

The Cost of Food Self-Sufficiency and Agricultural Protection in South Korea

John C. Beghin

beghin@iastate.edu
515-294-5811

Jean-Christophe Bureau

bureau@grignon.inra.fr

South Korea has the most supported agricultural sector among member countries of the Organization for Economic Cooperation and Development (OECD). Public intervention mainly consists of high production prices supported by government purchases, together with high tariffs that protect domestic producers from foreign competition and implicitly tax consumers. Trade liberalization recently took place in particular sectors, and Korea is now a major importer of oilseeds and coarse grains. However, Korea only reluctantly exposed its agricultural sector to the provisions of the Uruguay Round Agreement on Agriculture (URAA) of the World Trade Organization (WTO). It has kept nearly prohibitive tariffs in the rice, meat, and dairy sectors; high production subsidies in most other sectors; and significant non-tariff trade barriers on many commodities, including administrative barriers (import monopolies) and sanitary restrictions.

Exporting countries have stressed that Korean farm policy imposes high food costs on consumers and increases the cost of labor for its manufacturing sector. By artificially maintaining resources in agriculture, Korean agricultural policy allegedly slows the growth rate of the entire domestic economy. Other WTO member countries complain that Korea, while benefiting from global manufacturing export opportunities, creates considerable obstacles to other countries' exports of food products.

In preparation for the Doha Round of the WTO negotiations, Ko-

rea has promoted food security objectives and has emphasized the need to ensure an adequate supply of food under all market conditions. Korea defines food security as a joint reliance on trade, domestic production, and self-sufficiency. Despite trade concessions under the URAA, Korea has pursued food self-sufficiency as the way to achieve food security. Food security based on self-sufficiency is a recurring theme among developing-country members of the WTO. For instance, India has proposed similar policies. However, self-sufficiency objectives are detrimental to (poor) consumers and are inconsistent with food security as "access to food for all" proposed by the World Food Summit of the Food and Agriculture Organization.

WELFARE COSTS OF KOREAN AGRICULTURAL POLICY

Table 1 shows the producer support estimate, a measure of domestic subsidization expressed as a percentage of the value of production, calculated by the OECD. It reaches 74 percent in Korea compared to an OECD average of 40 percent in 1999. The Korean government provides a few direct payments and some input subsidies (fertilizers and interest subsidies), but 95 percent of subsidies are transfers from consumers. These subsidies cost consumers far more than producers gain.

Table 2 shows that it takes 15.8 won in lost consumer income for every 10 won increase in farmer income. These high costs are attributable to policy instruments that are coupled to production and consumer taxation. High tariffs and administrative prices reflect the Korean government's preference for self-sufficiency objectives regardless of the cost to consumers in sectors such as rice, pork, or poultry. Rice growers get the largest transfer, followed by beef, pork, and milk producers. Rice policy contributes

most to resource misallocation, followed by beef, dairy, and pork. Beef has the lowest efficiency of transfer, with around 47 percent of lost consumer income being gained by Korean producers.

TRADE IMPACTS OF KOREAN AGRICULTURAL POLICY ON TRADING PARTNERS

As a member of the WTO, Korea had to convert quantitative restrictions on imports into bound tariffs, reduce these tariffs over an implementation period, open its market to imports under the minimum access provisions, and reduce the most trade-distorting forms of domestic support in 1994. However, Korea applied the Uruguay Round provisions so that it could shelter its producers from foreign competition in key sectors. For example, Korea postponed the tariffication of rice for 10 years and negotiated an obligation to import only 4 percent of its consumption by 2004. In most staple foods, Korea also has kept import restrictions through its special domestic rules. Prohibitive tariffs and administrative barriers still restrict imports of many agricultural goods to Korea. Self-sufficiency remains a policy objective (see Table 3), particularly in the rice sector, because of the strength of the rice producer lobby, the cultural significance of this food, and South Korea's possible reunification with North Korea—which has been experiencing dramatic shortages of rice, making this issue particularly sensitive.

Other countries involved in the Doha Round care more about import and export volumes than about the politics of any given country. Despite the recent surge in imports of corn, wheat, and soybeans, we estimate that 2,273 billion won at (1995 prices; \$1=1,290 won) of trading opportunities are foregone every year. Self-sufficiency targets reduce de-

mand by imposing high prices on consumers, which can lead to the absurd situation where a country insulates itself from the vicissitudes of world markets by making a portion of its population go hungry. A reasonable alternative would be to set production levels of staple foods as targets and rely on imports as an additional source of food items. Low or no tariffs on the consumer side would result in higher demand. However, domestic production would be maintained, thus affording some insurance against world market uncertainty. This policy would result in the same "security" for domestic supply as that offered by self-sufficiency, without imposing large food taxes on consumers.

Table 4 presents the trade implications of alternative approaches to food security using historical production levels as a target. This reflects a policy based on deficiency payments and no tariffs.

A policy that sets production targets rather than self-sufficiency targets represents a more palatable option for importing countries within the WTO and could be implemented with large deficiency payments. This policy, which has been used in U.S. farm programs for years, would minimize consumer losses and generate additional Korean imports, with a limited loss of tariff revenue. In addition, lower food costs increase consumption and result in significant efficiency gains, sufficient to more than pay for the farm program. Targeted deficiency payments in the staple grains sector (rice and barley) that achieve historical production levels, while removing tariffs on imports, would reduce efficiency losses by 72 percent (to 1,716 billion won at 1995 prices) and would expand opportunities for exporters. ♦

TABLE 1. SUPPORT TO KOREAN AGRICULTURE, 1998–2000
(THREE-YEAR AVERAGE)

Producer support estimate	65%
Consumer tax	63%
Consumption at domestic price/consumption at world price	2.27
Production at domestic price/production at world price	3.05

TABLE 2. TRANSFERS AND WELFARE LOSSES INDUCED BY KOREAN AGRICULTURAL POLICIES, 1998–2000 (THREE-YEAR AVERAGE)

Transfer to farmers	10,571
Tariff and tax revenues	1,228
Cost of resource misallocation	6,152

Note: All figures in billion 1995 won.

TABLE 3. SELF-SUFFICIENCY IN KOREAN AGRICULTURE, 1998–2000
(THREE-YEAR AVERAGE)

	Production (10 ³ /tons)	Consumption (10 ³ /tons)	Net imports in percent consumption,
Rice	5,217	5,148	-1%
Wheat	4	3,113	99%
Barley	271	469	42%
Corn	0	9,438	100%
Soybeans	128	1,667	92%
Dairy	2,186	2,595	16%
Beef	327	547	40%
Pork	911	959	5%
Poultry	346	401	14%

TABLE 4. MARKET ACCESS UNDER PRODUCTION TARGETS, 1998–2000
(THREE-YEAR AVERAGE)

	Actual Situation	Production Target, Historical Levels		
		Staple Grains Only	Meat Only	Grains, Meat, and Milk
Value of imports at world prices	3,275	5,044	5,065	4,431
Lost trading opportunities ^a	2,272	515	485	1,132

Note: All figures in billion 1995 won.

^aRelative to the absence of governmental intervention.