

1. Moving Japanese Agriculture Forward

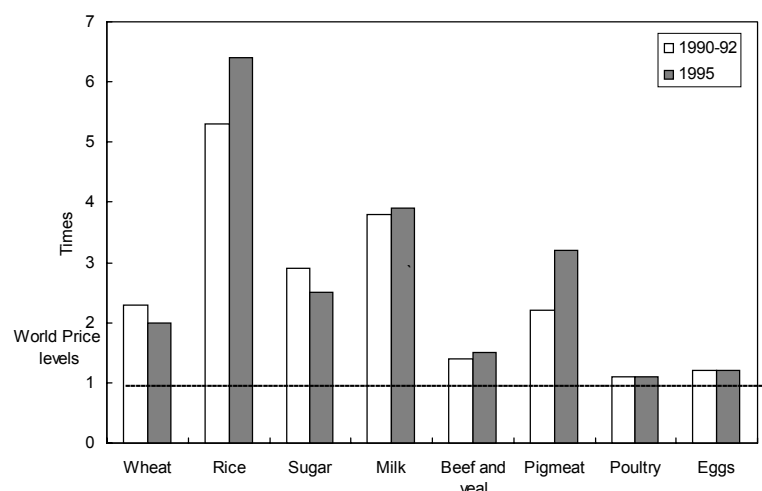
*Ray Trewin, Malcolm Bosworth and Peter Drysdale,
The Australian National University,*

1.1 Issues, options and strategies

High agricultural protection in Japan imposes high costs on the economy, particularly on consumers and processors of foodstuffs (see Figure 1.1). On average, Japanese consumers spend around 17 per cent of their disposable income on food. The agricultural arrangements – mainly price supports – cost Japanese consumers over US\$70 billion as they pay approximately double world prices for their food (EAAU 1997). The burden is heaviest on low-income consumers, who spend proportionally more of their budget on food, including rice where the discrepancy between domestic and world prices is large (ABARE 1988). If high protection continues, the cost to Japan will rise even further in the face of the continuing appreciation of the yen and further declines in world commodity prices. Some reforms have been undertaken, mainly in response to persistent criticisms from Japan's main trading partners, but much more is needed if agriculture is not to be an increasing drag on its economy.

While some industrialised countries have bitten the bullet of agricultural reform, change has been slow in Japan. The high level of agricultural protection, while benefiting a small section of Japan's population, has negative implications for the economy as a whole and for its relations with other countries. What are the main reasons for this protection? Are there better ways of achieving Japan's agricultural

Figure 1.1 Japanese prices relative to world prices



Source: EAAU (1997).

policy objectives at a lower cost? What are the best strategies for helping Japanese agriculture out of this unsustainable situation?

Some commentators have dismissed the need for reform in agriculture as far less important than in higher growth sectors such as finance. This is too narrow a view. Agribusiness, including agricultural-related manufacturing and services, constitutes 13 per cent of Japan's GDP – a significant share (Holt and Pryor 1999). In many industrialised countries, food processing and related services comprise over 90 per cent of agricultural value added. As economies develop, food tastes become more sophisticated so that most consumption is of processed food, which has many different inputs. Agribusiness in industrialised countries is complex and highly integrated with other sectors. In addition, farming has an important environmental role as farmers have stewardship over most natural resources, including land and water.

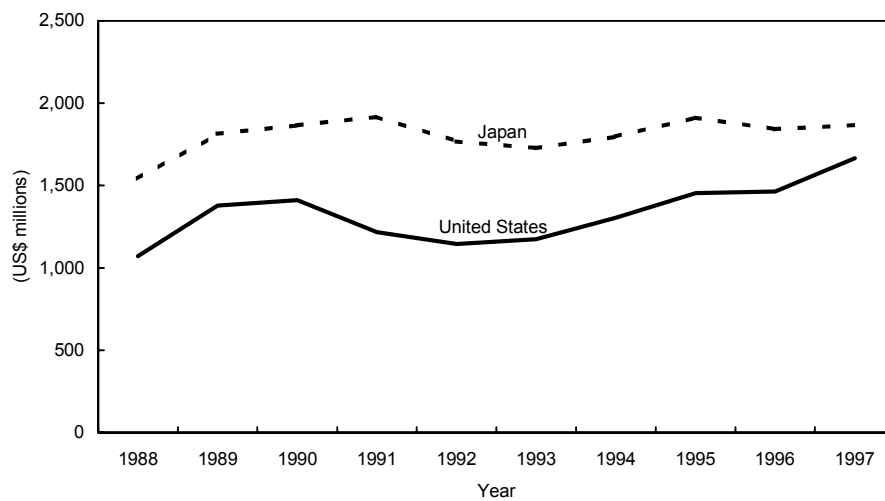
Japan's agricultural policies have long been of concern to its main trading partner, the United States. The politically powerful and generally efficient American farmers are demanding improved access to Japanese markets. Japan has been heavily criticised for its double standards: despite being a major beneficiary from multilateral market-opening measures in manufacturing, Japan continues to resist opening its agricultural markets. This position is becoming increasingly untenable multilaterally, especially following the inclusion of agriculture into the World Trade Organisation (WTO) during the Uruguay Round. Japan will encounter heightened external demands to provide better access to agricultural markets in return for further improvements in market access for its manufacturing exporters and foreign investors. While some progress has been made, Japan's agricultural reforms over the past decade have not reduced agricultural assistance by as much as in most other industrialised countries (OECD 1999).

1.2 Key reasons for Japanese agricultural protection

Japan has advanced several reasons to justify the high level of agricultural protection, including concerns about food security and food safety, and the need to protect the environment and preserve agriculture's multifunctional benefits (AJRC 1999 and 2000).

Agriculture is very important politically. Farmers and agricultural interest groups have a disproportionate influence in the political system and have successfully lobbied for assistance, despite international protest. Japan's agricultural policies act to transfer income to farmers and other related groups, reflecting the political interplay between farmers, farming cooperatives, the bureaucracy and political parties. The Liberal Democratic Party is especially dependent on the votes of farmers. Assistance is afforded through

Figure 1.2 Fertiliser imports are relatively high for Japan's size



Source: STARS database, ANU.

price support, trade restraints, monopoly trading by state enterprises, as well as input and infrastructure subsidies.

Japan places great value on food security (defined by the Food and Agricultural Organisation as ‘adequate and stable supplies of appropriate food to all’). The goal of food security, followed through policies aimed at achieving food self-sufficiency, has been used to justify agricultural protection. In practice Japan has only achieved food self-sufficiency in rice, and this has been at a high cost to rice consumers, producers of other agricultural goods, and food processors (Keidanren 1986). Expensive policies such as diversion programs for rice have had to be introduced to curtail surpluses (ABARE 1998). More fundamentally, Japan’s claims of self-sufficiency are questionable since it depends heavily on imports of agricultural inputs and food (see Figures 1.2 and 1.5a). Consumer concerns about food safety have risen following recent health scares, although most incidents have been domestic, such as with locally produced grain-fed beef. While ensuring food safety is a legitimate objective for any country, this is best addressed through appropriate regulations rather than agricultural protection (see Box 1.1, drawing on Bosworth and Holmes 2000).

Domestic support for reforming Japan’s agricultural protection has traditionally been weak, but this may be changing (Amyx 2000). The number of full-time farmers continues to decline and their political influence may wane. Changes mooted for the electoral system could also reduce the political power of the farming sector. The stagnant economy, historically high unemployment and the painful adjustment

Box 1.1 Addressing food safety concerns

Japan, as a major net food importer, has legitimate food safety concerns. But these are best addressed by having a well-functioning quarantine system that applies uniform sanitary and phytosanitary (SPS) regulations to both imported and domestic products. The need to protect human, plant and animal health through such trade-affecting measures is explicitly recognised in the WTO through the SPS Agreement. However, because such measures can be used as trade barriers, the agreement also specifies that international norms, where these exist, should be used, unless scientific findings show stricter regulations are needed to provide an acceptable level of risk. Members are also required to try to minimise the negative effects on trade when determining the appropriate level of SPS protection.

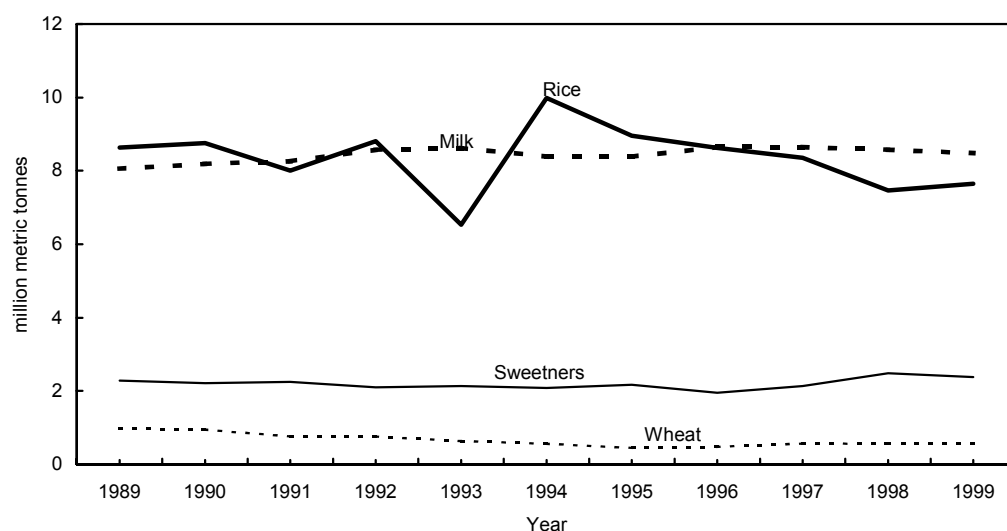
Japan is a major user of SPS measures (see the TRAINS database and WTO Trade Policy Reviews for details). However, it is unclear whether any departures from international norms are scientifically justified on the grounds of acceptable risk. In the only dispute of this type against Japan, the WTO held that Japan's varietal testing requirements for imports of certain fruits and nuts were without scientific justification. Japan is currently changing these tests.

It is in Japan's own economic interests to ensure that SPS regulations do not overly restrict trade. These regulations can impose similar costs on consumers and the economy as more conventional trade barriers through higher prices and reduced efficiency. Many of Japan's SPS regulations have existed for some period and are likely to be a product of a time when measures were set with a zero tolerance policy. Japan has relaxed some of its SPS arrangements and made several changes to its Food Sanitation Law. Efforts need to be intensified to ensure that SPS regulations are only imposed to meet scientifically proven health and safety concerns, and do not act as de facto trade barriers. While agricultural tariffs are currently high following tariffication, Japan should seize the opportunity to relax such measures behind the shelter of this substantial 'reserve or unused' protection.

other sectors have had to go through have highlighted the glaring need for agricultural reform. High food prices and rural infrastructure scandals are starting to concern the public (Amyx 2000). Japanese food processors have increasingly moved offshore to take advantage of lower input costs, taking capital and jobs with them (see Honma 2000a and Box 1.2).

The acceptance of the need for change is apparent in Japan's new Basic Law on Food, Agriculture and Rural Areas, passed in 1999. While more market-aware and WTO-consistent than the previous law, paradoxically the new Basic Law provides a new justification for protecting the rural sector, namely that farming brings important multifunctional benefits to the environment and culture beyond the value of agricultural output (ABARE 1999; Trewin 2000). Although such benefits exist, it is dubious whether the more chemically intensive parts of Japanese agriculture would have net positive environmental impacts. Moreover, multifunctional benefits would apply equally to agricultural exporters. Japanese agricultural

Figure 1.3 Stagnant production despite high prices



Source: FAO Web site.

protection could be locking out agricultural exports from its neighbours and therefore be suppressing the spillover benefits to Japan's environment that relatively clean agriculture brings, such as improvements to air quality.

1.3 The implications of this protection

Agricultural protection brings few, if any, benefits to the Japanese community as a whole, but many costs. Japanese farmers have not increased production despite high levels of protection (see Figure 1.3), although they do derive greater economic rents, mainly in the form of higher land values. The losers are Japanese consumers, and also food processors, many of whom have moved offshore (see Box 1.2). The heavy involvement of the state in trading agricultural commodities inhibits the development of new commercial opportunities and a total supply-chain approach.

There are clear signs that even full-time Japanese farmers are losing out from the trade-off involved in receiving higher prices at the expense of higher costs and less flexibility in how they run their operations. While incumbent farmers may benefit from inflated land values, lower land taxes and higher pensions, high land prices raise production costs, deter new entrants and discourage farmers from expanding into more efficient farming operations. Other factors such as the inheritance tax also act to deter land consolidation. These consequences are evident in the large proportion of Japanese agricultural land located in urban areas (Box 1.3, drawing on Stringer 2000).

Box 1.2 The effect on food processing industries

The high domestic prices induced by Japanese agricultural policies have placed domestic food processors at a competitive disadvantage. Food processors have moved production offshore, mainly to less protected economies such as Australia or North America, then exporting back to Japan and other markets (see Figure 1.4).

Japanese companies have had a long history of investing in the Australian meat industry, for example. Investment is now taking place in less developed countries such as China. Unlike many other outward investments, investment in food processing leads to an increase in net imports (EAAU 1997) (see Figure 1.5a). Food processing is an important industry, both regionally and to Japan. Keidanren (the Japanese Federation of Economic Organisations) is concerned about the effects of Japanese agricultural arrangements on the food processing sector: 'the [Keidanren] report emphasised the role of rice prices in pushing up the prices for other domestically produced agricultural products (which are raw materials for the food processing industries) and hence prices to consumers' (ABARE 1988, p. 53).

Figure 1.4 Japanese offshore investment in food: total and to key regions

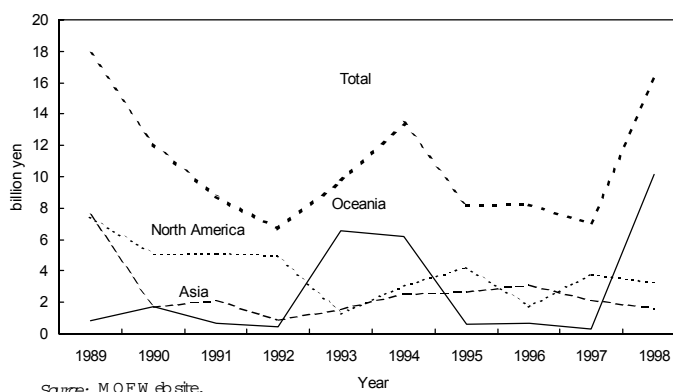


Figure 1.5a Japanese agricultural and processed food imports

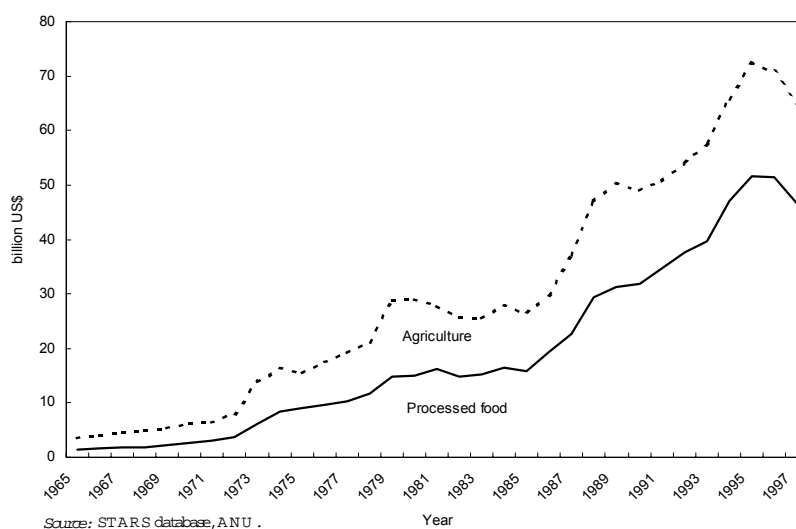
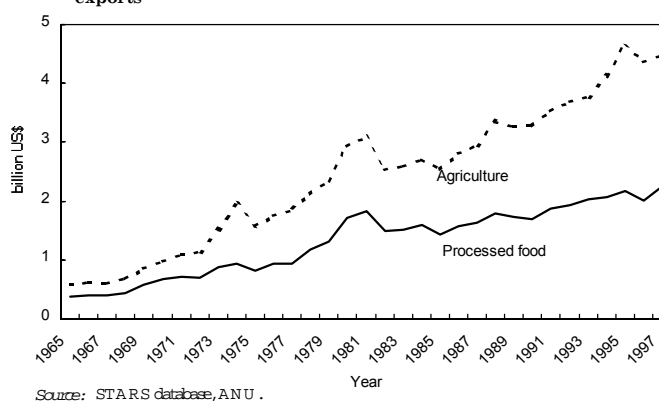


Figure 1.5b Japanese agricultural and processed food exports



Japan's agricultural policies impact negatively on other more efficient countries, including developing countries, that could export foodstuffs to Japan under more liberal arrangements. These policies also transfer instability to world commodity markets and other countries (ABARE 1988). Anderson and Tyers (1986) estimate that in the 1980s Japanese policies increased the variability of world food prices from a minimum of 8 per cent to up to 59 per cent for ruminant meats. Although policy changes would now have altered some of these calculations, the estimate of a 15 per cent impact on coarse grains is still relevant. Agricultural reform in Japan would help reduce the instability in world markets, which is an issue that has concerned Japan.

Japan's approach to agricultural policy reform has delivered only small changes. Its WTO commitment to 'tariffy' non-tariff measures, such as quantitative restrictions, and provide a minimal level of market access have resulted in unfilled tariff quotas because of high in-quota tariffs and restrictive state trading operations (see Box 1.4). Market access has generally declined contrary to the spirit of these commitments.

Box 1.3 Reforming Japan's land use policies

The pressure on land in Japan is intense given its geography and high population density. High land prices are a reflection of this scarcity, but also of agricultural support. Additional tax benefits increase the economic attractiveness of holding agricultural land.

By encouraging the use of land for agriculture, and favouring some activities over others, these policies hamper efficient land allocation, discourage the entry of new farmers, and encourage part-time farming at the expense of more efficient full-time farming. Current arrangements restrict the diversification of Japanese farmland; for example, farmers are constrained from joining with others to purchase land for joint activities. Agricultural policies result in farm fragmentation and prevent rationalisation. Land speculation is also increased. Farmers naturally resist reforms, fearing the effects on land values.

Land reform and agricultural reform are intertwined. Land reforms alone may raise agricultural land values as available farmland diminishes. Thus, efforts to fix the land allocation system without first, or at least simultaneously, reforming agricultural protection may be counterproductive. This does not justify delaying land reforms, but rather highlights the need to jointly commit to agricultural reforms.

It is difficult to predict how these joint reforms might affect domestic prices. In Canada land values fell after agricultural protection was 'de-capitalised' but these losses were more than compensated by gains from consolidation and better land use. Compensation for reduced land values was not required. While farmland is likely to decline in value initially, in the medium term to longer term, the enhanced productivity that results from rationalisation might return prices at least to previous levels.

Box 1.4 Japan's backsliding on agricultural liberalisation

Japan has turned quantitative import restrictions on 28 commodities (defined at the 4-digit HS level) into tariffs, largely choosing prohibitive tariff levels of between 171% and 614% (WTO 1998). The WTO required Japan, like other members, to commit to a minimum level of market access for these commodities to ensure that tariffication did not lower access. WTO members were asked to set tariff quotas to allow access to the level of the period 1986–88. Japan has substantially underutilised these tariff quotas in key commodities and imports of many of these products have increased little since 1995.

In 1998, for example, Japan imported 69,683 tonnes of dairy products compared to its quota of 180,600 tonnes – equivalent to an average quota utilisation rate of only 39% (WTO 1999). In-quota tariffs on these products were mainly set at 35%. Quota utilisation rates on specific dairy products varied in 1998 from 16% for mineral concentrated whey; 20% for butter and butter oil; 34% for prepared whey for infant formula; 38% for skim milk power, unless for school lunches when the rate was 52%; and 90% for evaporative milk. Import quotas were also underutilised on other products, such as dried leguminous vegetables (94%); starches (69%); ground nuts (57%); konnyaku tubers (58%); and raw silk (45%). In-quota tariffs for these products ranged from 7.5% to 40%.

Imports of cereals, skim milk powder, butter and raw silk remain subject to restrictive state trading monopolies (Honma 2000a). Private importers are required to sell and re-purchase imports from the state trading enterprises at mark ups set below the tariff equivalents, thereby making it impossible for private importers of these commodities to compete. Thus, even though tariff quotas on wheat and barley have been filled, most imports have been by the state trading enterprise.

Japan's minimum access commitments negotiated during the Uruguay Round specifically exempted rice from tariffication. When rice was later tariffied in April 1999 at a prohibitively high tariff equivalent of ¥351.17 per kg, Japan's original access requirements fell by 40,000 tonnes to 644,000 tonnes in 1999 and by 76,000 tonnes to 682,000 tonnes in 2000 (Honma 2000a). Moreover, rice imports are still controlled by the Food Agency, a state trading enterprise which also sets the domestic price of rice.

The import arrangements for pork were in principle tariffied but little has changed as the system of differential tariffs largely applies (Honma 2000a). Unlike with other products, Japan has made no minimum access commitments on pork.

1.4 Better ways to achieve Japanese agricultural policy objectives

The new Basic Law could lay the foundations for reform. It proposes moving away from import controls and price supports by restoring the price mechanism through tenders and lower guaranteed prices, as well as decoupling farmer payments from production. Land use arrangements have been reformed a little by allowing farmers to form joint-stock corporations to purchase land for agricultural production. However, the success of the new Basic Law will ultimately depend on its interpretation and implementation.

Are there better ways of meeting Japan's agricultural policy objectives? Food security concerns are being addressed in APEC, of which Japan is an important member, through the endorsement of a comprehensive and balanced package of policies aimed at promoting a regional approach based on cooperation and interdependence (see Box 1.5 and PECC 1999). Recommendations include improving production efficiency and liberalising food trade by removing import restraints as well as export taxes and embargoes. Japan's request that other countries lower export taxes would have similar implications for Japan as lowering import tariffs in terms of it requiring greater market access for increased world trade and placing more pressure on domestic industries. It is uncertain whether Japan views this request as a balanced commitment that exporting countries should make as a way of achieving food security through open trade, or whether it is just raising the issue to justify its import restraints. Article XI of the General Agreement on Tariffs and Trade could be strengthened to give food-importing countries greater protection against export controls.

A regional approach to food security fits the definition of food self-reliance, or 'maintaining a level of domestic production but relying also on international trade to meet the food needs of the population' (Honma 2000b). A regional approach would bring big gains to Japan (Trewin and Huang 2000). Food security would be increased and costs would fall.

Food security is best approached by allowing consumption, production, stock holding, trade and investment to take place in an open environment. By allowing comparative advantage to apply, incomes are maximised so that countries and individuals can afford to trade in food and other products, importing

Box 1.5 APEC food policy

At the Osaka meeting of APEC in November 1995, APEC leaders noted that population and economic growth in the Asia Pacific region would increase pressures on the environment and raise food demand. A Food Task Force was formed, co-chaired by Australia and Japan, respectively representing major agricultural exporters interested in reforming agricultural policies and major food importers concerned with food security. Early in 1999, the APEC Senior Officials Meeting established an ad hoc task force to analyse these issues in relation to an APEC Business Advisory Council (ABAC) proposal for a comprehensive and equitable APEC Food System. The ABAC proposal efficiently links food producers, processors and consumers; harnesses regional resources to more securely meet consumers' food needs; and maximises the food sector's contribution to the wealth and prosperity of all economies. The three main areas of cooperation identified in the proposal are rural infrastructure development, the dissemination of technological advances and the promotion of food trade. The APEC Economic Leaders meeting in 1999 agreed to press for the elimination of agricultural export subsidies and endorsed the APEC Food System proposal, which will be given further consideration in meetings this year.

