

**Multifunctionality and Direct Payments to Japanese Farmers
in the Context of International Trade Negotiations**

**by
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Protect Agricultural Multifunctionality such as Food Security,
and be Neutral to Production***

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The Government of Japan, prompted by external pressure resulting from the GATT (General Agreement on Trade and Tariffs) negotiations known as the Uruguay Round, and current WTO (World Trade Organization) negotiations known as the Doha Round, has gradually been changing from a coupled price support policy (one in which payments are made to farmers based on commodity prices) to a decoupled direct income payment policy. The decisive stage was reached in FY2007, when payments began to only be given to large scale individual farms (more than 4 hectares) and large scale “hamlet” (meaning community based producer cooperative or association) farms of more than 20 hectares (MAFFa and MAFFb 2007).

The direct payment approach is considered to be a production-neutral program and thus is an acceptable “Green Box” policy as opposed to price or product support policies that are considered the most trade distorting and designated as “Amber Box” policies. There are numerous acceptable ways in which direct payments can be made so that multifunctional aspects of rural areas can be met, household income protection policies can be formulated, and production efficiencies and productivity can be achieved. The direct payment approach has been utilized at various levels and is in various stages in most countries and regions (such as the European Union) where farm subsidies and other support have been part of farm policies. However, it appears that Japan is the only country with a very restrictive numerical policy aimed at radical structural adjustment designed to dramatically increase farm size, reduce production cost and substantially increase its food self-sufficiency rate (FSSR).

Japan’s direct payment policy is considered draconian by some because, as of 2007 when the phase-in of the direct payment program enters the fourth and final stage, income payments will only be made to 400,000 large farms out of a total of about 3 million farms in the nation (Tsuji, 2007). Some small farms will be included in the selected hamlet farms but, nevertheless, Tsuji calculates that “about two million small family farms will not be included, and they will disappear during the structural adjustment policy reform starting in 2007.”

There are several rationales behind Japan’s speeding up of what might be called its “decoupled direct payment policy with Japanese characteristics.” One is that its food self-sufficiency rate fell to 40 percent (caloric basis) in 2002 from 43 percent in 1995, and remained there through 2005 before dropping to 39 percent in 2006. The second is continued pressure to shift policies away from the Amber Box to the Green Box. The third, and surely most important, was great concern about expanded market access as part of a Doha agreement that would result in Japan having to drastically reduce tariffs on its agricultural and food imports. Japan’s legislators have also been under great pressure to significantly reduce expenditures in face of a huge domestic debt, a lackadaisical economy and a rapidly aging society. Those factors have led to a rather simplistic belief in “efficient” large scale farms as a panacea to (1) not only stop the decline in the FSSR but pull it to 45 percent and (2) reduce production costs so dramatically that Japan will become competitive internationally in crop and livestock production.

The purpose of this paper is to place Japan's deep interest in the multifunctional aspects of agriculture and its abrupt change to major changes in this agricultural structure through its direct payments policies (MAFFa, and MAFFb, 2007) in the context of Japan's situation in global trade negotiations and in the creation of bi-lateral free trade agreements (FTA).

Some of the issues considered include:

- Realistically, can Japan significantly reduce its production costs by the direct payment policy?
- Will the direct payment program be harmful, helpful or neutral to Japan and its society, particularly from an agricultural multifunctionality viewpoint?
- To what extent will aged people in rural areas be hurt by the direct payment program?
- What is food security in a Japanese context?
- What are options for Japan from an international trade standpoint?

Japan's Food Production Systems: Hard Reality

There are great pressures for Japan to further open its borders to agricultural imports from nations with which Japan is negotiating FTA's as well as within the WTO. A big question is the extent to which it can withstand reduced tariff and non-tariff barriers. A major part of the equation is makeup of Japan's agricultural structure and its costs of production. The following is intended to explain why Japan, even with its direct payments policy aimed at increasing the average size of farms cannot reduce its cost of production sufficiently to combat a significant reduction in import tariffs much less increase its food self-sufficiency rate.

Comparative Advantages: Netherlands, United States and China

Each country has comparative advantages and disadvantages in natural resources and in agriculture. Many countries have a low population density, and enjoy a high food self-sufficiency rate in numerous commodities. For example, France had a very low population density of just 3.2 persons per ha of arable land, and a food self-sufficiency rate (caloric basis) of 130 percent in 2002 (latest data available, MAFFc, 2007, and Table 1). The corresponding figures for Germany were 6.9 persons and 91 percent self-sufficiency. They were 1.5 persons and 119 percent in the U.S., and 9.4 persons and 74 percent in the UK. China had 9.0 persons per ha of arable land and an estimated (by the author) FSSR of 95 percent plus.

Japan, in contrast, had 27.8 persons per ha of arable land, and only 40 percent self-sufficiency. Clearly, Japan's small size and extremely high population density are major reasons for its low food self-sufficiency ratio. But, what about other countries with relatively high population densities?

