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COULD ROMANIA BECOME A FOOD SECURITY SPACE IN EUROPE?

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Abstract: *This article presents the most relevant elements to be taken into account, if the dimensions of the present and future food security in Romania are to be analyzed, from comparative perspective with European level. Romania's economy has a real advantage, in relation with other European countries, in terms of natural conditions for practicing sustainable agriculture. All changes that have occurred in the field of agricultural property from Romania, in the last 25 years, reveal still poor recovery benefits from the agriculture development and strengthening food security. The dynamics of the key factors of food security – agricultural farms - hold a central place within the analysis of the current situation in agriculture. The article presents also some ideas regarding financing prospects and increasing capacity of the national system of agricultural production in the next decade. Now, Romania looks like being not yet a reliable source of food security in Europe, but this sounds like good news for investors and farmers too. Why and in what manner this situation could be changed soon, it is shown in the following text.*

The article uses various sources of documentation and publications of the United Nations Organizations, European Council, Eurostat, INS Romania, The Institute for Researching Quality of Life from Bucharest, some other Romanian Academy researching institutes and others.

Keywords: *risks, climate change, agriculture, farms, financing*

Introduction

Food security – an European (and not only) long-term imperative

Global food security is currently threatened by multiple risks, like diminishing agricultural production, firstly, amid degradation of soils, reducing fresh water

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resources, global warming (which evolves in tandem with deforestation), pollution and, last but not least, the demographic growth. Food security is becoming an increasingly difficult task in many regions of the globe, while farm workers improperly exploit soils (by excess or, more rarely, deficiency of soil treatment with chemical or natural fertilizers), causing more and more degradation. As result, in recent years, we have witnessed *a steady increase in food prices*. But although food prices have risen, it has not been able to brake *general growth of food demand* which intensified the agricultural effort for obtaining vegetal and animal production growing. Such efforts imposed the selection of some plant varieties with shorter maturity cycle, the extension of greenhouses, the use (and abuse) of hormones or drugs in order to accelerate the maturity of the animal productions, prevention of disease, and others. All these have resulted in time in the impoverishment of vital nutrients and beneficial microorganisms both of the soil and the products resulted, reducing on a side the ability to retain water of the soil, and on the other side lowering the native quality of the products.

On a different plan, factors like increasingly unfavorable climate, have already produced some *phenomena of desertification*. Extended lands from different areas of the globe, as from the United States, sub-Saharan Africa, the Middle East or northern China, have already been compromised due to degradation. FAO estimates 25 percents of the agricultural land of the planet is highly degraded, and 8 percents is degraded. John Crawford, a specialist on sustainable development, from Rothamstead scientific researching center - United Kingdom, argues that soil degradation will cause the supplementation of the land attracted in agricultural circuit, which will determine the climate warming accelerating [1] *(Ionescu, 2014)*. Deforestation for agricultural purposes contributes to the increase in net greenhouse gas emissions. *But the increasing of the agricultural areas, from about 40 percent, as it is currently, to 70 percent from Earth's surface* to meet the demand for food by the year 2050, is imposed by world population growth to 9.6 billion by 2050 from 7.26 billion now. In the same time, the developing nations adopt Western diets in overwhelming proportions, involving a relatively high consumption of meat and food products that are not sold at fair prices, since, on many markets (even in developed countries), no account is taken in prices of the environmental costs and soil degradation.

Proper management of soil, according to the scientific principles of agriculture, is one of the basic principles of *sustainable agriculture*. But many factors can contribute to the degradation of soils, as well as the practice of extensive monocultures area, excessive use of fertilizers which can cause acidification or salinization of the soils, or microbial balance which negatively affects plant growth. To prevent these phenomena, it is necessary to improve the training of workers as well as that of the policy makers involved in the management of soil resources and agricultural technologies. The sharp increase of prices regarding agricultural products in 2008 has transformed itself into a food security topic debated worldwide. In 2012, have been reached new record prices for agricultural products, and in subsequent years, the agricultural markets remained unstable, though after 2012, the agricultural productions were higher again [1] *(Ionescu, 2014)*.

To live in a sustainable way means to achieve a balance between social factors that influence the global way of life and concrete objective living conditions, offered by our

planet at present. It may mean also, to maintain consumption of goods and services of the global population *under the critical level of the natural resources reserves*, to avoid wastage of food, and through the use of technologies for efficiency obtaining of the production of goods and services needed in global consumption. On the other side, social welfare institutions are supposed to use values and propose social tasks in order to attain at least a decent minimum level of living within all social communities. And last but not least, to live in a sustainable way means to create premises for recovery and keeping of biodiversity, so increasing and strengthening the chances for normal living of the people (a stable, sustainable, healthy life) of present and future generations.

Many factors that influence the way of life of mankind from today are manifested in different regional contexts, more or less extensive. There is however *a number of factors with global impact*, or *broad impact factors,* which determine quality of life for large masses of people. These factors should not be lost from the attention also by policy makers, from the national and international economic and social institutions. Among such factors are demographic factors, climate change, some ecological factors, availability or absence of basic food resources, income levels versus the phenomenon of poverty, the critical resources for development of certain regions of the world.