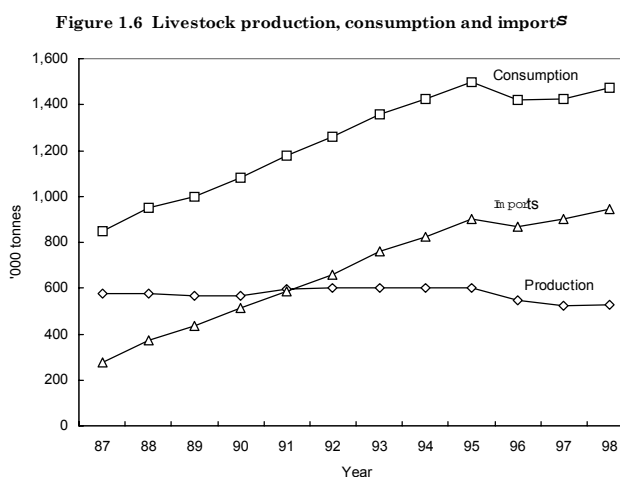
what they cannot produce efficiently and exporting what they produce best. Trade helps smooth out disruptions in production caused by the weather and offers consumers a greater choice than a policy of self-sufficiency. Greater openness in trade would foster new suppliers.

A more open approach to trade and investment would not mean the demise of local agriculture. In the livestock sector, for example, imports increased, prices fell and consumption rose following liberalisation, but the local industry has survived by catering for niche markets and becoming more competitive (see Box 1.6). Japan now exports high-quality Japanese beef to the United States. There are other highly protected industries, such as rice, where price premiums reflect taste and other factors, and these sectors are also likely to survive following reform (Goto 1999).

The success of suggestions such as an Asia Pacific approach to food security will depend on political support within Japan. Australia has offered strong commitments to supply agricultural products to Japan in the past, but domestic political considerations have meant protection has been maintained. Both domestically and internationally, the political economy of agricultural protection is likely to change (Amyx 2000; Honma 2000b). Moreover, some political players who relied on the support of the agricultural sector now have broader interests and could survive without this support. A large proportion of agricultural cooperative members are now non-farmers. Agricultural cooperatives could be active in lobbying for consumer interests.

Box 1.6 Beef industry liberalises and farmers survive

Agricultural liberalisation would not lead to the demise of full-time farmers in Japan, as illustrated by developments in the livestock industry. Beef import quotas were replaced in 1991 with tariffs set at 70%, which were then gradually reduced to the current level of 50%. While the Japanese beef market has grown in response to lower prices induced by increased imports, the domestic industry continues to produce at much the same level, but more competitively (see Figure 1.6 and Rae 2000). Beef exports, while only \$US6 million compared to imports of around \$US2.4 billion, are of a higher unit value and are increasing. The beef industry provides an example of how consumers, efficient agricultural producers and the economy can all benefit from agricultural liberalisation.



True food security requires an agricultural sector that can adjust to constantly changing international and domestic conditions. A flexible land market is important to this adjustment as it allows rationalisation and diversification of farmland. The shrinking Japanese population and technological advances in agricultural production are likely to place downward pressures on land values which are best accommodated within a more flexible land market. Concerns about land speculation could be addressed directly through approaches such as betterment taxes. Similarly, multifunctionality objectives are better addressed directly by paying farmers for providing these benefits rather than supporting agricultural prices.

1.5 Strategies for taking Japanese agriculture forward

The strategies for advancing Japanese agriculture need to take into account the reasons why agriculture is protected. Japan's concerns about food security and safety can be partly addressed through land reform and SPS arrangements, and the new Basic Law provides a vehicle for these reforms. However, the new Basic Law also contains some negative aspects and enlightened implementation will be critical to whether it achieves these reforms.

The implementation of the new Basic Law needs to be sensitive to international concerns. The New Basic Law acknowledges the benefits of making greater use of markets and being more consistent with WTO principles. Japan has benefited greatly from multilateral reforms in trade in manufactured goods and is under constant pressure to reciprocate by reforming its agricultural sector. Multilateral trade negotiations should be as comprehensive as possible, involving a broad range of products, arrangements and countries. Japan benefits most from such comprehensive negotiations. If the next WTO round is to have a narrow agricultural focus, then it should be broadened in other ways, for example covering all arrangements affecting food trade (for example, export taxes) and all relevant products (for example, processed foods).

For Japanese agriculture to survive, it must embrace the opportunities provided by increased globalisation. Japanese firms need to position themselves to take advantage of these challenges. This could mean getting bigger. It could mean increased offshore production. It certainly means that further reforms of agricultural arrangements are needed if Japanese agriculture is to remain a significant domestic industry. Japan's comparative advantage in agriculture will undoubtedly be, as it has been in manufacturing, in producing differentiated high-quality specialised products building on its expertise in technology (for example, biotechnology). Cheap inputs will be important in realising this comparative advantage. By focusing on self-sufficiency in rice and other products where it does not have a comparative advantage,

Japan has constrained export markets (see Figure 1.5b showing Japan's relatively low level of processed food exports).

Who is likely to drive these strategies? Big business is a significant force for change in Japan. Food processors are especially aware of the costs of Japanese agricultural policies. Food retailing is a large and growing sector that is fundamentally affected by current agricultural arrangements, particularly through high input costs, and therefore it may also drive change. The distribution sector may become more active in lobbying for reform, especially as traditional ties to domestic suppliers are now breaking down as the Japanese economy is becoming more internationalised (see for example the case of supermarket chains mentioned in WTO (1998)). Consumers and taxpayers have increased pressure for reform and have much to gain from change.

The international community, especially major traders such as the United States, are also drivers of change. The United States is keen to pacify its politically powerful farmers who are demanding better access to overseas markets. Leverage in terms of other sectors can be used to achieve these ends.

Researchers in Japan can also help achieve change, for instance via research done by the Council of Food, Agriculture and Rural Area Policies. There has been little work done by domestic researchers on the costs and benefits to Japan of agricultural liberalisation and this could be an important conduit for changing the political economy of agricultural protection. Dialogue between governments, greater consumer awareness, and involvement in multilateral forums are other important channels for reform (Trewin and Huang 2000). Changes will not occur quickly, but pressure should be maintained to achieve reforms in the longer term.

1.6 The continuing challenge

Many different interests are pushing for reform. Full-time Japanese farmers would like greater flexibility in deciding what to produce and which market niches to develop. Japanese food processors, food retailers and distribution companies are all positive forces for change. Japan will benefit most from reform. Major food exporters to Japan such as the United States will also benefit from better access to Japanese agricultural markets. Australia's interest in Japanese agricultural reform stems not only from it being major agricultural exporter, but from the benefits it gains from a healthy Japanese economy, which could boost demand for its other exports and investment.

In order to be dynamic and able to accommodate shifts in comparative advantage, the Japanese economy needs to continue necessary restructuring. Japan's very high unemployment suggests that the economy is

suffering from structural rigidities. Agribusiness is important to Japan, in terms of its direct contribution to GDP and links with other sectors, and must play an expanded role in improving the efficiency of the economy.

Many of these points were made in an Australia–Japan Research Centre Policy Brief presented to the Seattle WTO Ministerial Meeting (AJRC 1999). The failure of the meeting should not be seen as an insurmountable setback. Multilateral reform is a long-term process. Such reform could also be fostered cooperatively in APEC through, for example, the comprehensive and balanced package put forward on an APEC Food System. This package would be a better way of achieving food security than Japan's current self-sufficiency approach. APEC acknowledges the benefits of multifunctionality, but also recognises that such goals are best addressed directly through income transfers. More open trade and investment in agriculture could also develop bilaterally, as it has in the past, with major traders such as the United States insisting on the opening up of livestock, rice and other markets in return for better access for Japanese manufactured goods to markets in the United States. Multilateralising such initiatives would be in Japan's own interests.

The future of Japanese agriculture does not lie in a continuation of failed protectionist policies and a concentration on staple commodities. Its future lies in differentiated high-value, high-technology agricultural products integrated into a global system. Although this will take time, it is imperative that the process starts now before adjustment costs increase further. The new Basic Law could provide the foundation for change but its interpretation and implementation will be critical to whether it can deliver the necessary reforms. Domestic pressure groups, such as consumers and sectors penalised by the current arrangements, can play a crucial role in this implementation, in conjunction with major trading partners.

1.7 Australia's policy response

Developments in Japanese agriculture and food sectors have important consequences for efficient agriculture and food producers, such as Australia. How should Australia respond to the changes underway?

Australia has a cooperative trade and economic partnership with Japan in which agriculture plays a large part. Australia's food exports to Japan amounted to US\$2.8 billion in 1998, making Australia the third largest supplier of food to Japan, with a 7 per cent share of the market. The value of these exports grew from US\$1.5 billion in 1986, a rise of 90 per cent in 12 years or 5.4 per cent a year. The principal food exports were beef (US\$0.9 billion), wheat (US\$0.2 billion) and cheese (US\$0.2 billion). Japan receives 16 per cent of Australia's total exports of agricultural and food products, making it Australia's largest

market for these products. Processed food exports account for around 80 per cent of Australia's agricultural and food exports to Japan.

The collapse of the Seattle WT meeting will nevertheless slow progress on the multilateral agricultural negotiations and the so-called built-in agenda on agricultural trade negotiations in the WTO. A new impetus is required to get a comprehensive new trade round back on track since it is the only setting that can provide sufficient incentives for Japan to deal with the hard issues in agricultural trade liberalisation. Australia should be working to build support within the region for a new WTO round.

Given the difficulties that emerged in Seattle in gaining a consensus, the APEC process could be helpful in building a broad coalition of support for a new WTO round between Japan, the United States and other countries in the region. It is imperative that governments show strong leadership to see beyond narrow protectionist interests to persuade their constituents about the merits of trade liberalisation, especially of agricultural trade. Without strong public support, the prospects of successful liberalisation, either multilaterally or unilaterally, will be substantially diminished.

APEC is important because it sets clear targets for liberalisation by 2010 for advanced countries such as Australia and Japan and 2020 for developing country members. These targets are important reference points in striving, over the next decade, to prepare for agricultural and other trade liberalisation in the region.

It is crucial that Australia's trade diplomacy, for example in supporting sub-regional liberalisation arrangements through APEC, does not make it easy for Japan to exempt food and agricultural trade from liberalisation efforts. APEC's Osaka Action Agenda states that liberalisation in the region should be comprehensive in order to move forward and that sub-regional arrangements should be open to all APEC members and subject to the APEC discipline of comprehensive liberalisation by 2010.

Realistically, it may take a decade or more for arrangements on liberalising agricultural trade to be put in place, even if multilateral negotiations get underway over the next two years. There will still be opportunities arising for Australian farm and food products in Japanese markets over the next decade. The Japanese food market is opening up to imported food products, particularly fish, meat, feed grains and beverages, as a result of the following pressures:

- the higher cost of domestically produced food as Japan's comparative advantage in agriculture declines even further;
- the incentive this provides to import fresh produce (imports of which have been less restricted);

- the incentive this provides for Japanese food processors to produce and procure for production offshore, including Australia;
- the impact of financial and other reforms in Japan on the retailing and distribution of food products, lowering the costs of distribution and transactions with foreign suppliers; and
- the incentives these developments provide for Australian and other foreign food product suppliers to invest in distribution and retail links with the Japanese market.

The Australian and Japanese food processing and distribution industries can work together in capturing these opportunities. An important starting point for Australia is to identify the most promising markets for its products and the most effective strategies for developing them. This includes examining the role of foreign investment, joint ventures and alliances, and logistics systems in the development of the trade.

The future and competitiveness of Japanese agriculture will be heavily influenced by new technologies, including biotechnologies. Australia has an exceptionally strong scientific and research base in this field. Australia and Japan should also cooperate through establishing research and development links on agricultural and food products, at the industry level and between research institutions and the two governments.

References

- ABARE (Australian Bureau of Agricultural and Resource Economics) (1988) 'Japanese agricultural policies: a time of change', Policy Monograph No. 3, AGPS, Canberra.
- (1999) 'Multi-functionality: A pretext for protection?', ABARE Current Issues 99-3, ABARE, Canberra, August.
- AJRC (Australia–Japan Research Centre) (1999) 'Has Japanese agricultural protection had its day? Policies for the new millennium', AJRC Policy Brief prepared for the WTO Third Ministerial Summit, Seattle, November.
- (2000) 'A way forward for Japanese agriculture?', *Pacific Economic Papers* 300, AJRC, Canberra, February.
- Amyx, J. (2000) 'The political economy of Japanese agriculture', in 'A way forward for Japanese agriculture?', *Pacific Economic Papers* 300, AJRC, Canberra, February.
- Anderson, K. and R. Tyers (1986) 'Agricultural policies of industrial countries and their effects on traditional food exporters', *Economic Record* 62(179).
- Bosworth, M. and L. Holmes (2000) 'Assessing the costs and benefits of Japan's SPS measures', *Pacific Economic Papers* 305, AJRC, Canberra, July.
- EAAU (East Asia Analytical Unit) (1997) 'A new Japan? Change in Asia's megamarket', Department of Foreign Affairs and Trade, Canberra.
- Goto, J. (1999) 'APEC and Japanese rice imports: The impact of regionalism on agricultural trade', Kobe University and Inter-American Development Bank (mimeo).
- Holt, T. and S. Pryor (1999) 'Agribusiness as an engine of growth in developing countries', USAID, Washington DC.
- Honma, M. (2000a) 'The new Basic Agricultural Law and trade policy reform in Japan' in 'A way forward for Japanese agriculture?', *Pacific Economic Papers* 300, AJRC, Canberra, February.
- (2000b) 'Political economy and agricultural policy reform in Japan', *Pacific Economic Papers* 305, AJRC, Canberra, July.
- Keidanren (1986) 'The Report on the Food Processing Sector', Tokyo, December.
- OECD (Organisation for Economic Cooperation and Development) (1999) 'Agricultural policies in OECD countries: monitoring and evaluation 1999', OECD, Paris.
- PECC (Pacific Economic Cooperation Council) (1999) 'A 'win-win' outcome in APEC food policy', PECC Issues 4/1999, PECC, Singapore, September.
- Rae, A. (2000) 'Japan's livestock sector: consumption, production, policies and trade', in 'A way forward for Japanese agriculture?', *Pacific Economic Papers* 300, AJRC, Canberra, February.
- Stringer, R. (2000) 'Constraints on structural adjustment: the role of land institutions and regulations in East Asia', *Pacific Economic Papers*, 305, AJRC, Canberra, July.
- Trewin, R. (2000) 'Issues in Japanese agricultural policy', in 'A way forward for Japanese agriculture?', *Pacific Economic Papers* 300, AJRC, Canberra, February.
- Trewin, R. and Y. Huang (2000) 'East Asian approaches to food security and some implications for the next WTO Round', *Pacific Economic Papers* 305, AJRC, Canberra, July.
- WTO (World Trade Organisation) (1998) 'Trade Policy Review: Japan', WTO, Geneva, June.
- (1999) 'Japan's Notification to the WTO Committee on Agriculture', G/AG/N/JPN/43, WTO, Geneva, September.

2. The New Agricultural Basic Law and Trade Policy Reform in Japan

Masayoshi Honma, Seikei University

2.1 Introduction

Under the GATT Uruguay Round Agreement on Agriculture (URAA) that came into effect on 1 January 1995, Japan pledged to convert non-tariff barriers into tariff equivalents for 28 commodities. The implementation of the Agreement on Agriculture triggered domestic policy reform. In July 1999 the Japanese Diet passed the Basic Law on Food, Agriculture and Rural Areas, which replaced the Agricultural Basic Law of 1961. The new law outlines the direction and principles of Japanese agricultural policy for the 21st century and is more consistent with the World Trade Organisation (WTO) regime. However, these measures represent only the start of agricultural reform. Where is Japanese agriculture headed and do these changes represent a significant movement toward real reform?

Agricultural policymaking in Japan reflects political power struggles. Agriculture is a highly protected sector, and as in many other industrialised countries, protection has increased as agriculture's contribution to the economy has shrunk. Consumers – a larger and less politically organised group – tolerate agricultural protection as long as their incomes are rising, while agricultural producers are far smaller in number and lobby strongly as they have far more to lose. Pressure from foreign producers is a strong countervailing force against domestic interests that support agricultural protection, and explains why agriculture was one of the most important areas in the Uruguay Round negotiations.

2.2 Implementation of the Uruguay Round Agreement

The Uruguay Round Agreement on Agriculture consists of agreements in three areas: market access, export subsidies and domestic support.

In the area of market access, Japan agreed to convert non-tariff barriers to tariff equivalents (TEs) for 28 commodities, including wheat, barley, milk products, starches, legumes, peanuts, konnyaku roots, cocoons, silk and pork. The TEs are secondary duties based on the difference between domestic wholesale prices and import prices in the 1986–88 period. The duties apply to imports beyond the tariff quotas. Japanese commitments regarding market access differ depending on whether the commodity is privately

traded or sold by state trading enterprises. A differential duty system is maintained for pork. Rice was initially exempted from tariffication, but was included in April 1999.

Privately traded commodities

Import quotas on privately traded commodities were converted to tariff equivalents based on prices in the 1986–88 period, and secondary duties were levied on imports over the access quantities. Access was set at the level of the annual average import volume for the 1986–88 period. Imports of commodities in this category are shown in Table 2.1.

Imports of most commodities did not increase significantly after 1995 and the quotas have not always been met. In negotiations on import liberalisation, Japan has lobbied to maintain a certain level of import restrictions because of concerns that rapid increases in imports could occur. Exporting countries achieved the expansion of import quotas even though the quotas were not met in the past – demand was low for commodities such as skim milk and whey that are used for specific purposes. The abolition of restrictions, which would have been the best solution, would have had no effect on the imports of these commodities.

Table 2.1 Commodities with tariff quota duties^a

	Tariff quota (1995)		Secondary duty (TE) (yen/kg)	Import quantity ('000 tonnes)			
	Quota ('000 t)	Tariff (%)		1993	1994	1995	1996
skim milk:							
for school lunches	7.3	0	466	5.6	5.4	4.8	4.5
for feed	85.9	0	466	54.4	49.2	42.5	35.5
non-sugar condensed milk	1.6	25	299+25%	n.a. ^b	n.a. ^b	1.1	0.7
whey:							
for feed	45.0	0	500+35%	18.5	20.9	22.5	22.4
for milk powder	25.0	10	470+35%	13.4	17.7	6.6	5.0
concentr. minerals	14.0	25	500+25%	0.5	1.2	3.2	2.0
butter and butter oil	0.6	35	1,159+35%	0.5	0.6	0.5	0.3
preps. of milk fats	19.0	25	1,363+35%	n.a. ^b	n.a. ^b	13.1	18.1
other milk products ^c	124.6	12–35	63+25% -	n.a. ^b	n.a. ^b	124.6 ^d	126.5 ^d
		1,363+35%					
dried legumes	120.0	10	417	162.4	171.8	110.9	110.1
groundnuts	75.0	10	726	49.1	43.1	42.1	43.2
konnyaku roots	0.3	40	3,289	0.2	0.3	0.3	0.2
starches	157.0	25	140	167.0	147.3	107.6	120.6
cocoons	2.9	140Y/kg ^e	2,968	2.8	5.1	2.6	3.0

Notes: a When different rates are applied within one commodity group, tariffs and duties shown are minimum values.

b Not available because the commodity classification was changed in 1995.

c Measured as a milk equivalent.

d Estimated.

e Tariff-free after April 1998.

Sources: Customs and Tariff Bureau 1995; Japan Tariff Association (various years).

Imports by state trading enterprises

State trading enterprises are obliged to import access quantities of several commodities, which are sold in the domestic market at a marked up price that is lower than the imported price with the tariff equivalent (Table 2.2). Tariff duties imposed on private imports of these commodities are set as the difference between the tariff equivalent and the marked-up price, including other import charges. State trading enterprises can import more than the access quantities and still charge the same mark ups, thereby monopolising the markets.

Table 2.2 Comparison of state trading enterprise prices and import prices

	Access Quantity 1995 ('000 t)	Mark up 1995 (yen/kg)	Tariff equivalents 1995 (yen/kg)	1993	Import quantity (‘000 tonnes)		
					1994	1995	1996
wheat	5,565	53	65	5,814	6,352	5,965	5,928
barley	1,326.5	34	46	1,619	1,665	1,732	1,598
skim milk	137.2 ^a	358	466+25%	74 ^b	86 ^b	103 ^b	75 ^b
butter	137.2 ^a	950	1,159+35%	0	0	0	0
silk	1.8 ^c	1,000 ^d	8,209	1.5	1.8	1.8	2.0

Notes: a In milk equivalents for total imports of the designated milk products.

b Including imports by private traders.

c Quota for lower import charge.

d Import charge on the quota c.

Sources: Customs and Tariff Bureau 1995; Japan Tariff Association (various years).

Private buyers therefore have no incentive to import these commodities and instead buy from the state trading enterprise at the marked-up price. The mark ups are collected by MAFF and go toward supporting farmers.

Skim milk, butter and raw silk are traded by the Agriculture and Livestock Industries Corporation (ALIC), a state organisation that operates buffer stocks to stabilise the domestic prices of these commodities (the buffer stock for silk was abolished in 1998). Skim milk and butter are also imported privately but the duties on these products are prohibitively high and little is imported privately beyond the tariff quota. Wheat and barley are mainly imported by the Food Agency. Imports rose after tariffication in 1995, but little was bought privately – the state trading enterprise was responsible for the increase.

Differential tariffs on pork

Pork imports have been subject to a differential tariff, similar to the variable levy charged by the European Union. This system was to have been abolished, but under tariffication the TE would have been prohibitive at 425 yen per kilogram (the average c.i.f. price of pork in the base period was about 400 yen per kilogram). The United States, which had strongly criticised Japan's pork import system, reluctantly allowed Japan to maintain the differential tariff system for pork imports.

Formally, the Japanese pork import system was tariffed in the sense that the TE will apply when the import price is lower than a certain level, but little has changed since most pork imports are under the differential tariff system. The difference between the scheduled standard import price and the actual c.i.f. price is collected as long as the c.i.f. price is less. If the c.i.f. price is greater, an ad valorem duty is applied. Japan has no commitments on access quantities for pork, unlike other commodities under the URAA, although the government is committed to reducing domestic price support.

Treatment of rice imports

Rice was the most important issue for Japan in the Uruguay Round negotiations on agriculture. It was exempted from tariffication in return for greater access for imports, namely 4 per cent of domestic rice consumption in 1995, rising to 8 per cent in the final year of the implementation period in 2000. This would have represented 379,000 tonnes and 758,000 tonnes of milled rice in 1995 and 2000, respectively, as calculated from domestic rice consumption in the 1986–88 base period.

Several times a year the Food Agency, a state trading enterprise, lets import tenders for foreign rice to fulfill the minimum-access commitment, charging a mark up of 292 yen per kilogram on imported rice. The sale price of imported rice is then set by the government. Foreign rice had not been marketed in Japan before and the government had to decide how to estimate demand. A certain amount of imported rice goes through the simultaneous-buy-and-sell (SBS) method, with importers and wholesalers offering tenders for the selling and buying price of each variety of rice. The difference between the wholesale price and the imported price is the market's evaluation of the price differential between domestic rice and foreign rice under import restrictions. The Food Agency purchases rice at the lowest import price and sells at the highest wholesale price, collecting the difference.

