1. Introduction

This paper, presented at the annual meeting of the Agricultural Economics Society of Japan in 2018, has three objectives. Firstly, it examines the outcomes of differential treatment of developing countries under the present rules and commitments on agriculture of the World Trade Organization (WTO), with an analysis of the trends in world agricultural trade from 1995 to 2000. Secondly, it elucidates the background of the reason why the trade negotiation in the WTO since 2001 was named as Doha Development Agenda (DDA). Finally, it will examine the meanings of the “development agenda” at present, based on an investigation of recent changes in world agricultural trade. It will be possible to uncover some of the implications on a viewpoint needed to accomplish “development” from these processes.

2. GATT Uruguay Round and WTO Agreement on Agriculture

One of the main fields in the negotiations of the GATT Uruguay Round (UR) started in 1986 was agriculture as well as so-called “new fields”: trade of services, trade-related intellectual property and trade-related investment measures. Though developing countries did not want to include these “new fields” in negotiations, the United States persuaded them that...
they would have merits through trade liberalization, extension of investment and technology transfer with prospective rules. At the same time developed and developing countries such as Switzerland and Columbia sought the possibility of negotiation on the “new fields” together, and finally the member countries reached the decision of including them in UR negotiations. However, a lot of developing countries strongly required market liberalization of goods in their interest, agricultural commodities and textile products, for example.

One of the most distinctive features of WTO agreements was the single-rule principle without exceptions. Every member country had to accept all agreements and was not allowed to have any agreement as an exception (single undertaking). On the other hand, WTO agreements included special and differential treatment (S&D) for developing countries with 145 articles at present.

WTO agreement on agriculture includes commitments on reductions of tariffs after tariffication procedures, of aggregated measurement of support (AMS), and of values of export subsidies and amounts of their targets. As a result of S&D for developing countries, the levels of their reductions were kept at two-thirds of those for developed countries. Developing countries were required to accomplish the reduction from 1995 to 2004, compared to developed countries’ deadline of 2000. Moreover, the least developed countries (LDCs) were exempted from all the obligations of reductions. The WTO agreement on agriculture formed a regime which made it possible to expand export of farm produce for developing countries with larger reduction of support by developed countries, smaller reduction by developing countries and exemption of it for LDCs.

3. World Agricultural Trade in the Late 1990s and Its Outcomes

Let me proceed to analyze major countries’ trade balances in farm produce in the late 1990s in order to see the effects of the WTO agreement on agriculture. Brazil recorded 7.2 billion dollars of surplus in 1995 and 8.5 billion in 2000, and Chile’s surplus increased from 1.2 billion dollars to 1.6 billion (Figure 1). However, neither is such a remarkable expansion of agricultural trade surplus. India’s export surplus decreased from 3.3 billion dollars to 2.1 billion, and the trade balance of Mexico soon after the beginning of NAFTA changed from a surplus of 380 million dollars to a deficit of 1.9 billion. On the other hand, China (including Hong Kong and Macau) recorded a constant deficit in farm trade with a remarkable decrease from 5.2 billion dollars to 2.0 billion in five years.

\[\text{Figure 1. Trade balance in agricultural commodities: major developing countries}\]

Note: China includes Hong Kong and Macau, without Taiwan.
Source: FAOSTAT Database, accessed on April 13, 2018.

\[\text{Figure 2. Trade balance in agricultural commodities: major exporters of agricultural primary commodities}\]

Source: FAOSTAT Database, accessed on April 13, 2018.

Situations of primary commodity exporters vary from country to country (Figure 2). Vietnam, the second coffee exporter next to Brazil, doubled its trade surplus from 560 million dollars in 1995 to 1.3 billion in 2000. Among exporters of cacao beans, Ghana increased its surplus from 180 million dollars to 220 million, but Côte d’Ivoire decreased from 1.7 billion dollars to 1.6 billion. Among main exporters of palm oil, Malaysia’s surplus decreased from 4.4 billion dollars to 3.4 billion, while Indonesia increased its surplus from 610 million dollars to 890 million.