The increasing of global population, between 1950-2015 - tripling its number, from 2.30 to 7.25 billion, amid the achievement of critical values for global pollution, reduction of natural resource development and increasing indebtedness of many countries, raises capital questions concerning the ongoing and quality of life of the people (present and future generations) from different regions of the world. Although after 1970, global population growth reduced pace, this means still a wider social base, and the annual world population has increased by about 80 million people (about the current population of Germany). In such conditions, it is possible that around the year 2070 to achieve a maximum rate of increase, after which the mankind will see a downward trend until the end of this century, global population hovering between 6.8 and 16.6 billion people [2] *(Das Gupta, 2014).*

The estimated population of Europe, according to the UN, was 731 million in 2007 [3] *(*** 2011, World population prospects, UN),* around 11% of the world population (exact figure varying depending on the definition of the European continent geographical area). The European Union's population was 499 million people in 2008, including the non EU countries 94 million. Five other transcontinental states count other 240 million people, of which about half lived in Europe. Though the European population has grown continuously over the past four to five decades, the raising question is far from Asian or African rhythms. In these circumstances, if the present European population represents about 11-12% of the global population, in 2050, this will represent only around 7%. The decline in birth rates from European countries and the general growth of life is determining aging process of the population, particularly in the developed countries but not only, which will generate new economic and social problems (regarding in particular, institutions such as social security, social welfare, medical services, etc.) [4] *(*** 2015, Demographics of Europe, UN).*

Of course, all these realities set on the front line of general agenda the matter of food (in)security in the coming years…

Investment in agricultural holdings in Romania - average and big agro-holdings versus small farms

The agricultural reforms from the countries entered EU after the 1990s have brought into question the issue of advantages and drawbacks of the various categories of farms. The financing measures launched by NPDR (The National Plan of Rural Development) are conditioned by the *coefficients of standard production* and *farm size,* depending on which the beneficiary falls to a certain amount or financing and may or may not be eligible for funding.

In Romania, as in all the other European countries, one of the main reasons that the size of the facility and its output are determined is reimbursable funds. *Standard coefficient of production* is an essential tool in calculating the size of the farm, in most measures of funding from NPDR, the level of *SO production value* being the exclusion criterion.

The standard coefficients of production available in 2015 for NPDR 2014-2020 were the same with those that the ranchers and the consulting companies have used in previous years.

Among the regulations underlying the calculation of the coefficients SO 2010 are the following: European Council Regulation (EC) No 1242/2008 establishing a *Community typology for agricultural holdings*; Regulation (EC) No 868/2008 regarding *the sheets of the farm* used for the purpose of determining incomes of agricultural holdings and assessing economic activity; Regulation (EC) No 1166/2008 of the European Parliament and of the Council concerning structural adjustment in agriculture surveys and survey on agricultural production methods and repealing Council Regulation (EEC) No 571/88 and others [5] (*** 2015, *Ce sunt coeficienții...).*

Classifying farms according to their size in Romania

Small farm - between 8000 (15 ha wheat) - 11999 (22 ha wheat) SO (standard output - production value)
Average farm - between 12000 (22 ha wheat) - 250,000 (472 ha wheat) SO
Big farm - over 250,000 (472 ha wheat) SO
Young farmer (special category) - between 12000 (22 ha wheat) and 50000 (94 ha wheat) SO

Source: [5] **** 2015, Ce sunt coeficienții de producție standard și cât influențează dimensiunea fermei în accesarea fondurilor europene prin NPDR,* agrointel.ro, 26.03.2015

The calculation made by the authorities is considering SO/ha approved by Eurostat, which represents an average of the agricultural production from the years 2008 to 2012 [5] *(*** 2015, Ce sunt coeficienții ...).*

The dimension of farm matters in deciding whether to grant financial support from EU money. But the rules are odd and it is difficult for little competitors to apply.

The young farmers may submit a non-refundable project for funding only if the economic dimension of their farm is no less than 12000 SO. This is a medium size

farm, which could equate a 12 hectare vegetable farm cultivated with wheat or a 4 hectare farm planted with potatoes. A farm of cows needs a minimum 11 dairy cows. Young beekeepers qualify only if they hold more than 229 hives of bees.

By the measure addressed to the young farmers under 40, farms with a size between 12000 (22 ha of wheat) and 29999 (56 ha wheat) SO may receive no more than 40000 euro non-refundable support, while larger farms between 30000 SO (56 ha wheat) and 50000 SO (64 ha wheat) are eligible for the maximum amount of 50000 euro.

If the farm is higher, it no longer falls for funding through the establishment of young farmers and the applicant must opt for another measure of support from new NPDR [5] (*** 2015, *Ce sunt coeficienții.. ...)*. The size of the agricultural holdings shall be calculated by multiplying the existing elements (areas under cultivation, livestock) with standard coefficient of production associated with them (there is a list of these coefficients).

From historical perspective, mercantilists first pleaded for *relatively small holdings*, deeming them better suited to the more difficult economic conditions or, to the societies that have overcome a prolonged economic crisis. Physiocrats, but also a part of the English classics of the Economics claimed, as a rule, *the superiority of the big farms,* considering them better able to meet the continuous growing of food demand. But there are also economists who are the adepts of *medium agricultural holdings,* seeing in them a solution both for the food crunch which is looming on the horizon in the decades to come, and for the offer of jobs in rural areas.

The financial support granted to agricultural holdings from Romania

For farms with the economic dimension up to 500,000 SO, non-refundable public support will be 50% of the total eligible expenditure, but shall not exceed a maximum of:
- 500,000 euro and 100,000 euro for small farms - for projects that provide for simple contracts.
- 1,000,000 euro for sector and 200,000 euro for small farms vegetable sector - for projects that provide for construction-assembly
- 1,500,000 euro for vegetables in protection areas (greenhouses) and stockyard sector and 300,000 euro for small stockyard farms.
- 2,000,000 euro and 400,000 euro for small farms - for projects that provide the creation of integrated supply chains.