To implement the minimum-access agreement and to follow the recommendation of the Agricultural Policy Council's 1994 report, 'The Direction of Policy Development in Japanese Agriculture in a New

International Environment', in 1995 the government passed the new Staple Food Law.¹ The distribution of rice was largely deregulated under the new system.

Japan's decision not to include rice in the tariffication system resulted in an increased volume of imports and downward pressure on domestic rice prices. Following three years of good harvests, the stock of domestic rice reached 3 million tonnes in October 1996. But Japan had to import 510,000 tonnes of rice in 1997 in line with its minimum-access commitment.

In December 1998 the government decided to end this system and to convert the quantitative import restrictions on rice to tariffs. In April 1999 the tariff equivalent was set at 351.17 yen per kilogram, which was much higher than the mark up for rice of 292 yen per kilogram under the minimum-access system, and no privately imported rice is expected.

Compared with the original schedule, imports fell by 40,000 tonnes to 644,000 tonnes in 1999, and will fall further by 76,000 tonnes to 682,00 tonnes in 2000. Tariffication will result in an annual increase of imported rice of 0.4 per cent over five years, compared with the 0.8 per cent increase that would have been achieved under the previous system. This policy change benefits rice farmers but hurts consumers by reducing imports of foreign rice.

2.3 Issues for future negotiations

Japan has implemented the tariffication agreement and other commitments agreed to in the Uruguay Round, but imports of the commodities concerned have not significantly increased. Increases in imports are blocked by tariff quotas, a state monopoly on trading, and prohibitively high tariffs.

The role of the state trading enterprises in controlling agricultural imports means that as long as the mark ups are less than the tariffs charged on private imports, there are no incentives for private importers. These mark ups are used to promote domestic production, therefore Japan's level of protection is much higher than the tariffs published in the Customs Tariff Schedules of Japan would suggest.²

Pork has been the only imported commodity to increase rapidly after the Agreement on Agriculture. Imports of pork rose from 502,000 tonnes in 1994 to 591,000 tonnes in 1995 and 611,000 tonnes in 1996, but these increases can not be attributed to tariffication or reductions in domestic support, but reflected low production due to heat waves and hog diseases.

The increases in pork imports triggered safeguard measures four times in 1995 and 1996. The Temporary Tariff Measures Law allows for emergency safeguard imports of pork in two ways. First, it stipulates that the standard import price (SIP) can be raised to the level agreed in the Uruguay Round when the volume of pork imports between the beginning of the fiscal year (1 April) and the end of any quarter exceeds average imports during the same period of the three preceding fiscal years by 19 per cent or more. The increases in the SIP remain in effect until the end of the fiscal year. Second, the SIP can remain at this level in the first quarter of the next fiscal year if pork imports exceed average imports of the three preceding fiscal years by 19 per cent or more.

This safeguard system has been criticised by pork-exporting countries such as Canada and the EU.

One of the urgent issues for the next WTO negotiations on agriculture due to start in March is the reduction of tariffs and the expansion of tariff-rate quotas. Many of the tariff equivalents are higher than the existing differences between domestic and international prices because international prices in the base period were much lower than in the implementation period.

The tariff equivalents are also higher because of quality differences. The TE for rice (351.17 yen per kilogram in 1999) was calculated by comparing the price of rice that was mostly imported from Thailand with the price of higher-quality domestic rice in the base period. The agreement on agriculture allows TEs to be based on the four-digit level of the Harmonised Tariff System (HS), in which Thai rice and Japanese rice are not differentiated. If Japanese rice had been compared to rice of similar quality, for example, from the United States, the price gap would have been only about 150–200 yen per kilogram. The EU, Australia, Uruguay and Argentina criticised this method of calculating the TE when Japan implemented the tariffification of rice.

Japan will face demands to reform its state trading system. Article XVII of the GATT provides that state trading enterprises shall make any purchases or sales solely in accordance with commercial considerations and shall afford the enterprises of other countries adequate opportunity to compete for such purchases or sales. But state trading enterprises have a different role to that of private traders, as they use imports to stabilise domestic prices.

The consistency of the state trading enterprises with the WTO regime will be a major issue for Japan, and also for China, in the next agricultural trade talks and new rules on state trading may need to be established.

2.4 Food security and food safety

In April 1999, Japan's Ministry of Agriculture, Forestry, and Fisheries (MAFF) outlined 'Japan's Fundamental Position on the Upcoming WTO Negotiation on Agriculture, Forestry and Fisheries' (MAFF 1999). MAFF identified food security as the issue of most concern for Japan. Food security is defined by the Food and Agriculture Organisation as a situation in which all households have both physical and economic access to adequate food and are not at risk of losing such access. The government sees food security as one of its primary roles. Food security can be achieved through the pursuit of food self-sufficiency or through policies to achieve food self-reliance. Food self-sufficiency means meeting food needs as much as possible from domestic supplies, and minimising food imports. Japan's food self-sufficiency ratio has dropped to 41 per cent of total calorie intake, which is the lowest among the industrialised countries and is of concern to Japan. One of MAFF's aims is to raise Japan's food self-sufficiency ratio. Food self-reliance means maintaining some domestic production but relying also on international trade to meet the food needs of the population.

International trade contributes to food security by giving people access to cheaper food and to a greater range and diversity of foods. Trade is not risk-free and countries that rely on food imports face fluctuating prices and are exposed to the risk that comes from poor harvests abroad, political trade embargoes and disruptions to transportation systems (although these risks are less than if domestic supplies are solely relied on). The World Trade Organisation permits exporting countries to prohibit or restrain exports temporarily in order to prevent or relieve critical shortages of domestic foods or other products essential to them. On the other hand, importing countries are obliged to import agreed minimum-access quantities under the Uruguay Round. Because of this uneven treatment of exporters and importers in agricultural trade, the Japanese government may request a strengthening of the rules on export restrictions and prohibition measures to minimise the effects on importing countries.³

Many Japanese are also concerned about safety regulations on animal and plant trade. These regulations come under the Sanitary and Phytosanitary (SPS) Agreement, which affirms the right of countries to set their own safety and health standards, with the proviso that these be based on 'sound scientific evidence' and that international standards be used whenever possible. While appreciating the efforts to harmonise principles, Japan points out that countries may disagree about the implications of particular practices and how much risk the consumer should be protected from.

The progress in biotechnology has complicated this issue. Japan has allowed the production of several transgenic crops for consumption. But pressure by consumers in other countries against the sale of these genetically modified foods may restrict trade in this area and make it difficult to distinguish between

disguised protection and genuine health and safety issues. The labelling of transgenic crops would help alleviate these concerns, but it is sometimes difficult to identify transgenic crops from ordinary crops, for example in the case of soybeans.

2.5 Domestic policy reform

In September 1998, the Investigative Council on Basic Problems Concerning Food, Agriculture and Rural Areas, an advisory committee to the prime minister, submitted a report on the direction of policies on food, agriculture and rural areas for the 21st century (Investigative Council 1998).

The report strongly emphasised the further introduction of market mechanisms and the stabilisation of farm management, and gave reasons why current policies of price support should be changed. The report recognised that protection from market forces makes farmers inefficient, makes farming unattractive for those who have management ability, and restricts the improvement and structural adjustment of the sector. It states that ‘the policy does not reduce the price gaps between domestic and international agricultural products, and has contributed to the increase in imports of food products and half-finished products and the relocation of food industries into [*sic*] overseas’. This has been seen in the food processing industry. The report recommended that ‘the prices should reflect the trends of demand and market evaluation on quality exactly so that the prices can fully function as a signal for conveying them promptly and accurately to the farmers’. The reform of the price-support system was seen as integral to the improvement of the agricultural sector.

In December 1998 a report on the ‘Fundamental Principles of Agricultural Policy Reform’ was agreed by the LDP (the ruling party), MAFF and the agricultural cooperatives (*nokyo*) and resulted in the investigation of price-support policies and the decision that prices of domestic products would be set by a market system. For example, wheat produced in Japan had been purchased by the government at a fixed price that was much higher than the world price but the market price of wheat is now determined by tender. The government still gives wheat farmers a guaranteed price, but this price is being lowered gradually.

The acceptance of the Investigative Council report by MAFF and the agricultural cooperatives was remarkable. In drawing up the report, three issues had been under contention: whether the food self-sufficiency ratio should be made a policy target, whether joint-stock corporations should be allowed to purchase farmland, and whether direct payments should be given to farmers in hilly and mountainous areas.

The new Basic Law on Food, Agriculture, and Rural Areas

On 12 July 1999 a new Basic Law on Food, Agriculture and Rural areas (to replace the Agricultural Basic Law of 1961) was passed by the Diet (Basic Law 1999). The law is based on the Investigative Council's report and includes measures aimed at securing a stable food supply, fulfilling agriculture's multifunctional roles, achieving sustainable agricultural development and achieving the development of rural areas. It is hoped that the Basic Law (which is summarised in the appendix to this paper) will revitalise Japanese agriculture. One of the main measures of the new law is the restoration of the price mechanism in agricultural markets, with farmers supported by payments decoupled from production rather than through price support.

It was recognised in the council report that the food self-sufficiency ratio can not be improved by policy alone because it depends not only on domestic production but also on consumers' preferences. However, in response to requests from agricultural groups, the Basic Law recommends that the government set a self-sufficiency target. The target is supposed to be only a guideline, which the government is to help farmers, food industries and consumers to meet.

Another controversial issue in the council debates was whether joint-stock corporations should be allowed to own farmland. The Agricultural Land Law states that farmland should be owned by cultivators of the land. Joint-stock companies, which are owned by stockholders who do not cultivate the land, have therefore been excluded from land-intensive farming such as rice production. This regulation has become an obstacle for the expansion of operations and greater efficiencies. Farmers resisted any change to the law, believing that joint-stock companies would purchase land speculatively and neglect it until a chance came to convert it to industrial or residential use. This fear is justified, but existing farmers already speculate on land and the problem is better addressed through other policies for land-use planning. The council report came up with a compromise, stating it was desirable to deregulate the law but only to allow current farmers to establish a joint-stock company to operate farms. Current joint-stock companies in non-agricultural sectors are still prohibited from purchasing or renting farmland.

Although the direct route into the agricultural sector continues to be closed for joint-stock companies, non-farmers are able to purchase the shares of farm companies and participate in farm management, although the number of non-agricultural participants is limited. More varied types of farm operation would help revitalise Japanese agriculture in the future.

The introduction in the new Basic Law of direct payments to disadvantaged areas was another contentious issue debated in the council. Farmers sometimes believe this payment to be a compensation for the

introduction of market prices but the payment is for farming activities that preserve the environment and secure the multifunctional roles of agriculture. For example, payments to areas where paddy fields contribute to flood mitigation should not be extended to rice farmers in areas where paddies do not provide this benefit. Although this support is meant to go to those who clearly continue these activities, it is feared that it will be extended to all farmers because politicians will wish to retain the support of voters in rural areas.

2.6 Conclusion

Japanese agricultural policy has become more market oriented. But the success of agricultural reform depends on whether farmers themselves can change from being dependent on support to competing in freer markets. The theme of agricultural negotiations in the Uruguay Round was 'Bringing Agriculture into the GATT'. The results of the negotiations were successful in many respects and remarkable compared with previous rounds. But there are still many problems to solve. The theme of next WTO negotiations on agriculture will be 'Bringing Agriculture into the Market' – Japanese agriculture and world agriculture are truly at a crossroads.

Appendix: The basic law on food, agriculture and rural areas (provisional translation by MAFF)

Content

Chapter I General provisions (Articles 1–14)

Chapter II Basic policies

Section 1 Basic plan for food, agriculture and rural areas (Article 15)

Section 2 Policies for securing a stable food supply (Articles 16–20)

Section 3 Policies for sustainable agricultural development (Articles 21–33)

Section 4 Policies for development of rural areas (Articles 34–36)

Chapter III Administrative bodies and relevant organisations (Articles 37 and 38; omitted)

Chapter IV The council for food, agriculture and rural area policies (Articles 39–43; omitted)

Supplementary provisions (omitted)

Chapter I General provisions

Article 1 (objective)

The objective of this Law is to stabilize and improve people's lifestyle and to develop the national economy through comprehensively and systematically implementing policies on food, agriculture and rural areas by means of establishing basic principles and basic matters for realising them and clarifying the responsibilities of the state and local governments.

Article 2 (securing stable food supply)

1. In consideration of the fact that food is indispensable in maintaining human life and important as a basis for healthy and fulfilled living, a stable supply of good-quality food at reasonable prices shall be secured for the future.
2. In consideration of the fact that there are certain unstable factors in the world food trade and supply/demand, this stable food supply to the people shall be secured with domestic agricultural production as a basis, together with an appropriate combination with imports and stockpiles.
3. Food supply shall be managed in such a way as to improve agricultural productivity and to comprehensively promote the sound development of agriculture and food industries, in response to the more sophisticated and diversified public demand.

4. Even in the case that domestic supply is insufficient to meet demand or is likely to be for a certain period, due to unexpected situations such as a bad harvest or interrupted imports, the minimum food supply required for the people shall be secured in order not to be a hindrance to the stability of peoples' lives and smooth operation of the national economy.

Article 3 (fulfillment of multifunctional roles)

In consideration of the importance of maintaining the stability of the people's lives and the national economy, the multiple roles that agriculture plays through stable production in rural areas, from the conservation of national land, water resources, and the natural environment to the formation of a good landscape and maintenance of cultural tradition, in addition to its conventional role as a primary food supplier (hereinafter referred to as 'multifunctional roles'), shall be fulfilled sufficiently for the future.

Article 4 (sustainable agricultural development)

In consideration of the importance of its conventional role as a primary food supplier and its multifunctional roles, the sustainable development of agriculture shall be promoted by securing agricultural facilities including the necessary farmlands and irrigation/drainage, and a workforce, establishing a desirable agricultural structure with an effective combination of the above elements, based on regional characteristics, maintaining and improving the natural cyclical function of agriculture. (The latter term means the function of agriculture in stimulating the biological and physical cycle in nature while being influenced strongly by the cycle. This is the meaning referred to hereinafter.)

Article 5 (development of rural areas)

In consideration of the fact that rural areas play important roles as the bases for sustainable agricultural development, where farming is operated in the place of living for local residents including farmers, rural areas shall be developed through improvements in agricultural production conditions and rural welfare including living infrastructure so that the conventional role as primary food supplier and the multifunctional roles can be fulfilled sufficiently.

Article 6 (proper consideration to fisheries and forestry industries)

In taking measures on food, agriculture and rural areas, adequate consideration shall be given to the development of the fisheries and forestry industries in view of their close relationship with agriculture.

Article 7 (responsibility of the State)

1. The State is responsible for formulating and implementing comprehensive policies with regard to food, agriculture and rural areas, pursuant to the basic principles on policies for food, agriculture and rural areas prescribed in Articles 2–5 (hereinafter referred to as the ‘basic principles’).
2. The State shall make efforts to obtain a better understanding of the basic principles among the people by providing relevant information on food, agriculture and rural areas.

Article 8 (responsibility of local governments)

The local governments are responsible, in pursuant with the basic principles, and based on an appropriate sharing of roles with the State, for formulating and implementing policies that suit their natural and socioeconomic characteristics with regard to food, agriculture and rural areas.

Article 9 (efforts of farmers etc.)

Farmers and farmers’ organisations shall make voluntary efforts to realize the basic principles in operating farming and other relevant activities.

Article 10 (efforts of the food industry)

Operators in the food industry shall make efforts in operating their business, pursuant to the basic principles, in order to secure a stable food supply to the people.

Article 11 (support provided to the efforts of farmers etc.)

In taking measures on food, agriculture and rural areas, the state and local governments shall aim to provide support to the voluntary efforts of farmers, farmers’ organisations and food industry operators.

Article 12 (consumers’ role)

Consumers shall be encouraged to have a better understanding of food, agriculture and rural areas and be more positive in improving their dietary patterns.

Article 13 (legislative measures etc.)

The Government shall take legislative, fiscal and financial measures required to implement policies with regard to food, agriculture and rural areas.

Article 14 (annual report)

1. The Government shall annually submit to the Diet a report on the state of food, agriculture and rural areas and on the policies implemented with regard to food, agriculture and rural areas.
2. The Government shall annually prepare and submit to the Diet a document explaining policies the Government is going to implement in consideration of the state of food, agriculture and rural areas described in the report in the preceding paragraph.
3. The Government shall seek opinions from the Council of Food, Agriculture and Rural Area Policies, in preparing a document explaining policies the Government is going to implement as referred to in the preceding paragraph.

Chapter II Basic policies

Article 15

1. The Government shall establish a basic plan for food, agriculture and rural areas (hereinafter referred to as the ‘basic plan’) for the promotion of the comprehensive and systematic implementation of policies on food, agriculture and rural areas.
2. The basic plan shall stipulate the following matters:
 - 1) Basic direction in formulating policies on food, agriculture and rural areas
 - 2) Target for food self-sufficiency ratio
 - 3) Policies implemented comprehensively and systematically by the Government with regard to food, agriculture and rural areas
 - 4) Besides the preceding matters, matters required to comprehensively and systematically promote policies on food, agriculture and rural areas.
3. Target for food self-sufficiency ratio as referred to in the second item of the preceding paragraph above shall be established as a guideline for domestic agricultural production and food consumption, while identifying issues which farmers and other relevant parties should address.
4. Policies in the basic plan related to rural areas shall be developed in harmony with the national plan of comprehensive use, development and conservation of national land.
5. The Government shall seek opinions from the Council of Food, Agriculture and Rural Area Policies in establishing the basic plan, under the provision of paragraph 1.

6. The Government shall, without delay, promulgate the basic plan when established under the provision of paragraph 1.
7. The Government shall revise the basic plan approximately every five years, in consideration of changes in circumstances surrounding food, agriculture and rural areas and also the result of policy evaluation on food, agriculture and rural areas.
8. Provisions of paragraphs 5 and 6 above shall apply *mutatis mutandis* to changes of the basic plan.

Section 2 Policies for securing a stable food supply

Article 16 (improvement of food consumption policies)

1. The State shall take necessary measures such as improving the management of food hygiene and quality as well as proper food labeling, in order to secure food safety, improve food quality, and help consumers make proper selections.
2. The State shall take necessary measures such as developing guidelines for a healthy dietary pattern, broadening the people's knowledge of food consumption, and providing relevant information, in order to promote better dietary patterns and the effective use of agricultural resources.

Article 17 (sound development of the food industry)

The State shall take necessary measures such as reinforcing the management base, encouraging closer cooperation with agriculture, and streamlining its distribution system, in order to promote the sound development of the food industry in view of the importance of its role as a stable food supply and with proper consideration given to reducing the adverse effects of its business operations on the environment and ensuring effective use of resources.

Article 18 (policies on imports/exports of farm products)

1. The State shall take necessary measures such as tariff rate adjustments and import restrictions, where urgently required when certain imports have or are likely to have a significant adverse effect on the production of domestic farm products competing against such imports, in order to secure stable imports of farm products for which domestic production cannot meet demand.
2. The State shall take necessary measures such as enhancing the competitiveness of domestic farm products, promoting market research, providing relevant information, and encouraging dissemination activities, in order to increase exports.

Article 19 (food security for emergencies)

The State shall take necessary measures such as production increases and distribution restrictions, should these be deemed necessary in order to secure the minimum food required by the people in the events prescribed in paragraph 4 of Article 2.

Article 20 (promotion of international cooperation)

The State shall endeavour to promote international cooperation including technical and financial cooperation for the development of agriculture and rural areas as well as food aid to developing regions, in order to help the long-term stability of the world's food supply/demand.

Section 3 Policies for sustainable agricultural development

Article 21 (establishment of desired agricultural structure)

The State shall promote a better agricultural production infrastructure, expand the scale of farm management, and take other necessary measures for improving farmers' management structure, according to the type of management and the regional characteristics, in order to encourage efficient and stable farm management and to construct an agricultural structure in which such management can play a major part.

Article 22 (farming operations by full-time farmers etc.)

In consideration of the fact that it is important to enable full-time farmers and other motivated farmers to use their originality and creativity in their farm management, the State shall take necessary measures for revitalising family farming by means of bringing about conditions for better farmers' management such as more rationalized business administration and smooth business succession, and to promote the incorporation of farm management.

Article 23 (securing and effectively utilising farmland)

The State shall take necessary measures such as securing the agricultural use of land suitable for farming, promoting the intensive use of farmland by those farmers whose management structure is efficient and stable, and promoting effective use of farmland in order to secure and efficiently utilize the farmland for domestic agricultural production.

Article 24 (improvement of agricultural production infrastructure)

The State shall take necessary measures for improving the agricultural production infrastructure including field division enlargement, the creation of multipurpose paddy fields, maintenance of better functions of irrigation and drainage facilities, according to regional characteristics, in consideration of harmony with the environment and with the view of efficient operation, in order to encourage the improvement of agricultural productivity by maintaining farmland with good conditions and agricultural water facilities and promoting their effective use.

Article 25 (securing and fostering the workforce)

1. The State shall take necessary measures such as improving the technical and management skill of farmers, and encouraging recruitment of new farmers to acquire knowledge of agricultural technologies and management styles, in order to secure and foster a workforce to play a major role in effective and stable farm management.
2. The State shall take necessary measures such as the promotion of agricultural education so as to obtain a better understanding and interest of agriculture among the people.

Article 26 (promotion of women's involvement in agriculture)

In consideration of the importance of securing opportunities for both men and women to participate in all kinds of social activities as equal members of society, the State shall promote the creation of an environment in which women's roles in farming operations are fairly assessed and women can be provided with opportunities to become involved in farm management and other relevant activities on a voluntary basis.

Article 27 (promotion of activities by elderly farmers)

The State shall create an environment in which elderly farmers can be satisfied with their activities relevant to farming in accordance with their role in local farming and their skills and improve their welfare.

Article 28 (promotion of activities of agricultural production organisations)

The State shall take necessary measures for promoting activities by cooperative organisations including those based on rural communities and organisations which operate commission farming, in order to contribute to secure effective agricultural production in local agriculture.

Article 29 (development and promotion of agricultural technology)

The State shall take necessary measures such as setting specific goals for the research and development of technology, encouraging closer cooperation among national and local research institutes, universities and private bodies, and promoting the dissemination of agricultural technologies that suit regional characteristics, in order to effectively promote Research and Development and dissemination activities of such technology in the fields of agriculture, food processing and distribution.

Article 30 (price formation of farm products and stabilisation of farm management)

1. The State shall take necessary measures for allowing the prices of farm products to form appropriately reflecting the real supply/demand situation and quality evaluation, in order to promote agricultural production responsive to consumer demands.
2. The State shall take necessary measures for mitigating the adverse effects of significant price changes of farm products on farm management supposed to be encouraged.

Article 31 (compensation for disaster losses)

The State shall take necessary measures such as reasonable compensation for disaster losses, in order to prevent any possible hindrance to agricultural reproduction caused by disasters and to help the stabilisation of farm management.

Article 32 (maintenance and promotion of the natural cyclical function of agriculture)

The State shall take necessary measures such as securing the proper use of agricultural chemicals and fertilizers and improving soil fertility through effective use of livestock manure, in order to maintain and promote the natural cyclical function of agriculture.

Article 33 (rationalization of production and distribution of agricultural materials)

The State shall take necessary measures such as encouraging rationalized production and distribution systems of agricultural materials, in order to help with cost reduction of agricultural materials in farm management.

