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AGRICULTURE AND FOOD SECURITY IN ROMANIA

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Abstract

Theoretical definitions are given within the article regarding food security and independence and also there are presented the agents that influence them. Moreover, a description of the security at global and national level is given, ilustrated by a series of specific indicators and trends of their evolution. Finally, it is described the perspective of food security in our country.

Key words: food security, food independence, food crisis, price volatility, food consumption.

Introduction

During the last three years, under the impact of crisis the global community faced, the problems related to food security aggravated. Predictions are no longer necessary to be made for Romania in regards to food crisis for a great part of the population is already affected by it. Romanians' precarious food security is not yet the direct consequence of the lack of food, but of the decrease of the purchasing power generated by at least four factors: salary adjustment, VAT increase, re-calculation and taxation of pensions and inflation increase. The aforementioned agents highly contribute to the decreasing of the food consumption, both from quantitative and qualitative point of view, and to the volatility of the prices for food, to the decreasing of self-consumption at the same time with the substantial increase of imports.

From ONU's perspective, the national and international (collective) security notion is a single whole of the following dimensions: economics, food, environmental, community, demographics and military. All these dimensions of the security concept are highly connected and interact with each other.

According to many field specialists, the food security of a country is the most important dimension of the national security. A state has food security when it has sufficient agricultural and food products in order to cover the feeding necessities of all

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inhabitants within its borders and to assure, at the same time, the necessary reserves of feeding stuff for animals and water in cases of natural disasters, war, crises etc. Not being able to ensure food security may lead, within the country, to social tensions, to the physical and psychical health deterioration of the population and may create economic and political instability. And outside the country, it may create diplomatic, economic and political pressures, triggering unwanted and dangerous influence upon national security.

Hunger has become an endemic phenomenon in the world. According to FAO, presently, the number of the persons that suffer from hunger exceeds 1.26 billions, compared to the estimated amount of only 862 millions during 2000-2004. The existence and amplification of food penury is favored mainly by the following factors: demographic increase; cataclysms; drought; climatic disorders (mostly generated by global warming); oil appreciation; poverty; financial crisis; economic crisis; urban development; cleavage augmenting between production and food consumption etc.

According to ONU, for over 8 years humankind has been consuming more food than it produces. Until now the food penury was mitigated by consuming the reserves gathered in the favorable agricultural years. The issue has become more serious as since 1999 until now, at a global level, the cereals reserves have been reduced to half of the total amount. Thus, if in 1999 the global cereals reserves could have ensured around 116 days for the whole worldwide population, nowadays it can only provide for 56 days, a period which is below the acceptable period of time for the food security assurance.

A few years ago, field experts estimated an imminent food crisis within the world, with serious manifestation forms for 2018-2020. Such crisis may have significant influence upon national and international security and may generate instability within economic, social, political and military environment. If unethical people or terrorist organizations should take the lead on such times, "food weapon" could cause unforeseeable effects that may outrun the ones caused by weapons of mass destruction. In fact, the World Bank Group and the International Monetary Fund have already noticed the state leaders from all over the world to take all necessary measures and to lodge all immediate efforts in order to prevent such crisis from happening.

Influenced by crises that affected during the last three years the global economy and by the political instability in many Arab countries that generated into food appreciation, the issues related to global food security aggravated. The Japan nuclear crisis, generated by the earthquake of approximately 9° on the Richter scale and the serious drought China and other Asian countries are confronted with, will aggravate much more the aforementioned issues. In this case, we can consider that the estimated food crisis will take place sooner than expected. There are already visible signs, that is the evolution of the price volatility to the mainly agro-food products. (see table 1)

Table no. 1. Annual indexes of the prices of primary food on a global level (1990-2011)