Let's take the Netherlands as an example of a relatively small major food-exporting nation. Japan is about 10 times larger than the Netherlands. But, because Japan is so mountainous and the Netherlands is almost completely flat, only 14 percent of Japan's land is classified as agricultural (which includes arable permanent crops and permanent pasture) compared with 58 percent of the Netherlands (Table 2). Japan has

very little permanent pasture (1 percent of its agricultural area) while the Netherlands has a great deal (31 percent). Just 12 percent of Japan's agricultural land is considered arable compared with 27 percent of the Netherlands. These are reasons why the Netherlands has an arable land population density of 18 people per ha, while Japan has 28 people per ha—65 percent more than the Netherlands—and yet the Netherlands has a food self sufficiency rate of 67 percent!

It is true that the Netherlands' 18 people per ha of arable land is relatively high when compared with China's 10 people and the USA at 1.5. However, flat terrain in the Netherlands, large farms, large fields conducive to irrigation (62 percent of its agricultural land is irrigated compared with 59 percent in Japan), and use of large size machinery are some of the invaluable factors of production which has permitted the Netherlands to attain economies of size necessary to be a relatively low cost producer.

Farms in the Netherlands are extremely large compared with Japan, 20 ha on average opposed to 2 ha in Japan, although modest compared with the average of 200 ha in the U.S. It is important to realize that the general trend in the European Union (EU) towards farms averaging 50 or more ha continues in the Netherlands as well. From an economic point of view, large holdings are ones that are physically large (such as those in the UK) and/or intensive farms like those in the Netherlands.

Japanese still generally retain the myth that farms in Europe are quaint small ones struggling to survive. The hard reality is they are not. Rather, even though the vast proportion is family owned or operated, they have considerable economies of size that Japan cannot conceivably match in the foreseeable future. Furthermore, farm layout and cropping systems are completely different. The Netherlands has large fields and even if land is rented from a neighbor there is ready access to it. In contrast, Japan is primarily a rice based agriculture in which even large size farms are divided into small plots with bunds separating them to accommodate flooding the rice in its early growing stages. The result is machinery is quite small compared to western farms resulting in high operating and ownership costs per unit harvested.

A very serious consideration in comparison with western farming is that in Japan plots of land owned or rented by an individual farmer are often spatially separated, particularly as farm size grows, and the distances can be considerable leading to significant increases in labor and other operating costs. This scattering of plots cropped by a farmer as he or she increases in size is one major reason why the increase in economies of size is relatively small.

The Netherlands has a few other factors on its side as well. One is great specialization in a few major commodities, such as pig production. Its urban areas are quite separated from most agricultural production, and appropriate cropping systems support use of pig manure for fertilizer (a big problem in densely populated Japan).

Transportation costs are another significant factor. They are quite low in the Netherlands both for service to domestic consumers and for exports. Ports are readily accessible from almost anywhere in the Netherlands, a clear advantage for international trade. In contrast, transportation costs are extremely high in Japan due to very heavy congestion on most roads, rural as well as urban. Nearly three quarters of the nation is mountainous, which has resulted in very high tolls on highways.

The relatively large amount of pastureland in the Netherlands (an average of 16 persons per ha verses 298 in Japan) also allows it to specialize in production of beef,

much of which is exported. Production is equivalent to 34 kg per capita while consumption is 20 kg per capita. Being a member of the European Union is another important card held by the Netherlands due to its Common Agricultural Policy (CAP) in addition to ready access to nearby countries. In summary, comparative advantage in resources is an indispensable advantage to determining the extent to which a country will be a net exporter or net importer of agricultural commodities.

Japanese feel uninformed about their nation's agriculture and agricultural policy. They are not alone. Two surveys carried out in mid 2001 revealed that only 50 percent of Europeans had ever heard about the CAP. Despite this, almost half of the general public surveyed said European governments should boost spending on agriculture. Furthermore, over 90 percent of the general public in the EU recognize the importance of agriculture and want to learn more about it. A significant aspect of the two surveys is that both the general public and farmers put food safety and environmental protection as their top goals for farm policy. Both groups in the surveys regarded protection of farm incomes and small farms as being inadequate, and support protecting farm incomes and ensuring the competitiveness of European agriculture in international markets (Simpson, 2002).

One reason Europeans are so favorably disposed to support high spending levels on agriculture is because farming has come to be really appreciated for its multifunctional aspects and as a scientifically based profession. An increasing number of young farmers are four-year university graduates, and in some countries such as Denmark, farmers receive licenses to prove their skills. In contrast to most Japanese, Europeans place a great deal of attention on protection of the environment—both urban and rural. They strongly value beauty, both human made and natural, and are proud of their culture, nations and the communities where they live. I really believe that if surveys were available, it would show that nearly all Europeans believe that **food is life**. This is why they generally, and several countries specifically, support Japan's proposal for a multifunctionality approach in the WTO negotiations.

