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INTERNATIONAL TRADE OF TOMATOES (2009-2011)

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Abstract

The study reveals the commercial activities related to international situation for tomatoes, during 2009-2011. It aims to highlight the level of imports and exports value worldwide in general and the situation by continents (Africa, Asia, the two Americas, Asia, Europe and Oceania). Based on the indicators mentioned above (determined by multiplying the physical volume of imports and exports respectively with average selling prices), was established international commercial exchanges balance for tomatoes. There are highlighted specific situations of continental units as well as two particular cases - Romania and the European Union - having regard to the realities of our country reporting at regional and continental levels. In terms of world imports and structure stands out: the preponderance of Europe in the quantities imported - 57.61 %, shares quite low for Africa and Oceania - 0.62 % and 0.08 %, the rest of the continental units not exceeding 30.0 % (respectively 26.42 % and 15.27 % America and Asia); imports accounted for about 4 % of total world production of tomatoes (average 2009-2011); The European Union is a leading brands worldwide, surpassing the situation of most continents - 43,76 % (17,06 % of total production); Romania constitutes a "normal" operator, achieving 0.75 % of total worldwide imports. When analyzing the export situation can be observed the following: Europe remains, as in the case of imports, the main player on the market (39.13 %), but the situation is balanced in favor of Asia 28.12 %, while for America - 25.88 % the situation is similar (as a percentage) with the existing imports (same observation applies to Oceania - 0.08 %); Africa manages to significantly increase the share in the exports (6.79%) for imports compared to the situation; the world's total exports is about 4.5 % of the total tomato production; European Union held 37.0% of total world exports of tomatoes amount representing approximately 12 % of their production; Romania achieved 0.02% of world exports of tomatoes and the indicator has an upward trend for analyzed period, something beneficial - especially given that oscillating evolves of imports (approximately 1.81 % of the national total production - negative aspect);

Key words**:** *commercial balance, commercial exchanges, tomato, value*

INTRODUCTION

Vegetables grown in the open, industrial greenhouses, glasshouses - solar and other shelters and are important for food industry, as a factor intensifying land use and the use of labor resources, feed, export and source of profit [4].

In a rational diet, fresh or processed fruits and vegetables covering about 15% of human energy.

Industrial processing for consumption or fruits, leaves, flowers, buds, roots, rhizomes, seeds, tubers or stems of varieties of plants, shrubs, trees or trees [5].

1. Market activity is not conducted in a vacuum, but in a competitive environment. However, there are two types of competition: perfect and imperfect [6].

Development of international trade has experienced an intensity and different stages. The longest period of uninterrupted growth in world trade relative were the years 1820-1914; in the interwar period growth rates were significantly lower, particularly under the influence of economic crisis.

The largest rate of growth for world trade is recorded in the decades that followed the Second World War. Main characteristic of this period is the faster growth of world trade relative to world production [3].

International economic relations are imperative to know the characteristics of the foreign market of agricultural products as their base should be based on the work of foreign trade operators represented by companies and private entrepreneurs [2].

Worldwide agricultural trade holds a small share in total agricultural production (approx. 15%), most of which is intended, primarily, to domestic consumption. The main reason is that countries of the world exporting what they abound over domestic demand, with a strong agricultural trade waste.
The most important marketed products are cereals, oilseeds, dairy products, beverages, vegetable oils and fats. The biggest exporters are the US and EU, who own a 19% share of global exports [8].
Although the share of vegetables in area under cultivation at EU level is about the same as in our country, given that consumption needs cannot be provided from internal resources, it is necessary to organize routes for internal capitalization and trading to limit imports of vegetables and canned from EU Member States or with third countries [9].
Under the conditions our country's horticultural recovery paths are pointing in three different directions: fresh consumption; export delivery; raw material for food industry [1].
In this context it seems interesting to present the evolution of international trade with tomato (2009 - 2011), worldwide.

MATERIAL AND METHODS

Drawing up the paper was used documentation by using statistical data [10]. Following this we used a nomenclature system of indicators specific to highlight some agricultural trade approved by the United Nations Food and Agriculture Organization - FAO.
They were selected quantitative information on volume and value volume of imports and exports of tomatoes to worldwide at the five continental units (Africa, America, Asia, Europe and Oceania).
The study carried out Romania's position in the global market in terms of foreign trade with tomato.