Section 4 Policies for development of rural areas

Article 34 (comprehensive development of rural areas)

1. The State shall systematically promote measures on the comprehensive development of rural areas including agricultural development, giving proper consideration to the coordination of land use for agricultural and other purposes.
2. The State shall take necessary measures for comprehensively promoting improvements in agricultural production bases and rural welfare including living infrastructure such as transportation, telecommunications, public health, education and culture fitting in with regional characteristics, in order to promote the sound development of regional agriculture and create pleasant and resident-friendly rural areas surrounded with beautiful landscape.

Article 35 (development of hilly and mountainous areas)

1. The State shall take necessary measures, in areas with poor geographical conditions and disadvantages in agricultural production including mountainous areas (hereinafter referred to as ‘hilly and mountainous areas’), such as increasing job opportunities by promoting agricultural and other businesses through the introduction of new types of crops and the production/distribution of regional specialties, taking such regional characteristics into consideration and promoting the settlement of people through improved living conditions.
2. The State shall take specific measures for the fulfillment of the multifunctional roles of agriculture in hilly and mountainous areas, by providing support to compensate for disadvantages in agricultural production conditions so that such areas can maintain adequate production activities.

Article 36 (exchanges between urban areas and rural areas)

1. The State shall take necessary measures such as encouraging exchanges between urban areas and rural areas, and promoting the improvement of kitchen gardens, in order to obtain a better public understanding and awareness for agriculture and rural areas and to contribute to a healthy and comfortable life.
2. The State shall take necessary measures so that agriculture in and around urban areas can operate production activities responsive to the needs of urban residents, making use of the advantage of proximity to consumers.

**Chapter III Administrative bodies and relevant organisations
(omitted)**

**Chapter IV The council of food, agriculture and rural area policies
(omitted)**

Supplementary provisions (omitted)

Notes

- 1 The full name of this law is the Law for the Stabilisation of Supply and Demand and Price of Staple Food. It replaced the Food Control Law, which had regulated the distribution of rice since 1942, although it was amended several times.
- 2 Although Japan committed itself to bind tariff equivalents in the country schedules presented to the WTO, the tariffs in the Customs Tariff Schedules of Japan published by the Ministry of Finance are not truly representative for some commodities because of state trading enterprise mark ups. This does not conflict with WTO principles because charges as border measures are admitted as well as duties and taxes (GATT Article XI: 1).
- 3 Under Article 12 of the Uruguay Round Agreement on Agriculture, the rule on ‘Disciplines on Export Prohibitions and Restrictions’ states that exporting countries can institute export prohibitions or restrictions if they give due consideration to the effects on importing members’ food security (Article 12:1 (a)).

References

- Basic Law (1999) ‘The Basic Law on Food, Agriculture and Rural Areas (Provisional Translation)’, July.
- Investigative Council (1998) ‘The Report Submitted to the Prime Minister by the Investigative Council on Basic Problems Concerning Food, Agriculture and Rural Areas’, Tokyo, September.
- MAFF (Ministry of Agriculture, Forestry and Fisheries) (1998) ‘Fundamental Principles of Agricultural Policy Reform’, Tokyo, December.
- (1999) ‘Fundamental Position of Japan on the Upcoming WTO negotiations on Agriculture, Forestry and Fisheries’, Tokyo, April.

3. Issues in Japanese Agricultural Policy

Ray Trewin, The Australian National University,

3.1 Introduction¹

The Japanese economy has been changing rapidly in recent years, primarily because of the prolonged recession, and many previously highly protected sectors have begun to open up. There are both opportunities and threats in the changing situation that Australian interests, including interests in agriculture, need to be aware of in their dealings with Japan.

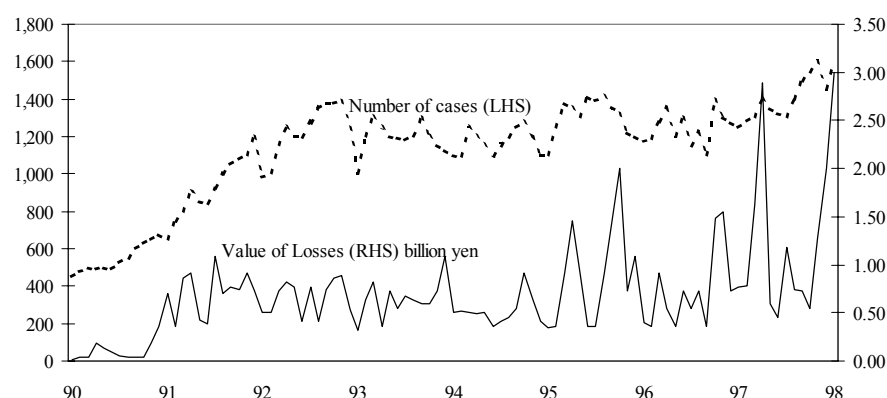
When Japan's economy was stronger, the heavy costs of protection were bearable. In the current recession, traditional practices have had to change and many restrictions on imports, regulations and other institutional arrangements that have added to the cost of dealings with Japan have gradually begun to be dismantled.

The political will has been weak when it has come to reforming agriculture and the lack of change in this sector has exacerbated the impacts of the recession on other sectors and on consumers. Some reforms were announced in the late 1980s (ABARE 1988) and further changes were agreed to in the Uruguay Round. Following Prime Minister Hashimoto's 1997 statement that agriculture would not be spared from reforms, in July 1999 the Japanese Diet passed the Basic Law on Food, Agriculture and Rural Areas. Although the law is yet to be implemented, and its form and impact are uncertain, it discusses a number of key issues for improving Japanese agri-industry² trade policies. Other issues were raised in Japan's paper on 'The Fundamental Position of Japan on the Upcoming WTO Negotiations on Agriculture, Forestry and Fisheries' (MAFF 1999). Foreign producers and governments need to have adequate information on the benefits and costs of these measures. Strategies need to be developed to take advantage of any opportunities, or if necessary to promote more appropriate options or counter any potential threats.

3.2 The changing Japanese economy and agricultural sector

The Japanese economy has been in recession for some time. GDP fell by 0.7 per cent in 1997, by 2.8 per cent in 1998 and is expected to have fallen by a further 0.5 per cent in 1999 despite some fourth-quarter growth (DFAT 1999). Much of the recent growth has been stimulated by government spending, and the recession is likely to continue for some time. Bankruptcies have been common and many loss-making Japanese businesses have been looking for foreign partners (Figure 3.1). Unemployment is high by

Figure 3.1 Bankruptcies and business losses, 1990–98

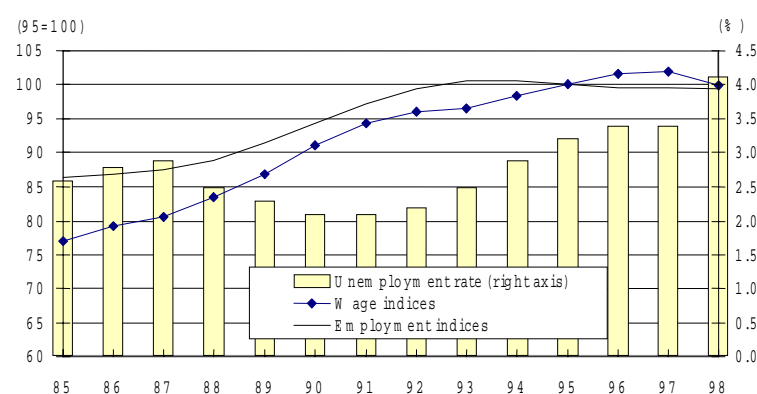


Source: APEG (1992).

Japanese standards, at over 4 per cent, and real wages have fallen (Figure 3.2). Asset prices have also fallen (Figure 3.3). Consumer sales have been depressed (APEG 1998), although sales did rise in the last quarter of 1999 as a result of a government spending program.

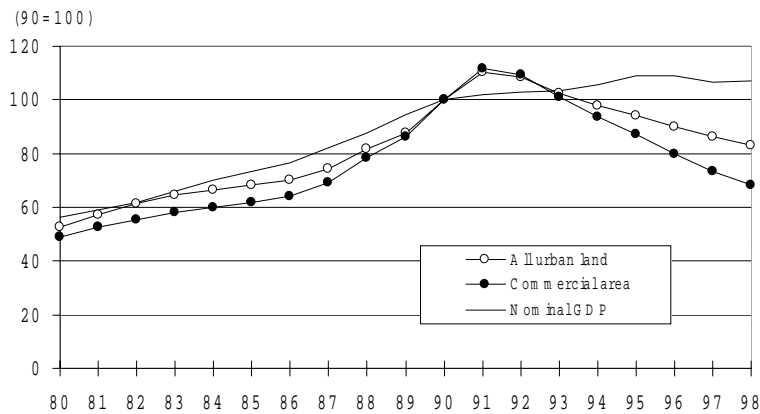
Agriculture is a declining sector, representing only around 2 per cent of GDP and 1 per cent of exports. Japan's main export markets for agricultural products are Hong Kong, Taiwan and the United States (EAAU 1997). About 20 per cent of inputs used by agri-industry, including agricultural commodities, feeds and fertilisers, are imported, mainly from the United States, China, Australia and Canada. Taiwan is a significant supplier of processed foods. Significant value is added to agricultural imports through processing and in services industries (e.g. restaurants) to the extent that the agri-industry sector contributes around 13 per cent to GDP. This imbalance between exports and imports would appear to be one

Figure 3.2 Wages and employment in Japan, 1985–98



Source: Management and Coordination Agency, *Labour Force Survey*.

Figure 3.3 Japanese urban land prices and nominal GDP, 1980–98



Source: The Japan Real Estate Institute; EPA, *National Accounts*.

reason why Japan's intra-industry trade is relatively low, given its stage of development (see Trewin and Chen 1998).

The agricultural sector has been growing more slowly than the rest of the economy and the number of farmers has been declining (APEG 1998). Most farmers are part time. In 1994 there were 2.8 million farm households but only about 15 per cent were farming full time (EAAU 1997). Over half of Japanese farmers are older than 65. Farming incomes are higher than the average, with only 14 per cent of income gained from farming, while 80 per cent comes from the government, mainly through price support (EAAU 1997). This is a result of an electoral system that gives greater weighting to the rural vote.

Rice is the largest component of agricultural production, and production of vegetables and vegetable products is also significant. Agricultural production has been rising, especially for flowers and livestock (EAAU 1997). The production of cereals (mainly rice) and cereal products, and oil crops and products has fallen (see Figure 3.4).³ In some years production incentives have resulted in overproduction of cereals (Fu 1999). Japanese farming is very intensive and highly dependent on fertilisers, chemicals and other inputs that can harm the environment.

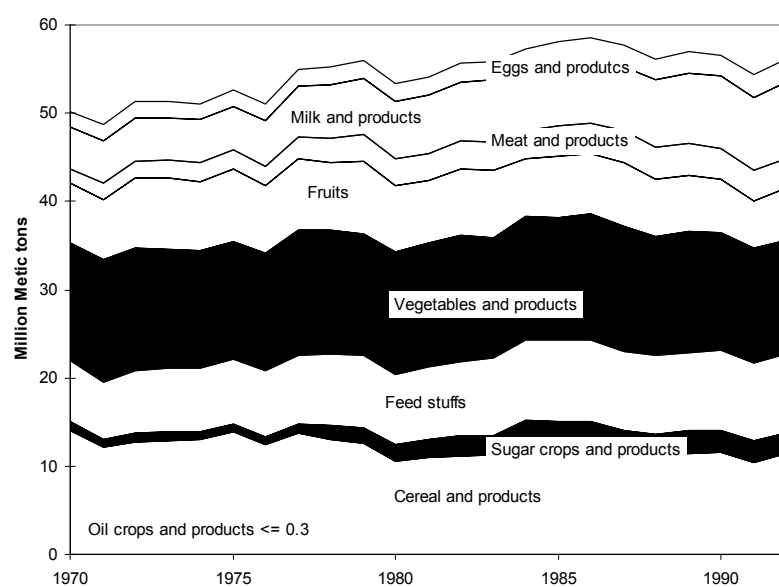
Aggregate consumption of agricultural goods, especially of higher-value commodities, has been increasing faster than production (Figure 3.5). Demand for flowers and beef is predicted to increase by 58 and 54 per cent respectively. On the other hand, the consumption of rice is predicted to fall by 10 per cent between 1992 and 2005 (EAAU 1997). Despite a 13 per cent increase in spending on food, the share of food in total expenditure fell from 21 per cent in 1983 to 17 per cent in 1994 – which was still much higher than in many comparable countries, for example the United States at 8 per cent (Mitchell et al.

Table 3.1 Self-sufficiency ratios for selected commodities, 1970–92 (per cent)

	Cereals and products	Sugar crops	Sugar crops and products	Oil crops	Vegetable Oils	Feed- stuffs	Vegetables and products	Fruit	Meat and products	Milk and products	Eggs and products
1970	48.0	100.0	23.4	4.9	15.6	81.6	99.2	86.7	88.4	84.8	97.9
1971	45.7	100.0	23.4	4.6	16.4	81.1	98.9	85.9	86.3	86.9	98.1
1972	43.9	100.0	22.6	4.3	14.1	82.6	98.7	84.5	82.9	86.1	98.1
1973	40.9	100.0	25.6	3.7	12.4	78.7	98.1	85.9	78.3	84.9	97.8
1974	39.6	100.0	18.4	5.1	14.0	80.9	97.6	86.1	87.3	81.0	98.1
1975	41.8	100.0	21.1	4.3	13.7	88.1	97.7	86.0	83.8	82.4	97.9
1976	37.1	100.0	23.1	3.6	12.7	80.9	96.8	84.8	80.0	74.0	97.8
1977	37.9	100.0	22.7	3.7	13.2	79.9	97.0	85.2	82.3	72.8	97.6
1978	35.6	100.0	35.9	4.7	13.0	82.6	96.2	83.2	82.8	71.3	98.1
1979	33.9	100.0	34.6	4.9	12.8	83.9	95.8	84.2	82.4	72.8	98.1
1980	30.2	100.0	42.2	4.4	12.7	84.1	95.5	84.1	85.2	74.9	98.4
1981	31.3	100.0	52.2	5.6	12.8	86.8	94.8	82.7	82.5	78.1	98.3
1982	31.3	100.0	47.0	4.8	12.3	87.1	95.9	83.0	84.0	76.6	98.6
1983	30.6	100.0	50.3	4.6	12.0	82.8	95.2	84.3	83.5	77.4	98.9
1984	31.9	100.0	51.9	4.8	12.0	86.8	93.8	80.7	83.1	77.6	99.1
1985	31.9	100.0	50.7	4.0	11.1	87.1	94.5	81.3	83.7	76.6	99.0
1986	31.5	100.0	52.0	4.4	11.5	86.1	93.9	78.3	81.5	78.2	98.4
1987	29.1	100.0	52.3	4.8	10.7	86.7	93.3	78.4	79.1	74.3	99.1
1988	28.0	100.0	51.0	4.5	10.5	83.0	91.0	75.4	76.3	73.4	98.2
1989	29.1	100.0	52.4	4.7	10.3	86.0	91.3	73.6	73.8	78.3	98.1
1990	29.5	100.0	53.5	3.7	9.5	83.8	91.2	72.1	73.0	80.2	98.1
1991	26.7	100.0	52.5	3.5	9.5	82.1	90.0	68.6	70.9	76.9	97.4
1992	28.6	100.0	51.4	3.2	8.9	81.5	89.4	68.9	67.8	78.6	98.2

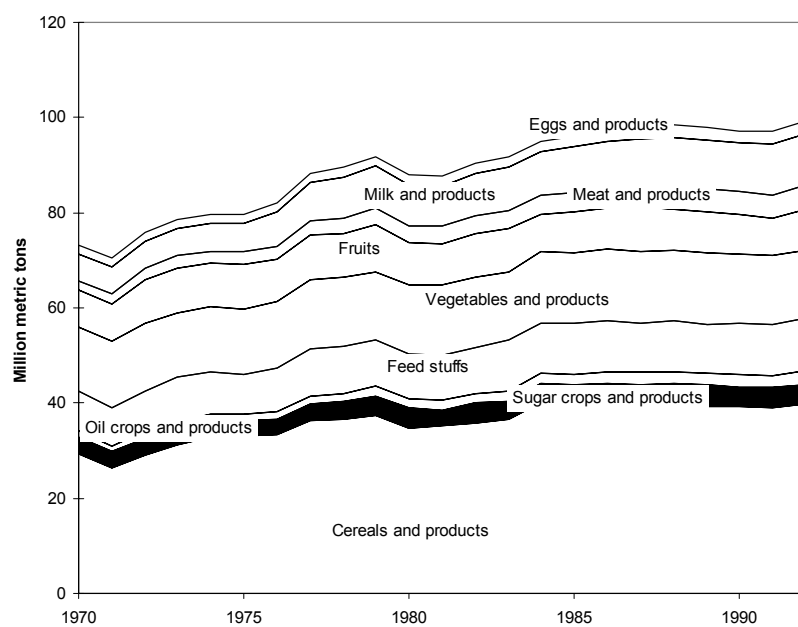
Source: FAO.

Figure 3.4 Agricultural production by commodities, 1970–92



Source: FAO Website.

Figure 3.5 Agricultural consumption by commodities, 1970–92



Source: FAO Website.

1997). Japan's self-sufficiency in food has fallen (from 52 per cent in 1985 to 42 per cent in 1995 in calorie terms), but is still high in some commodities given its low comparative advantage in agricultural production (Table 3.1).

'Getting the prices wrong' lies behind many of the unusual aspects of food consumption and production in Japan, such as the unexpectedly high self-sufficiency ratios and relative food expenditures. Food prices in Japan are around three to four times higher than world averages and are also high in comparison with other goods and services sold in Japan that are similarly priced to goods and services in other countries.

Japanese agricultural production has little comparative advantage when measured in terms of revealed export specialisation for traded goods. Its performance is also poor when measured in terms of returns on assets or net worth (which are both negative unlike the all-industry averages of around 2 and 10 per cent respectively), or of GDP per employee.

Japan's restrictive agricultural trade arrangements protect producers and impose costs on consumers. Table 3.2 lists four measures that illustrate the high levels of protection accorded Japanese producers of agricultural commodities. Producer subsidy equivalents (which represent the transfer from taxpayers and consumers to producers) are around 77 per cent, not including the substantial assistance provided through infrastructure spending. Agricultural support has been estimated to cost the world approximately US\$70 billion (EAAU 1997). Producer and consumer nominal assistance coefficients represent the ratio

Table 3.2 The cost of agricultural protection in Japan

	Protection of producers				Costs to consumers			
	Percentage PSE		Producer	NAC	Percentage		Consumer	NAC
	1990–92	1995 ^b			1990–92	1995 ^b		
Wheat	97	103	7.3	8.3	–56	–49	2.3	2.0
Rice	88	97	5.6	7.2	–80	–84	5.3	6.4
Oilseeds	46	35	1.8	1.4	–	–	1.0	1.0
Sugar ^c	69	71	2.8	2.8	–65	59	2.9	2.5
Total crops	88	96	5.3	6.7	–59	–58	2.5	2.4
Milk	86	90	5.2	5.7	–73	–74	3.8	3.9
Beef and veal	35	46	1.5	1.8	–30	–32	1.4	1.5
Pig meat	52	67	2.2	3.1	–52	–69	2.2	3.2
Poultry	12	13	1.1	1.1	–10	–11	1.1	1.1
Eggs	20	19	1.3	1.2	–19	–18	1.2	1.2
Total livestock products	46	53	1.8	2.0	–38	–42	1.6	1.7

Notes: a A negative figure represents a tax on consumers; b: Provisional figures; c: Refined equivalent; PSE: Producer Subsidy Equivalent; CSE: Consumer Subsidy Equivalent; NAC: Nominal Assistance Coefficient.

Source: EAAU (1998).

of domestic to world prices and are, respectively, over double and around 50 per cent higher than OECD averages (which include the highly protected European Union markets). Consumer subsidy equivalents represent the usually negative transfer to consumers, and range from 11 to 84 per cent.

Japanese protection, including both tariffs and non-tariff barriers (for example, constraints on rice promotion) are high compared with other APEC countries (see PECC 1995). Low levels of trade do not simply reflect consumer tastes – if this were true there would be no reason for trade barriers as such preferences would be reflected in the market. Where trade has been freer, as in Okinawa, taste preferences proved not to be significant. Agricultural protection imposes costs downstream and has led to the escalation of protection in other sectors. Protectionism has constrained the ability of processors to reduce costs and many have moved offshore as a result.

3.3 Pressures for deregulating agriculture

The government has tried to drag the economy out of recession, mainly through macroeconomic policies, including monetary policy and budget measures such as tax cuts and increased government spending. A more sustainable basis for recovery is likely to require microeconomic approaches and restructuring to make the economy more competitive. The need for extensive structural adjustment and efficiency improvements is now glaring, as the sectors that have been protected from competition are stagnating and costing the economy dearly. Structural adjustment is required across the economy in terms of capital and labour inputs. Protection inflates the prices of inputs and outputs bought by other industries or consumers and draws away scarce resources from more competitive sectors.

Financial services reforms have impacted on other sectors. Japanese companies have had to find new sources of capital and improve their competitiveness in order to obtain capital. This has driven the introduction of new practices in labour and other markets, as well as new technologies and methods, often through foreign direct investment (FDI).

The traditionally inefficient service sectors have been undergoing significant changes through the introduction of new technologies and practices. The distribution sector is particularly important for agri-industry trade. Regulations such as the Large Scale Retail Stores Law, limiting the establishment of large stores, and traditional distribution systems that feature complex relationships between firms, have made it difficult for traders to add value and to have a say in the competitive marketing of their products. More flexible, direct and competitive methods of marketing have begun to emerge. Traditional operators such as trading houses have had to redefine themselves to remain useful and have become more competitive.

Foreign direct investment has introduced technologies and practices which have helped make the economy more competitive, and the government has encouraged this investment. Investment in the retail sector has introduced foreign marketing and management know-how, has changed 'jobs for life' practices, and has made the labour market more efficient. FDI in Japanese agri-industry has been low relative to higher-growth sectors such as services. This is despite a worldwide trend of FDI in agri-industry increasing at a greater rate than trade – multinational companies have been exporting technologies and brand names rather than products (Henneberry 1997). Companies are attracted to countries that have dynamic agricultural sectors as they can offer strong domestic sales and provide a springboard into neighbouring countries that have similar tastes and market characteristics.

Apart from some parts of the food processing and distribution sectors, agriculture has remained isolated from these changes. Farming has been described as 'gardening with retirees', reflecting the aging, part-time structure of farming. There is deep concern in Japan that farming lacks the dynamism to attract new entrants and also that Japan's intensive production methods are environmentally unsound or unsafe because of chemical contamination (an accusation previously only levelled at foreign food). Consumers are now demanding lower prices and a larger range of foods (EAAU 1997), but trade in some agri-industry products is still almost nonexistent.

It is difficult for one sector to accept the pain of the recession, deregulation and greater competition when another is protected from these forces, especially when this protection is siphoning off capital, government funds and land, and raising input costs. As the economy recovers from the recession, the efficiency differences between a protected agricultural sector and newly competitive deregulated sectors will be magnified, and the more competitive sectors may no longer be able to compensate for the performance of agriculture.

The political will to institute deregulation has not just been driven by domestic forces. Bilateral negotiations, especially between Japan and the United States and particularly in respect to livestock arrangements, have been important. In the Uruguay Round Japan committed to convert a number of non-tariff barriers to tariffs and to provide greater access for some agri-industry products. It is yet to be seen whether these commitments will be fully implemented and whether the pace of reform will continue in the spirit of the upcoming WTO agricultural round.