Very low population density in the U.S. (1.5 persons per ha of arable land) is the main reason for its 119 percent food self-sufficiency ratio. A comparative advantage in cereals exists due to soils and climatic conditions, which allows most crops to be produced without irrigation. In fact, only 12 percent of arable land is irrigated, (compared with 60 and 62 percent in Japan and the Netherlands, respectively). Low population density and geographical conditions have also allowed the U.S. to develop an awesome interstate highway and goods distribution system that results in very cheap truck transportation costs. For example, calves are economically shipped 2,000 km or more to a feedlot for fattening, then another 500 or 1,000 km to a slaughterhouse, and then thousands more km to processing facilities and ultimately retail outlets.

The China Factor

Japan is increasingly becoming tied to China as a trading partner in terms of all commodities. In agricultural products, China's proportion of all exporters to Japan grew nearly 50 percent in the decade 1996-2006, from 9 percent to 13 percent (MAFFa, 2007). That may not seem like a lot, but it is concentrated in a few commodities, particularly vegetables, fruits and fishery products. Japan's trading and other companies have increasingly set up bases in foreign countries and China is one of the major ones in which food tie-ups are very large businesses. So, what is the problem? Again, why worry

about a few onions? Why worry about dependence on one country? After all, shifts in trade advantage are natural, and negative impacts on farmers in affected countries are everyday occurrences all over the world. Is this a problem? The answer is yes, and particularly with neighboring China (Simpson and Yamada, 2004).

There are a number of misconceptions about China. One is that it is a heavily populated country with a high population density. Actually, it has 9 persons per ha of arable land, less than in the UK, not much more than the 7 persons in Germany, and half that of the Netherlands (Table 1). China also has vast areas considered as permanent pasture and has a population density of just 3 persons per ha of it, much less than the 16 persons in the Netherlands (although there are clearly differences in quality) and miniscule compared to Japan's density of 298 persons.

Another misconception is about China's agricultural structure. It is widely believed that China's agriculture is an Asian type system. This is wrong as it has much more similarity to European systems. One of the paradoxes is that while statistically farm size in China is very small, in reality effective production sizes of crop land are really quite large. This is because, like the Netherlands, the fields are very large, even irrigated ones. In the major cropping areas, many families cultivate the same field so that an outsider would not know where one household's land begins and ends. There is also considerable cooperation between households. Increasingly, there is contracting of major tasks such as land preparation, planting and even harvesting using large and efficient machinery. In effect, as the economy grows and as the value of labor increases, mechanization will continue to keep costs low. Japan has little possibility for these cost reductions and/or savings.

Japanese Agricultural Structure Farm Household and Population Changes

Japanese agriculture, as in most developed countries, only accounts for about 2 percent of GDP. It is relatively mechanized, but rather than being large-size, is extremely small scale (2 ha per household on average), and in many respects its structure resembles that of other Asian nations except China.

Japan's farm household numbers—which really means rural households, dropped from 4.7 million in 1980, to 3.0 million in 2002, a 34 percent decline over the 22-year period (Table 3). They are dropping at about 2 percent annually. The ratio of farm—rural—to total households declined from 13 percent of the total in 1980, to 6 percent in 2002 as the agricultural sector has restructured, and as the proportion of imports has increased.

Rice accounts for about 25 percent of all Japan's agricultural output (value basis) and utilizes about 40 percent of its arable land area. Per capita consumption of rice has been declining while yields have been increasing. As a result, contrary to popular opinion, agricultural land increasingly lying fallow is not because of farmers aging or a lack of interest in farming. Rather, to a large extent, it is because rice surpluses are such a chronic problem that enforcement of rice production reducing policies is one of the Ministry of Agriculture's greatest headaches. The changes have been significant. For example, in 1985 there were 2.3 million ha planted to rice. By 2000 it had declined 24 percent to 1.8 million ha. Production declined 17 percent over that period to 9.5 million tons in 2000.

Commercial Farms

At least 80 percent of the 3.0 million Japanese “farm” households produce at least some rice, although only 42 percent sell it. Three quarters of farm households (about 2.2 million out of 3 million) are classified as “commercial.” But, care is called for because classification as commercial only means the household has at least 30 *Ares* of land (about a third of a hectare) and annual sales of 500,000 yen or more. That is very small. To put it in perspective, 30 *Are* is a parcel equivalent to 30 X 100 meters (about the size of 2 residential lots in Japan). If high quality rice were produced on it and sold, the proceedings would about equal the minimum sales requirement. Interestingly, 24 percent of consumers bought rice directly from farmers in 2002 according to a MAFF survey.

Full time Farm Households

In 2002 only 14 percent of all farm households were considered full-time, and many were very small regardless of the type farming activity they engaged in. There were only 623,000 full time farm households in Japan in 1980, and by 2000 that number had fallen to 426,000, a 32 percent decline. However, since then there has been a steady growth in this size category, reaching 439,000 in 2002.

Part time Farm Households

About 11 percent of households classified as “farm” are part-timers, mainly engaged in agriculture. The remaining 75 percent of “farm” households are classified as rural, and have virtually no farming activities.

Agricultural Production Costs: Can Japan Compete?

