1.10. Inflation, end year changes in consumer prices, per cent.....	22
1.11. Composition of Producer Support Estimates.....	30
1.12. Producer Nominal Protection Coefficients	31
1.13. Composition of Total Support Estimate	32
2.1. Brazil: PSE level and composition over time.....	36
2.2. Brazil: Producer NPC by commodity, 2003-05 average	36
2.3. Brazil: TSE composition over time.....	36
2.4. Evolution and annual changes of agricultural output in Brazil, 1995-2005.....	39
2.5. Agro-food trade in Brazil, 1996-2005	41
3.1. Bulgaria: PSE level and composition over time	50
3.2. Bulgaria: Producer NPC by commodity, 2003-05 average.....	50
3.3. Bulgaria: TSE composition over time	50
3.4. Evolution and annual changes of agricultural output in Bulgaria, 1995-2005	53
3.5. Agro-food trade in Bulgaria, 1996-2005	55
4.1. China: PSE level and composition over time	64
4.2. China: Producer NPC by commodity, 2003-05 average	64
4.3. China: TSE composition over time	64
4.4. Evolution and annual changes of agricultural output in China, 1995-2005	67
4.5. Agro-food trade in China, 1995-2005.....	70
4.6. Rural household income per person in China, 1995-2005.....	71
5.1. Evolution and annual changes of agricultural output in India, 1995-2005.....	83
5.2. Agro-food trade in India, 1995-2005	86
6.1. Romania: PSE level and composition over time	98
6.2. Romania: Producer NPC by commodity, 2003-05 average.....	98
6.3. Romania: TSE composition over time	98
6.4. Evolution and annual changes of agricultural output in Romania, 1995-2005	101
6.5. Agro-food trade in Romania, 1995-2005	103
7.1. Russia: PSE level and composition over time	112
7.2. Russia: Producer NPC by commodity, 2003-05 average.....	112
7.3. Russia: TSE composition over time	112
7.4. Evolution and annual changes of agricultural output in Russia, 1995-2005	115

7.5. Russia's agricultural terms of trade: ratio of index of prices received over index of prices paid	116
7.6. Agro-food trade in Russia, 1996-2005	119
8.1. South Africa: PSE level and composition over time	130
8.2. South Africa: Producer NPC by commodity, 2003-05 average	130
8.3. South Africa: TSE composition over time.....	130
8.4. Evolution and annual changes of agricultural output in South Africa, 1995-2005	133
8.5. Agro-food trade in South Africa, 2000-05	136
9.1. Ukraine: PSE level and composition over time	144
9.2. Ukraine: Producer NPC by commodity, 2003-05 average	144
9.3. Ukraine: TSE composition over time.....	144
9.4. Evolution and annual changes of agricultural output in Ukraine, 1995-2005	147
9.5. Agro-food trade in Ukraine, 1996-2005	150

This book has...



StatLinks 

**A service that delivers Excel® files
from the printed page!**

Look for the *StatLinks* at the bottom right-hand corner of the tables or graphs in this book. To download the matching Excel® spreadsheet, just type the link into your Internet browser, starting with the <http://dx.doi.org> prefix.

If you're reading the PDF e-book edition, and your PC is connected to the Internet, simply click on the link. You'll find *StatLinks* appearing in more OECD books.