RESULTS AND DISCUSSIONS

Table 1 shows the evolution and structure of imports worldwide.
The year 2009 is characterized by a total export value of 7,128,098 thousand $, which amount is based on continental contributions, punctual as follows: 9,462 thousand $ Oceania (0.13 %), Africa 13,249 thousand $ (0.19 %) 351,497 thousand $ Asia (4.93%), 1,820,340 thousand $ America (25.54%), Europe 4,933,550 thousand $ (69.21%).
For 2010 there is a total value of world imports of 8,383,299 thousand $, whose structure is based on the percentage contribution of 65.47% Europe – 5,488,550 thousand $, 27.16% America – 2,276,900 thousand $, 7.03% Asia - 589,661 thousand $, 0.21% African – 16,892 thousand $, 0.13% Oceania – 11,296 thousand $.
If we analyze the situation of 2011 it appears that in each continent were recorded different values of the indicator, from 15,249 thousand $ for Oceania (0.18%) to 5,389,510 thousand $ for Europe (62.72%).

Table 1. Tomatoes - World Imports (2009-2011)

Specification	2009		2010			2011			Average 2009 – 2011		
	Th. $.*	Str.** %	Th. $.*	Str.** %	2010/ 2009**	Th. $.*	Str.** %	2011/ 2010**	Th. $.**	Str.** %	Average/ 2011**
Africa	13,249	0.19	16,892	0.21	127.49	25,687	0.30	152.06	18,609.3	0.23	72.44
America	1,820,340	25.54	2,276,900	27.16	125.08	2,616,050	30.44	114.89	2,237,763.3	27.85	85.53
Asia	351,497	4.93	589,661	7.03	167.75	546,879	6.36	92.74	496,012.3	6.17	90.69
Europa	4,933,550	69.21	5,488,550	65.47	111.24	5,389,510	62.72	98.19	5,270,536.7	65.60	97.79
Oceania	9,462	0.13	11,296	0.13	119.38	15,249	0.18	134.99	12,002.3	0.15	78.70
Total	7,128,098	100	8,383,299	100	117.60	8,593,375	100	102.50	8,034,923.9	100	93.50
EU	4,063,890	57.01	4,478,410	53.42	110.20	4,304,340	50.09	96.11	4,282,213.3	53.29	99.48
Romania	42,211	0.59	58,288	0.70	138.08	40,271	0.47	69.08	46,923.3	0.58	116.51

* http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E
** own calculation

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The rest of the continents have experienced levels of the indicator 25,687 thousand $ Africa (0.30%), Asia 546,879 thousand $ (6.36%) and 2,616,050 thousand $ America (30.44%). The total value of the indicator was 8,593,375 thousand $.

The average period stand out with a total value of world imports of 8,034,923,9 thousand $, from which can be found in each continent effective contributions, variables: 12,002.3 thousand $ Oceania (0.15%); 18,609.3 thousand $ Africa (0.23%); 496,012.3 thousand $ Asia (6.17%); 2,237,763.3 thousand $ America (27.85%); 5,270,536.7 thousand $ Europe (65.60%).

The European Union has made sequential contributions worldwide on the indicator, of 57.01%, 53.42%, 50.09 % and 53.29% for 2009, 2010, 2011 and period average - values 4,063,890 thousand $, 4,478,410 thousand $, 4,304,340 thousand $and 4282213,3 thousand $.

Romania has contributed in varying proportions to achieving global level of indicator: 42,211 thousand $ for 2009 - 0.59% 58,288 thousand $ for the year 2010- 0.70%, 40271 thousand $ for the year 2011- 0.47%, 46,923,3 thousand $ for the period average - 0.58%.

Tomato export value level is shown in the Table 2, both in terms of its structure and in terms of time evolution.

For 2009 the indicator varied from 11,569 thousand $ in Oceania, to 3,772,680 thousand $ in Europe, and the overall level on the indicator reached 7,009,064 thousand $. As a result there are continental variable weights in total as follows: 0.17% Oceania, Africa 5.03% - 352,595 thousand $, 14.70% Asia – 1,030,610 thousand $, 26.27% America – 1,841,610 thousand $ and 53.83% Europe.

If we analyze the specific situation of 2010, it may be noted that the overall level for the indicator was 8,251,085 thousand $, to which continents brought their contributions: 4,220,310 thousand $ Europe - 51.15% 2,353,060 thousand $ America - 28.52% 1,312,680 thousand $ Asia - 15.91% 350,491 thousand $ Africa - 4.24% 14,544 thousand $ Oceania - 0.18%.