For farms with over 500,000 SO, public support will be 30% non-refundable and will not exceed a maximum of:
- 1,000,000 euro for vegetable sector, respectively 1,500,000 euro for vegetables in protected areas (greenhouses) and livestock sector - for the projects that provide construction-assembly
- 2,000,000 euro-for projects proposing the creation of integrated supply chains.

Non-refundable support may grow, but the maximum rate of support combined shall not exceed 90% for small and medium-sized farms (up to 250,000 SO) and 70% for farms between 250,000 SO and 500,000 SO, for young farmers' investments (under 40), for integrated projects, the European partnership for innovation-PEI etc.

Source: [6] *** *Document MADR*, 25 martie 2015, http://agrointel.ro/31790/coeficienti-standard-de-productie-2015-dimensiunea-fermei-accesarea-fondurilor-europene/

The truth is, however, not the size of the agricultural holding provides the guarantee of correct methods application, healthy management of soils, waters and other categories of economic resources through agriculture, but first of all, *the level of training of specialized managers and farm workers* and then *the level of funding* or *the level of resources* available. In terms of size, each category of holding presents advantages and disadvantages, the superiority of one or the other being defined in a broad context of economic, ecological, social and even cultural conditions. *The size of the agricultural holdings* may be expressed by *the surface of farmland* or by *livestock***,** in the case of cattle-breeding farms. Other indicators, as *the number of staff, financial resources, size* or *endowment indicators* (capital operation, the number of tractors and farm machinery etc.) indirectly reveal the size of a farm.

In the European Union, *the size of the agricultural holdings* can be expressed by *physics dimensions (hectares utilized as agricultural area)* and/or through *economic dimensions (the number of European-scale units* (ESU). A unit of European dimension corresponds to a certain amount of *standard gross margin (SGM),* denominated in the single currency (euro) and periodically adjusted to inflation. Basically, an ESU equals approximately 1.5 hectares cultivated with wheat [7] *(Tofan, 2005).*

MBS per hectare or per *livestock* unit indicates production value per ha/unit, minus variable cost of production factors.

Services that manage the *farm accountancy data network (FADN)* establish, every two years, for each region, the unit amount of the SGM for crop and animal productions. The total SGM, expressed in euro, divided by 1200, show the number of ESU of the holding in question. Agricultural holdings are classified into *6 classes of economic size* (Table1) as follows: class 1:0-< 4 ESU; class 2:4-8; < ESU class < 3:8-16 ESU; class 4:16-40 ESU; < class < 5:40-100 ESU; class 6: > = 100 ESU.

Holdings exceeding certain thresholds are considered *professional holdings* and are under the observation of the FADN. Other holdings are considered *occupational* or *leisure* and are not subject to environmental concerns. Minimum thresholds of economic size of agricultural holdings are distinct for each EU Member State, reflecting the great diversity of agricultural structures.

In Western countries (primarily in the European Union), the best farms are the *family-private* direct working operations, managed or leased. In these productive units, the working time is shared with family life, the work being carried out by family members, employment (seasonal) being little used. But not always family farms are small or medium-sized, and large or very large farms aren't always based on employment.

Table 1. Minimum threshold of economic size of agricultural holdings in the Member States EU in 2004

Country	The threshold of economic size (in ESU)
Belgium, Netherlands, United Kingdom	16
Denmark, Germany, France, Luxembourg, Austria, Finland, Sweden, United Kingdom (Northern Ireland), Malta	8
Slovakia	6
Italy, Czech Republic	4
Greece, Spain, Ireland, Portugal, Hungary, Latvia, Lithuania, Estonia, Poland, Slovenia	2
Cyprus	1

Source: [7] *** http://europa.eu.int/comm/agriculture/rica/methodology1_fr.cfm, from Tofan Alexander, 2005, *Economic size of agricultural holdings*, http://anale.feaa.uaic.ro/ anale/resurse/ 20, Tofan_A_-UR_Dimensiunea _economica_a_exploatatiilor_agricole.pdf

The European *trend is to upward the average size of the farms,* which generates *reducing of the total number of agricultural holdings,* through the disappearance of a number of small holdings. This process is favored also by the force of the other branches of the economy - when they offer jobs and earning sources, they determine workers and farmers to leave the agricultural branch.

Phenomenon of reduction in the number of agricultural holdings and increasing the average dimension of a maturity holding manifested in most countries of the world, most in the last half of the twentieth century and, in particular, in the United States and Western Europe. In the USA, over the course of five decades, between 1940 and 1990, the number of farms decreased almost three times [8] *(Otiman, 2001),* and the average size of a farm has grown from 70.4 ha at 200 ha.

In Europe, where the agricultural area is smaller than that of the other continents, increasing the average size of farms has a lower rate. The EU needed direct actions on restructuring the agricultural holdings in order to obtain more economical profitable structures (Table 2). A decade after the establishment of Common Market, in 1968, the Mansholt Plan provided for 1990-2000, limits of 80-120 ha for grain farms, 40-60 cows for dairy cattle farms and 450-600 heads for pig farms.