The exporters of cereals are mainly developed countries or areas, with Russia and Ukraine included (Figure 3). The United States remarkably decreased its surplus of farm produce trade from 28.4 billion dollars to 11.5 billion in the late 1990s. Ukraine also decreased her surplus from 1.7 billion dollars to 0.7 billion, while Australia increased from 10.1 billion dollars to 11.5 billion. The EU basically maintained a deficit in the late 1990s with 6.0 billion dollars in 1995, but recorded a surplus of 1.1 billion only in 2000. Though Russia is a cereal exporter, her trade balance in farm produce...
stayed in the red, but its value fell to almost half, from 11.6 billion dollars to 6.2 billion.

In short, among the main exporters of farm produce, many decreased their trade surplus, and a few recorded a small increase. On the other hand, a lot of countries with a trade deficit decreased its value. As a result, the agricultural exporters could not recognize the merit of trade liberalization that WTO agreements should have provided.

However, the amount of global trade in farm produce increased in the late 1990s. World wheat exports expanded from 101.7 million tons in 1995 to 117.2 million in 2000, with an increase of 12.6%. Maize exports also increased from 78.2 million tons to 82.5 million, and rice from 22.4 million to 23.4 million in five years. Soybeans exports greatly expanded from 31.9 million tons to 47.4 million with an increase of 48.4%. World exports of primary commodities showed much the same trends. Exports of green coffee beans expanded from 4.2 million tons in 1995 to 5.5 million in 2000, with an increase of 29.7%. Exports of cocoa beans also increased from 1.8 million tons to 2.5 million, and palm oil exports from 10.2 million tons to 14.2 million in five years; both recorded greater increase rates than those of cereals. Those of meat exports vary by varieties; world beef exports changed from 5.1 million tons to 5.5 million with only an 8.6% increase in five years, while pork rose from 3.8 million tons to 5.1 million with a 33.8% increase, and poultry from 5.8 million tons to 8.0 million with 52.7%.

On the other hand, the value of global trade in farm produce generally decreased. When world export values in 1995 and 2000 are compared, wheat export changed from 1.7 billion dollars to 1.4 billion and maize export from 1.1 billion to 8.8 billion. Export of green coffee beans decreased from 1.2 billion dollars to 0.8 billion, cocoa beans export from 2.5 billion to 2.2 billion, and palm oil export from 6.4 billion to 4.5 billion in five years. The value of world beef exports changed from 15.8 billion dollars in 1995 to 14.3 billion in 2000, and that of pork decreased from 10.7 billion dollars to 9.6 billion. Only exports of soybeans and poultry recorded increases in the late 1990s; the former changed from 7.5 billion dollars to 9.2 billion, the latter from 9.1 billion dollars to 9.8 billion in five years. The export amounts of agricultural commodities mentioned above increased in the late 1990s, but for many of them, the value of the exports fell, and even in the cases of soybeans and poultry, the increased rate in export value did not exceed that in amount. Exporters of farm produce, both developing and developed, did not feel any merit from agricultural trade because they could not increase their trade surpluses, or could gain only a little in spite of their efforts.

It was just a result of a decline in the international prices of farm produce that an increase in the amount of world agricultural trade and a decrease in value occurred simultaneously. According to data provided by the IMF, the international price of wheat per metric ton declined from 156.21 dollars in January 1995 to 93.62 in January 2000, that of maize from 106.90 dollars to 92.95, and that of soybeans from 202.50 dollars to 180.38 (Figure 4). Depreciations of primary commodities were much sharper; the price of mild Arabica coffee per metric ton declined from 3,799.31 dollars to 2,406.70 in five years, and Robusta coffee from 2,925.97 dollars to 1,182.09 (Figure 5). The international price of cocoa beans dropped from 1,467.56 dollars per metric ton to 918.48, and that of palm oil declined from 541.27 dollars to 301.79 (Figure 6). Changes in meat prices were more moderate than those.
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53.42 cents to 51.61. The price of poultry meat in-

88.20 in January 2000, and that of pork declined from

price was 97.76 cents per pound in January 1995 and

of cereals or primary commodities (Figure 7); the beef

price was 97.76 cents per pound in January 1995 and

88.20 in January 2000, and that of pork declined from

53.42 cents to 51.61. The price of poultry meat in-

increased from 51.25 cents per pound to 58.23 in five

years. In short, trends in changes in the international

price of farm produce was a large decline for wheat

and primary commodities, a decline of about one-tenth

for maize and soybeans, and a milder decline or in-

crease for meat.