Year			Price	s index		
	Total food	Meat	Milk	Cereals	Oil	Sugar
1990	105,4	124,0	74,8	97,6	74,0	178,1
1991	103,6	125,4	79,6	96,9	79,1	127,2
1992	108,4	125,2	95,4	102,3	84,3	128,5
1993	104,6	118,1	84,6	99,5	86,0	142,2
1994	110,5	115,0	82,3	104,5	113,4	171,8
1995	123,2	118,4	109,6	119,4	125,0	188,5
1996	129,1	128,4	109,4	140,7	111,2	169,7
1997	118,4	123,2	105,1	112,1	112,5	161,4
1998	107,1	103,2	99,1	99,8	129,9	126,6
1999	92,3	97,8	86,3	90,2	91,6	89,0
2000	90,2	95,8	95,4	84,5	67,8	116,1
2001	93,3	96,5	107,1	86,2	67,6	122,6
2002	89,9	89,5	82,2	94,6	87,0	97,8
2003	97,7	96,8	95,1	98,1	100,8	100,6
2004	112,4	113,7	122,6	107,4	112,2	101,7
2005	117,3	120,1	135,4	103,4	103,6	140,3
2006	126,5	118,5	128,0	121,5	112,0	209,6
2007	158,6	125,1	212,4	166,8	169,1	143,0
2008	199,6	153,2	219,6	237,9	225,4	181,6
2009	156,8	132,9	141,6	173,7	150,0	257,3
2010	185,1	152,0	200,4	182,6	193,0	302,0
2011	233,4	167,9	225,6	249,3	278,5	419,2

Source: Global Food Price Monitor March 2011, FAOSTAT

From the table above it results a significant price increase (price volatility) that occurred in the last two years for primary food on a global level. This evolution forebodes the start of a food crisis of great proportions within the world.

After Romania has adhered to NATO – being a full rights and obligations state member-politicians with national security responsibilities have rightfully considered, taking into consideration some of our troops' participation to several potential conflict areas, our country as a security ensurer. It would be "magnificent" if we made the same statement about food security. Unfortunately, this is not possible because, nowadays, Romania is a "net importer" of food and thus, of food security.

Most advantaged countries in what concerns the insurance of food security are those that have a great agricultural potential and can provide great quantities of food raw materials and food above the national demand. Romania is one of these countries and has a generous agricultural potential, being on the 5th place of EU countries, and can provide food demand for approximately 80 millions people. We can state that such countries may have – and most of them have – food independence. This advantage that Romania has is not sufficiently valued because, according to experts' estimations and

some of national and international institutes in domain, approximately 70% from the food aggregate demand is covered by import of such products.

In such conditions, the current status of Romania's food independence and security is unacceptable.

Predictions of food crisis are no longer useful because a more increasing part of the population is affected by it. This food crisis is not yet the consequence of food lack on the market, but the decrease in the purchasing power, generated by at least four factors: public workers salary adjustment with 25%, re-calculation of pensions and health insurance taxation (5,5%), and from these, VAT increase with 5% and inflation increase (the biggest in all EU state members).

After the National Institute of Statistics published the consumption price index in February 2011, it was considered that Romania was in food crisis, emphasizing that food prices have increased, at least in the last three years, more than those of non-food products or other services.

We also mention the prognosis made by Nomura Bank in Japan, which states that Romania's food problem will accentuate. According to it, our country is on the 12 place in the world in what concerns the food risk generated mostly by food price volatility (vulnerability). (table 2)

Regarding the disorders generated by food price vulnerability on the global market, Robert Zoellick, World Bank President, states the following: "We should be alarmed because price increase tendency causes pain for all poor people in the world", but he advised the international community to be aware of this risk and not to aggravate this problem by imposing measures, such as interdicting exports or setting administered prices. Moreover, he requested G20 leaders to consider food as number one priority of 2011. Angel Gurria, Secretary General of the OECD, asserts that "Agricultural markets have always been unstable, but if governments collaborate such extreme price variations can be diminished and vulnerable consumers and producers may be protected."