The government has resisted the demand from consumers and other sectors of the economy, but it has started to address agricultural reform. The new Basic Law on Food, Agriculture and Rural Areas and the Japanese government's position paper on the 'Fundamental Position of Japan on the Upcoming WTO Negotiations on Agriculture, Forestry and Fisheries' reflect this view.

The basic law on food, agriculture and rural areas

The Basic Law on Food, Agriculture and Rural Areas, passed in July 1999, aims to provide a dynamic and sustainable vision for Japanese agriculture. A number of industrialised countries have restructured agriculture to better reflect their comparative advantage. For example, despite its comparative disadvantage in land, agriculture in the Netherlands is dynamic because the country's expertise in technology, marketing and investment has produced value-added, high-technology and high-price products. The Japanese government has stated it wants an innovative sector, but its protection of agriculture works against this goal.

The Basic Law originates from an Investigative Council report (1998) and a position paper on principles on agricultural policy reform published by MAFF (1998). The law aims for a more efficient, competitive sector, but it is not clear how this will be achieved. Similar opportunities were offered in 1988 but never implemented (see ABARE 1988). The law is very general and open to interpretation by officials. It states that food should be available at reasonable prices (Article 2-1), but if current rice policies were continued, prices would be very much higher than world prices (a tariff equivalent of 1,100 per cent according to Fu 1999). The law would allow farmers to be assisted through income support, a policy that is less distorting to the market and trade. This has occurred in the dairy sector where deficiency payments, which were contrary to the Uruguay Round agreement, are being replaced by arrangements where the price of milk received by farmers and paid by processors will be determined by auction. This may open up the monopoly on the sale of milk, but the use of tariff quotas still limits imports and maintains domestic prices above world prices, and local content arrangements to support the auction price will be very distorting. Australia is concerned that the administration of tariff quotas could favour countries with which Japan is running large trade deficits, as has been the case in the past.

Because of its generality, specific aspects of the Basic Law might be unrealistic. For example, it is hoped that Japanese consumers will voluntarily purchase more Japanese agri-industry products (Article 12), despite these products being more expensive and not matching their more sophisticated tastes. Although Japanese consumers do prefer Japanese products, as a background paper (a Prime Minister's Office poll on food) to the Basic Law reported, this is only on the condition that prices fall to a similar level to imported products.

The generality leads to the appearance of a number of possible inconsistencies within the Basic Law. Some articles promote measures to allow prices to form appropriately (Article 30-1) yet many of the arrangements to achieve self sufficiency in food work against such price mechanisms (Article 18-1). Article 36-1 encourages kitchen gardens, which would crowd out not only imports but the commercial

production that other articles are aimed at facilitating (Article 2-1). Articles promote the use of rural resources to increase production (Article 23), yet others encourage the conservation of these resources (Article 35). There is no mention of how these competing aims will be resolved. There are even inconsistencies within the one article. Article 18-1 mentions adjusting tariffs when imports are likely to have a significant adverse impact on domestic production but this is justified in order to secure stable imports when domestic production can not meet demand.

The coverage of agriculture, food and rural areas raises issues on the impact the law will have on the competitiveness of downstream sectors (other sectors that compete in the international market but also in the domestic market for inputs) and on the cost to consumers. The encompassing of rural areas shows the dominance of policy objectives aimed at protecting the agricultural sector and conserving rural resources.

The law promotes the preservation of agriculture's multifunctional roles, along the lines of the European Union (Article 3) (see Trewin 1998b). One question is whether current, historic or some other level of multifunctionality should be chosen. Sustainable agricultural development is a major component of multifunctionality (Article 4). The law defines this as 'the function of agriculture in stimulating the biological and physical cycle in nature while being influenced strongly by the cycle'. What this will mean in reality is unclear.

Stabilisation is also a key feature of the Basic Law (e.g. Articles 1 and 2) but stabilisation is more like stagnation, as heavy protection negates the need for change. The result is a sector that is changing little, apart from farmers getting older.

Another change in the law is that joint-stock corporations will be able to purchase farm land but only if the corporations were established by existing farmers. Under the current Agricultural Land Law, which requires the owners of the land to be the cultivators, joint-stock corporations cannot purchase or rent farm land. This measure had been put in place to lessen land speculation, although this indirect approach does not prevent speculation by farmers and constrains farm amalgamations and efficiency gains.

A key element of the Basic Law concerns achieving food security⁴ through self-sufficiency. The law states that self-sufficiency ratios are to be set (Article 15-2(2)). These will only be revised every five years. Behind the setting of self-sufficiency ratios is the assumption that there will be a world shortage of food. Even if this assumption were true, because Japan produces inefficiently, production would rise if efficiency improved. Currently some consumption is wasted (despite high prices) and if Japan decreased this wastage, this would further improve self-sufficiency ratios. Moreover, the government aims to direct consumption back to traditional foods by providing information on 'more appropriate' diets (Article 12),

whereas high prices and changing tastes would appear to be more important factors behind recent changes in consumption. The government's plan fails to see that inefficient production is a result of current policies and a continuation or expansion of these policies will lead to further falls in production.

Questions also need to be asked about whether domestic agricultural production, for instance of live-stock, is really self-sufficient when it is highly dependent on imported inputs like feeds and fertilisers (Trewin 1998a). There is also an issue of whether a self-sufficiency approach that raises the risks of disruption by weather and natural disasters is secure. World food trade may be unstable but there are financial and other instruments for diminishing this instability. One of the key factors behind this instability is domestic price support arrangements like those applied by Japan (although these have not been as distorting as the European Union's use of export subsidies, as ABARE (1999) discusses).⁵ These arrangements are based on raising production rather than efficiency, and increase the costs of reallocating resources. A dynamic agricultural sector would more easily be able to adapt to changing circumstances and more efficiently address food security.

The Basic Law continues to endorse the role of the cooperatives (Article 9) and the state agencies, such as the Japan's Food Agency which controls imports and hence consumption of products such as rice, wheat and meat. For example, foreign rice is imported by tender and then sold at higher domestic prices or through the simultaneous-buy-and-sell method (the agency tends to choose prices that achieve the largest difference between buying and selling, as this increases its commission).

Japan's WTO position paper

The Japanese government suggested in its April 1999 position paper on the 'Fundamental Position of Japan on the Upcoming WTO Negotiations on Agriculture, Forestry and Fisheries' that Japan should promote its agricultural exports. This could magnify the negative impact of Japan's agricultural policies on world markets. Japan's call in the paper for equal treatment of exporters in respect of bans and taxes, and of importers in respect of tariffs and non-tariff barriers is to be commended. The equal treatment of industrialised and developing countries is a more complex story. Development is better achieved through policies that aim to expand efficient production and trade rather than through the provision of food aid, which can crowd out domestic production. Although Japan takes its WTO commitments seriously, it may seek to stretch these to protect sensitive sectors such as rice, for instance by donating rice imported from other countries under 'minimum access' requirements. A key issue is whether Japan conceives of its trade commitments as being in its own economic interests or just a process of trading off commitments with its trading partners.

A number of key elements from the new Basic Law appear in the position paper, but not always in a consistent fashion. Exporters are criticised for imposing taxes on exports at the same time as domestic production (resulting in less imports) is encouraged in the Basic Law (Article 2). The position paper favours trade restrictions to achieve food security, and the preservation of the countryside's multifunctional roles is supported. While Japan supports these goals through price support, which is paid for by consumers, the EU is tackling these aims with the use of direct payments from government budgets, which distort world markets less and impose some discipline on the extent of assistance.

A number of specific aspects in the WTO Position Paper require clarification. It is suggested that high tariffs will protect against illegal fishing. However, greater trade and economic returns would give more incentives for (self) enforcement. Also, it would appear that Japanese fishing operations rather than illegal fishing are more to blame for overfishing of species such as whales and Southern Bluefin Tuna. Subsidies are cited as a solution for reducing overcapacity, but it is likely that these will have the opposite effect.

Addressing the key issues

Better information so that appropriate options and strategies can be chosen is the main requirement for addressing the key issues on improving Japanese agri-industry trade and investment. For example, Japan uses an undocumented model to predict world food supply and demand to lend support to its policy of food self-sufficiency. Although this model predicts no overall food shortage, under extremely pessimistic assumptions shortages in some foods are apparent (see Tables 3.3 and 3.4). This should not be used as a justification for protection because world shortages would not occur if distribution were better and food more affordable (i.e. less protection). And, as previous shortages have shown, the resulting price increases under the pessimistic scenario compared to trend (Figures 3.6 and 3.7) would soon attract additional supplies into the world market. In the early 1980s, MAFF forecasted food shortages and that world market prices would soar but in fact prices fell and have remained low ever since (EAAU 1997) (see Figure 3.8).

There is a range of well-documented and tested models that have considered world food supply and demand under a range of realistic assumptions. An example is IFPRI's IMPACT model, which has held up well in comparisons with other models such as those constructed by the World Bank (Mitchell et al. 1997) and the Food and Agriculture Organisation (Alexandratos 1988). The IFPRI model predicts a continuing fall in world food prices from the 1990 baseline but a 13 per cent increase in world food supplies due to technological gains. These widely accepted model outcomes should be used in the Japa-

Table 3.3 Simultaneous equation model of the world food market (forecast)

Year	World		Industrialised Countries			Developing Countries		
	Output	Consumption	Output	Consumption	Net exports–imports	Output	Consumption	Net exports–imports
1994	1,782	1,782	843	740	104	939	1,043	-104
2025 ^a	2,914	2,914	1,213	989	225	1,700	1,925	-225
2025 ^b	2,473	2,476	1,132	852	282	1,341	1,624	-282

Notes: a continue current output growth per unit.

b constraints on the environment and irrigation imply that current output growth per unit will decrease.

Table 3.4 Forecast consumption per person (kg)

	1994		Trend		Constrained supply	
	value	index	value	index	value	index
Industrialised countries	578	100	709	123	611	106
Developing countries	240	100	289	121	244	102
Central South America	279	100	340	122	271	97
Africa	163	100	192	118	140	86
Middle East	335	100	359	107	291	87
Asia	235	100	298	127	262	112
World	317	100	362	114	308	97

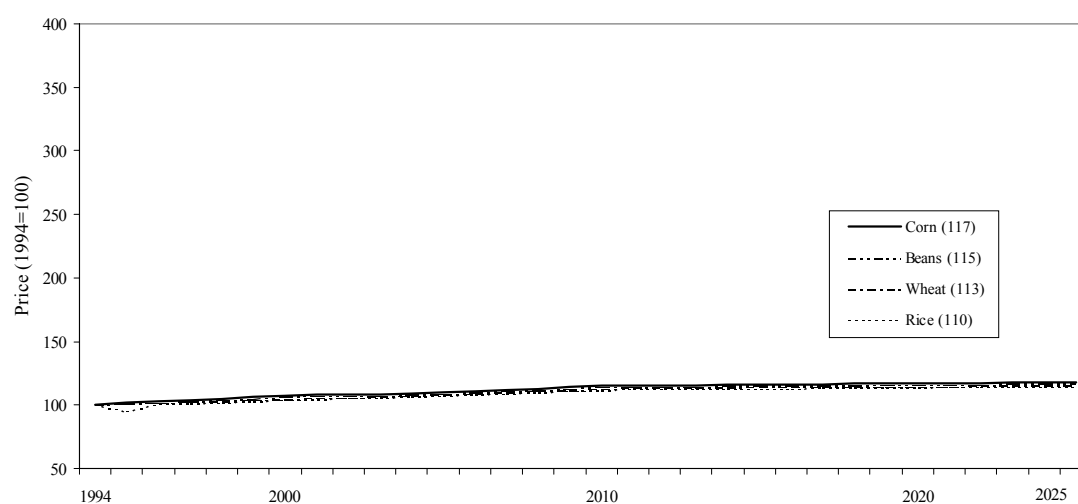
Figure 3.6 Forecast of international prices (real) of commodities – trend, 1994–2025

Figure 3.7 Forecast of international prices (real) of commodities – pessimistic scenario, 1994–2025

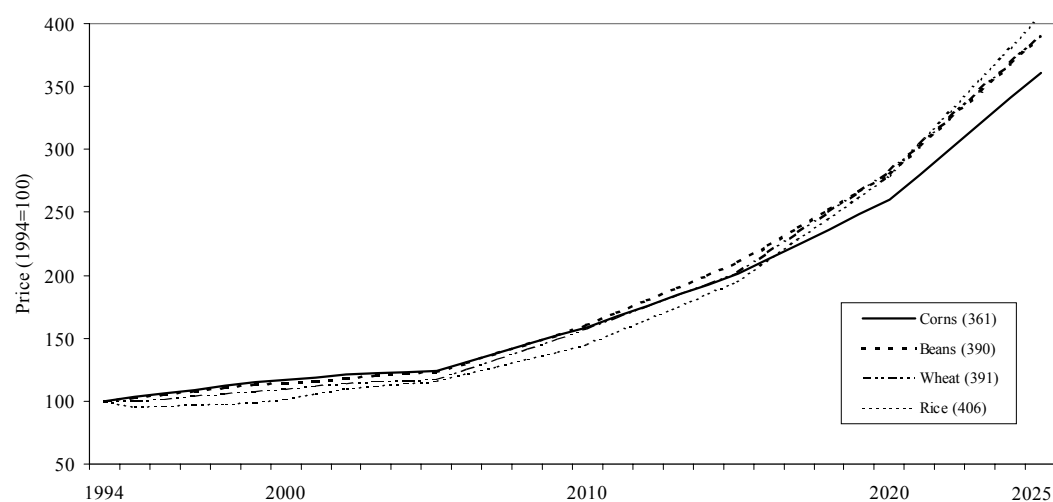
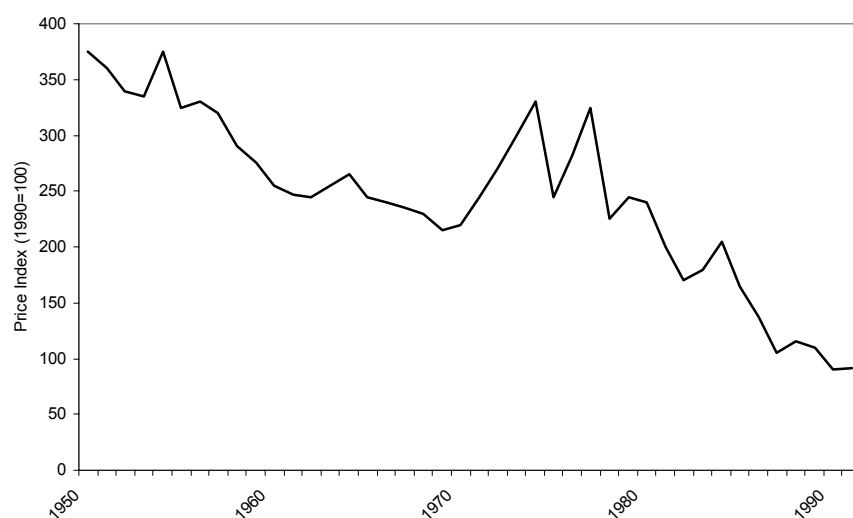


Figure 3.8 World food price index, 1950–92



nese analysis, even if only for comparing key assumptions. It would appear that Japanese analysts would welcome such information, especially on the Japanese food market. Such modelling has not been encouraged in Japan, which makes it difficult to estimate the impact of policies proposed in the new Basic Law.

Another example of the need for information concerns the multifunctionality aspects of the new Basic Law. The value of agriculture's other benefits to society has been calculated by estimating the replace-

Table 3.5 The estimated value to Japan of the multifunctional roles of agriculture (billion yen/year)

Function	Value
1. Flood control like a dam	2,878.9
2. Water recycle through irrigation system	1,288.7
3. Protection from soil erosion	285.1
4. Protection from natural disaster	142.8
5. Recycle of organic waste	6.4
6. Absorption of polluted gas	9.9
7. Cooling air in summer	10.5
8. Cultural value of rural areas	2,256.5
Total value	6,878.8

Source: National Research Institute of Agricultural Economics of MAFF.

ment values of various functions such as flood prevention, water preservation, soil erosion and landslide prevention, soil purification, and air purification (see Table 3.5). For example, the value of paddy fields in preventing floods is found by calculating the effective water storage capacity of paddy fields and multiplying this by the depreciation plus the maintenance costs per volume of water storage associated with a replacement dam.

There are questions concerning the calculation of some of these values. For example, the government states that flood-preventative benefits of paddy fields do not involve the environmental damage that accompanies dam construction (but what about greenhouse effects or that siltation decreases water capacity).⁶ It is also stated that underground water is cheaper than river water but it is not clear why this should be the case from society's point of view.

The beauty of the rural landscape and recreation amenities in the countryside are cited as other multifunctional benefits. The value of these benefits has been calculated by multiplying the population that has travelled to rural areas by the annual average number of visits and then by the average expenditure per visit. The ratio of paddy fields in total agricultural land are used to establish the likely number of visits to paddy fields.

This approach is based on a projection of consumer demand, with the overall benefits calculated by summing the area under the demand curve for individual households (the consumer surplus). When appropriately applied, this method compares well with direct surveys of these values. There are, however, questions concerning the calculation of these values. The measured costs need to reflect the benefits in terms of willingness to pay for the visit (Pearce and Turner 1990). These costs include transport

and the opportunity cost of time. Major difficulties relate to opportunity costs, for example if a car is used would it be used otherwise? It is not clear what is included in the near US\$500 average costs per visit. Meals that would be consumed otherwise should not be included, so the figure appears high for just a room. Other difficulties in measuring include whether the visit had a sole purpose or not, whether all paddy fields are accessible for visits, and a truncation bias because non-visitors who may place a value on the amenity are ignored.

It may not be a legitimate method to sum individual values as this may involve double counting in circumstances where there is difficulty in specifying direct and unique ecological–economic relationships, such as when functions overlap (Barbier 1994). For example, flood prevention involves both fostering water resources and preventing soil erosion, and since these functions are not independent, adding individual values will involve double counting.

It is important to determine the right values of these functions, as there is always a trade-off between their benefits and their costs. For example, the benefits of preserving the rural landscape and recreation amenities for visitors could be achieved with far fewer paddy fields – that is more visits to less areas. Costs also include the high costs of protection to agriculture, which are paid for by consumers rather than more directly through the budget. It has been estimated, although this figure is questionably high, that paddy fields deliver indirectly around 7,000 billion yen in multifunctional benefits, while the costs of the protectionist policies supporting the paddy fields have been estimated to be of the same order in the past (EAAU 1997). Other options such as agro-forestry, wilderness areas and golf courses may offer similar, if not greater benefits without the environmental damage created by paddy fields, such as greenhouse gas effects and water pollution. The flood control benefits of paddy fields might be better met through funding a dam. Agro-forestry may deliver the same social benefits without the economic efficiency, social welfare and environmental costs associated with paddy fields. Similarly, more direct instruments might be more appropriate in fisheries conservation rather than tariff barriers aimed at constraining trade and maintaining domestic production.

Trade also has a multifunctionality aspect. If Japan eased restrictions on its agricultural trade, the rise in agricultural imports could be accompanied by greater opportunities to export manufactures. A fall in Japan's agricultural production could benefit its environment. If agricultural markets were more open, for example, neighbouring countries could export more agricultural products and the acid rain falling on Japan from highly polluting industrial activity may decrease.

The vision for Japanese agriculture should be one of innovation and comparative advantage driven by international competitiveness. Some parts of Japanese agriculture could compete effectively if not constrained by arrangements, such as constraints on land transfers, that assist the most inefficient.

Japan's aim of achieving food security could be achieved through self-sufficiency, with the risks it entails in relation to dependence on key inputs and weather, or through diverse trade, trade and investment agreements, stockholdings, long-term contracts and key overseas investments. Stabilisation of world food supplies could be achieved in a more open environment through the use of futures markets and other financial market instruments, or through income support which does not distort markets as much.

If Japanese agriculture is to become more innovative, cooperatives and food agencies must be more market oriented. Management should be separated from ownership and inputs and marketing services could be more efficiently supplied. These agencies should not be involved in rent seeking and peripheral tasks like investing in housing loans.

Reform is made more difficult by the absence of an appropriate safety net if workers retire or leave farming. The high cost of some assets such as land, a consequence of agricultural protection, prevent farmers from leaving the sector and others from entering. The government could enact land reform, start a land bank, or provide funds to those wishing to expand their land into adjoining areas. Trade liberalisation would push down asset values such as land and improve comparative advantage measures. Structural adjustment is better achieved by retraining farmers who wish to leave the sector or providing one-off compensation payments than by continued agricultural support or many of the present infrastructure projects.

Providing information to Japanese and other policymakers on the impact of current agricultural trade and investment policies and on alternatives is a key component of achieving agricultural reform in Japan. Foreign academics could work with Japanese academics, such as those in the Council of Food, Agriculture and Rural Area Policies (Article 14-3), to analyse the Basic Law on Food, Agriculture and Rural Areas, develop analytical tools such as models, and organise academic exchanges, joint conferences and publications. Bilateral and multilateral arrangements like APEC can contribute to this process as they have in the past (see for example suggestions in PECC 1999).

The sector should be considered in broad terms. Focusing on only one issue such as rice tariffication risks the possibility of reforms in this sensitive area being avoided. Unlike the Uruguay Round that

achieved reforms through trading off reforms in other sectors, the upcoming WTO round looks as if it will consider agriculture in isolation.

3.4 Conclusion

Many issues⁷ on Japanese agri-industry trade and investment policies have been raised by the Basic Law on Food, Agriculture and Rural Areas and Japan's WTO Position Paper, and many others have come out of discussions with business, officials and academics. Included in the questions that have been raised are:

- What should be the vision for Japanese agriculture?
- How should policies be implemented, for example tariffs, quota levels, other potential barriers to trade and investment such as technical standards and quarantine arrangements?
- Are Japan's policies realistic, for example in respect of budget implications?
- Will policies be consistent across the board?
- What are the intersectoral impacts of the policies?
- What does multifunctionality mean in terms of the extent and distribution of resource use?
- What is the best means of achieving food security and stability, for example via protection, income support or stocks of products obtained at much lower cost on the world market?
- What are the main drivers of consumption trends?
- What institutions are required and how should they operate, for example in respect to food quality?
- What are the broader costs of promoting inefficient agri-industry exports?
- What is the best means of achieving required adjustment in the sector?
- Are there broader impacts on Japanese trade and foreign policy, and efficient export-oriented Japanese industries, from Japan's approach to agriculture?

There is a clear need for better information on the Japanese food market – in terms of supply, demand and prices. Analysis is required of the social benefits attributed to Japanese agriculture, and the costs associated with achieving multifunctional goals through current agricultural protectionist policies.

There are other better ways of achieving Japan's objectives, for example by using direct support to preserve agriculture's social benefits and greater competition to encourage Japanese agriculture to be more innovative. In other issues of food security, stability, the role of cooperatives and structural adjustment, more competitive approaches based on open trade and investment along with appropriate safety nets have a number of appealing features.

Finally, in terms of strategies to improve Japanese agricultural trade and investment policies, encouragement can be given to both domestic and foreign forces for change (see Amyx 2000). The Council of Food, Agriculture and Rural Area Policies could be a vehicle for academic analysis of the costs of current approaches and for researching better options. The Cairns Group has been very successful in presenting concerted viewpoints on the need to reform certain agricultural approaches. Whether internal or external pressures or both are brought to bear, experience shows that the reform process is smoother if reforms are considered broadly and in the longer term.