For 2011 we can see the variation, level of the indicator, from 13,290 thousand $ for Oceania (0.16%) to 4,039,790 thousand $ at European level (47.52%). The remaining continents recorded 449,635 thousand $ Africa (5.29%), Asia 1,157,370 thousand $ (13.61%), 2,841,480 thousand $ America (33.42%). These values have made the world's total exports to record 8,501,565 thousands $.

Table 2. Tomatoes - World Exports (2009-2011)

Specification	2009		2010			2011			Average 2009 – 2011		
	Th. $.*	Str.** %	Th. $.*	Str.** %	2010/ 2009**	Th. $.*	Str.** %	2011/ 2010**	Th. $.**	Str.** %	Average/ 2011**
Africa	352,595	5.03	350,491	4.24	99.40	449,635	5.29	128.28	384,240.3	4.85	85.45
America	1,841,610	26.27	2,353,060	28.52	127.77	2,841,480	33.42	120.75	2,345,383.3	29.61	82.54
Asia	1,030,610	14.70	1,312,680	15.91	127.36	1,157,370	13.61	88.16	1,166,886.7	14.73	100.82
Europa	3,772,680	53.83	4,220,310	51.15	111.86	4,039,790	47.52	95.72	4,010,926.7	50.64	99.28
Oceania	11,569	0.17	14,544	0.18	125.71	13,290	0.16	91.37	13,134.3	0.17	98.82
Total	7,009,064	100	8,251,085	100	117.72	8,501,565	100	103.03	7,920,571.3	100	93.16
EU	3,686,590	52.60	4,126,180	50.01	111.92	3,932,130	46.25	95.29	3,914,966.7	49.43	99.56
Romania	1,351	0.02	2,125	0.03	157.29	1,918	0.02	90.25	1,798	0.02	93.74

* http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E
** own calculation

Discussing the average period it is found that global indicator reached a level of $ 7,920,571.3 thousand $, a level which is based on Continental contributions percentage - variables: 0.17% Oceania (13,134.3 thousand $); 4.85% Africa (384,240.3 thousand $); 14.73% Asia (1,166,886.7 thousand $); 29.61% America (2,345,383.3 thousand $); 50.64% Europe (4,010,926.7 thousand $).

Reporting the specific situation of the European Union to world situation can be found in the structure of world exports variable weights as follows: 46.25% in 2011 (3,932,130 thousand $), 49.43% for period average (3,914,966.7 thousand $), 50.01% for 2010 (4,126,180 thousand $) and 52.60% in

2009 (3,686,590 thousand $).

In Romania's case we can see an average of the 1,798 thousand $ indicator (0.02% versus the global index), which is based on average annual contribution: 1,351 thousand $ in 2009 (0.02%), 2,125 thousand $ in 2010 (0.03%), 1,918 thousand $ for 2011 (0.02%).

On the export of fresh vegetables, Romania can boost the European and world market by forming commercial farms, especially those producing organic [7].

Table 3 shows the trade balance of global exchanges achieved by the tomatoes.

The trade balance world exchanges with tomato has been deficient in 2009 (-118.9 Mil. $), This situation is due to the surpluses recorded for Africa, America, Asia and Oceania - 339.4 million $, 21.3 million $, 679.1 million $ and 2.1 million $, especially the specific deficit for European continent: -1,160.8 million. $.

2010 maintains the weak trade balance (-132.2 mil. $), Something determined in the previous year mostly by European deficit (-1,268.2 million. $), which could not be offset by surpluses of other continents 333.6 million $, 76.2 million $, and 3.2 million $, 723. $ - specific values for Africa, America, Asia and Oceania.

If we refer to the situation in 2011 it can be seen that deficient trade balance only appear in two continents - Europe and Oceania (-1,349.7 and 1.9 mil. $), While the surplus character is specific to America, Africa and Asia - 225.5 million $, 423.9 million $ and 610.5 million $. Therefore we can talk of a deficient global trade balance (-91.7 mil. $).