COUNTRY X # **COUNTRY** X 1 21 Bangladesh 101,5 India 100.4 Morocco 101,3 22 China 100,4 3 101,3 23 Latvia 100,4 Algeria 4 Nigeria 101,2 24 Vietnam 100,4 5 Lebanon 101,2 25 Venezuela 100,4 Portugual 6 Egipt 101 26 100,4 Sri Lanka 101 27 Saudi Arabia 100,3 Kazakhstan 8 Sudan 100,9 28 100,3 100,9 29 Uzbekistan 100,3 9 Hong Kong Azerbaijan 100,8 Russia 100,3 10 30 100,8 100,3 11 Angola 31 Mexico 12 100,7 32 100,2 Romania Indonesia

Table 2. Food price vulnerability index for 40 countries with food risk

#	COUNTRY	X	#	COUNTRY	X
13	Philippine	100,7	33	Croatia	100,2
14	Kenya	100,7	34	Peru	100,2
15	Pakistan	100,6	35	Greece	100,2
16	Libya	100,6	36	Belarus	100,1
17	Dominican Republic	100,6	37	Slovenia	100,1
18	Tunisia	100,5	38	Syria	100,1
19	Bulgaria	100,5	39	Turkey	100,1
20	Ukraine	100,5	40	South Korea	100,1

Source: Bussiness Inteligence no. 5074/2011, page 33

All the abovementioned regarding current situation and the perspectives of Romania's food security are supported by unfavourable trends of indexes evolutions by means of which population alimentation is characterized, respectively: monthly average consumption per person of agrofood products, the share of self-consumption in the total consumption of agrofood products and the evolution of external trade with agrofood products.

The annual average consumption per inhabitant for the primary agrofood products during 2000-2009 (Table 3) had oscillating evolutions. An increase tendency was registered for Romania during the period before adherence to the European Union, and afterwards a slight decrease. Moreover, it results that in the last three years a series of basic products for population's alimentation (cereals and cereal products, potatoes, vegetables, fruits, sugar, milk and dairy products, beer and wine) have suffered a decreasing trend, highlighting a deterioration of Romanians' alimentation.

Table 3. The annual average consumption of primary food products and beverages in Romania during 2000-2009 (kilo/pers./month)

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Loaf	9,925	9,825	9,931	10,112	9,875	9,713	9,55	9,37	9,223	8,978
Pork	0,699	0,747	0,72	0,79	0,859	0,761	0,799	0,869	0,899	0,891
Poultry meat	0,919	0,918	1,062	1,121	1,098	1,198	1,262	1,34	1,418	1,499
Meat products	0,733	0,822	0,839	0,894	0,945	0,958	1,003	1,05	1,111	1,106
Fish and fish products	0,327	0,353	0,363	0,376	0,426	0,467	0,505	0,547	0,596	0,636
Milk*	6,441	5,96	5,82	5,854	5,934	5,962	5,85	6,067	6,151	6,168
Cheese and cream	1,143	1,101	1,09	1,14	1,127	1,186	1,218	1,28	1,319	1,329
Eggs**	13,819	13,879	14,277	14,471	13,428	13,479	13,319	12,977	13,065	13,055
Oil***	0,867	0,911	0,907	0,916	0,9	0,913	0,915	0,907	0,899	0,914
Fruits	2,291	2,144	2,019	2,277	2,457	2,56	2,705	3,082	3,312	3,552
Potatoes	3,967	4,58	4,396	4,114	4,027	4,028	3,705	3,639	3,614	3,586

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Vegetables and vegetable tins	7,974	7,293	7,027	7,102	7,083	6,769	6,987	7,036	7,305	7,532
Tomatoes	2,065	0,923	0,94	0,994	0,891	0,825	1,007	1,032	1,089	1,148
Sugar	0,834	0,839	0,839	0,853	0,835	0,819	0,789	0,775	0,759	0,758
Honey	0,029	0,034	0,031	0,029	0,034	0,038	0,042	0,045	0,049	0,055
Mineral water and other non-alcoholic drinks *	1,735	1,842	2,132	2,48	2,737	3,067	3,437	4,259	4,833	4,821
Wine*	0,773	1,275	1,28	1,28	1,097	0,984	0,824	0,905	0,933	0,704
Beer*	0,64	0,554	0,549	0,634	0,701	0,797	0,919	1,081	1,201	1,165

^{*} liter/pers./month ** pieces/pers./month *** corn, sunflower and soya oil liters **Source**: Standard of living coordinates in Romania. Population's income and consumption, INS, Bucharest, editions 2000-2010

In 2009 self-consumption (Table 4) had significant shares in the primary agrofood products consumption, as it follows: eggs (52%), vegetables (37%), milk and dairy products (32%), potatoes (29%), pork (29%), poultry meat (25%), wine (75%) etc. The high level of agrofood products self-consumption influences the performance of agrofood system, the respective products are not validated on the market under no kind of performance in what concerns quality, safety and their prices. Economic agents resort to bigger and bigger imports of agricultural raw materials or finite food products in order to ensure continuity in providing manufacturing and distribution processes and satisfy the consumers' demand.