Within the framework of the Common Agro Policy, in those six founding countries of the European Union, the total number of farms was reduced with 42%, between 1967-1997. The six countries have restructured so 2.7 million farms of small dimensions (1.3 million holdings with less than 5 ha of useful agricultural surface), which has allowed increasing the average size of a holding from 10 hectares in 1967 to 17 ha in 1997, [9] *(Vidal, 2000).*

Table 2. The situation of agricultural holdings in the EU and Romania, 2003

Class size (ha)	The European Union (25)			Romania		
	Number of holdings (thousands)	% from total number	% from total agricultural area	Number of holdings (thousands)	% from total number	% from total agricultural area
0-5	6110.1	61.9	6.2	4205.1	93.8	35.5
5-10	1293.7	13.1	5.9	218.9	4.9	10.3
10-20	974.4	9.9	8.8	37.4	0.8	3.4
20-50	823.1	8.3	16.6	9.5	0.2	2
≥ 50	669.3	6.8	62.5	14.1	0.3	48.8
Total	9870.6	100	100	4484.9	100	100
Average dimension (ha)	**15.8**			**3.1**		

Source: [7] *** *L'Agriculture dans l'Union Européenne - Informations economiques et statistics 2005*, from Tofan Alexander, 2005, *Economic size of agricultural holdings*, http://anale. feaa.uaic.ro/anale/ resurse/20_Tofan_A_-UR_Dimensiunea_economica_a_ exploatatiilor_agricole.pdf

The growth of the size of agricultural holdings determines *faster growth of economic value of the production (*through the intensification of the production/surface). In Italy, for example, between 1975 and 1995, the average size of a farm holding grew by 14.6% (from 7.5 to 8.6 ha), but the average economic dimension increased by 562.5% (from 3.2 thousand to 21.2 thousand ECUs). *The general trend of increasing farm size in the EU* results from a wide variety of situations. Currently, in the EU the most farms are medium-sized or large, all three types (including the small farms) being most frequently family run. Of the nearly 6.8 million existing holdings, 96% belong to a single person, 3% to companies and only 1% belongs to a group of individuals. Around 63% of farms in the EU are using less than an annual work unit (UTA, from French, *unité de travail per année*, i.e. work full time for one year, of a person from a farm, the equivalent of 2200 hours per year). Only 12% of farms use more than 2 UTA (especially in the Netherlands -36%, and Luxembourg -30%). Of the total work in a year in EU agricultural holdings (6,346 thousands UTA), 73.2% is family work, 16.3% of work is performed by employees and only 10.5% is seasonal work [10] *(Charlier, 2002).*

Managing of the agricultural holdings on economic principles, along with compliance with environmental requirements constitute fundamental premises for practicing sustainable agriculture. In principle, *sustainable agriculture* contains agricultural practice which reject industrial-type approaches, though they were used on a large scale in the late twentieth century. The concept of *sustainable agriculture* involves the use of agricultural techniques that value in the highest degree the natural factors, such as free air, natural fertilizers, biodynamic inputs, minimizing plowings, using clean water circuits, in order to maintain soil health, through the planting of different crops from

one year to the next, through alternation with grazing areas, paddies, avoiding the use of pesticides. The so-called agricultural industry is based on the *principle of monoculture* on very large areas, on mechanization, on the use of chemical pesticides, often excessive, fertilizers, biotechnology, and Government subsidies.

True, such principles have made possible extremely high agricultural production, which eventually produced food wealth and food prices at a relatively affordable level. These prices, however, ignored a number of costs, which existed without being registered in prices, however, added at ecological level costs (for example, through water and soil pollution or through excessive deforestation), to the loss of biodiversity, desertification of some large areas and, last but not least, to disbanding of many jobs in agriculture, or to the decline or disappearance or medium farms (200-400 ha).

According to *The 2012 Report regarding the development policies of the European Union,* Member States have given priority attention to *enhancing agriculture,* funding for sustainable practices, promoting ecosystem services, centering on practices developed at local level and encouraging smallholders to exceed the limits of rural livelihoods through the creation of wider associations of producers. It also was granted greater consideration to the supply chains and more viable marketing, claiming investment bank loans through private and highly responsible agricultural credits. In the report, it shows that the EU will continue its work in the broad sense of taxation standards increasingly regarding healthy eating and reducing the volatility of food prices.

Romanian agro-food system - differences near the average European level

A high-performance system can ensure the security of agricultural production and food safety of the population of a country, regardless of fluctuations in various factors that are brought to bear. At present, the cooperation of the European countries, in obtaining economic agents involved and agro-food products constitute one of the key factors of development and economic performance of the agro-food system in the EU. But nothing can be done if the fundamental economic agents or the supporting pillars of agriculture in the global level are not managed in supervision of the sustainable principles of agriculture.

The supporting pillars of agriculture

Soil

Soil, the base of the terrestrial life existence, represents about 29% of the land surface of the planet, the agricultural heritage representing only 6.4 percent. It achieves 98% of agro-food production, while the surface covered by water (71%), offer only 2% of the total food of the world.

- Globally, *soils with high and good fertility* represent 11% of the total; in Romania, their share is 28%.
- *Soils with moderate fertility* are spread over 27% of the surface worldwide; in Romania - 20%.
- *Low and very low fertility* global soil is 62% of the surface, while in Romania – 52%.

Romania has a high potential of production capacity of soils, which is not capitalized. The weight

of the soil with low and very low fertility is growing worldwide, and in Romania, as a result of climate change, but also because of the use of underperforming agricultural technology and of the exports of soil nutrients, taken with the harvest, which is to be repaid by fertilization.

Water resources

Water resources are vital. But the drought and desertification phenomena extended worlwide. Water occupies 71% of the Earth's surface and only 2.5% of the total returns as "fresh water". A result of the demographic explosion and the use of water in many areas of activity, available water resources will decrease substantially - from 7000 m3/year per capita in 2000, to 5100 m3/year per capita in 2025. Water is "the keystone" of agriculture. Currently, 70% of total water resources are used in agriculture; in anticipation of the year 2030, the quantities of water will be supplemented with 30-60%. "The absolute priority of investments made in agriculture should be oriented to the fitting of new irrigation systems.