Small is beautiful, particularly in rugged mountainous Japan but, unfortunately, production cost is the primary factor in determining comparative advantage between individual producers, production regions and countries. If the difference between countries is relatively small, higher cost ones may be able to retain their advantage due to additional transportation costs from other regions, labeling and inspection requirements, tastes and cultural preferences, and so forth. If the cost differences are extreme, tariff or non-tariff barriers are the only solutions. Because there is mobility of human and capital resources within a country, comparative advantage takes on less meaning than in the international arena—and this is why Japan’s case is so special. The purpose in this part is to show that, due to high cost differences between Japan and competing countries, if Japan is to keep its food self-sufficiency rate from declining further (or the flip side which is the food import dependency rate from significantly growing), its tariffs and non-tariff barriers cannot be reduced to any extent in the current WTO negotiations (Simpson, 2005a).

Rice

Japan is a very high cost producer of all agricultural commodities, largely because of small size holdings. Not only is the average land holding just 2 ha, only 15 percent of all commercial households have at least 2 hectares. This is the major reason for differences in domestic and imported rice wholesale prices. For example, while the average wholesale price of California rice arriving at a Japanese warehouse in 1999 was

60 yen per kg (excluding government markup or tariff), the average wholesale price of domestically grown Japanese rice that year was about 306 yen per kg. The Japanese price was thus 5 times higher than the U.S. price. The ratios are currently similar.

A few years ago Professor Shoichi Ito, a very well respected scholar, and two colleagues at the International Food Policy Research Institute (IFPRI) in Washington, D.C., evaluated the quality of foreign *japonica* rice's in terms of prices relative to Japanese domestic retail prices. They used taste tests among Japanese and discovered that rice's produced in China were quite superior to those grown in the United States. They also carried out marketing margin studies and found out that tariff rates ranging between 238 percent and 432 percent (depending on variety) would be needed on U.S. rice to equalize prices for Japanese consumers. However, a tariff rate of 1,755 percent would have been required for Chinese Ha-chiang 19 utilizing estimated production costs at that time.

Japan has historically relied on non-tariff barriers to avoid rice imports. That changed during the Uruguay Round of GATT negotiations when tariffs were substituted for fixed quantitative limits to trade. It was agreed that Japan would allow "minimum access" to Japan's rice market beginning in 1995, and that the amount would grow at 0.8 percent per year until it reached 8 percent of the base year (1986-88) consumption. Japan decided to "tariffy" its rice imports starting April 1, 1999. At that time, an annual minimum access (a quota) of 682,000 tons beginning in 2000 was adopted. A tariff of 351.17 yen per kg on over-quota imports was adopted for 1999, and 341 yen beginning in 2000.

Tsujii (2007) estimates that the average cost of production for a 15 ha Japanese farm is about 8 times as high as the average cost in the United States, similar to the earlier calculations by Ito. From them it is clear that Japan simply cannot compete without either extremely high direct payments or high tariffs. Japan's tariffication policy, combined with a marketing markup method used in actual purchases of foreign rice and a weaker yen, has effectively kept rice imports from increasing to any large degree. The bottom line: Substantial tariff reductions on rice in the current round of negotiations will lead to very significant increases in rice imports.

The average cost per kg of rice production on Japanese farms in 2005 was ¥13,543 in 2005 and ¥14,337 in 2000. At 120 yen per \$1, that \$1.88 per kg in 2005 and \$ 2.39 in 2000. The average production cost in the United States in 2000 was \$0.13 per kg. Japan's cost using these data was 18 times more than in the U.S. Clearly, there are differences in varieties, whether *japonica* or *indica*, etc, but the point is clear—the differences are so great that what might be called Japan's "decoupled direct payment policy with Japanese Characteristics" has no hope of ever substantially reducing the gap more than a trivial amount.

Beef Cattle

Wagyu is the breed that makes up more than 95 percent of Japan's beef-type cattle. Japan, like the United States with which economic comparisons are made in this section, has two main production periods, birth to weaning (and possibly a short growing period) known as the cow-calf system, and growing to slaughter age (called the fattening period) (Simpson, Kojima, Kada, Miyazaki and Yoshida, 1996).

Production cost of calves in the United States is only *one fifth* that of Wagyu calves in Japan due to huge differences in production objectives and methods, geography, and very large size cattle operations.

There are also great differences in the goals and fattening methods of beef cattle between the United States and Japan. The goal in the U.S. is to produce lean, tender meat primarily for steaks, grilling, barbecues, etc. In contrast, the primary objective of Wagyu production is heavily marbled beef for *sukiyaki* and *shabu-shabu*. Fattening costs to produce heavily marbled beef are significantly higher than for lean beef, and as a result, the final cost of Wagyu beef in Japan is 7-10 times more than the lean type U.S. beef. Production costs in Australia are even lower than in the U.S. for many types of beef.

Wagyu beef is a very different product than the lean beef produced in the U.S. It commands a much higher price and that, plus tariffs and only importing certain cuts, are the main reasons Japanese producers have been able to survive. It may be concluded that without tariffs at current levels (38.5 percent) without marketing changes by Japan's Wagyu industry, it will be extremely difficult for Wagyu producers to survive in the longer term (Simpson, 2002). In fact, Wagyu are now produced in several countries and now that the beef market in Japan is open from the BSE debacle, producers are touting Japan as a potential for their product (Simpson, 2007).

