(3) The importing countries of the Pacific market are confronted with an increase in beef prices due to the exit of US beef from the market. This reduces beef consumption, and as a substitution effect, consumption of other meats, i.e. pork and chicken, increases. In 2004 and 2005, consumption of beef in Japan decreases by 12% in both years, and in contrast, consumption of pork increases by 2% and 1%; and consumption of chicken increases by 1% in both years. After 2006, such a substitution effect becomes much smaller as beef imports from the US resume.

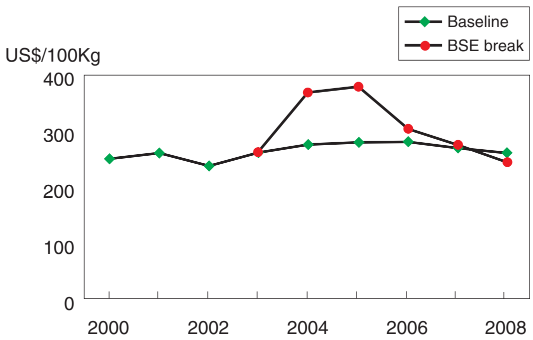

Fig. 2. Outlook of Beef Price in World (Pacific) Market

5. Concluding Remarks

As we have seen, the halting of US beef exports to the Pacific market due to the outbreak of BSE will bring a large-scale ripple effect to Pacific countries. This article tries to identify the effect using the AGLINK model and the partial equilibrium modeling framework.

The BSE event is important not only for the modeling framework, but it also directly influences dietary life in many countries. Therefore, we have to continuously monitor the effects of the BSE outbreak, as well as the measures taken by each country to secure safety and resume beef imports.

Background of Brazil's Farm Trade Growth and Its Effects on Japanese Agriculture

Junichi SHIMIZU

1. Objective

Brazil has been the world's largest net exporter of agricultural products since 2003. In addition, Brazil is endowed with more than 140 million hectares of potential cropland which could be converted to arable cropland. Brazil's agriculture has a significant impact on the world's supply and demand of food. It is especially important for Japan, as its self-sufficiency rate for food is only 40%. The purpose of this research is to analyze the factors of the growth of Brazil's farm trade and to investigate the effect of Brazil's strategy of multilateral agricultural trade negotiations on Japanese agriculture.

2. Method

Firstly, the time-series database of the main agricultural commodities in Brazil was created. Then the impact of the economic policy change on Brazilian agriculture and the farm trade was investigated.

3. Outline of the results

(1) Changes in main agricultural exportables

The value of Brazil's agricultural exports has been increasing rapidly since 1990. The export boom has been driven primarily by soybeans, but supported by other products, notably sugar, ethanol, poultry, pork, and beef (Fig. 1). As a result of these change, there has been a significant change in the composition of agricultural exports. The export shares of soybean products, sugar and ethanol, and meat have increased, while the shares of orange juice and coffee have declined.

(2) The change of the economic policy and competitive power of agribusiness

At the beginning of the 1990s, Brazil went through a policy change from import substituting industrialization (ISI) policies into neo-liberalism. Under the policy change, trade was liberalized, domestic markets deregulated and a customs union (Mercosul) established. The agricultural sector benefited the abandonment of ISI policies through the improved agricultural terms of trade. At the same time, the devaluation of Brazil's currency, real, operated positively to agricultural exports.

(3) Growing presence in the WTO

Brazil has gradually strengthened its

presence in the WTO. At the time of the Uruguay Round Agreement on Agriculture (URAA), it was only a member of the Cairns Group. In the Doha WTO Round, Brazil became an initiator of the G20, a group of developing countries arguing for agricultural trade liberalization in the fifth WTO Ministerial Conference held in Cancún in 2003. At the General Council in 2004, Brazil participated in the creating a modality together with the developed nations such as the US, EU and Australia. In the behind of the growth of Brazil's presence, there are two factors: strong export competitiveness and low protection level for agriculture. Brazil reduced the tariff rates several times after the tariff reform in 1990. As a result, applied tariff rates were rather lower than the bound tariff rates for 1996. Since Brazil had cut down its agricultural protection levels before the beginning of the WTO agricultural trade negotiations, it enables Brazil to maintain its aggressive attitude in the WTO.