Table 3. Tomatoes - The trade balance global trade - Mil. $ (2009-2011)

Specification	2009			2010			2011			Average 2009 – 2011		
	export*	import*	±**	export*	import*	±**	export*	import*	±**	export*	import*	±**
Africa	352.6	13.2	339.4	350.5	16.9	333.6	449.6	25.7	423.9	384.2	18.6	365.6
America	1,841.6	1,820.3	21.3	2,353.1	2,276.9	76.2	2,841.5	2,616.0	225.5	2,345.4	2,237.8	107.6
Asia	1,030.6	351.5	679.1	1,312.7	589.7	723	1,157.4	546.9	610.5	1,166.9	496.0	670.9
Europa	3,772.7	4,933.5	-1,160.8	4,220.3	5,488.5	-1268.2	4,039.8	5,389.5	-1,349.7	4,010.9	5,270.5	-1,259.6
Oceania	11.6	9.5	2.1	14.5	11.3	3.2	13.3	15.2	-1.9	13.1	12.0	1.1
Total	7,009.1	7,128	-118.9	8,251.1	8,383.3	-132.2	8,501.6	8,593.3	-91.7	7,920.5	8,034.9	-114.4
EU	3,686.6	4,063.9	-377.3	4,126.2	4,478.4	-352.2	3,932.1	4,304.3	-372.2	3,915.0	4,282.2	-367.2
Romania	1.3	42.2	-40.9	2.1	58.3	-56.2	1.9	40.3	-38.4	1.8	46.9	-45.1

* http://faostat3.fao.org/faostat-gateway/go/to/download/T/TP/E
** own calculation

In the period average (fig. 1) there is a deficient trade balance (-114.4 mil. $), a situation which is based on continental levels of: 1.1 mil. $ Oceania; 107.6 mil. $ America; 365.6 mil. $ Africa; 670.9 mil. $ Asia; -1,259.6 Million. $ in Europe.

The European Union is characterized by a strictly deficient trade balance for tomatoes, averaging -367.2 million. $, While extreme values recorded were -352.2 million. $ in 2010 and -377.3 million $ in 2009 - fig. 2.

At national level it can be seen that the tomatoes trade balance is strictly deficient, unfavorable aspect. The weak are manifested throughout the analyzed period (Fig. 3): -40.9 million. $ in 2009; -56.2 million. $ 2010; -38.4 million. $ in 2011; -45.1 million. $ for period average.

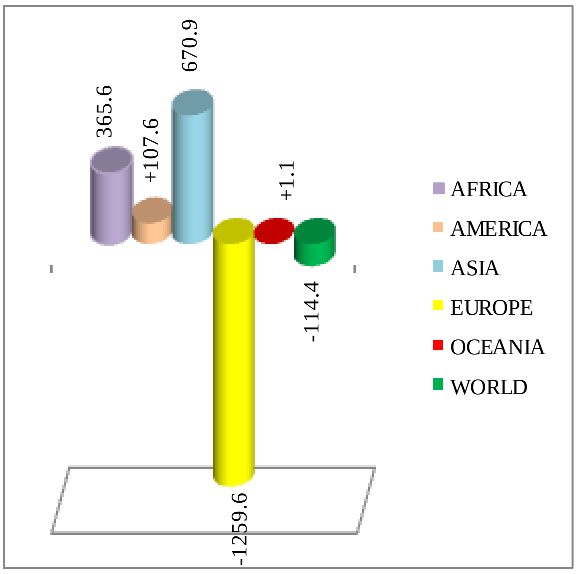

Fig. 1. World trade balance - the period average (mil. $)

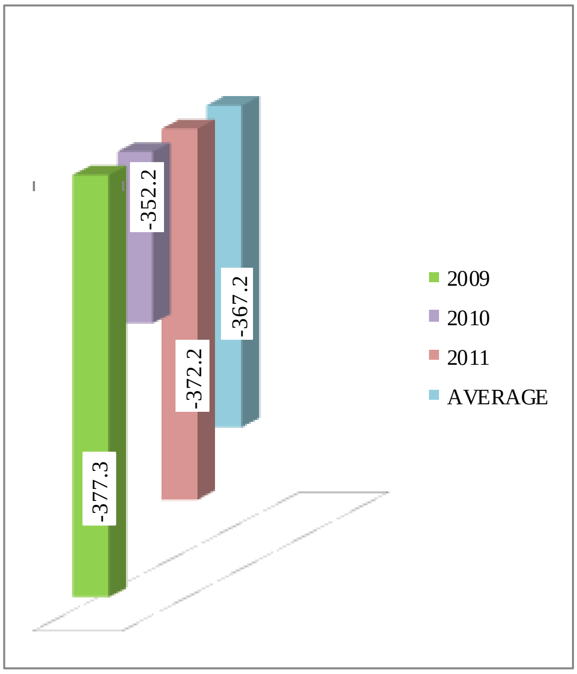

Fig. 2. EU. The trade balance - annual evolution (mil. $)