Dairy Cattle and Products

Japan's dairy industry is a relatively efficient one that has undergone rapid structural adjustment. For example, in 1985 there were 82,000 dairy farms. By 2000, just 15 years later, the number had declined to 34,000 farms. In the meantime, milk consumption has leveled off while milk yield per cow has continued to grow at a brisk pace as a result of technology development and industry restructuring. Consequently, fewer cows are, and will be, needed and farmers will keep dropping out of business due to retirement and/or low income, etc. As such, was projected (Simpson and Onoochi (2002a and 2002b) that by 2010 only about 20,000 dairy farmers will be left (and this is provided there is no reduction in tariff levels as a result of the ongoing world trade negotiations). By 2006 there were 27,000 households (MAFFc 2007).

The WTO negotiations are a big "if" affecting any projection assumptions. Cost of milk production in Japan is double that of the United States, 70 yen versus 36 yen per kg. The production cost on medium size dairy Chinese dairy farms is calculated to be 20 yen per kg (Simpson, 2006). The within-quota tariff for milk is 25 percent and it is 114 percent for over-quota. This tariff is currently sufficient to prevent imports of fresh milk due to the bulkiness of it, and associated high transportation costs. However, in some countries techniques are being utilized to reduce water content in milk as ways to lessen transportation cost of it. The matter is potentially very serious for Japanese producers. For example, a few years ago a very large dairy farmer in California was considering exporting this slushy water content reduced milk mass to Japan in super-tanker airplanes, and then adding water back during the processing stage. He said that on paper it was an economically viable venture. However, logistics, partner tie-ups, government resistance and high tariffs were, and continue to be, another matter.

Japan has the highest megatariffs of any country in the world on processed dairy products, a mean of 322 percent on 48 products. In contrast, the mean tariff in the EU is 87 percent on 41 products, and 43 percent in the U.S. on 7 commodities. Japan's tariff

level and associated high levels of domestic support for the dairy industry, such as formal pricing of milk, are prime targets for trade negotiators in many dairy product-exporting countries. The dilemma for Japan is it must keep very high tariff levels, or lose its dairy industry (Simpson 2005b).

Multifunctionality

The term multifunctionality first came into use in the 1980s as a result of concern about the Uruguay Round of trade negotiations (Sakuyama, 2005). There are a wide range of individual perceptions of what constitutes a multifunctional service like a “family farm.” The importance of the functions varies greatly depending on the analyst’s background, culture and nation (See for example Lee and Paarlberg, 2005; Prestegard, 2005; and Schmitz and Moss, 2005).

Multifunctionality, for Japanese and particularly the Ministry of Agriculture, (MAFFa, 2007) contains many functions and roles including food supply, conservation of national land, water resources, preservation of the natural environment, soil and mountainous conservation, biological diversity maintenance. It also figures prominently in lifestyles for rural residents, maintenance of cultural identity, particularly in preservation of local foods, and as a source of recreation for urban residents.

Food security

All-in-all, there is good reason why Japanese should maintain control of their food security and its supply. The problem Japanese face is that food security is not just about having enough substance to survive in times of international boycotts or bans such as the ones suffered during the beef and poultry meat bans in 2003-2004, or earlier ones on pork that have disrupted international markets and caused price increases in Japan. It is also not about being able to obtain supplies of standard internationally traded commodities in times of war or climatic aberrations. Rather, the problem is how Japanese can continue to maintain a lifestyle in which they can be assured of having the kind and brands of foods they desire, and in the form that satisfies them. Is that a problem? Doesn’t a nation or a “peoples” have the right to define what they mean by food security?

Aged People

There are about 3 million rural households. An increasing number are made up of aged people. And a large percentage of them farming—even on a very small plot—can mean added income to help them survive. Farming also is their way of life and despite the trials and tribulations associated with it, having a job is something they look forward to....

Non-trade Concerns: Alternatives for “decoupled direct payment policy with Japanese characteristics.”

One conclusion so far is that the direct payments program does not enhance the multifunctional aspect of agriculture as envisioned in Japan’s FY 2007 policy statement.

Another one is that—realistically—Japan has no hope for improving agricultural efficiency and productivity enough to compete internationally even with the direct payments program as inaugurated in 2007 if there is substantial de-terrification of agricultural commodities in the current or future rounds of WTO trade negotiations. In brief, Japan must have some sort of protection of its agricultural sector if the food self-sufficiency rate is to not fall dramatically. Non-trade concerns are the solution. So, does Japan have a *right* to decide to protect its agriculture?

Several sections of the United Nations' *International Covenant on Economic, social and Cultural Rights* (ICESCR) brought into effect a quarter century ago pertain to present day food production and WTO member proposals on multifunctionality. Article 1 states "*All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development. All Peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.*" There are other clauses that amplify the rights. But, as Schoenbaum (2005) points out there is no precedent set for using the covenant to override other international agreements.