(4) Trade disputes in the WTO

In 2004, Brazil celebrated two WTO farm subsidy victories. The WTO panel ruled that as much as half of EU sugar exports are illegal and separately confirmed that $3 billion in US cotton subsidies violate WTO rules. Although both the US and the EU appealed to the appellate body, the body upheld the panels' rulings. These two rulings have significant importance for international farm trade, because they ruled against developed nations' "domestic" subsidies as well as export subsidies. These victories would enable Brazil to increase its agricultural exports. Hereafter Brazil will present a great influence to the WTO agricultural negotiations, furthermore, to an agricultural revision in our country. We need to keep eyes on Brazil.

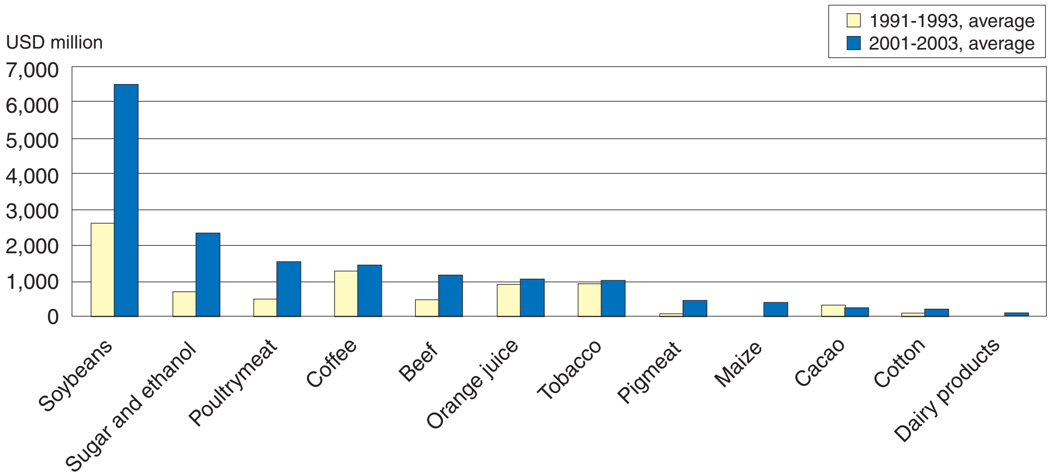

Fig. 1. Changes in exports of Brazil's major agricultural exportables

Fragility of the Sahelian Farmers and Soil Degradation: A Village Level Study

Takeshi SAKURAI

1. Objective

It is often pointed out that there is a vicious cycle between the degradation of natural resources and poverty. However, it is not yet obvious if the prevention of desertification, which is one of the most significant problems in sub-Saharan Africa, really has an impact on poverty alleviation, and if poor farmers in fact accelerate soil degradation. Hence, this research aims to empirically investigate the relationship between the degradation of natural resources and poverty. For this purpose, Burkina Faso, a landlocked country in West Africa, was selected as the study site.

Burkina Faso is located on the southern edge of the Sahara desert, in the so-called Sahelian region. Most of the country's territory belongs to the Savanna zone whose annual precipitation varies from 400 mm in the northeast to 1,200 mm in the southwest (Fig. 1).

It has been indicated that the problem of desertification and soil degradation is serious in this country. Because of the stagnation of agricultural productivity, the country remains one of the poorest in the world, and 61 percent of the country's total population is below the poverty line defined by "less than one dollar expenditure per day per capita." This poverty has made the rural population rely on external migration (mostly to neighboring Côte d'Ivoire) as well as remittance from relatives living outside the country. It is estimated that such revenue constitutes 10–20% of their total