Notes

- 1 This paper is part of an Australia–Japan Research Centre project on Japanese agri-industry trade policies. The project will provide advice to the Cairns Group prior to the next World Trade Organisation (WTO) agricultural round commencing this year (see Trewin and Bosworth 1999). The author wishes to acknowledge the research assistance of Dr Tina Chen and Marpudin Azis. Useful comments on a draft were provided by Peter Drysdale, Malcolm Bosworth, Ivan Roberts, Pamela Fayle and participants at an APSEM/RSPAS Economics of Trade and Development Seminar. The paper also benefited from discussions with Japanese officials, academics, industry and Australian Embassy officials in Tokyo in late April 1999. The financial assistance of Rural Industry Research and Development Corporation (RIRDC) and the support of the Department of Foreign Affairs and Trade (DFAT) are also gratefully acknowledged.
- 2 Agri-industry refers to all raw and processed agricultural, fisheries and forestry products.
- 3 Livestock production has flattened out since 1990 (see Rae 1999).
- 4 Food security is defined by the Food and Agriculture Organisation as a reliable source of food at affordable prices.
- 5 It has been argued that arrangements such as export subsidies provide cheaper food to food importers but such ‘benefits’ come at a greater cost to the efficient development of all food producers, especially current and potential exporters who currently import. Higher prices would not only attract higher supplies but also a greater variety of suppliers.
- 6 This discussion ignores the important question of whether price support for rice is a cost-effective means of preventing floods, especially when much of the rice is grown on coastal plains. Multi-functionality is discussed in some detail in ABARE (1999).
- 7 For a systems framework to consider such issues, see Trewin and Chen (1998).

References

- ABARE (Australian Bureau of Agricultural and Resource Economics) (1988) ‘Japanese agricultural policies: a time of change’, Policy Monograph No. 3, AGPS, Canberra.
- (1999) ‘Multifunctionality: a pretext for protection?’, ABARE Current Issues 99.3, August, ABARE, Canberra.
- Alexandratos, N. (ed.) (1988) *World Agriculture: Towards 2000: An FAO Study*, Belhaven Press, London.
- Amyx, J. (2000) ‘The political economy of Japanese agriculture’, paper included in this volume.
- APEG (1998) ‘Asia Pacific profiles: Japan’, *Financial Times*, Singapore.
- Barbier, E. B. (1994) ‘Valuing environmental functions: tropical wetlands’, *Land Economics*, 70(2), pp. 155–73.
- Basic Law (1999) ‘The Basic Law on Food, Agriculture and Rural Areas (Provisional Translation)’, July.
- DFAT (Department of Foreign Affairs and Trade) (1999) ‘Trade Outcomes and Objectives Statement 1999’, Department of Foreign Affairs and Trade, Canberra.
- EAAU (East Asia Analytical Unit) (1997) ‘A new Japan? Change in Asia’s megamarket’, Department of Foreign Affairs and Trade, Canberra.
- Fu (1999) ‘Liberalization of the rice sector in Japan, Korea and Taiwan’, paper presented at the 25th Pacific Trade and Development Conference, Osaka, June 16–18.
- Henneberry, S. R. (ed.) (1997) ‘Foreign direct investment and processed food trade’, papers presented at the Conference of NCR-182 ‘Organization and Performance of World Food Systems’, Arlington, Virginia, 9–10 March 1995, Oklahoma State University, Oklahoma.
- Investigative Council (1998) ‘The Report Submitted to the Prime Minister by the Investigative Council on Basic Problems Concerning Food, Agriculture and Rural Areas’, Tokyo, September.
- MAFF (Ministry of Agriculture, Forestry and Fisheries) (1998) ‘Fundamental Principles of Agricultural Policy Reform’, Tokyo, December.
- Mitchell, D. O., M. D. Ingco and R. C. Duncan (1997) *The World Food Outlook*, Cambridge University Press, Cambridge.
- Pearce, D. W. and R. K. Turner (1990) *Economics of natural resources and the environment*, Harvester Wheatsheaf, London.
- PECC (Pacific Economic Cooperation Council) (1995) ‘Survey of impediments to trade and investment in the APEC region’, A report by PECC for APEC, APEC Secretariat, Singapore.
- (1999) ‘A “win-win” outcome in APEC food policy’, PECC Issues 4/1999, September, PECC, Singapore.

- Trewin, R. (1998a) 'The fallacy of food security in East Asia', APEC Economies Newsletter 2(4), Australia–Japan Research Centre, Australian National University, May.
- (1998b) 'Book Review: CAP and Environment in the European Union by F. M. Brouwer and S. van Berkum (eds)', Australian Journal of Agriculture and Resource Economics 42(2), pp. 204–7, June.
- and M. Bosworth (1999) 'Has Japanese agricultural protection had its day? Policies for the new millennium', Policy Brief, Australia–Japan Research Centre, Australian National University, Canberra.
- and T. Y. Chen (1998) 'Identifying key APEC Agribusiness Policy Issues', paper presented to the AARES Annual Conference, UNE, January (submitted to the Australasian Agribusiness Review).

4. The Political Economy of Japanese Agriculture

Jennifer Amyx, The Australian National University

4.1 Introduction

Agriculture played an important role in Japan's industrialisation. A surplus of capital in this sector provided funds for investment in manufacturing and industrial development, and technological developments in agriculture generated surplus labour to be used in other sectors. Once industrialisation took off, agriculture continued to be very important – albeit in a different way. For many years, agricultural policies played a central role in the redistribution of income across society, and in doing so supported political and social stability. These policies aimed to curb the depopulation of rural areas, support regional economies, conserve water and land conservation, and give the nation some degree of food security. Through the use of price support and trade controls, the Japanese government has given agricultural producers standards of living comparable to or even better than workers in more competitive and successful sectors.

While these policies have given the Liberal Democratic Party (LDP) a stable base of rural electoral support, they are a source of contention in the international arena. Although Japan is the world's largest importer of agricultural products, Japan's agricultural producers are the second most protected in the OECD (OECD 1996a:187, cited in George Mulgan 1998:61). Although some liberalisation has taken place in the agricultural sector, significant barriers remain to imports of rice and some other agricultural products. As approximately one-third of Japan's calorie intake comes from rice, this potentially lucrative market for foreign rice producers has drawn the most attention (Oga 1993:400), but high tariffs also remain on other products. Because Japanese exporters have benefited from trade liberalisation under the General Agreement on Tariffs and Trade (GATT), the international pressure being placed on Japan today to further open up its market to agricultural imports seems justified.

What have been the impediments to greater liberalisation of Japan's market for agricultural products? Many have been political. Agriculture has been an inefficient but politically powerful sector in Japan throughout the postwar period.

In recent years, however, there have been some important shifts in political dynamics surrounding agricultural policymaking in Japan, and a number of these changes suggest a subtle strengthening of domestic support for liberalisation. These changes include the rising interest of the bureaucracy in multilateral

negotiations, a lowered tolerance among the public for distributive policies amid prolonged economic stagnation, and the inability of current agricultural policies to meet past aims of income equalisation and food self-sufficiency. At the same time, however, there are reasons to be pessimistic: the government has propped up other sectors that are inefficient and distributive in nature, no political party coherently represents the non-farming voice, and agriculture continues to be a key base of LDP electoral support. Progress in negotiations for greater trade liberalisation may hinge ultimately on the ability of foreign interests to better understand the strategic calculations of Japanese government actors and to link up effectively with like-minded domestic interests.

This paper examines the context within which agricultural protection takes place. Three facets of the political economy of Japanese agriculture are examined: the LDP–farmer clientelistic relationship, the role of the agricultural cooperatives, and the interplay of bureaucratic interests. The paper asks how recent developments in Japan, including the stagnant economy and the planned reorganisation of central government ministries and agencies, will affect the interests and positions of these actors. In doing so, the paper sheds light on the nature of Japan’s participation in multilateral institutions such as the WTO and formulates some plausible strategies for dealing with Japan in future agricultural trade negotiations.

4.2 Votes for subsidies and price supports

The contours of agricultural policy in the postwar period can not be mapped without an understanding of the dynamics underlying electoral politics and party support bases. The high degree of protection accorded Japanese farmers began after World War II. Cheap rice flooded into Japan from its colonies for more than a decade before the war with the support of big business interests in the two major political parties (Calder 1988:231, citing Waswo 1977).

In the postwar period, agricultural policies and the political coalitions behind these policies have been very different. Redistributive support for agriculture has been combined with regional policies promoting industrial development and additional employment opportunities in rural areas. With the mechanisation of agriculture, especially of rice cultivation, many farmers were forced to find alternative full-time or part-time employment. The concentration of public-works spending in rural areas and the location of electronics and precision machinery production in the countryside provided such employment. As a result, the share of part-time farmers earning more than half their income outside agriculture has risen to a higher level in Japan than in any other major industrialised nation. These policies have enabled Japan to avoid the levels of poverty, unemployment and social distress that have appeared in many societies during periods of rapid industrialisation. Importantly, the strategy of integrating support for agriculture

with measures to provide alternative employment also enabled the LDP to wean many farmers away from agriculture without losing their electoral support.

The LDP has been in power for all but one year since 1955 and support for agriculture has long served as the party's most reliable means of obtaining electoral backing. In the early postwar period, Japan's cities were politically unorganised centres of divisive union activity, and had diverse social structures. In contrast, farmers were well organised for annual tasks of rice planting and harvesting and most belonged to agricultural cooperatives. These organisations played the role of official government agency for many grant programs (Flanagan and Reed 1996:358) and also provided ready-made bases for political organisation.

The structure of the nation's electoral system also gave politicians incentives to prioritise local constituency interests over national interests, thereby raising the salience of the farm vote. From 1947 to 1994, members of the Lower House (the most powerful chamber in the Diet) were elected by a single nontransferable vote cast in medium-sized multi-member districts. This electoral system encouraged pork-barrelling at the local level because it forced candidates to compete for votes with candidates both from other political parties and from their own party. Personal support organisations (*koenkai*), rather than local party offices, thus provided primary election campaign support. Accordingly, politicians – particularly those with less stable support networks – have prioritised constituency business over national-level issues.

Under the changes made in 1994, however, 300 members of the Lower House are now elected by the first-past-the-post system in single-member constituencies, while 200 members are elected from party lists in 11 regional constituencies according to a system of proportional representation (PR). This change was expected to shift electoral politics somewhat away from a patronage system to one more focused on national issues and interests. Yet, while the new system does make it somewhat more difficult for politicians to cater exclusively to agricultural interests, many of the characteristics of the old system remain. Individuals elected through PR must take care not to anger their party apparatus if they want to ensure a high ranking on the party list in the next election. And, most politicians elected through PR appear to aspire to election next time through the single-member component, so as to avoid dependence on the party organisation (personal interviews with Diet members, April 1999).

The overrepresentation of the rural vote and underrepresentation of the urban vote that exists in both the Upper and Lower Houses has encouraged a skewed allocation of public resources to farmers and other locally based interest groups – such as construction firms and small and medium-sized enterprises (SMEs).¹

Prior to the new districting and apportionment rules for Upper House elections in 1994, a vote in the most overrepresented rural district carried 6.5 times the weight of a vote in the most underrepresented urban district. The new system shrank the differential to 4.8 – a significant improvement but still an imbalance. The new Lower House electoral system improved upon the old,² but has not completely remedied it. In 28 rural districts, votes have double the weight of votes in some urban districts (Miyagawa 1996).

Notably, while indirect representation of the farm vote in the Diet remains strong, *direct* representation has declined considerably. Direct representation refers to members of the Diet who either hold posts concurrently in agricultural organisations or formerly served in such organisations. This decline accelerated from the mid-1980s (George Mulgan 1997a: 885–7).

Heightened electoral competition among political parties tends to empower organised interests representing reliable voting blocs (George Mulgan 1997a:898). Given that agriculture represents perhaps the most formidable organised interest in Japan, it could be expected there might be a link between the recently intensified political competition in Japan and changes in levels of agricultural support. Since 1991, numerous new parties have been formed and in 1993 the LDP was bumped out of power for the first time in 38 years. Many new parties have since disbanded or have reorganised under different names, and candidates have frequently switched party affiliations. This recent fluidity contrasts starkly with the relative stasis of party affiliations in preceding decades. Only the Japan Communist Party has retained its name and has been able to avoid major defections.

It is questionable, however, how much these developments – which seem to reflect heightened competition between parties – have been spurred by changed voting behaviour. The loss of the LDP's majority in 1993, for example, happened *before* the elections as LDP members split off and formed new parties. Further, in the 1996 Lower House election, voters essentially elected the same individuals but those individuals had changed affiliations.

Given theories of Japanese policymaking in times of perceived electoral vulnerability, the bald exchange of votes for favourable policies would not be unexpected in this period.³ The government's temporary guarantee for 1999 and 2000 of the loans of all small and medium-sized enterprises seemed to provide evidence that this is indeed taking place.⁴ The November 1999 formation of the Forum to Reconsider Deregulation, an LDP Diet group, is another development which does not bode well for liberalisation of the traditionally weak areas of the economy.⁵

A further development supporting a pessimistic outlook for the liberalisation of the agricultural sector has to do with the current dynamics of coalition politics. While the LDP's failure to win a single metropolitan-district seat in the 1998 Upper House elections reflected the party's difficulty in obtaining the electoral support of Japan's urban constituency, the LDP has since formed a three-party coalition with the Liberal and New Komeito parties.⁶ Without New Komeito, the LDP–Liberal Party ruling alliance had been short a majority in the Upper House, making the passage of any controversial legislation extremely time-consuming. With New Komeito, the coalition has stronger numbers in the Diet than has any ruling coalition since the LDP's formation in 1955. In many respects, therefore, the government is now in a position of unprecedented legislative strength.

It is not yet clear, however, what common policies – if any – serve as a foundation for the alliance between the LDP, the Liberal Party and New Komeito. New Komeito – along with the Democratic Party of Japan (DPJ), the largest opposition force – has had the most success in metropolitan districts. It was one of the few opposition parties to support the partial liberalisation of the rice market in the early 1990s and its presence in the ruling coalition might be viewed as a potential force for liberalisation.

In fact, however, the effect of New Komeito's entrance into the coalition appears to have diluted the urban voice. In its desire to remain in the coalition, New Komeito has reversed its stance on policies espoused earlier when the opposition forces displayed more strength.⁷ Thus, New Komeito's presence in the government lowers the likelihood of it linking its relatively strong urban voice with a similar voice represented by the DPJ.

If New Komeito's pressure for liberalisation is diluted, who is left to represent the non-farmer? The DPJ, the largest opposition party in the Diet since making significant gains in the 1998 Upper House election, represents a wide range of concerns including conservatives and social democrats, and therefore lacks any real policy coherence. It is held together more by anti-LDP sentiment than through some commonly held vision. While the party played a major role in the passage of ground-breaking financial legislation in October 1998, its allies in that effort now rule in coalition with the LDP. It is difficult to see the DPJ acting as an effective representative of non-farming interests. In fact, a large number of DPJ members in the Lower House represent Hokkaido – a farming stronghold.

One effect of the political instability of the 1990s, however, has been to raise the support big business has lent to forces other than the LDP. Big business has very much supported agricultural liberalisation because the government's policies in this sector have the potential to spur protectionist sentiment abroad, threatening key export markets. Prior to the political shake-up in the 1990s, the largest opposition party

was the Japan Socialist Party and big business had very little leverage to use against the LDP. After all, businesspeople did not want a socialist party in power. Today, however, a number of nonsocialist opposition parties exist, giving the business lobby more opportunity for politically voicing its opposition to the LDP's continued protection of the agricultural sector.

4.3 Tolerance of consumers and the general public

During rapid industrial development, the general public sympathised with the decline of the rural sector and tolerated agricultural protection. This was especially true when government support for agriculture was seen to play a positive role in redistributing income across society. Agriculture has been the mainstay of the Japanese economy for centuries and most Japanese still have family ties with farming. Agricultural policies no longer equalise income, however. Income inequality – based both on pre-tax and after-tax household income – rose dramatically with the onset of the bubble economy. Today, the income gap is even wider in Japan than in the United States (Tachibanaki 1998). This development has weakened popular support for direct price subsidies and price supports for farmers. Other means of support for the farming community, such as the promotion of foreign investment in the countryside, have shown greater promise both in increasing jobs and tax revenues (*Yomiuri Shimbun*, 17 July 1999).

During the nation's earlier period of rapid economic growth, household incomes increased rapidly and the proportion of income spent on staples such as rice decreased. Domestic rice prices that were five times the global average were thus less difficult for consumers to bear during the 1950s to early 1970s. Japan is now in the midst of its longest recession in the postwar period and consumers are far more price conscious, as the proliferation of '100 yen' shops and discount stores in Tokyo attests. This fact suggests less consumer tolerance for high rice prices.

On the other hand, however, consumers in Japan have long considered food safety to be even more important than low prices (see Meyerson 1994:102; Searight 1999; and Vogel 1999). This remains an issue. Yet, in the wake of incidents of deadly food bacteria and the recent controversy over dioxin levels in domestically grown produce, concerns about food safety are no longer directed only at imported food products.

Japanese consumers also differ from consumers in most other countries in their opposition to agricultural liberalisation. As Vogel (1999) documents, many consumer groups work closely with farming co-operatives and have long-standing alliances. Consumers in Japan do not identify themselves as distinct from producers in the way that consumers elsewhere tend to.

Agricultural assistance continues to be justified to the Japanese public in terms of supporting food security, providing stable prices for consumers, and protecting the environment. The current instability of the world economy weighs heavily in the minds of Japanese consumers. Japan's food dependence ratio has been repeatedly emphasised, particularly in relation to other industrial nations. As Table 4.1 shows, Japan's self-sufficiency ratio, even in grains, has decreased significantly over time. Although consumers are increasingly price conscious, they also desire food security (*shokuryo ampo*) and believe high domestic food prices may be a necessary evil. In a 1997 survey, for example, 83.4 per cent of respondents supported food self-sufficiency measures, even though these measures inflate prices (Prime Minister's Office survey reported in the *Nikkei Weekly*, 31 March 1997:7, cited in Vogel 1999:3). Complete food security is acknowledged as unrealistic, but the overwhelming opinion is that Japan should strive at least to be self-sufficient in staple products such as rice.⁸ South Korea, Taiwan and China have joined in the appeal that food should be exempted from free-trade principles.

Table 4.1 Japan's self-sufficiency ratios in grain production

	Overall self-sufficiency in grains	Self-sufficiency in staple grains
1960	82%	89%
1970	46%	74%
1980	33%	69%
1996	29%	63%

Source: MFAA 'Shokuryo Jyujyuhyo', cited in Keizai Doyukai, *Nippon no Yume to Muda* (Tokyo: Recruit, 1998), 28–9.

4.4 Agriculture's organised voice: the agricultural cooperatives

Japan's agricultural cooperatives or *nokyo* (*nogyo kyodo kumiai*) have been the organised voice of rural Japan since 1947. The Central Union of Agricultural Cooperatives (*zenkoku nokyo chuokai* or *zenchu*) presides over a multitude of local cooperatives, regional federations and special business organisations such as banks, insurance companies and trading houses. The *nokyo* were originally established to cater to the approximately 8 per cent of Japan's workforce employed in farming. Non-farmer membership in the cooperatives has increased over the years, however. Non-farmers joining as associate members have boosted *nokyo* membership in spite of the decline in Japanese agriculture. In 1994, nationwide membership was close to 9 million.

Nokyo functions extend from the distribution and marketing of rice and the supply of agricultural inputs, to the provision of banking and finance, health care, social organisations, joint-use facilities, insurance, transport, and the management of contract farming and land development. The Norin Chukin Agricultural Cooperative Bank of the *nokyo* was the principal underwriter of Japanese government bonds and in 1992 ranked seventh in the world among financial institutions in terms of assets. *Zenkyoren*, the *nokyo*'s insurance arm, ranks as the largest insurance company in the world, and *Zenno*, the *nokyo*'s trading company, is internationally active (Bullock 1997:3). Total 1991 sales put the *nokyo* at approximately 15th on the Fortune-500 list, second within Japan only to Toyota.

Although supposedly nonpartisan government-subsidised institutions, agricultural cooperatives have effectively served as election office headquarters. Nearly all farmers belong to the *nokyo*, which makes the network an effective conduit for obtaining votes. With over 2,000 branches across the country, the *nokyo* network is huge.⁹ At election time, the *nokyo* can supply thousands of campaign workers. Although the law prohibits the door-to-door soliciting of votes, *nokyo* members can visit voters on another pretext related to one of the *nokyo*'s many business undertakings and refer in passing to a preferred candidate during the visit (van Wolferen 1989:85).

The *nokyo*'s main role has been lobbying the Diet members who specialise in agricultural affairs (the *norin zoku*) for price increases for rice. The *norin zoku* then pressure members of Ministry of Agriculture, Forestry and Fisheries's Rice Price Deliberative Council on the *nokyo*'s behalf. The organisation has been able to maintain the domestic price of rice at around five times the world price, in return for farmers' support of LDP candidates in rural areas.

The composition of *nokyo* membership has changed significantly in recent years, however. Most *nokyo* farmers obtain over 80 per cent of their income from non-farming activities and only work part-time in agriculture. Farmers who focus exclusively on rice production comprise no more than 15 per cent of the membership. While the *nokyo* remain a huge lobbying force for agricultural interests, the cooperatives have demonstrated their willingness to sacrifice purely farm interests – especially those of full-time farmers – in order to remain viable as an organisation. In short, the *nokyo* have assumed the role of general purpose area cooperatives (Goto and Imamura 1993:19).

As a result, the organisation has become increasingly less popular among full-time farmers – many of whom now back local farm organisations and opposition politicians (Bullock 1997:7). Many full-time farmers would welcome greater price competition for rice, and more freedom to be able to expand into larger-scale farming activities. They tend to oppose the system of being paid not to produce (*Kankocho Jiten* 1997:737). These farmers, however, have less sway on *nokyo* policies than do part-time farmers.

The organisational strength of the *nokyo* has weakened not only because of the change in its membership, but because of deregulation and its financial difficulties. Under the Food Control Law, the *nokyo* dominated rice collection and distribution, and fees for handling, storing and distributing rice were important sources of income (Yamaji and Ito 1993:360). Under the Staple Food Law passed in 1995, farmers were able to bypass the *nokyo* as distribution agents. The lifting of the total prohibition of foreign rice imports in 1995 also weakened the *nokyo*'s influence.

During the speculative bubble in the late 1980s, the Norin Chukin Agricultural Cooperative Bank's prefectural and local branches aggressively expanded operations into real estate and other non-agricultural investments. These agricultural cooperatives found themselves sitting on huge amounts of nonperforming loans when the bubble burst. Many small *nokyo* organisations in very rural areas face bankruptcy. In 1998 a safety net, similar to the Deposit Insurance Corporation in place for banking institutions, was established for these agricultural cooperatives. The creation of a similar safety net for prefectural-level agricultural cooperatives is now being discussed due to the prominence of recent problems at these institutions. As the financial woes of these institutions and the unscrupulous nature of many of their financial dealings become more widely known, public sympathy and support for the agricultural cooperatives is likely to fall.¹⁰

Prior to the financial hardships of the local and prefectural-level *nokyo*, the profits from the organisation's banking and finance operations compensated for deficits in those areas more directly related to agriculture. The banking and finance operations now also face serious problems. One *nokyo* official stated, 'Out of the three liberalizations (rice, beef/citrus and finance), financial liberalization has had the worst impact' (quoted in Bullock 1997: 5). The *nokyo* has a huge and politically salient membership, but its interests are no longer as uniform or its organisation as robust as in the past.