Climate

Global climate change - the most serious challenge of the Millennium III with dramatic influences on the environment/natural resources, exceeding their capacity of recovery, may result in the impossibility of achieving food security. Under these conditions, industrial agriculture has to be reformed.

Biodiversity

Restriction of biodiversity as a result of global climate change, largely due to the negative effects of technical progress and exercise of intensive industrialization, cause adverse effects on agriculture. Conventional farming cannot ensure food security; conservative agriculture is an important ally, and biotechnological agriculture constitutes a valuable partner for the optimization of agricultural production [11] *(Hera, 2014)*

Human capital

World population grew from 2 billion inhabitants, in 1927 - of which 600 million were Europeans, to over 7 billion in 2012 - of which 900 million Europeans. In 2050, in the world will live about 9 billion people, of which one billion Europeans. Various international organizations affirm their concern regarding the imminent demographic crisis on the background of the climate and environment radical changes in the following decades. Managing primary resources to serving the needs of the people (water, food, shelter, health services and energy) against the background of an increase in the incidence of natural disaster and the accumulation of various stress factors become a real challenge. Demographic changes will generate numerous social problems in European space too, making demography a priority of European policy. The largest segment of the European population will continue to be represented by the age group 15-64 years, but this will be reduced from 67% in 2010 to 56% in 2060.

In Romania, the resident population from 1 January 2013 was approximately equal to that of 1969, hovering around of 20.01 million inhabitants. Romania stands still European average, in terms of the share of the population aged 15-64 years in total population - which in Romania was 68 percent, compared with the European average of 63,9%. Eurostat Demographic Projections for the average European level, conducted two decades ago, marked a reversal of the amount of the dependency rates by categories of age to year 2015, when the rate dependence of older people became superior to that of children. In Romania, however, demographic changes (young people emigration, low birth rate, increased life expectancy) have made the social dependence rata of the elderly to overcome that of the children in 2013.

Source: [12] *** 2012 *Ageing Report, European Commision*; [13] *** 2012, *Europa va avea cea mai bătrână populație din lume,* Calea Europeană)

It is not needed any high experts to see the slow progress of the Romanian agro-food system, or the many discrepancies and non-convergences between the Romanian and EU countries agriculture. The extremely high rates of rural poverty, the precariousness of food security in a large part of the Romanian urban and rural population results from (and not only) high prices of food products and extremely high volume of imported food. This kind of ideas are abundant in all kinds of academic studies, in mass-media, and lately, in *The Strategy of Food Safety and Security of the Romania for the period 2016-2035* [14] *(Otiman, 2014*).

Indeed, most of the data and information addressing the field confirm that *food security of Romania now, in spite of the remarkable potential of the natural resources of the country, can be characterized as rather a challenge*. It estimated that Romania, with adequate investment of kind, could provide safe food for 38.5 million people (the double of present Romanian population), in the horizon of 2030-2035 years, letting apart the agricultural non-food products for export of about 49-50 billion €. Of course, this is more than true, but when in Romania's history were spent actual massive money in agriculture or in rural infrastructure? After the year 2000, there were several years of different agricultural support funds, on average 500 to 600 million €/year, and a peak of investment of 908 million €/year in 2008. But this economic effort was not seen in any degree as agricultural yield growth in that period. Specialists in agriculture could probably affirm, Romanian agriculture is in fact a far too insensitive machine to refer the energy intake of a such insignificant financing magnitude. Luckily we shall never find out what would have been there without such investments.

Strategy of Food Safety and Security of the Romania for the period 2016-2035 [14] *(Otiman, 2014*) indicates also *the main weakness of the Romanian agro-food sector - financial resources*. On average, after 25 years starting from '89, the accumulation of fixed assets annual investments in agricultural holdings was of 38 Euro/ha/year. At the end of 2009, the annual stock of fixed capital in agricultural holdings was of 7.95 bills. Euro while in France, for instance, in the same period, the annual stock of fixed capital in agricultural holdings were of 309 Euro/ha/year, for a national stock of fixed capital of 232.3 billion Euro for agriculture. In Romania, the stock of fixed capital in relation to the agricultural area used, is of 541 Euro/ha (about 700 €/arable area + trees + vine) vs. France where the same indicator reached the value of 2100 Euro/ha (meaning a ratio of 1:3). Equipment with fixed assets of a Romanian farmer, compared to a French farmer is of 3,600 Euro versus 290,000 Euro per farmer, representing a ratio of 1: 80,6). And *the structure of the stock of fixed capital* from Romanian agricultural holdings is a lot different (derogatory), compared to France. While in France the "active" fixed assets (machinery, equipment, tractors, plantations, animal breeding and infrastructure) holds a share of 80%, the share of land capital being of only 20%, in Romania, the situation is reversed. Land value recorded a share of 67% (agricultural land at market value price in Romania being of 5-6 times lower than in France), and direct productive fixed assets represent in Romania only 1/3 of the capital stock of the farm.

