Karolina Pawlak[1]
Department of Economics and Economic Policy in Agribusiness
Poznań University of Life Sciences

The development and significance of foreign trade in agri-food products in selected preferential trade agreements[2]

Abstract. The aim of the paper is to present the development tendencies and the significance of agri-food trade in selected preferential trade agreements in both Americas, Asia and Africa. The analysis included the values of trade turnover both within the region and in exchange with third countries, the share of the agri-food trade in the total trade in the region and the share of the regions under investigation in the global agri-food trade. The analysis allowed us to indicate the greatest global exporters and importers of agri-food products. The assessment of trade creation and trade diversion effect in agri-food trade of selected trade agreements was also possible.

Key words: export, import, agri-food products, preferential trade agreement, regional grouping, trade creation effect, trade diversion effect

Introduction

The international agricultural market is supplied mainly from three sources: the countries with the most favourable natural and economic conditions to the development of agriculture, such as the United States, Australia and New Zealand, other highly developed countries, which subsidise their agriculture to a considerable extent, especially the products for export, and poorly developed countries, for which the export of agricultural products is the sine qua non for the import of industrial goods [Przygodzka 2006]. Thus, agricultural trade occupies an important position in the structure of international trade exchange of many countries at different levels of economic development.

The changes which take place in contemporary international trade chiefly consist of the tightening of relations within the existing integrative groups, the development of new trade zones and the pursuit of liberalisation of the rules of global trade exchange [Dybowski 1998]. It is possible to state that the volume and structure of global trade, including the agri-food trade, is the resultant of two opposite but overlapping tendencies, i.e. multilateralism and regionalism. Regionalism, which is defined as the tendency of a specific group of countries to liberalise mutual trade exchange and simultaneously, to discriminate against the other countries of the world (the countries outside the preferential trade area), has a relatively long history [Machlup 1977]. Its beginnings could be traced back to the establishment of the German customs association (Zollverein) in 1853, but it is the establishment of the European Economic Community (EEC) in 1957 that is commonly recognised as the genesis of regionalism in Western Europe.

[1] PhD, e-mail: pawlak@up.poznan.pl
[2] The paper is funded by National Science Centre within the research project in the field of basic research – SONATA No. 2011/01/D/HS4/03830, titled "Competitiveness of the agri-food sector of the European Union countries' (some ranking and typology with the use of ex post and ex ante measures) – proposals for Poland".

Bhagwati [1992] distinguishes two stages of regionalism after World War II[3]. According to him, the first wave of regionalism appeared in the late 1950s and early 1960s and spread both to developed and developing countries. At the time the idea of regional economic integration became rooted in Europe, Asia, Australia and New Zealand, Latin America and Africa. The second wave of regionalism began in the 1980s, but it boomed in the 1990s. According to the data of the World Bank, from 1990 to 1998, 82 regional trade agreements took effect and more than half of the present free trade zones and customs unions were established or modified during that period [Bijak-Kaszuba 2003]. In contrast to the early forms of regionalism, contemporary regionalism is centred around developed countries[4] located in three main regions of the world, i.e. in Europe, both Americas and Asia. Thus, all the countries that play a leading role on international markets became involved in the development of trade blocs, which began to have significant influence on world trade. It is necessary to stress the fact that developing countries showed great activity in the development of preferential trade areas both during the first and second wave of regionalism. However, the impact of the trade systems they established on the global trade was incomparably smaller than that of developed countries. It is significant that the second wave of regionalism swept across a larger number of countries and higher volume of global turnover than the first wave. The high intensity of the processes of formation of regional trade systems in the late 1980s and early 1990s can be accounted for by the domino effect and the growing concern of the countries not associated in appropriate integrative groups not to be marginalised both on the regional and global markets. Finally, as long as the first wave of regionalism had rather minimal effect on the geographical structure of international trade, the second wave caused its distinct reorientation and contributed to the emergence of three trade blocs, which concentrated their activity on America, Europe and the Pacific region and determined the development of global trade[5].

According to the data of the WTO, at the beginning of January 2013 there were 354 effective regional trade agreements around the world [Regional Trade Agreements Information System (RTA-IS), http://rtais.wto.org/UI/PublicMaintain RTAHome.aspx, 1.02.2013]. The aim of this paper is to present the development tendencies and the significance of agri-food trade in selected preferential trade agreements in both Americas, Asia and Africa.