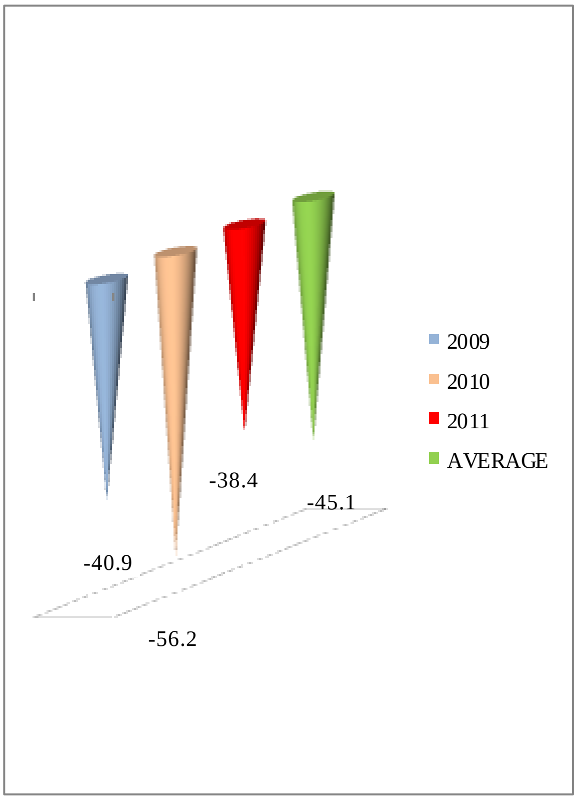

Fig. 3. Romania's commercial balance (mil.$)

CONCLUSIONS

-The European Union has made imports exceeding half of the world - 53.29% (almost 10% higher than the quantitative imports share registered) being the main player in the European market;

- Romania has a share of 0.58% lower than the existing quantitative imports (-0.17%);
- Global imports dynamics is upward, a trend which is respected in African, American and Oceania continents. Rest of the analyzed areas present an oscillating evolution for 2009-2011;
- For the value of exports, Europe remains the main global player, followed at a considerable distance by America - 50.64 % and 29.61% respectively (increases compared to the share at the quantitatively level of the expressed indicator).
- The dynamics of exports is an ascending one worldwide and for the American continent, otherwise the evolutions being uneven;
- Global balance is strictly deficient, both average and sequentially. This situation is caused by the deficit for Europe - decisive actor the global market for tomatoes rest of the world registering excess balances;
- The European Union is characterized by a deficient balances, being able to affirm that it decisively influenced the European situation;
- At national level, we can say that the situation is unfavorable, the weak balance being a permanent one.

REFERENCES

[1]Constantin, M., 1992, Marketing in agriculture, Didactic and Pedagogic, Bucharest, Chapter 9, p. 126-144

[2]Constantin, M. et al., 2009, Food production Marketing, Ed. Agro Engineering, Bucharest, Chapter 9, Part I, p. 201-256

[3]Crețoiu, G., Cornescu, V., Bucur, I., 2008 Economics, Second Edition, Ed. Beck, Chapter 21, p. 426-461

[4]Pânzaru, R.L., Medelete, D.M, Stefan, G., 2009, The Economics of vegetable production, Ed. Universitaria Craiova, Chapter 3, p. 141-188

[5]Stefan, G., Toma, A.D, Pânzaru, R.L, 2006, "Economy and agri-food policy" Alfa Publishing, Iasi, Chapter 6, p. 155-208

[6] Stefan, G., Bodescu, D., Toma, A.D, Pânzaru, R.L., 2007, Economy and chain food products, Alfa Publishing, Iasi, Chapter 10, p. 326-446

[7]Zahiu Letitia et al., 2005, Police and agricultural market reform and European integration Ed. Ceres, Bucharest, Chapter 3, p. 250-465

[8]Zahiu Letitia et al., 2006, EU Agriculture under the impact of Common Agricultural Policy, Ed. Ceres, Bucharest, Chapter 12, p. 330-352

[9]Zahiu Letitia et al., 2010 Agriculture in the Romanian economy, between expectations and reality, Ed. Ceres, Bucharest, Chapter 3, p. 58-96

[10] http://faostat.fao.org