This situation could have a positive effect if subsistence and semi-subsistence farms (population's households) provide a greater quantity of products to the market.

Table 4. Share of self-consumption in the agrofood products and beverages' consumption in Romania (2000-2009) %

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Loaf	18,7	18,4	18,6	16,2	11,8	12,9	13,0	11,8	10,9	10,9
Potatoes	29,2	38,8	39,9	37,1	31,6	33,0	32,0	30,9	33,0	29,3
Pork	38,3	48,2	46,5	47,2	48,8	41,9	38,9	38,8	32,8	29,4
Poultry meat	61,8	54,0	50,5	49,1	43,8	38,6	34,1	31,0	26,7	25,4
Meat products	25,8	38,7	37,4	36,5	32,0	27,9	25,3	23,0	21,9	21,0
Fish and fish products	28,4	21,2	19,0	16,5	12,9	12,2	12,9	12,4	12,2	10,4
Milk	48,3	46,6	45,1	44,6	42,0	40,2	40,2	37,9	34,4	32,2
Cheese and cream	51,0	49,8	47,7	46,5	42,8	42,0	40,6	38,4	36,2	33,1
Eggs	64,2	59,1	60,0	59,6	59,1	56,5	55,5	53,3	52,5	52,6
Oil	9,3	7,9	8,9	9,2	5,2	5,3	4,9	3,3	5,2	1,9

Product or product group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fruits	42,0	40,5	38,3	38,1	31,7	31,8	30,8	27,4	26,2	25,2
Vegetables and vegetable tins	32,2	46,0	46,1	43,5	42,5	43,1	38,6	41,1	38,9	37,1
Honey	34,5	38,2	41,9	37,9	32,4	36,8	33,3	31,1	26,5	23,6
Wine	85,3	85,6	85,5	86,1	83,0	79,8	77,2	78,7	78,7	74,7

Source: Own calculations over the data taken from INS

As a conclusion, the evolutions in the first years regarding prices, average consumption, self-consumption per inhabitant, and also the external trade with agricultural products highlight an unfavourable evolution regarding agricultural production and, especially, population's food security.

The increase of the valorification degree of agricultural potential may transform Romania in an independent state in what concerns the assurance of population's food security, and also into a provider of such type of security for other countries by means of net export of agricultural products, raw materials and food. This can be made only by adequate strategies and policies, meant to stimulate investments in this area and to increase performance and competitiveness in agrofood sector and in all economic organizations that compound it. Thus, OCDE considers that "Agricultural investments in developing countries will be highly important for increasing the quantity of available food, and for obtaining income and creating new jobs."

Without a systemic approach and fare financial and investment support together with agricultural and rural development strategies and policies, the food security of our country may be seriously affected in the future. We must take into consideration that this issue will be aggravated by the effects of global warming and climate instability, by the increase of drought manifestation on land and other natural phenomenon that will have a negative impact on agriculture.

Romania's adherence to European Union on the 1st of January 2007 is only the beginning of a complex and – we hope- not long process of full integration within EU's structures. At least on the economic level, this process generates many challenges Romania must face. Due to the small level of performance and the degree of compatibility between agricultural sector and rural economy in Romania and similar entities from EU developed countries, we can consider that most challenges may occur in this domain. In order to reduce the aforementioned deviations, now Romania may benefit from two European funds: European Agricultural Guidance and Guarantee Fund and European Agricultural Fund for Rural Development. The main purpose of the second fund is to contribue to the increase of productive performance and competitivity in agrofood and rural economy and to the food security of the country and reducing the deviations of development and standard of living in villages and towns, between different agricultural areas and economic regions.

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