Material and research method

The author analysed both the groups of the world's greatest food exporters and importers and those which have a smaller share in the global agricultural trade, but which attempt to specialise in the exchange of agri-food products and thus they gain a considerable part of the export income in the region. The analysis included the values of trade turnover both within the region and in exchange with third countries, the share of the agri-food trade in the total trade in the region and the share of the regions under

[3] For more information on the history of regionalism see Grimwade [1996] and Carpenter [2009].
[4] Fiorentino, Crawford and Toqueboeuf [2009] show that in December 2007 26% of all effective regional trade agreements notified upon Article XXIV of the GATT were agreements between developed countries, whereas 37% of them bound developed and developing countries and 37% bound developing countries only.
[5] There are interesting considerations of the subject presented by Schott [1991].

investigation in the global agri-food trade. The analysis used the statistics from the database of the United Nations Conference on Trade and Development (UNCTAD). The investigation encompassed foreign trade in the agri-food products classified in sections 0, 1, 22 and 4 of the Standard International Trade Classification (SITC). The period of time subject to analysis depended on data availability and applied to the years 1995 and 2011. Simultaneously, 1995 was the first year when all of the preferential trade agreements under study functioned at the same time[6].

The volume and structure of trade in agri-food products in selected preferential trade agreements

The essential premise and simultaneously the condition of the development of international trade is diversification of production in individual countries or, to be more specific – the entities functioning within the borders of those countries, i.e. the specialisation of production. In the agri-food sector it depends on the availability, dynamics and above all on the effective use of the necessary factors of production, including natural resources, to a far greater extent than in other sectors of the national economy. For this reason the significance of the agri-food trade in the preferential trade agreements under study is diversified.

The integrative groups from the region of Latin America and Africa play the least important role in the global exchange of agri-food products. In 2011 the regional import of agri-food products in that region reached the maximum value of 1-2% of the global import, whereas the export, except for the Southern Common Market countries (MERCOSUR) and their nearly 9.5% share in the global export of agri-food products, reached the value of not more than 1.5% of the global export (Tables 1 and 2). However, the importance of the agri-food sector in regional trade in those regions of the world was relatively high. In 2011 agri-food products provided 37%, nearly 36%, 17% and about 20% of regional income from the exports of the MERCOSUR countries, the Central American Common Market (CACM) countries, those of the Common Market for Eastern and Southern Africa (COMESA) and the Andean Community (ANCOM), respectively. The second and third of the groups listed above spent simultaneously more than 13% and nearly 19% of total import expenses, respectively. The importance of agri-food trade in the West African region was only slightly less significant. In the Economic Community of West African States (ECOWAS) the share of agri-food export and import in total trade reached 10.5% and 15.5% respectively. In 2011 the countries of the Caribbean Community (CARICOM) were also distinguished by their high share of the agri-food import, which reached almost 18%, in the total import of products in the region. On the other hand, the export of agri-food products played a less important role in the trade exchange structure of that group, as it amounted only to 8% of the total export of products. Simultaneously, it is worth mentioning that in 1995 the share of income from the foreign sales of agri-food products in that area of the world was about 65% higher and reached the value of about 22.5% of the total export

[6] The latest of the trade agreements under study, i.e. the Common Market for Eastern and Southern Africa (COMESA), replaced the Preferential Trade Area for Eastern and Southern Africa established in 1981 and it began to take effect on 8 December 1994.

income. From 1995 to 2011 in the CACM there was also a significant decrease of nearly 35% in the importance of agricultural export in the total export of the region.

Table 1. Export of agri-food products in selected preferential trade agreements in 1995 and 2011

Regional trade agreement	Total agri-food export (billion USD)[a]	The share of the region in the global agri-food export (%)	The share of the agri-food export in the total export in the region (%)	Agri-food export within the region		Agri-food export to the third countries	
				Billion USD	The share in the agri-food export in the region (%)	Billion USD	The share in the agri-food export in the region (%)
1995							
EU-27	208,7	45,4	9,7	149,8	71,8	58,9	28,2
NAFTA	79,5	17,3	9,3	22,4	28,2	57,1	71,8
MERCOSUR	25,0	5,4	35,5	3,9	15,6	21,1	84,4
ANCOM	7,2	1,6	34,0	0,4	5,6	6,8	94,4
CACM	5,1	1,1	54,8	0,4	7,8	4,7	92,2
CARICOM	1,3	0,3	22,4	0,2	15,4	1,1	84,6
ASEAN	32,0	7,0	10,0	6,3	19,7	25,7	80,3
COMESA	5,0	1,1	20,4	0,4	8,0	4,6	92,0
ECOWAS	4,1	0,9	18,5	0,3	7,3	3,8	92,7
2011							
EU-27	558,8	40,3	9,3	425,0	76,1	133,8	23,9
NAFTA	196,5	14,2	8,6	80,4	40,9	116,1	59,1
MERCOSUR	130,7	9,4	37,0	9,3	7,1	121,4	92,9
ANCOM	21,1	1,5	20,3	1,8	8,5	19,3	91,5
CACM	12,6	0,9	35,8	1,9	15,1	10,7	84,9
CARICOM	1,7	0,1	8,1	0,5	29,4	1,2	70,6
ASEAN	131,3	9,5	10,5	27,8	21,2	103,5	78,8
COMESA	16,3	1,2	16,9	3,1	19,0	13,2	81,0
ECOWAS	15,3	1,1	10,5	1,8	11,8	13,5	88,2