It turned out that trends in world agricultural trade in

the late 1990s were characterized by an increase in

amount and a decrease in value as a whole. We need

further examination to make sure whether this was an

outcome of trade expansion effects caused by a reduc-

tion of agricultural supports by WTO agreements.

Nevertheless, it is clear that exporters of farm produce,

especially developing countries, could not enjoy re-

markable merits from expansion of agricultural trade

because of the decrease in export value. The discontent

doing countries exporting farm produce surged

without effective functions of S&D for developing
countries in the WTO agreement on agriculture. Even

even though it was not because of defects in the agreement,

claims of those countries did not calm down, which

could be regarded as one of the reasons for failure in

starting a new round of trade negotiation at the WTO

ministerial meeting held in Seattle in 1999. Therefore,

development became one of the main fields when the

start of new trade negotiation was decided at the minis-
terial meeting in 2001, and the negotiation was named

the “Doha Development Agenda” (DDA).

4. World Agricultural Trade in the 21st Century

The trends in international agricultural prices took

an upward turn in the 21st century, especially in the

late 2000s, and trade in farm produce expanded both in

amounts and values. World soybean exports expanded

from 47.8 million tons in 2000 to 79.0 million in 2008

and 106.2 million in 2013. The total value of soybean

exports also increased from 9.2 billion dollars to 39.3

billion and 57.3 billion in the same period, which

means it grew almost six times in 13 years. The

amount of maize export also expanded one and a half
times from 82.4 million tons to 110.0 and 124.2 and its
value increased about four times from 8.8 billion dol-

lars to 26.9 and 35.0 in the same period. Developing

countries such as Brazil, Argentina and Ukraine espe-
cially extended their share in maize export after 2010.

Wheat exports expanded about 40% from 117.2 mil-

lion tons in 2000 to 131.2 million in 2008 and 162.8

million in 2013, while export value increased three
times and half from 14.2 billion dollars to 44.2 billion
Trade in primary agricultural commodities also expanded in the 2000s, but began to fall in value in the 2010s. The export of green coffee beans maintained an increase from 4.5 million dollars in 2000 to 40.5 million in 2011 and then decreased to 33.8 million in 2013. The same trend is observed in palm oil exports; the amount expanded from 14.2 million tons to 37.0 million and 41.7 million in the respective years, but its value increased from 4.5 million dollars to 40.5 million in 2011 and then decreased to 33.8 million in 2013. One of the reasons for these changes was sharp price fluctuations of primary commodities. In particular, the prices of cacao beans and palm oil changed dynamically in the late 2000s and after (Figure 6), which caused a discrepancy between trends in export amount and in export value.

World meat trade continuously expanded in the 21st century. The expansion of beef export has been stable; its amount increased from 5.5 million tons in 2000 to 7.0 million in 2008 and 8.8 million in 2013, while its value grew about six times, from 14.3 billion dollars to 32.3 billion and 42.8 billion in 13 years. Pork exports doubled in amount from 5.1 million tons to 9.3 million and 10.4 million, and tripled in value from 9.6 billion dollars to 26.7 billion and 30.7 billion in the same period. The expansion of poultry export was more remarkable; its amount grew more than twice from 8.0 million tons in 2000 to 14.0 million in 2008 and 17.1 million in 2013, and its value increased 3.6 times from 9.8 billion dollars to 27.2 billion and 35.7 billion in 13 years.

What should be especially mentioned here is the skyrocketing rise of international agricultural prices in 2007 and 2008, caused by the rapid influx of a huge amount of money speculated in future markets because of the global financial crisis. Since the international market in farm produce was also severely affected, export values of almost all agricultural commodities quickly jumped up in 2008 and plunged into a dive in 2009 with an outflow of speculation money. However, exports of farm produce rapidly recovered within one or two years and has reached a level which surpassed that before the financial crisis.

Summarizing the trends of world agricultural market in this century, I can say that soybean exports have continually expanded and exports of wheat, maize and rice have maintained high levels in the 2010s. Though primary commodity exports also increased in the 2000s, they have recorded a decrease in value since 2011 because of sharp fluctuations in price. On the other hand, exports of meat hugely expanded in the 2000s especially in value. Beef exports have kept on expanding and exports of pork and poultry have grown steadily since 2010.