Large differences that exist between the Romanian and the European agriculture performance ranks Romania among the countries with the lowest yields of agricultural land in the EU. Among the long list of the weaknesses of the Romanian agro-food system are, also, the following items:

- the cereal production (kg/ha) - 0.52 (52% from the European average); agricultural yields for the grain production of the Romanian farms in the period 1990-2010 was of about 2,770 kg/ha;
- the value of agricultural production (€/ha) - 0.32 (32% from European average);
- the GFCF (gross financial capital formation) (€/1ha) - 0.35 (35% from European average);
- primary agricultural production per hectare obtained by Romanian farmers (800-900 €/1ha) is 2-2.5 times lower than the European average (1,800-2,000 €/1ha);
- intermediate consumption as a measure of financial support addressed to technologies and agricultural production is of 715 Euro/ha in Romania, versus 8,369 Euro/ha in the Netherlands or 3,987 Euro/ha in Belgium;
- farmer's endowment with agricultural utilities in Romania is about 25 times weaker than that of the EU 15 (9,000-9,200 € in EU versus 350 € in Romania);
- gross value added in the Romanian agriculture is half of that pertaining to the EU-15, which makes the final agricultural yields in Romania of about 1,400-1,500 €/1ha vs. 2,400-2,600 €/1ha in the EU-15;
- agricultural production of small subsistence farms in Romania is the 400-420 €/1ha (four times lower than in the EU-15); as a result, the final food consumption of Romanian households ' is very high - 90-92% from the production of their farms, and in the case of semi-subsistence farms - 50-52%, compared with only 10 - 12% in EU-15 farms [14] *Otiman, 2014).*

By NRDP runs the Community funds intended for rural development. As a tool for assessing the social situation of consumers of goods and services in Romania, *monthly minimum consumption basket* was introduced in Romania through the "Emergency Ordinance of Government No. 217 of 24 November 2000 which approve the monthly minimum consumption basket ", in the base of Law No. 554/17.10.2001 [15] *(http://www.infolegal.ro/cosul-minim-de-consum-lunar/2015/05/26/).*

To guarantee food security might be considered the paramount of the Romanian population welfare, a major goal of the *Country and Society Project*. But *to guarantee that* is not about simple words, it results from a long sustained process and supposes the realization of some concrete objectives; we think, in no case, this should appear as the first objective of a *Strategy*, or as a theoretical and utopian settlement, but maybe in the final of a *Strategy*, as a result of many concrete actions. We say it knowing, for instance, the bad specifics of the banking system from Romania (and not of Romania, because really we do not have a national banking system, to follow the Romanian financial interests), who believes too little or not at all in the concept of Romanian *Strategy*… of any kind, as starting point in doing money. We know their low trust in agricultural initiatives.

We know also how difficult is even for the experienced farmer to access a bank loan, this being one of the few tools that would allow to turn any agricultural subsistence farm in a modern European one. "By comparing *the level of Romanian agriculture lending* with the level from other EU member countries, we notice major differences. If in 2009

in Romania registered an average bank loan of 110 Euro/ha, in Germany it was used 2126 Euro/ha, in France 1698 Euro/ha, in Hungary 255 Euro/ha, or ... in addition to the low level of credit disadvantages, cost of bank credit for Romanian farms is much higher compared to the developed countries of the European Union. In Romania, the interest plus commissions, induces a *real cost of bank credit in lei, two to three times higher* compared to the cost of funding sources from other developed countries of the EU. Low level of Bank lending to the Romanian agriculture favored the proliferation of commercial credit (credit provider which is much more expensive) as an alternative of "meeting need" of the farmers. In spite of being more expensive, commercial credit, is also more operative, so, it is more used by farmers in great financial need. Financing commercial loan cost is by about 20% over bank credit. Romania, with the average of 57 €/year for agricultural area performance, as *direct payments from the EU budget on an agro-hectare*, within the 2007-2013 in Romania, placed on the latest place in the EU-27 top, having earmarked only 11.2% of the level granted to Greece (507 €/1ha), 12.1% of the level granted to the Netherlands (469 €/1ha) and 12.9% of the level given to Belgium (€ 443/1ha) etc. " [14] *(Otiman, 2014).* But these are not the only barriers in the way of guaranteeing the Romanian food security. We know, also, the farmer's retractile and wary character in the face of any kind of association which is awaking the painful recent and ancestral memory about managing agro-property. It is difficult, if not impossible, to pretend a normal social behavior and to make modern agriculture, with a people traumatized psychologically for decades, if not centuries. We believe that, in such circumstances, it would be appropriate to think anything further than that, to find solutions for the formation of some agricultural associations to give confidence and, why not, even some safeguards, for the potential members, that in a worst agricultural year they are not threatened to go out of business, ruined economically.

Monthly minimum consumption basket

It represents also *an instrument of preventing possible severe crisis in food security of the households living in poverty*. In Romania, the theoretical concept of minimum monthly consumption basket was established by, at least, two public institutions: **The National Institute for Statistics (NIS)** from Bucharest, and the **Research Institute for Quality of Life belonging to National Institute of Economic Research, Romanian Academy**.

NIS concept is structured for an average household size, on the base of a sample of 2.804 people. All the necessary expenditure for living in a month by purchasing contains: (1) food products, (2) non-food products and (3) services. The structure and components of the monthly minimum consumption basket are approved, on a quarterly basis, starting from the basic salary of the national minimum wage policy and social policy.

The minimum monthly consumption rate expressed on a quarterly basis by the National Institute of Statistics is approved by decision of the Government. The monthly minimum consumption basket approved by O.U.G. No. 217/2000 have the following structure and components, calculated by the prices from October 2000:

- **Food strictly necessary for a rational consumer and a healthy population**, expressed in value and quantity: 34 food products *the nominees*, in total amount of

1,399,757 lei: 3.1 kg of flour, 5.89 cornmeal, 31.97 kg of plain bread, 0.5 kg of products of other kinds of breads, 0.7 kg of pasta, 1.4 kg or rice, 2.1 kg of beans, 13.18 kg of potato, 1.68 kg of carrot, parsley and parsnips, 2.5 kg dry onion, 3.8 kg pickled cabbage and pickles, 0.84 kg broth, 0.56 kg canned vegetable, 3 kg of apples, 0.56 kg citrus, 0.7 kg canned fruit, 0.7 kg of bovine meat, 2.52 kg pork meat, 2.8 kg poultry, 0.42 kg of mutton, 2.52 kg of meat preparations, 0.84 kg of fresh and frozen fish, 14.86 liters of fresh milk, 0.7 liters of buttermilk, 1.12 kg of cow's milk cheese, 0.7 kg sheep's milk cheese, 0.98 kg fresh cheese and cream, 42 eggs, 2.8 liters of edible oil, 0.7 kg of lard, 0.56 kg of margarine, 2.8 kg of sugar, 0.1 kg chocolate and candy and 2.38 liters of soft drinks.