a – the value covers sections 0, 1, 22 and 4 of the Standard International Trade Classification (SITC)
Source: UNCTADStat, http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx, 29.01.2013; own calculations.

It is necessary to note the fact that except for the import of agri-food products to the MERCOSUR countries, and in 2011 to the CACM countries as well, the signatories of the aforementioned trade agreements achieved more than 70% of the turnover in agri-food products with third countries, which may indicate small impact of the trade diversion effect which accompanied the formation of a preferential trade area. Trade in those regions was above all created. The investigated integrative groups from Africa and Latin America, except the CARICOM and CACM, were characterised by some of the world's highest rates of increase in the agri-food export. From 1995 to 2011 the rate of increase in export rose

from about 3 to more than 5 times (Table 3). Apart from the MERCOSUR[7], in all of the groups listed above the export within the region increased faster than the export to third countries, which proves the prevailing impact of the trade creation effect. The tendency became the most visible in the African region. Between 1995 and 2011 in the COMESA and ECOWAS the value of the intraregional export of agri-food products increased nearly 8 and 6 times respectively, whereas the value of export to the countries outside the preferential trade agreement increased nearly 3.5 and 4 times respectively.

Table 2. Import of agri-food products in selected preferential trade agreements in 1995 and 2011

Regional trade agreement	Total agri-food import (billion USD)[a]	The share of the region in the global agri-food import (%)	The share of the agri-food import in the total import in the region (%)	Agri-food import within the region		Agri-food import from the third countries	
				Billion USD	The share in the agri-food import in the region (%)	Billion USD	The share in the agri-food import in the region (%)
1995							
EU-27	214,2	45,1	10,3	141,0	65,8	73,2	34,2
NAFTA	50,8	10,7	5,0	20,9	41,1	29,9	58,9
MERCOSUR	7,7	1,6	9,6	4,0	51,9	3,7	48,1
ANCOM	2,8	0,6	10,3	0,4	14,3	2,4	85,7
CACM	1,6	0,3	11,9	0,4	25,0	1,2	75,0
CARICOM	1,7	0,4	17,5	0,2	11,8	1,5	88,2
ASEAN	19,2	4,0	5,4	5,2	27,1	14,0	72,9
COMESA	6,8	1,4	20,6	0,4	5,9	6,4	94,1
ECOWAS	3,1	0,7	16,0	0,2	6,5	2,9	93,5
2011							
EU-27	546,8	39,1	9,0	378,7	69,3	168,1	30,7
NAFTA	170,4	12,2	5,6	78,4	46,0	92,0	54,0
MERCOSUR	14,1	1,0	4,3	7,8	55,3	6,3	44,7
ANCOM	11,7	0,8	9,4	1,9	16,2	9,8	83,8
CACM	7,7	0,6	13,2	2,5	32,5	5,2	67,5
CARICOM	5,3	0,4	17,7	0,6	11,3	4,7	88,7
ASEAN	74,2	5,3	6,4	24,3	32,7	49,9	67,3
COMESA	25,6	1,8	18,8	2,2	8,6	23,4	91,4
ECOWAS	17,2	1,2	15,5	1,5	8,7	15,7	91,3

a – the value covers sections 0, 1, 22 and 4 of the Standard International Trade Classification (SITC)

Source: UNCTADStat, http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx, 29.01.2013; own calculations.

[7] As far as the MERCOSUR countries are concerned, between 1995 and 2011 the value of export of agri-food products to third countries increased nearly 6 times, whereas the value of income from the export of this group of products within the region increased almost 2.5 times (Table 3).