Non-trade Concerns in WTO Negotiations

This is a critical time at the World Trade Organization (WTO) concerning agricultural trade, the lynchpin of the Doha Development Agenda of multilateral trade negotiations inaugurated in Doha, Qatar November 2001. The crucial issues at stake are part of the larger controversy over management of globalization so that domestic social and political stability will be improved. This is the overriding issue of our time, and agricultural trade can be viewed as a case in-point. Globalization includes an emphasis on the benefits of the free flow of goods, capital and services. But the social concerns and tensions arising from this process must not be overlooked. This is what is meant by calls for "balance" by many developing nations, and by economically developed countries that are substantial net food importers (Simpson and Schoenbaum, 2004).

The excesses of globalization regarding food and agriculture can be managed only by paying adequate attention to what are termed "Non-trade Concerns" (NTC), and the ultimate Agreement on Agriculture (AoA) of the Doha Development Agenda will have to be balanced to achieve success. A balance must be struck in the WTO between agricultural trade liberalization on the one hand, and NTC on the other. The concepts of "NTC," "multifunctionality of agriculture," "rights to self-determination in production and consumption of food," and even considerations about "animal welfare" are central in attempts to balance the economic dimensions of trade with non-economic values.

To some, including many trade theorists and net food exporting countries, NTC are simply trade protectionism in disguise. To others, particularly net food importing countries at risk of basically losing one of their three economic sectors under heavy trade liberalization, it truly is a major issue that cannot be made without careful consideration of long-term consequences. Non-trade Concerns are mandated to be taken into account in the current round of negotiations and they must be addressed in order to get a new agreement on agriculture. They are legitimate concerns for their own sake and cannot be

ignored regardless of cynics decrying them as a means to disguise protectionism. Thus, it is crucial to deal with the NTC issue from a conflict resolution standpoint to further the goal of trade liberalization, yet take into account what in classical economics was considered “political economy.”

One vexing issue is that while Non-trade Concerns are supposed to be taken into account in the negotiations regarding agricultural trade, as set forth in the Work Programme adopted at the WTO Ministerial Conference in Doha, Qatar November 2001 questions still abound about how to incorporate them in any meaningful way (Simpson, 2005c).

Issues and problems in Non-trade concerns

The Preamble to the Uruguay Round Agreement on Agriculture (URAA) recalls that the long-term objective “*is to establish a fair and market-oriented agricultural trading system*” and notes that “*commitments under the reform programme should be made in an equitable way among all Members, having regard to Non-trade concerns, including food security and the need to protect the environment; having regard to the agreement that special and differential treatment for developing countries is an integral element of the negotiations...* (World Trade organization, 1994).” A problem—and an opportunity to assure that the key words “fair” and “equitable” are incorporated in an Agreement on Agriculture (AoA)—is that the URAA only states that Non-trade Concerns will be taken into account; it does not provide any definition or indication of what they are.

The WTO Ministerial Declaration from the Doha Conference is not much more help in defining NTC, for Article 13 merely states that “*We recall the long-term objective referred to in the Agreement (Article 20 in the URAA) to establish a fair and market-oriented trading system through a program of fundamental reform encompassing strengthened rules and specific commitments on support and protection in order to correct and prevent restrictions in world agricultural markets*” (World Trade organization, 2001). It is important to note that the word “protection” has been added as it is especially important for the defining statement “*We take note of the Non-trade concerns reflected in the negotiating proposals submitted by Members and confirm that Non-trade concerns will be taken into account in the negotiations as provided for in the Agreement on Agriculture.*”

The mandate about taking NTC into account is clear and yet, well into the actual WTO negotiations (the modalities, i.e. the agenda of what can be discussed were agreed upon in Geneva on August 1, 2004), the role of NTC has been minimized, for several reasons. The **first** problem is lack of a clear or even accepted definition of NTC. The **second** difficulty is lack of clarity about how NTC fit in with the 1994 Uruguay Round Agreement on Agriculture (URAA), a vital concern since it provides the point of departure for the current negotiations. **Third**, there are no accepted criteria for their use. **Fourth**, advocates for substantial trade liberalization do not even want to consider them.

Developing countries

There are 151 members of the WTO of which about 119 are considered developing countries. Article 13 of the Doha Development Agenda states “*We agree that special and differential treatment for developing countries shall be an integral element of*

all elements of the negotiations ...” Difficulties abound, not the least of which is their diversity. At one end of the spectrum are those with a significant comparative advantage in agricultural production and, as such, primarily are interested in greater market access for their agricultural exports as well as reduced domestic and export subsidies (primarily by developed countries) to improve their terms of trade. At the opposite spectrum are net food importing countries concerned about the inability of their agricultural sectors to compete at the world level. The majority of developing countries fall in the middle spectrum. They are struggling to feed their citizens, and are faced with the specter that one day—if they are successful in achieving some reasonable level of economic development—they too will be required to open their borders to tariff levels set in this or other rounds of trade negotiations.

Very small developing countries are particularly at risk because no matter how much their economies grow, they can never compete with developed countries due to small scale of their agricultural enterprises and very high transportation costs, and aspects made abundantly clear in a World Bank conference on how to utilize trade liberalization in economic development (Ingco and Winters, 2001).