- **Other food *consumption needs***, in the amount of 209,964 lei.

Total food = 1,609,721 lei.

- **Non-food products**, cast (only) value:

- 6 non-food products *the nominees*, in amount of 384,039 lei, namely: clothing, knitwear, footwear, books and school supplies, medicines, hygiene items; other food items.

- **Other *different* non-food products**, in amount of 193,556 lei.

Total non-food products = 577,595 lei.

- **Services:**

- 9 service *nominees*, in amount of 826,897 lei, of which 5 expressed quantitatively: water, sewer, sanitation, electricity, thermal energy or other energy sources o,86 Gkal, natural gas 29.16 cubic meters, radio-tv subscription, telephone 50 impulses, 42 passenger travel, medical services, taxes and fees.

- **Other services,** *different*, in the amount of 122,381 lei.

Total services = 949,278 lei.

Grand monthly total value of the minimum consumer basket = 3,136,594 lei.

The monthly minimum consumption basket is a particularly important indicator which expresses :

1) the level and the evolution of the national index of consumer prices for goods, services or other necessities of the consumers living (rational, healthy);

2) overall level of consumption;

3) the minimum cost of living ;

4) general price index and index of services tariffs (price index and the retail tariffs).

It offers also, a scientific foundation for social policy addressed to:

1) basic minimum salary;

2) wage policy;

3) other social policies.

The Research Institute for Quality of Life (RIQL) from Romanian Academy structured, starting from 1990, a new concept of ***decent minimum basket of consumption*** **which,** even if it is rather close to the concept belonging to the NIS, it allows a better distribution of expenses and a better quality of life for the population at the margin of poverty (Table 3).

Table 3. The structure of the minimum consumption basket, for the different types of households from Romania. Comparison between *the decent minimum basket of consumption of RIQL* and *the minimum consumption basket of the NIS* (%), 2014

Total consumption expenditure	Family of 2 employees with 2 dependent children (RIQL)/ employee head of family (NIS)		Family of 2 pensioners (RIQL)/Pensioner head of family (NIS)		Family of 2 farmers with 2 dependent children (RIQL) /Farmer head of household (NIS)	
	Through MD	NIS	Through MD	NIS	Through MD	NIS
1. food and drink	46.1	44.1	41.2	48.8	41.5	61.7
2. clothing, footwear	6.0	6.3	4.2	4.0	10.8	5.5
3. housing, water, electricity, gas and other fuels	13.1	16.6	17.8	18.8	13.5	12.2
4. furniture, equipment of dwelling	3.1	3.8	3.9	4.3	7.9	4.0
5. health	5.7	2.7	8.5	8.1	1.9	1.8
6. transport	7.1	8.2	7.8	4.0	4.5	4.8
7. postal and telecommunications	0.9	5.5	1.4	4.1	3.6	3.3
8. education, recreation and culture	2.3	6.3	2.0	3.8	3.0	3.4
9. Miscellaneous products and services	5.7	4.6	3.2	3.3	3.3	2.2
10. hotels, cafes, restaurants	-	1.9	-	0.8	-	1.1
11. safety and savings fund	10.0	-	10.0	-	10.0	-
Total value lei 2014	**2330**	**2078.5**	**1447**	**1362.2**	**1878**	**1312.5**

Source: [16] **** Coordonate ale nivelului de trai în România, „Nivelul cheltuielilor totale de consum, pe destinații și categorii de gospodării, după statutul ocupațional al capului gospodăriei în anul 2014”,* INS, București, 2015.

Note: MD = decent minimum basket of consumption; RIQL = The Research Institute for Quality of Life; NIS = National Institute of Statistics. Data for *minimum basket of consumption* and *decent minimum basket of consumption* are from October 2014.

The distance between the minimum basket of consumption (NIS)/decent minimum basket of consumption (RIQL) and the *overall consumption expenditure* of some of the *main family structures from Romania* may be seen, using the Table 4. We see that, in fact, the average farmer, pensioners and employees families are spending actualy at the level of minimum basket (NIS figures) being much under the threshold line of the decent minimum basket of consumption (RIQL).

Table 4. The overall consumption expenditure by destination and by categories of occupational status of the household head in Romania 2014

Destinations	Total households	Employees	Pensioners	Farmers
Total consumption expenditure (lei)	**1637.5**	**2078.5**	**1362.2**	**1312.5**
1. Food and non-alcoholic beverages (%)	40.0	35.9	42.2	51.7
2. Alcoholic beverages, tobacco (%)	7.7	8.2	6.6	10.0
3. Clothing/footwear (%)	5.3	6.3	4.0	5.5
4. Housing, water, electricity, gas (%)	17.2	16.6	18.8	12.2
5. Furniture, equipment of dwelling (%)	4.0	3.8	4.3	4.0
6. Health (%)	4.6	2.7	8.1	1.8
7. Transport (%)	6.2	8.2	4.0	4.8
8. Communications (%)	4.7	5.5	4.1	3.3
9. Recreation and culture (%)	4.5	5.6	3.6	3.2
10. Education	0.5	0.7	0.2	0.2
11. Hotels, cafes, restaurants (%)	1.4	1.9	0.8	1.1
12. Miscellaneous products and services (%)	3.9	4.6	3.3	2.2

Source: [16] *** *Coordonate ale nivelului de trai în România, „Nivelul cheltuielilor totale de consum, pe destinații și categorii de gospodării, după statutul ocupațional al capului gospodăriei în anul 2014”,* INS, Bucureşti, 2015.