The EU-27 countries were the world's largest exporter and importer of agri-food products, because in 2011 they spent nearly 547 billion dollars to purchase agri-food products abroad, whereas they achieved the income of 559 billion dollars from the sales of domestic products on foreign markets, which made about 40% of global agricultural turnover (Tables 1 and 2). In contrast to the developing countries, most of the trade was done as the intra-EU trade, whose rate of increase between 1995 and 2011 was higher than the rate of exchange with third countries (Table 3). The transactions completed between the EU member states during that period can be estimated at about 66-76%, which proves the fact that apart from the creation effect, the formation of a preferential trade area also resulted in a trade diversion effect. As a result, the geographical structure of the exchange became reoriented and the more effective trade partners from the countries outside the zone, who did not avail themselves of preferences, were replaced with less effective but preferentially treated suppliers from other member states of the EU[8]. The agri-food sector in regional trade in the EU-27 was of lesser importance than in Latin American and African countries. The share of agri-food turnover in the total commodity trade in the EU was about 10% in 1995 and about 9% in 2011.

Table 3. The dynamics of export and import of agri-food products in selected preferential trade agreements in 1995-2011 (1995=100)

Preferential trade agreement	Export			Import		
	Total	Intraregional	To the third countries	Total	Intraregional	From the third countries
EU-27	267,8	283,7	227,2	255,3	268,6	229,6
NAFTA	247,2	358,9	203,3	335,4	375,1	307,7
MERCOSUR	522,8	238,5	575,4	183,1	195,0	170,3
ANCOM	293,1	450,0	283,8	417,9	475,0	408,3
CACM	247,1	475,0	227,7	481,3	625,0	433,3
CARICOM	130,8	250,0	109,1	311,8	300,0	313,3
ASEAN	410,3	441,3	402,7	386,5	467,3	356,4
COMESA	326,0	775,0	287,0	376,5	550,0	365,6
ECOWAS	373,2	600,0	355,3	554,8	750,0	541,4

Source: Own calculations based on the data from table 1 and 2.

The countries of the North American Free Trade Agreement (NAFTA) were the second largest participant of international agri-food markets, as in 2011 their export value was 196.5 billion dollars and the import value exceeded 170 billion dollars, thus making about 14% of the world's export and 12% of the import, of which 41-46% was concentrated in the region (Tables 1 and 2). The share of the agri-food export in the total commodity export of the NAFTA countries was similar to that of the EU-27 countries. However, the import of food was of lesser importance, which points to a higher level of food self-sufficiency and in consequence – a smaller degree of import penetration of the market in

[8] For more information on the effect of creation and diversion in the agri-food trade between the EU countries from the Central and Eastern European region see Pawlak [2011].

that region. Due to the high degree of food self-sufficiency of the NAFTA countries, especially the USA and Canada, and due to the export specialisation of those countries not only in agri-food products but also in industrial, diversified products, with higher value added, the rate of increase in the agri-food trade in those countries between 1995 and 2011 was one of the lowest of all the regional groupings under analysis[9] (Table 3).

What also deserves attention is the stronger position of the Association of South-East Asian Nations (ASEAN) as an exporter of agricultural products. From 1995 to 2011 the value of export of agri-food products from this integrative group increased more than 4 times and in the last year under investigation it exceeded 131 billion dollars (Tables 1 and 3). At the same time a nearly four-fold increase in import expenses could be observed, which reached the value of over 74 billion dollars in 2011. The share of income from the sales of this group of products in the total commodity export from the region in 2011 was 10.5% and it was 1.2% and 1.9% higher than in the EU and NAFTA countries, respectively (Table 1). Globally in 2011 the ASEAN countries provided 9.5% of the agri-food export value and they were the world's third largest food exporter. Their share in the global import of agri-food products was smaller and amounted to about 5% (Table 2).

It is important to note that due to the complementary structure of production and, in consequence, their export offer, the ASEAN countries completed about 80% of their export and 70% of import with the countries outside the association. However, from 1995 to 2011 the rate of increase in the intraregional turnover was higher, especially in imports. Thus, it is possible to draw a conclusion that the establishment and functioning of the ASEAN free trade area resulted in a stronger trade creation rather than trade diversion effect. The geographical structure of exchange and the considerable share of third countries in it were largely developed by the trends in specialisation of production and availability of specific products, which caused the need of exclusive import both in the countries belonging to the group and in its external trade partners.

Concluding remarks

To sum up, it is possible to say that the two waves of regionalism and the domino effect they caused led to the concentration of the most important trade agreements in the global trade system in three regions, i.e. in Europe, both Americas and Asia, with a smaller share of preferential trade areas in Africa. It is necessary to note the fact that contemporary preferential trade agreements break the scheme of integration of the countries at a similar level of economic development, which was characteristic of the first stage of regionalism. The regional systems established in the 1990s connect countries with different degrees of development, the examples of which are such organisations as the EU-27, NAFTA or COMESA. This fact results not only from different conditions in which regionalism developed at the end of the 20th century but also from a change in the strategy of foreign trade in the developing countries, which was manifested by its increased openness.