In brief, it has become abundantly clear that virtually all developing countries have legitimate concerns stemming from the URAA and contemporary international pressures. The question facing most of them—and ironically a number of developed countries—is how the demands on their governments, aspirations of citizens, and agricultural sustainability can be met in a fair, equitable and balanced manner (Baylis, Rausser and Simon, 2005).

Special treatment for net food importing countries

It is logical to ask why NTC have grown to the extent that a decision was taken by the WTO General Council on August 1, 2004 to reserve for *special treatment* certain “sensitive” agricultural products. There is no hard evidence, but it seems that the “Friends of Multifunctionality” (Japan, Korea, Mauritius, Norway and Switzerland), was formed after the URAA in recognition that their agricultural sectors were going to get hammered in the next round if action was not taken. These net food importing countries, with their low food self-sufficiency rates (not to be confused autarky, the goal of self-sufficiency) needed some way to validate their right to some protection of certain facets of their agricultural and food sector. The problem was how.

If countries with high dependency on food imports due to high costs beyond their control had simply stood up and said “we have a right to decide how to use our natural resources and determine the level of food security we deem appropriate” they would have been deemed protectionist—a terrible label—even now despite Article 13 of the Doha Agenda mandate that deals with agriculture stating there will be “*specific commitments on support and protection in order to correct and prevent restrictions and distortions in world agricultural markets.*” The approach they took was to open the concept of “multifunctionality” of agriculture to international debate. The result, as Sakuyama describes in a fascinating article (2005), is that the concept has become legitimized.

It is important to realize that NTC, and within it the multifunctionality concept, are widely recognized as being very important. For example, forty WTO members and observers met in Doha during the Ministerial Conference and held their own Non-trade Concerns Ministerial (Conference) from which a statement was released about the need

to secure the coexistence of various types of agriculture, as foreseen in Article 13 of the Doha Declaration. Another major step was the 4th International Conference on Non-trade Concerns in Agriculture at Ministerial Level, held in Rome June 14, 2002. This turned out to be a significant meeting as 54 ministers and representatives from WTO members and observers attended and reaffirmed their support for Non-trade Concerns.

These meetings (not to mention the dramatic protests at the WTO Ministerial in Seattle, Washington that resulted in failure to set a new trade agenda) reveal wide acceptance that food is different than manufactured products, and farms are different than factories. In effect, while increased trade and efficiency are desirable, other values should also be taken into account since materialistic progress is just one aspect of maximizing quality of life in this world. Economic efficiency is a value, and it is a good value. However, ethically and legally it should be balanced against other values, and it should not violate human rights. The concept that people and countries, regardless of whether they are rich or poor, have a right to use their natural resources in the way they feel best meets their needs, desires and values, is evolving—but it is not part of WTO law (Schoenbaum 2005).

Article 5 of the Doha Ministerial Declaration states “*We are aware that the challenges Members face in a rapidly changing international environment cannot be addressed through measures taken in the trade field alone....*” The keywords highlighted earlier, “fair” and “equitable,” in the Preamble to the URAA are simple, but vital for a plethora of countries at all levels of economic development that are worried about how their small scale, high cost agricultures will ultimately be affected by trade liberalization. They are crucial for countries bent on deciding for themselves how to organize their use of natural, human and capital resources (Simpson, 2003a and 2003b). In effect, NTC are a first line of defense for high net food importing nations (and in some cases food exporters) to prevent unfavorable, and in many cases disastrous, outcomes of current and future negotiations .

Current Situation about Non-trade Concerns as Japan’s Line of Defense

Japan has taken a leadership role on NTC in expanding it from “friends of multifunctionality” to a group of 9 countries called the “G-10” (Iceland, Israel, Japan, Rep. Korea, Liechtenstein, Mauritius, Norway, Switzerland, and Chinese Taipei. Bulgaria had been a member but dropped out). They are aligned in their desire to have countries given the right to name some commodities as “sensitive.” There is a like thinking group named the “G-33” (“friends of special products,” since 27 November 2006 understood to comprise 46 countries).

Special and sensitive products are categories of agricultural goods that would face limited or no tariff cuts. It is clear both from simple logic and Article 13 that many countries need significant, special and differential treatment. Essentially, three main tools have been accepted in WTO talks to provide this flexibility: sensitive products open to all countries, and special products coupled with a special safeguard mechanism open to only developing nations.

Conclusions

Japan's direct payment program, as envisioned to begin in 2007, is in conflict with national goals on enhancing multifunctional characteristics of agriculture, particularly concern for aged people in rural areas and food security.

The direct payment program will have only a negligible impact on Japan's international competitiveness and the policy goal of raising the food self-sufficiency rate from the current 39 percent to the desired 45 percent.

The only real feasible solution for Japan to avoid a significant reduction in the food self-sufficiency rate that could result from a WTO agreement on agriculture is to be protected by the clause on Non-trade Concerns that was included in the Uruguay Agreement on Agriculture.