5. Recent Situations of Developing Countries and the Prospects of the Development Agenda Today

In terms of the situations of developing countries at present, agricultural exporters such as Brazil and Argentina are enjoying economic surplus from trade with an increase in exports of soybeans, cereals and meat (Figure 1). It is not such a merit for these countries to seek for more liberalization of agricultural markets, which is quite a different situation from that at the beginning of the DDA. On the other hand, exporters of primary agricultural commodities still cannot be exempted from fragile conditions with price fluctuations, rapid change in export value and instability of their trade balances (Figure 2). This is an old and new problem at the same time, which seems to indicate a limit of development strategy with economic growth through trade liberalization.

Moreover, agricultural importers, especially those countries depending on food import, are placed under the severest conditions. Though the skyrocketing of world food prices soon after the global financial crisis has settled down, the levels of international prices remain higher than those before the crisis, which adversely affects the trade balance in farm produce. Deficits in the agricultural trade balance of net food importing developing countries and least developed countries (LDCs) have quickly intensified since 2008 (Figure 8). They must be a great burden for these countries, which need to find and realize effective development

![Figure 8. Trade balance in agricultural commodities: groups of food importers](source: FAOSTAT Database, accessed on April 13, 2018.)
strategies as soon as possible.

Let me try to discuss the positions of various countries, including developed ones, in the global economy with a theoretical framework of the “world system” approach of Emmanuel Wallerstein. The core countries would be developed agricultural exporters such as the United States, the EU and Australia. They are expanding exports of cereals and meat, increasing trade surplus for farm produce and gaining the greatest merit from agricultural trade. Developing countries such as Brazil, Chile, India, Russia and China, following the core countries, could be placed on a semi-periphery, which might shift either to the core or to the periphery. Exporters of farm produce are expanding agricultural trade and economic surplus, while importers are increasing trade deficits, with high international prices for farm produce and growth of the world agricultural market. Primary commodity exporters could be included in the periphery, providing economic surplus for the core countries. Their trade surplus might increase with a rise in prices of their export commodities, but their trade balance will go into deficit when heavy falls in those prices occur. Therefore, it is much difficult for these countries to accumulate capital continuously and to find a key to economic development.

Moreover, there are such countries as are situated at the bottom of the world system. They are LDCs and developing countries depending on food import without any promising export commodity. They are separated from any international division of labor connected to the value chain in agricultural trade and transfer of wealth, and have no choice other than accepting trade deficits in agricultural trade. It is almost impossible for these countries to get out of instability under political-economic conditions which may cause social crisis when skyrocketing of international food prices such as that in 2007 and 2008 occurs.

Finally, here I would like to inquire into the meanings of the development agenda at present. Since we cannot expect success of the DDA in reality, then what is required for development? Probably no one would deny the general opinion that we need to share trade interests among developed and developing countries. However, it seems to me that the most important issue to be considered seriously is the status of the most fragile countries on the periphery and separated from the international division of labor. We have to make sure to provide secure food supplies for these countries.

The proposal by the government of Japan at the beginning of the DDA seemed to contain validity from this viewpoint. Its basic idea was “coexistence of various styles of agriculture” including food security and multifunctionality. I think this is worth considering for exporters of primary commodities and net food importers. Actually, there were proposals from this standpoint in the negotiation on agriculture in the DDA; The Bali Agreement at the WTO ministerial meeting in 2013 allowed public stock for food security, for example. However, whether this should be a permanent measure or not is to be discussed in the committee on agriculture, and is not yet decided.

Since a new agreement is not yet completed, the member countries must keep the present WTO agreement on agriculture, which has some problems resulting from the process in the UR. It was an outcome of negotiation under the situation in which agricultural commodities were in excess in the international market, and strongly reflects the interests of food exporters. For example, importers are obliged to accept a certain amount of import as minimum access, while there is no obligation for exporters other than reduction of support. The prospective modality on agriculture in December 2008 contained regulations for disciplinary measures for prohibition or restriction of agricultural export proposed by Switzerland and Japan. However, they are not yet realized as WTO rules because of the delay in negotiations of the DDA.

It seems necessary to set up rules that pay more attention to the present situations of primary commodity exporters and developing countries importing agricultural commodities in order to make the development agenda effective. Moreover, developed countries importing farm produce, such as Japan, should strongly support opinions and claims of food-importing developing countries. These movements could improve the situations of the most fragile developing countries such as LDCs and form a voice of food importers as a whole, including both developing and developed countries.

Do you think this is just an unrealistic dream by the author?