4.5 Interests and actors in the central government bureaucracy

Agricultural policy outcomes are not just about LDP politics and organised interests – the bureaucracy also plays a key role. While the Ministry of Agriculture, Forestry and Fisheries (MAFF) sits at the centre of the debate over agriculture policy, it is not the only agency involved in this issue. The Ministry of International Trade and Industry (MITI), Ministry of Finance (MOF), Ministry of Foreign Affairs (MOFA), Ministry of Labor (MOL) and the Environment Agency (EA) also play important roles in the debate over agricultural trade.

MAFF is one of the most heavily politicised ministries – second only to the Ministry of Construction – and is responsible for drafting and implementing legislation, compiling annual budget requests and negotiating with the ruling party on policies related to agriculture, forestry and fisheries. MAFF is also well represented in the LDP, offering a local and national springboard for officials entertaining ambitions to run for elective office.¹¹ The presence of ex-MAFF officials has helped the LDP consolidate ties with agricultural special-interest groups and extend its patronage.

MAFF, of course, has little intention of actively advocating the deregulation of agriculture. Doing so would mean the loss of its own control and the loss of opportunities for employment for the ministry's retired officials in the hundreds of government-affiliated agencies that distribute agricultural subsidies and manage funds generated by state trade in agricultural products (George Mulgan 1998:66). Even prior to the current economic recession, however, agricultural spending was a common target for cuts to government expenditure, and MAFF cannot afford to be seen as a 'subsidy distribution' ministry forever. MAFF spending has therefore primarily been in the form of fiscal stimulus – for instance, through public works projects disproportionately benefiting rural constituencies rather than through direct price subsidies. More than half of MAFF's 1998 budget was allocated to public works.¹² In the ministry's most recent articulation of policy objectives, an increasing emphasis was placed on issues of food security and the environment.¹³

With the progress made in opening up the rice market in the Uruguay Round talks, MAFF's slogan has shifted from 'protecting farmers' to 'fostering farmers' (*nogyo no hogo de wa naku ikusei*) (see <<http://www.maff.go.jp/>>). Ironically, however, the 1999 Basic Law on Food, Agriculture and Rural Areas gives MAFF more discretion than ever before in implementing new policies. The new legislation reflects Japan's adoption of the European Union's concept of the multifunctionality of agriculture, wherein agricultural products are treated as not just tradable commodities but as having cultural, political and environmental significance.

The Ministry of Labor (MOL) has worked cooperatively with MAFF in the past and serves as a source of support for MAFF's protectionist policies and a force for lobbying for the retention of agricultural jobs. Yet, the Ministry of Labor is unlikely to be a significant part of future debates over Japan's agricultural trade policies for two reasons. The Ministry of Labor has been overshadowed recently on employment issues by MITI and various advisory councils established by the prime minister to deal with Japan's unemployment. The second reason is that the Ministry of Labor is to be merged with the Ministry of Health and Welfare in 2001, as part of the consolidation of 22 ministries and agencies into 12, and its organisational attention is currently focused on this process.

More meaningful support is likely to come from the Environment Agency. In particular, the Environment Agency is likely to strongly support MAFF's argument for limited liberalisation under the rationale that the protection of farm jobs translates into the protection of farmland and the environment. The agency has displayed a significant amount of clout recently and is to be promoted to ministerial status in 2001. The Japanese media's aggressive reporting of environmental issues such as high domestic dioxin levels has lent support to the ministry. It is likely that support for rural areas on the basis of environmental concerns will be a continuing emphasis in Japan's agricultural trade negotiations.

The MITI Minister and officials in MITI's International Policy Bureau serve as coordinators of Japan's policy in trade negotiations and tend to be blamed for breakdowns in multilateral negotiations. MITI has been pursuing a more liberal and multilateral trade agenda than in the past and represents a significant potential countervailing force to the MAFF's protectionist tendencies (Searight 1999). As Searight notes, agricultural trade issues are very important to MITI because Japan's failure to liberalise has prevented MITI from appealing to multilateral bodies for dispute resolution in cases of trade conflict. MITI's business constituency includes Japan's export-oriented manufacturing firms, which suffer if other nations close their markets to retaliate for Japan's failure to liberalise in agricultural products or other areas. Japan's partial liberalisation of the rice market in the Uruguay Round helped legitimise MITI's more aggressive pursuit of a multilateral agenda in the WTO and further liberalisation would strengthen MITI's ability to take cases to the WTO on behalf of Japanese business.

Domestic food-processing companies that use expensive domestic inputs have long pressured MITI through the Federation of Economic Organisations, or *keidanren*, for greater agricultural liberalisation (George Mulgan 1998:68).

Japan's economic woes may also provide MITI with some leverage in its dealings with MAFF. In 1996 agriculture accounted for only 1.8 per cent of Japan's GDP compared to the 23 per cent of GDP contributed by the manufacturing sector (see *Keizai kikakucho* [Economic Planning Agency], '*Kokumin keizai keisan*' [National Economic Calculations] at <<http://www.epa.go.jp/>>). Agriculture employs a smaller percentage of the population than does the small and medium-sized enterprise sector – also overseen by MITI. The current economic difficulties should provide MITI with more ammunition to use in arguments that agriculture should not be protected at the expense of sectors that contribute more to the economy.

The Ministry of Finance (MOF) also influences agricultural policies through its authority over the government's budget and national tax policies, and has long favoured agricultural reform for fiscal reasons. In the early 1980s, long before the nation's current economic woes, the MOF became increasingly

concerned about the rising intervention of the LDP *norin zoku* in the budget and the escalating cost of producer prices. MOF's efforts to rein in budget expenditures across the economy heightened in the 1990s, but its credibility suffered with the crises in the banking sector and the real economy, and in 1997 there was unprecedented intervention by the Diet in policymaking. Money has flowed out of the budget at unprecedented levels, directed primarily to public-works projects and measures to relieve the credit crunch. As soon as growth becomes positive once again, it is inevitable – particularly given the serious state of national public finance – that pressures to reduce budgetary outlays will again emanate from MOF's Budget Bureau and constrain government support for agriculture.¹⁴

Fiscal stimulus measures used by the Ministry of Finance to rejuvenate the economy have included substantial funds directed to MAFF for regional public works projects that are expected to benefit the whole economy. With increasing scrutiny of the actual effectiveness of public works in stimulating the economy, however, even this type of support can not be taken for granted.¹⁵ Farmers have long enjoyed preferential tax treatment from MOF, through lower income and land taxes, as well as through exemption from inheritance tax on agricultural land. Dwindling revenue and the overhauling of the tax system make it likely that these preferential treatments will be increasingly scrutinised and most likely moderated in the future.

Finally, the Ministry of Foreign Affairs (MOFA) may act as a check on MAFF policy aims. MOFA is well known for its wish to maintain amiable relations with the United States – relations that can be severely damaged by perceptions that Japan is maintaining unfair trade barriers. MOFA is concerned about Japan's image in the international arena and is eager to promote Japan's reputation as an upstanding citizen in the multilateral negotiating arena.

4.6 Conclusion

As the above discussion has suggested, building a domestic consensus on agricultural trade policies will involve bargaining among a number of actors – notably, elected officials, interest groups and central government administrative agencies. The power of the agricultural lobby has decreased due to the new electoral system, progress of multilateral negotiations such as the GATT, and a nationwide consensus on the need to deregulate. Yet, it is not clear by how much agricultural interests have been weakened. The agricultural sector remains very politically salient in Japan due to persisting anxiety over food shortages and dependence on imports, a continued political sensitivity to the farm vote, the desire to preserve rural employment opportunities (and thereby avoid accelerated urbanisation), and concerns about environmental degradation.

Given the constellation of interests, what should be the strategy of foreign actors seeking further liberalisation of the Japanese agricultural market? As Schoppa (1997) has shown, foreign pressure has the power to influence Japanese policy outcomes most when 'the Japanese domestic political arena offers opportunities for employing synergistic strategies that take advantage of divisions of opinion and interest on the Japanese side'. George Mulgan (1997b) confirms this, arguing that international pressure linking up with domestic forces favouring liberalisation was the key ingredient leading to Japan's substantial lowering of barriers to agricultural trade in the 1990s. Schoppa elaborates:

Opportunities for employing these strategies are greatest when foreign demands can be presented as legitimate, when demands can arguably be characterized as 'in Japan's national interest', when latent support for foreign demands can be found outside the bureaucratic and interest group circles that ordinarily dominate the policy process, and when recognized Japanese policy problems are in search of solutions.

It is important for the United States, Australia and other foreign nations dealing with Japan not to overlook the less-obvious domestic allies in liberalisation, such as Japanese rice wholesalers. While currently marketing rice to Japanese living abroad, these companies have made it clear that they hope to be able to export Japanese-style rice back to Japan (Schiffrin 1999). Agricultural interests within Japan are already taking advantage of lower-cost production overseas and looking forward to the opening of Japanese agricultural markets.

Care must be exercised in dealing with Japan as it grapples with severe economic difficulties, however. There have been some signs that Japan's recent economic difficulties have given rise to nationalistic sentiments and a move to the Right.¹⁶ Japanese society went through a period of blaming politicians for the country's problems in the first half of the 1990s. When the configuration of political parties changed and the LDP was bumped out of power, but desired results were not obtained, the public then shifted its criticism to ministries such as MITI and MOF. While this anti-bureaucracy sentiment lingers, there are signs that the next shift in public criticism may be to foreign actors. There are already signs of a 'victimisation' mentality emerging.¹⁷ Being too forceful in international negotiations, therefore, has the potential to backfire and lead instead to a defensive and defiant Japan. Many Japanese leaders emphasise that other countries such as the United States and Canada also have high tariffs, so Japan should not be the only focus of criticism.

During Japan's high-growth period, policies that stabilised rice prices and offered extra income to farm families eased the transition from an agrarian to an industrial society. Today, however, the societal transition to be made differs significantly from the one that influenced policy decades ago. It remains to be

seen how long the present system, with its symbiotic relationship between Diet members and agricultural interests, can be maintained on the backdrop of the rapidly advancing multilateral negotiations and the severe domestic fiscal constraints that Japan is experiencing. 'Reform' is the main theme of nearly every policy debate in Japan today, and it is difficult to see how any of the domestic actors described above can maintain an outright opposition to liberalisation. Liberalisation will inevitably move ahead. Yet, in a sector such as agriculture – where entrenched domestic interests now find allies in the vocal anti-globalisation sentiment that has emerged in other developed countries (and most prominently at the most recent WTO meeting in Seattle) – the pace of liberalisation will undoubtedly remain slow.

Notes

- 1 The SME sector is also well represented organisationally. Like the *nokyo*, Japan's Chambers of Commerce are located throughout Japan and have served as the redistributing locus for government subsidies to the sector.
- 2 In the 1982 Lower House election, for example, a vote cast in a rural district of Hyogo prefecture carried more than three times the weight of a vote cast in an urban district of Chiba prefecture.
- 3 Calder (1988) argues that when the government party perceives itself to be electorally vulnerable, a 'crisis and compensation' dynamic comes into play, affecting policy outputs and increasing support for particular areas such as agriculture.
- 4 In any period of economic crisis, however, it is common for a government to step in and play a greater role until the crisis abates. Thus, it is difficult to tell at this point whether this is a reversion to the past with significant implications for long-term trends or a temporary adjustment.
- 5 This group seeks relief for small companies facing hardships due to deregulation. A number of top politicians such as Kabun Muto, the LDP's leader for administrative reform, and the LDP policy affairs chief, Shizuka Kamei, are members.
- 6 Gubernatorial elections in 1995, 1996 and 1999 also saw an unprecedented number of independent candidates win governorships in Tokyo, Osaka and other major cities.
- 7 An example is New Komeito's stance on the complete partitioning of the Ministry of Finance's fiscal policymaking functions from its responsibility for private sector finance. New Komeito once supported this plan but then later withdrew its support to align itself more with the LDP.
- 8 Efforts to address this concern are seen to be necessary both on the production and consumption front. Agricultural cooperative representatives propose that Japan should have numerical targets for a calorie-based dependency ratio. Others, however, suggest that Japan's capacity for domestic production needs to be determined first before targets are set. Since self-sufficiency ratios are affected by diets, some in the government and in industry associations advocate public relations campaigns to educate Japanese about the type of diet necessary to promote national food security.
- 9 *Nokyo* branches have merged in recent years, but until just a few years ago the number of branches totaled over 3,000.
- 10 The Financial Supervisory Agency (FSA), the nation's regulator of private sector finance since June 1998, also plays a role in agricultural policies indirectly through its joint supervision with MAFF of the Norin Chukin Agricultural Cooperative Bank and of the Agriculture, Forestry and Fisheries Finance Corporation. Prior to 1998, supervision of these institutions was effectively left to MAFF. In the aftermath of the *jusen* housing and loan problems and the serious nature of financial problems experienced by the *Nokyo*, however, the new independent supervisory authority has heightened its monitoring of these institutions.
- 11 More than a quarter of Japan's Diet representatives advance to national politics after first serving as local politicians.
- 12 Although MAFF's 1999 budget reflected a 0.9 per cent rise over the previous year, this was far less than the 5.4 per cent hike in the national government budget as a whole.
- 13 In the outline of the draft 1999 budget for MAFF, three main policy goals were articulated: promoting measures aimed at enforcing the New Agriculture Basic Law, promoting development of forests to curb the greenhouse effect, and promoting a sustainable water culture that operates in harmony with the environment.
- 14 Notably, relations between the MAFF and MOF have been rather tense since the 1996 *jusen* housing and loan resolution legislation. The passage of this legislation and use of 680 billion yen in public funds was a major blow to MOF's Budget Bureau. The MOF, rather than MAFF, took the blame for the use of taxpayer money to resolve this crisis. In fact, the primary reason public funds were necessary was to prevent the collapse of the *nokyo*, which had lent considerable sums to the *jusen* and faced probable bankruptcy if the *jusen* had been permitted to fail.
- 15 Despite large budgetary outlays for public works projects in the first half of the 1990s, economic effects were much lower than anticipated. Much debate still exists for the reasons for this ineffectiveness.

- 16 These signs include the election of Shintaro Ishihara to the governorship of Tokyo, the popularity of the recent movie glamorizing Tojo Hideki, the submission with little public debate of bills making the Hinomaru flag and Kimigayo song the national flag and national anthem, and the number of books published in the past year reflecting rising nationalistic sentiments.
- 17 *Manee Haisen* (Money Defeat), by Mototada Kikkawa (Tokyo: Bunshun Shinsho, 1998) is an example of a book that is based on solid research and is well regarded among academics and the Japanese public, yet its interpretation of events is tainted with a victimisation mentality.

References

- Bullock, Robert (1997) 'Nokyo: a short cultural history', PRI Working Paper 41, Japan Policy Research Institute, December.
- Flanagan, Scott C. and Steven R. Reed (1996) 'Politics in Japan', in Gabriel A. Almond and G. Bingham Powell, eds., *Comparative Politics Today: A World View*, HarperCollins, New York.
- Calder, Kent E. (1998) *Crisis and Compensation: Public Policy and Political Stability in Japan, 1949–1986*, Princeton University Press, Princeton.
- George Mulgan, Aurelia (1997a) 'Electoral determinants of agrarian power: measuring rural decline in Japan', *Political Studies*, XLV, pp. 875–99.
- George Mulgan, Aurelia (1997b) 'The role of foreign pressure (*Gaiatsu*) in Japan's agricultural trade liberalization', *The Pacific Review* 10(2).
- George Mulgan, Aurelia (1998) 'Agriculture and fisheries', in Patrick Heenan (ed.), *The Japan Handbook*, Fitzroy Dearborn Publishers, London.
- Goto, Junko and Naraomi Imamura (1993) 'Japanese agriculture: characteristics, institutions and policies', in Tweeter et al. (eds), *Japanese and American Agriculture: Tradition and Progress in Conflict*, Westview Press, San Francisco.
- Kankocho Jiten* (Encyclopedia of Public Bureaucratic Agencies) (1997) Sangyo Chosakai, Tokyo.
- Miyagawa, Takayoshi (1996) *Shosenkyoku hirei daihyo heiritsusei no majyutsu* (Magic of the Joint Single-Member Election District/Proportional Representation System), Seiji Koho Sentaa, Tokyo.
- Oga, Keiji (1993) 'Impacts of trade arrangements on farm structure and food demand: a Japanese perspective', in Luther Tweeter, Cynthia Dishon, Wen Chern, Naraomi Imamura and Masaru Morishima (eds), *Japanese and American Agriculture: tradition and progress in conflict*, Westview Press, San Francisco.
- Schiffirin, Anya (1999) 'Japanese rice producer sticks to its investment in Vietnamese venture', *Asian Wall Street Journal*, 27 May.
- Searight, Amy (1999) 'MITI and multilateralism: the evolution of Japan's trade policy in the GATT regime', Doctoral Dissertation, Stanford University.
- Leonard Schoppa (1997) *Bargaining With Japan: What American Pressure Can and Cannot Do*, Columbia University Press, New York, pp. 6–7.
- Tachibanaki, Toshiaki (1998) *Nihon no keizai kakusa* (Japan's Economic Gap), Iwanami Shinsho, Tokyo.
- Van Wolferen, Karel (1989) *The Enigma of Japanese Power*, Macmillan Press, London.
- Vogel, Steven K. (1999) 'Can Japan disengage? Winners and losers in Japan's political economy', *Social Science Japan Journal*, Spring.
- Waswo, Ann (1997) *Japanese Landlords: The Decline of a Rural Elite*, University of California Press, Berkeley.
- Yamaji, Susumu and Shoichi Ito (1999) 'The political economy of rice in Japan', in Luther Tweeter, et al. (eds), *Japanese and American Agriculture: tradition and progress in conflict*, Westview Press, San Francisco.
- Yomiui Shimbun* (1999) 'Foreign investment revitalises local areas', 17 July.

5. Japan's Livestock Sector: Consumption, Production, Policies and Trade

Allan Rae, Massey University

5.1 Introduction

Japan is the world's leading importer of agricultural products. These imports account for around 20 per cent of Japan's total merchandise imports, which is at least double the ratio of most other countries in the Asia Pacific region. Meat, dairy products and live animals comprised 15 per cent of Japan's agricultural imports in 1996 compared with less than 7 per cent 20 years earlier. This paper reviews trends in the production, consumption and trade of livestock products in Japan, along with the policies that lie behind the structure of Japan's imports. Japan is densely populated, with a very low endowment of agricultural land, and therefore has a comparative disadvantage in agricultural production. Imports of livestock products have increased, despite the continuing heavy protection of Japan's livestock sector, because this comparative disadvantage has intensified and because consumption has been increasing.

Some policy reforms have occurred recently, most noticeably for beef, which have lowered consumer prices and boosted domestic consumption. Beef reforms could provide the direction for reforms in other sectors, as trade liberalisation has been achieved without bringing an end to domestic production. This has resulted from the adoption of new approaches to domestic support that have been less trade distorting than the policies they replaced.

5.2 Consumption trends

The transformation of diets as economic development proceeds and consumers grow wealthier typically involves a shift in consumption away from cereals to higher-value or higher-protein foods, such as meat, processed foods and fruit.

Not only do incomes and expenditures rise with economic development, other changes occur, such as migration from rural to urban regions, changes in the country's demographic structure, and improvements in transportation, communications and marketing infrastructure. Recently there has been a heightened interest in the impact of structural variables on food consumption patterns, particularly in Asia where rapid growth and dietary transformations have been taking place. Urbanisation has been shown to have significantly reduced demand for rice and coarse grains in several Asian countries, to have consis-

tently increased the demand for wheat, and to have increased the consumption of animal products (Huang and David 1993; Rae 1998).

The two decades following World War II were periods of rapid growth in incomes, urbanisation and infrastructure development in Japan. As Table 5.1 shows, the change in Japanese diets from a reliance on cereals to an increased emphasis on animal products was especially rapid before the mid-1970s. More recently the fall in cereals consumption appears to have bottomed out, while consumption of animal

Table 5.1 The transformation of Japanese diets

	Average consumption kcalories/person/day				% change from:		
	1965–67	1975–77	1985–87	1995–97	65–67 to 75–77	75–77 to 85–87	85–87 to 95–97
Cereals	1,417	1,251	1,182	1,193	-11.7	-5.5	0.9
Animal products	337	478	567	603	41.8	18.6	6.3
meat	48	95	134	161	97.9	41.0	20.0
dairy	55	93	113	124	69.0	21.5	9.7
fish	130	179	195	193	37.7	8.9	-1.0

Source: FAO 1998.

products has slowed considerably. The growth in the latter food group has been primarily because of the increasing consumption of dairy products and beef.

While per person consumption of animal products in Japan currently exceeds that in other East Asian countries (with the exception of Hong Kong), it is only 50 to 60 per cent of the consumption levels in Australasia and North America. While cultural differences no doubt influence food consumption, there does appear to be further scope for increased consumption of animal products in Japan, especially if economic growth picks up or if future trade reforms bring lower food prices. Japan was essentially an urbanised society by 1970, so urbanisation is not likely to have the effect on demand for animal products that it will in Asian economies.

Domestic production trends

Encouraged by consumer demand and government policies, the production of livestock products in Japan grew rapidly throughout the 1960s and 1970s. The parallel growth in demand for feedstuffs could not be satisfied by the domestic cropping sector and imports of coarse grains grew from 4 million tonnes

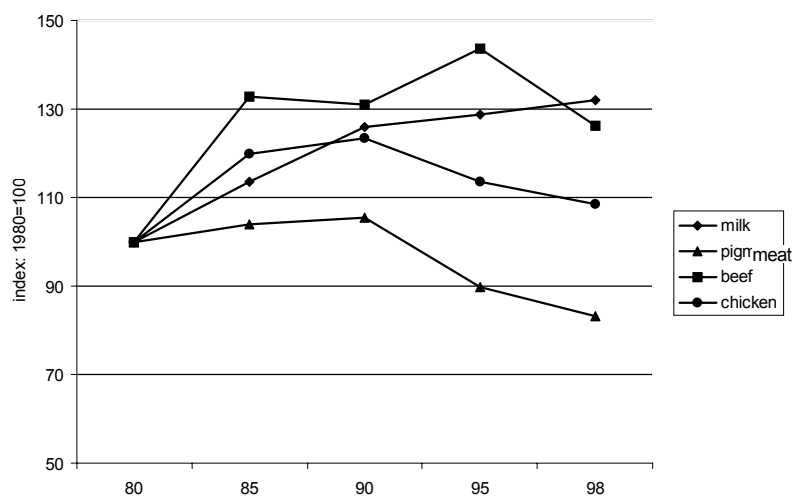
in the mid-1960s to 17 million tonnes 20 years later. Physical and economic constraints have tempered, and in some cases reversed, these production trends in recent times. Beef production was static over the late 1980s and declined in the 1990s. Growth in poultry output slowed during the 1980s and output declined in the 1990s. Pig production, which had stabilised during the 1980s, fell by 21 per cent between 1990 and 1998. Milk production has not yet declined, but output was static during the 1990s (Figure 5.1).

Livestock production has undergone substantial structural change over the past two decades. The trend to large-scale intensive farming has been especially apparent in poultry and pig production: between 1975 and 1997 the number of pig farms fell from 223,000 to 14,000 and the average number of pigs farmed rose from 34 to over 700 (Table 5.2). There have also been large increases in the size of broiler and layer operations as production has intensified.

Livestock and the environment

Pollution from livestock farming can affect the atmosphere, surface water and groundwater. Animal manure in particular is an environmental hazard due to its high concentrations of nitrate, phosphate, potassium and ammonia. Decomposition of manure can release these elements directly into surface waters or they can be leached through soil to groundwater sources. This can threaten the quality of

Figure 5.1 Output trends



Source: FAO 1998.