The dependence of production and its trends in specialisation on the natural conditions and access to natural resources causes differences in the importance of agri-food trade in individual integrative groups. The world's greatest exporters and importers of agri-food products were the EU-27 and NAFTA countries. However, the importance of agricultural

[9] Without the rate of increase in export in the CARICOM countries.

turnover in the total commodity trade structure was relatively small in them and fluctuated around 10% of the total volume, which means that highly developed countries more often tend to specialise and make profit from the export of industrial products. In contrast to them, the countries concentrated in the integrative groups from the regions of Africa and Latin America do not play an important role in the global exchange of agri-food products in spite of the relatively high importance of the agri-food sector in regional trade, which could be observed there.

The establishment and functioning of a preferential trade area is accompanied by the trade creation and diversion effect. The impact of these two effects in the regional groupings under study was diversified. The strongest diversion effect could be observed in the EU-27 countries, where 66-76% of their agri-food turnover was part of the intra-EU trade. In the other groups trade creation was more visible than trade diversion, which resulted in a larger scale of trade with third countries. This leads to a conclusion that regional trade liberalisation did not inhibit the development of global agricultural trade.

On the one hand, a less complex character of negotiations and a greater ability to reach an agreement undoubtedly implicate the easiness of signing regional trade liberalisation agreements and speak in favour of them. On the other hand, by liberalisation of trade on a smaller scale regional trade agreements offer less profit to the producers of specific goods. It is so because of the fact that regional liberalisation contributes to a less dynamic increase in global prices than in the case of multilateral liberalisation and additionally, it offers producers smaller compensation due to the limitation of price support. However, in view of the fact that the WTO plays an important role in the liberalisation of trade in industrial products and its effects concerning agricultural trade are less significant[10], it is possible to conclude that regional trade agreements are an effective form of liberation and stimulation of the development of agricultural trade.

References

Bhagwati J. [1992]: Regionalism versus Multilateralism. *The World Economy*, vol. 15, No. 5.

Bijak-Kaszuba M. [2003]: Regionalna liberalizacja handlu międzynarodowego a zmiany strukturalne zagranicznych obrotów towarowych kraju uczestniczącego (na przykładzie Polski). Wydawnictwo Uniwersytetu Łódzkiego, Łódź.

Carpenter T. [2009]: A Historical Perspective on Regionalism, [w:] Multilateralizing Regionalism. Challenges for the Global Trading System, R. Baldwin, P. Low (red.). Cambridge University Press, Cambridge.

Dybowski G. [1998]: Uwarunkowania handlu zewnętrznego Polski towarami rolno-spożywczymi, [w:] Identyfikacja priorytetów w modernizacji sektora rolno-spożywczego w Polsce. FAPA, Warszawa.

Fiorentino R. V., Crawford J., Toqueboeuf Ch. [2009]: The Landscape of Regional Trade Agreements and WTO surveillance, [w:] Multilateralizing Regionalism, R. Baldwin, P. Low (red.). Cambridge University Press, Cambridge.

Gibson P., Wainio J., Whitley D., Bohman M. [2001]: Profiles of Tariffs in Global Agricultural Markets. Agricultural Economic Report No. 796, Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington D.C.

Grimwade N. [1996]: International Trade Policy. A contemporary analysis. Routledge, London, New York.

Ingco M. [1995]: Agricultural Trade Liberalization in the Uruguay Round. One Step Forward, One Step Back? Policy Research Working Paper 1500, International Trade Division, The World Bank, Washington D.C.

[10] In 1992 the level of customs tariffs on agricultural products was about 15 times higher than the tariffs on industrial products, whereas in 2001 when the period of implementation of the Uruguay Round decisions in developed countries finished, the duties on agricultural products were still 12 times higher than those on industrial products. See Ingco [1995] and Gibson et al. [2001].

Machlup F. [1977]: A History of Thought on Economic Integration. The Macmillan Press Ltd., London, Basingstoke.
Pawlak K. [2011]: The static effects of customs union in agri-food trade of the New Member States of the European Union. *Annals of The Polish Association of Agricultural and Agribusiness Economists*, Volume XIII No. 6, Warszawa-Poznań-Wrocław.
Przygodzka R. [2006]: Fiskalne instrumenty wspierania rozwoju rolnictwa – przyczyny stosowania, mechanizmy i skutki. Wydawnictwo Uniwersytetu w Białymstoku, Białystok.
Regional Trade Agreements Information System (RTA-IS). [Available at:] http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx. [01.02.2013].
Schott J. J. [1991]: Trading Blocks and the World Trading System. *The World Economy*, vol. 14, No. 1.
UNCTADStat. [Available at:] http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx. [29.01.2013].