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Table 1. Population density in China compared with selected countries and regions, 2002

Country or region	Total land area	Agricultural area (1)	Arable land area	Permanent crops	Permanent pasture
	-----Persons per ha-----				
World	0	1	4	48	2
Australia	0.03	0.04	0.40	65	0.05
France	1	2	3	53	6
Germany	2	5	7	400	17
India	4	6	6	125	95
Japan	3	25	29	371	298
Korea, Republic of	5	25	28	246	847
Netherlands	5	8	18	487	16
Taiwan	6	24	25	NA	4,653
United Kingdom	2	3	10	1,186	5
USA	0.3	1	2	142	1
China	1	2	9.0	113	3
China, 2010	1	2	9.6	121	3
China, 2020	2	3	10.1	127	4
China, 2030	2	3	10.2	129	4

Source: All except for Taiwan derived from online www.fao.org. Taiwan from online www.coa.gov.tw

(1) Agricultural area includes arable, permanent crops and permanent pasture.

Table 2. Agricultural areas in selected countries as a percent of total land area, 2002

Country or region	Total land area	Agricultural area (1)	Arable land area	Permanent crops	Permanent pasture
	-----Percent-----				
World	100	38	11	1	27
Australia	100	58	6	0	52
France	100	54	34	2	18
Germany	100	49	34	1	14
India	100	61	54	3	4
Japan	100	14	12	1	1
Korea, Republic of	100	20	17	2	1
Netherlands	100	58	27	1	30
Taiwan	100	25	24	NA	0
United Kingdom	100	70	24	0.4	46
USA	100	45	19	0.4	26
China	100	59	15	1	43

Source: All except for Taiwan derived from online www.fao.org.

Taiwan from on-line www.coa.gov.tw

(1) Agricultural area includes arable, permanent crops and permanent pasture.

TABLE 3. FARM HOUSEHOLD AND POPULATION STRUCTURE, JAPAN, 1980-2002

ITEM	UNITS	1980	1990	1995	2000	2001	2002
POPULATION							
ALL JAPAN	1,000	117,060	123,611	125,570	126,925	126,284	126,478
AGRICULTURAL POPULATION	1,000	21,366	17,296	15,084	13,458	NA	NA
OWN FARMING ONLY	1,000	NA	5,150	4,463	3,549	NA	NA
OWN AND OTHER FARMING	1,000	NA	5,216	4,613	3,307	NA	NA
OTHER	1,000	NA	6,930	6,008	6,602	NA	NA
RATIO AGRICULTURAL TO ALL POPULATION	PERCENT	18	14	12	11	NA	NA
HOUSEHOLDS							
ALL JAPAN	1,000	36,015	41,036	44,108	47,063	48,015	48,638
TOTAL FARM (RURAL) HOUSEHOLDS	1,000	4,661	3,835	3,444	3,120	3,072	3,028
NON-COMMERCIAL FARM (RURAL) HOUSEHOLDS	1,000	NA	864	792	783	781	779
COMMERCIAL FARM HOUSEHOLDS	1,000	NA	2,971	2,651	2,337	2,291	2,249
FULLTIME	1,000	623	473	428	426	433	439
PART TIME	1,000	4,038	2,497	2,224	1,911	1,858	1,809
MAINLY ENGAGED IN FARMING	1,000	1,002	521	498	350	319	300
MAINLY ENGAGED IN OTHER JOBS	1,000	3,036	1,976	1,726	1,561	1,539	1,509
RATIO, TO ALL JAPAN HOUSEHOLDS							
TOTAL FARM (RURAL) HOUSEHOLDS	PERCENT	13	9	8	7	6	6
NON-COMMERCIAL FARM (RURAL) HOUSEHOLDS	PERCENT		2	2	2	2	2
COMMERCIAL FARM HOUSEHOLDS	PERCENT		7	6	5	5	5
FULLTIME	PERCENT		2	1	1	1	1
PART TIME	PERCENT		11	6	5	4	4
MAINLY ENGAGED IN FARMING	PERCENT		3	1	1	1	1
MAINLY ENGAGED IN OTHER JOBS	PERCENT		8	5	4	3	3
RATIO, TO TOTAL FARM (RURAL) HOUSEHOLDS							
NON-COMMERCIAL FARM (RURAL) HOUSEHOLDS	PERCENT		23	23	25	25	26
COMMERCIAL FARM HOUSEHOLDS	PERCENT		77	77	75	75	74
FULLTIME	PERCENT		13	12	12	14	14
PART TIME	PERCENT		87	65	65	61	60
MAINLY ENGAGED IN FARMING	PERCENT		21	14	14	11	10
MAINLY ENGAGED IN OTHER JOBS	PERCENT		65	52	50	50	50

SOURCE: STATISTICAL YEARBOOK OF MAFF, TOKYO, VARIOUS ISSUES.

**NON-TRADE CONCERNS IN WTO
AGRICULTURAL TRADE NEGOTIATIONS:
CONFLICT RESOLUTION IN THE
DOHA DEVELOPMENT AGENDA**

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