Table 5.2 Structural change in the livestock sector ('000s)

	1975		1985		1997	
	Number of farms	Livestock/farm	Number of farms	Livestock/farm	Number of farms	Livestock/farm
Dairy	160	11	82	26	39	49
Beef	474	4	298	9	143	20
Pigs	223	34	83	129	14	702
Broilers	12	7,305	7	21,459	4	28,579
Layers	507	230	123	1,037	7	20,879

Source: MAFF.

drinking water and cause damage to aquatic and wetland ecosystems. Livestock farming also results in emissions of ammonia and (in the case of ruminant animals) methane gases into the air.

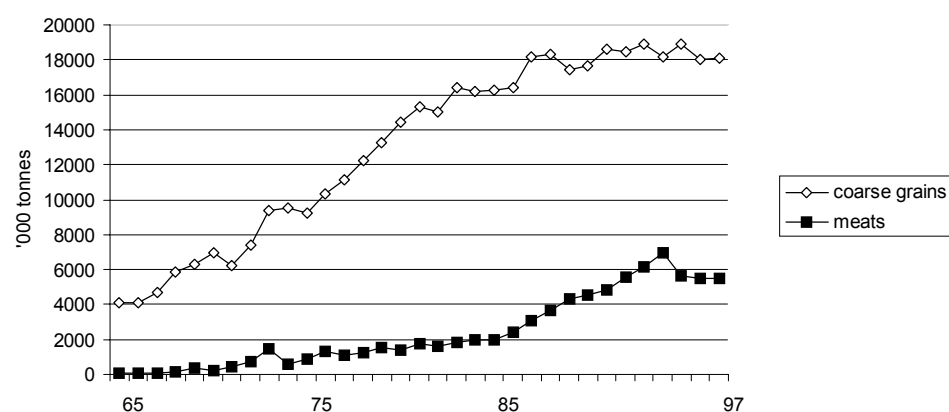
The intensification of livestock production in Japan, as elsewhere, has brought with it increasing environmental problems such as water pollution, unpleasant odours and insect infestations. The large production units are particularly blamed for these problems. Recent serious problems have included disputes over water pollution between livestock farmers and the fishing industry in the dairy farming area of Hokkaido. While the amount of nitrogen produced annually from livestock manure is about equal to the crop sector's total demand for N-fertiliser, in remote areas there is less demand for fertiliser and farmers face the problem of manure disposal (Sakurada et al. 1997). Large producers wrestle with non-profitability of investments required to meet environmental regulations on manure disposal and many smaller producers are leaving the sector (Taha 1992).

5.3 Trade and self-sufficiency trends

If actual meat imports are converted to grain equivalents,¹ total grain imports (including meat) grew by 4 million tonnes in 1965 to approximately 25 million tonnes in 1995. Most of this growth is due to the imports of livestock products since the early 1980s, as imports of coarse grains were stable (Figure 5.2). Between 1985 and 1997, imports of beef and pig meat increased fourfold, that of poultry by a factor of six, and cheese imports doubled. These trends reflected the slowdown in domestic livestock production, policy reforms and increases in consumption.

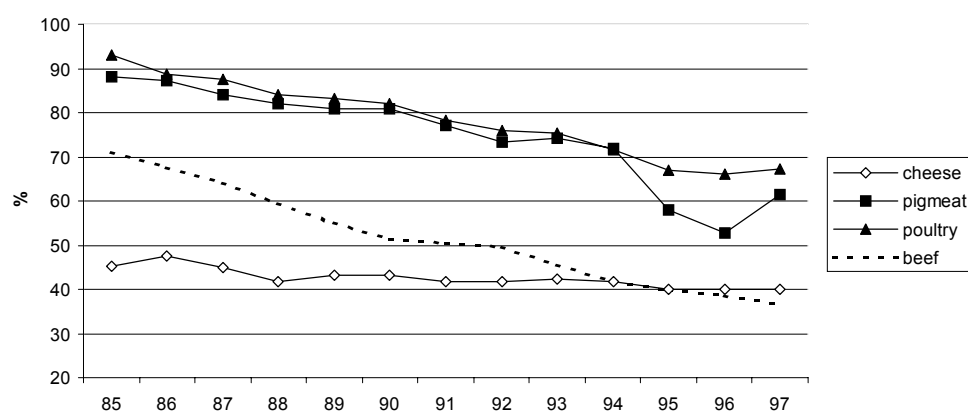
The self-sufficiency ratios for all these livestock products have fallen (Figure 5.3). By the late 1990s these ratios were 56 per cent across all meats, 39 per cent for beef, 59 per cent for pig meat and 65 per cent for poultry. For dairy products as a whole, self sufficiency had fallen to 72 per cent by the late 1990s,

Figure 5.2 Japan's imports of coarse grains and meats (grain equivalents) 1965–97



Source: FAO 1998.

Figure 5.3 Self-sufficiency trends in livestock products, 1985–97

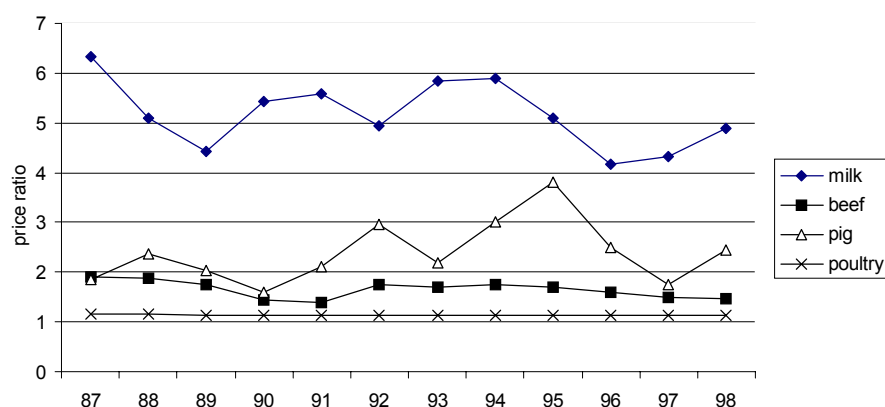


including a ratio of 40 per cent for cheese. These ratios are all substantially lower than the ratios of 15 years earlier – the Japanese livestock sector is clearly losing market share to foreign suppliers.

5.4 Livestock sector policies

The Japanese government provides support to the livestock sector primarily through border measures, such as tariffs, and administered prices. A national milk quota is operated and deficiency payments bring producer milk prices up to a guaranteed level. A deficiency-payments system also operates for calves and has been drawn upon in most years since it was introduced in 1990. While the trend has been for these guaranteed prices, and the stabilisation price of butter, to decrease in recent years, prices are still

Figure 5.4 Ratios of world prices to producer prices, 1987–98



Source: OECD 1999.

well above world levels – in 1998 producer prices for milk were almost 5 times the world price, while producer prices for pig meat and beef were 2.4 and 1.5 times the world price, respectively (Figure 5.4). A state agency, the Agricultural and Livestock Industries Corporation (formerly the LIPC), operates price stabilisation schemes for beef and pig meat, and plays a major role in the importation of dairy products.

Tariffs were reformed as a result of the Uruguay Round of the General Agreement on Tariffs and Trade. The tariff on cheese was reduced and earlier beef tariff reductions, which have contributed to lower consumer prices and increased consumption, were continued. However, import barriers remain substantial in the case of skim-milk powder – the within-quota tariff plus the mark up is equivalent to a tariff in excess of 200 per cent. The out-of-quota tariff is even higher and prohibits further trade.

As a result of these trade interventions, consumer prices of livestock products are generally much higher than world prices. Consumers pay prices for milk products, beef, pig meat, poultry and eggs that are respectively 245 per cent, 42 per cent, 140 per cent, 12 per cent and 18 per cent above world prices (OECD 1999).

Despite reductions in border protection and administered prices, the livestock sector in Japan remains heavily supported when compared with other OECD countries. Across the livestock sector as a whole, policy transfers account for around 45 per cent of producer revenue. This compares with just over 40 per cent in the case of the European Union, also acknowledged as a heavy subsidiser of livestock production. For the dairy sector in Japan, total transfers are equivalent to 80 per cent of producer revenue.

Table 5.3 Producer subsidy equivalents in the Japanese livestock sector

Commodity	1986–88	1991–93	1996–98
Milk	84	82	78
Beef	44	35	33
Pig meat	42	50	51
Poultry	12	11	11

Source: OECD (various issues).

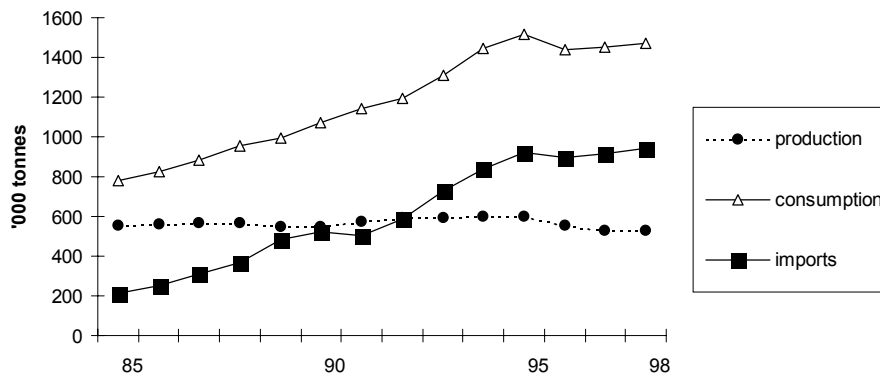
Support has been declining somewhat over recent years in the beef (in particular) and dairy sectors, but not in the pig sector (Table 5.3). Whereas the European Union in recent years has moved from price supports to less-distortive direct payments as a means of supporting farmers, this has not been the case in Japan. In 1997, 84 per cent of farmer support in Japan came from price support (compared with 85 per cent in 1986–88) – for the EU these proportions were 75 per cent in 1986–88 and 55 per cent in 1997.

Special mention should be made of the liberalisation of Japan's beef imports, as this preceded the Uruguay Round negotiations and anticipated GATT's tariffication approach to increased market access. Up until the 1980s, Japan's beef imports were regulated by quotas and tariffs. Following negotiations among the governments of Japan, the United States and Australia, agreement over beef reforms was reached in 1988. Import quotas were initially expanded, and then abandoned and replaced by tariff-only protection. The tariff was then reduced from 70 per cent in 1991 to 50 per cent two years later. As a result of lowered domestic consumer prices due to the removal of quotas and reductions in tariffs, but also no doubt to continuing trends in incomes, tastes and demographics, beef imports and consumption have increased. Beef consumption has doubled since 1985 (Figure 5.5), with consequent improvements in consumer welfare. The Japanese government still assists beef farmers but in less trade-distorting ways – lower consumer prices have enabled imports to expand and the introduction of a deficiency-payments program has helped maintain farm incomes. Thus domestic production changed little after the introduction of the beef reforms, with 1996–98 production just 5 per cent less than that of 1986–88.

5.5 A projection to 2005

Projections of macro variables and productivity growth can be incorporated into an applied general equilibrium model to predict national and regional production, consumption and trade flows between 1995 and 2005. The GTAP-4 model is a relatively standard, multiregion model that distinguishes sectors by their intensities in five primary production factors: farmland (agricultural sectors only), natural re-

Figure 5.5 Beef trends, 1984–98



Sources: FAO 1998; WTO 1995; and <www.maff.go.jp>.

sources (extractive sectors only), capital, and skilled and unskilled labour (Hertel 1997). In trade, products are differentiated by country of origin, allowing bilateral trade to be modelled.

The 50 commodities in the GTAP-4 database have been aggregated into 14 commodity groups. The feedstuffs group is composed of six commodities (rice, wheat, other grains, oil crops, other crops and processed food). Livestock farming is represented by beef cattle (ruminant livestock), other livestock (non-ruminants) and raw milk production. These farming sectors provide inputs to the beef processing (ruminant meat), other meat (non-ruminant meat) and dairy products industries in each region. All remaining production sectors are aggregated into manufactures, services, or other natural-resource-based commodities.

Projections are made by imposing exogenous shocks to endowments of capital, skilled and unskilled labour, population, and productivity for each of the 11 regions. Appendix Table 5.1 reports the shocks that are assumed. Projections for population, capital stock, and the labour force are based on the most recent World Bank forecasts (spring 1999). Projected changes in skilled labour for developing countries are based on expected increases in the stock of tertiary-educated labour and are taken from Ahuja and Filmer (1995). Projections for the OECD countries are from the World Bank (1997). The stock of farmland in each region is held constant.

Relative cross-country changes in livestock productivity are measured and incorporated into the projections (Hertel et al. 1999). Due to the lack of cross-country data on total factor productivity in livestock production, a partial productivity measure was employed. This is meat output per head of inventory for pigs and poultry, production per head slaughtered for beef, and milk production per cow in the case of

dairy farming. These measures showed that Japan's livestock sectors approached and in some cases surpassed North American productivity levels prior to the 1980s. Since then, relative productivity has been maintained in beef and milk production, but not in non-ruminant production.

To forecast non-livestock productivity growth, an approach is adopted that is simple, transparent and can be easily modified. Bernard and Jones (1996) show that productivity growth tends to be more rapid in agriculture than in manufacturing, which in turn has a higher productivity growth rate than services. Based on their averages for the OECD as a whole (Bernard and Jones 1996, Table 5.1), the following multiples of the manufacturing productivity growth rate can be obtained for other sectors: agriculture (non-livestock) = 1.4, services = 0.5, and mining = 0. In this way, productivity growth in each sector of the economy has a common measure – namely productivity growth in manufacturing.

The economies are then divided into four groups according to their overall annual rate of productivity growth: low (0.25 per cent), medium (0.75 per cent), high (1.25 per cent) and very high (1.75 per cent). The low-growth group includes Japan, Southeast Asia and New Zealand. The medium-growth group includes the United States, Sub-Saharan Africa and the rest of the world. Higher productivity growth rates are foreseen for Australia, the European Union and South America. Finally, Korea and China's productivity growth rates are expected to remain quite high – although they will be somewhat lower as this data is from the period prior to the Asian crisis. As a check on the plausibility of these assumptions, the baseline cumulative GDP growth in the model (second to last column) can be compared to that forecast by the World Bank, in the last column of Appendix Table 5.1. Apart from China and Korea, all the projections are reasonably close.

Such projected income growth will tend to boost the demand for livestock products relative to grains, and in some regions there will be a strong shift away from traditional food products. On the supply side, the accumulation of skilled labour and capital in some regions can be expected to continue to promote the shift of activity away from agriculture and toward manufacturing and services.

Finally, it should be noted that the projection holds all policies unchanged, since a comprehensive set of post-Uruguay Round tariffs for the GTAP-4 database is not yet available. For agriculture, it could be argued that the barriers to trade at the end of the Uruguay Round will be the same as those in 1995, given evidence of 'dirty tariffication', but barriers may fall. Liberalisation of textiles and industrial trade under the Uruguay Round agreements could also raise income growth rates in several countries, including Japan, and hence demand for livestock products. Thus we may be underestimating the growth in agricultural imports such as beef and dairy products to Japan. However, the projections do not incorporate adjustments due to the agreed phase-out of the Multifibre Agreement – this could increase world trade in

these commodities although it may have only a small impact on income growth in Japan (Anderson et al. 1997). The results reveal that Japanese agriculture will continue its relative decline over the projection period. The contribution of the grains sector to GDP contracts by between 4 per cent and 8 per cent. The contribution of processed livestock products contracts less, by between 1 per cent and 3 per cent for meat and dairy products. The manufacturing sector's share of GDP declines by 1 per cent, partly because of Japan's relatively low productivity growth in this sector. The major output expansion projected in Japan is in the other-natural-resources sector (including forestry, fishing and minerals), whose share of GDP is projected to increase by nearly 12 per cent. The services sector also expands.

Table 5.4 Projections of the Japanese livestock sector, 1995–2005

	% change in		Trade Balance (US\$ million)		
	Quantity domestic sales	Quantity imports	Initial 1995	Projected change	Final 2005
Beef	7.5	7.5	-4347	-431	-4778
Poultry & pig meat	5.8	8.4	-6383	-815	-7198
Dairy	7.4	6.6	-845	-52	-897
Coarse grains	0.4	6.8	-3056	-311	-3367

The volume of domestic sales of beef and dairy products expands over the 10-year period by 7.5 per cent, with the import volumes growing by a similar percentage (Table 5.4). While domestic sales of non-ruminant meats are projected to expand by just under 6 per cent, imports rise by 8.4 per cent. Japan's trade balances for beef, non-ruminant meats and dairy products all deteriorate due to the rise in both the volume and the price of imports. The results show trade balances for beef, non-ruminant meats and dairy that are 10 per cent, 13 per cent and 6 per cent below the 1995 balances, respectively. Meat imports are projected to grow faster than grain imports, continuing recent trends.

Even without a further reduction in agricultural support and trade protection, the contribution of the agricultural and livestock sectors to GDP continues to fall. Imports of livestock products continue to expand and therefore there is no increase in self-sufficiency in this sector.

5.6 Conclusion

The Japanese livestock sector remains heavily protected from international competition, despite recent reforms. The production of livestock products has stagnated or declined over recent years in response to

economic and environmental constraints. Japan's reliance on imported grains has reduced its overall agricultural self-sufficiency to around 40 per cent. In the 1980s Japan's imports of feedgrains levelled off, but imports of meats and dairy products grew at a faster rate. Hence self-sufficiency in livestock products has declined, substantially so in the cases of beef and pig meat.

When the Japanese economy recovers from the current recession, income growth rates are more likely to reflect those of other industrialised economies rather than those of the newly industrialising economies. As Japan is now highly urbanised, any growth in consumption is more likely to come from a fall in prices should the current high protection be reduced. This occurred after trade policy reforms in beef and cheese. Even if there are no policy reforms, the GTAP-4 model indicates that demand will grow as income grows, and imports may also increase as productivity in Japan's livestock sector declines further.

Projections of the Japanese economy indicate that, even without policy reforms, self-sufficiency and the trade balance in livestock products will continue to fall, especially in non-ruminant meats. If Uruguay Round reforms are successful, self-sufficiency will decline further and import volumes will grow even faster.

Despite some recent reductions in guaranteed prices and tariffs (for beef and cheeses) Japan's livestock sector remains one of the most highly protected in the world. Moreover, protection is delivered primarily through price support, which distorts output, consumption and trade volumes. Demand has been hampered by substantial policy-induced gaps between consumer prices in Japan and those in less-protected economies.

Japan's beef policy reform is indicative of what might be achieved in other livestock sectors. Tariffication of former non-tariff barriers and subsequent reductions in tariffs have reduced consumer prices. Consumption has risen, increasing consumer welfare. Imports have also risen, easing international frictions. And the beef production sector has been able to survive with the help of other government support, including a deficiency-payments scheme.

Domestic fiscal constraints and international pressures are likely to combine to force further reductions in government support to the livestock sector. In addition, the emergence of environmental problems associated with livestock production in Japan could also weaken popular support for the protection of domestic livestock farming. The beef example suggests reforms can bring benefits to consumers without distorting production or hurting farmers.

However, perhaps in opposition to the above forces, the political shift in Japan (and elsewhere) toward preserving the countryside could give rise to a new politics of farm protectionism. As coined by the European Union, the term multifunctionality refers to the recognition of the need to support the multiple roles of agriculture within society. In addition to the production of food and fibre, such roles might include the preservation of the rural environment and the maintenance of rural society. Japan's new Basic Law on Food, Agriculture and Rural Areas, for example, gives direct payment to farmers in disadvantaged hilly and mountainous areas (OECD 1999).

Such public goods and positive externalities are being promoted by governments and interest groups as reasons for continuing public support of the agricultural sector. The policy instruments through which such support might be delivered require careful assessment, in terms of their impact on international trade and whether they achieve these multifunctional goals. The next WTO round of agricultural trade negotiations offers an opportunity to restrict the adoption of such instruments to those that have minimal impacts on agricultural exports and imports.

Appendix Table 5.1 Annual growth rates of exogenous variables used in the projections and GDP growth

	Population	Unskilled	Endowments Skilled labour	Capital labour	Non-agri- cultural productivity	Forecast GDP	World Bank forecast
Australia	0.91	1.04	4.72	1.59	0.75	3.0	2.9
China	0.75	1.06	3.33	8.22	1.75	6.3	6.9
Japan	0.18	-0.26	2.57	0.33	0.25	0.8	0.9
Korea	0.74	0.64	4.74	1.53	1.75	2.9	3.4
New Zealand	0.73	0.71	4.72	2.28	0.25	2.3	2.3
South East Asia	1.36	1.89	6.27	2.31	0.25	2.6	2.6
North America	0.78	0.89	3.02	3.04	0.75	2.7	2.5
European Union	0.09	0.02	3.02	0.76	1.25	1.9	2.3
South America	1.37	1.94	5.50	0.96	1.25	2.7	3.0
Sub-Saharan Africa	2.55	2.84	5.97	1.05	0.75	3.0	3.3
Rest of World	1.38	1.86	5.45	2.47	0.75	3.2	3.2

Source: Hertel et al. (1999).

Note

- 1 Net import volumes of beef, pig meat and poultry were converted to grain equivalents by multiplying by factors of 7, 4 and 2 respectively.

References

- Ahuja, V. and D. Filmer (1995) 'Educational attainment in developing countries: new estimates and projections disaggregated by gender', *World Bank Policy Research Working Paper 1489*, World Bank, Washington DC, July.
- Anderson, K., B. Dimaranan, T. Hertel and W. Martin (1995) 'Asia-Pacific food markets and trade in 2005: a global, economy-wide perspective', *Australian Journal of Agricultural and Resource Economics* 41(1), pp. 19–44.
- Bernard, A. B. and C. I. Jones (1996) 'Productivity across industries and countries: time series theory and evidence', *Review of Economics and Statistics* 78, pp. 135–46.
- FAO 1998, FAOSTAT Statistical Database, Food and Agricultural Organisation, Rome.
- Hertel, T.W. (ed). (1997) *Global Trade Analysis: Modeling and Applications*, Cambridge University Press, Cambridge and New York.
- Hertel, T. W., A. Nin-Pratt, A. N. Rae and S. Ehui (1999) 'Productivity growth and "catching up": implications for China's trade in livestock products', presented at the Second Annual Conference on Global Economic Analysis, Denmark, 20–22 June.
- Huang, J. and C. C. David (1993) 'Demand for cereal grains in Asia: the effect of urbanisation', *Agricultural Economics* 8, pp. 107–24.
- MAFF (Ministry of Agriculture, Forestry and Fisheries), Tokyo, see <<http://www.maff.go.jp/>>.
- OECD (Organisation for Economic Cooperation and Development), *Agricultural Policies in OECD Countries*, OECD, Paris (various issues).
- Rae, A. N. (1998) 'The effects of expenditure growth and urbanisation on food consumption in East Asia: a note on animal products', *Agricultural Economics* 18, pp. 291–9.
- Sakurada, M., S. Syogenji and F. Egaitzu (1997) 'Environmental constraints to Japanese agriculture', Ch. 3 in A. D. Meister and A. N. Rae (eds), *Environmental Constraints to Pacific Rim Agriculture: Further Evidence*, Agricultural Policy Proceedings No. 19, Massey University, June.
- Taha, F. A. (1992) 'Environmental constraints in East and Southeast Asia: potential for changing patterns of agricultural production and trade', pp. 47–52 in *Pacific Rim Agricultural and Trade Report*, Agricultural and Trade Analysis Division, Economic Research Service, USDA, RS-92-2, Washington DC.
- World Bank (1997) *Global Economic Prospects and the Developing Countries*, World Bank, Washington DC.
- World Trade Organisation (1995) *The International Markets for Meat 1994–1995*, World Trade Organisation, Geneva.