Analyzing the social situation of the population from Romanian, we see that many regions where there are more inhabitants with high unemployment rate and minimum wages share in the entire population, are in the same time, those where more money are spent on basic food comparing with some of the prosperous areas of the country.

Prices of basic foods (potatoes, beans, meat, milk, eggs) vary from one county to another and, as a rule, they are not lower in poorer areas. Maybe is not by purpose, but too often, in Romania, the most expensive food is available in poorer counties. For instance, in the first three months of the year 2013, as in all periods of the previous years, potatoes and beans have been rising the most. Statistics of the Ministry of Agriculture have shown that the highest prices of these vegetables were in the poorest counties: the most expensive potatoes (over 2.5 lei/kg) were in Vaslui, Iaşi, Neamţ,

Bihor and Alba, and cheaper ones (below 2 lei/kg) were in Timiș, Cluj, Covasna and Mehedinţi; the most expensive beans were (10 lei/kg) in Alba, Bihor, Satu Mare, Neamţ, Vaslui Valcea, while the cheapest (6-7 lei/kg) was in Bucharest, Calarasi, Constance, Suceava and Timiș [17] (*** 2013, *Preţuri mari pe piaţa buzoiană a alimentelor de bază, ...).*

The perspective of increasing food security of the population from Romania

A realistic assessment and an informed prediction of the Romanian agriculture future were carried out by a collective from the Institute for Agricultural Economics of the Romanian Academy [14] *(Otiman, 2014).* This presents some of the key indicators of the current production capacity of the Romanian agro-food system and the prediction until 2030. Anyone seeing the figures from Table 5 could conclude that the Romanian agricultural context looks rather optimistic. There is much hope in the expectations of the experts and people as concern the future of the Romanian food security. But a former Minister of agriculture and rural development asserted in 2014: " even if *Romania is far from a food crisis*, there are necessary a better stability of the market, and many measures to strengthen the productive capacity of the farmers. We need to ensure efficient use of water in agriculture and to develop competitive advantages to farmers. It is our mission to make sure that these measures work, the Romanian agro-food industry has the best prospects of development and, most importantly, it has a future! The social value of agriculture should be appreciated and rewarded and also, the agricultural activities that contribute to the protection of the environment or the preservation of certain qualitative parameters of productive resources. All these are added-value, service in public benefit, and we all benefit of them. We must correctly appreciate the importance of labor in agriculture" [18] *(*Daniel Constantin, in ****Securitatea alimentară a României, 29 mai 2014, Focus Agricol).*

Table 5. The production capacity of the Romanian agro-food system (horizons 2015, 2020, 2025, 2030)

No. crt.	Specification	Strategic horizons				
		2010	**2015**	**2020**	**2025**	**2030**
1.	Utilization of ecological resource, Ku	0.39	0.50	0.61	0.72	0.83
2.	Average conventional cereals yield *Q*, kg/ha	2770	3500	4270	5040	5810
3.	Agro-area useful, thousand ha	11000	11000	11000	11000	11000
4.	Agricultural production, grain equivalent mil. t	30.5	38.5	47.0	55.4	63.9
5.	Crop production Value, bill. €	12410	15670	19130	22550	26000
6.	Animal agricultural production, value bill. €	6680	10450	15650	22550	31800
7.	The coefficient for the processing of agricultural output, k	1.04	1.28	1.52	1.76	2.00

No. crt.	Specification	Strategic horizons				
		2010	2015	2020	2025	2030
8.	Animal production/vegetal production, value	0.35	0.40	0.45	0.50	0.55
9.	The value of primary agricultural production, bill. €	19090	26120	34780	45100	57800
10.	The value of agro-food production, bill €	19850	33430	52870	79380	115600
11.	Food consumption, €/loc and year	1000	1500	2000	2500	3000
12.	Domestic food consumption, bill. €/year	18300	33000	44000	55000	66000
13.	Insured population with food internal source**,** mil. inhabitants	18.3	22.3	26.44	31.75	38.50
14.	Import/Export value/D	-1550	+430	+8870	+24380	+49600
15.	Fixed assets, €/1ha	700	1000	1350	1700	2100
16.	The stock of fixed capital, bill.. €	10.3	14.7	19.8	25.0	30.8

Source: [14] Otiman Păun Ion (coord.), 2014, *Strategia siguranței și securității alimentare a României, calculații interne IEA*, http://www.acad.ro/viataAcademica/doc2015/i0307-Strategia AgroalimRo-PIOtiman.pdf

The current economic development of agriculture and social situation in Romanian rural area indicate some major changes happened in the last quarter century: the extinction of the collectivist structures, with simultaneous demise of the economic base and former farm cooperatives, followed by the atomization of properties on the agro-land and general orientation towards subsistence agriculture. Massive depopulation and demographic ageing of the villages, with the consequence of a large impoverishment of the population from rural area were also, the main social trends in the last 25 years. All these signify, in fact, the failure of reform and of all the policies directed to rural area in the last 25 years.

The General Agricultural Census of 2010 from Romania shows that *unused agricultural land* was of *896 thousand hectares*, and *the agricultural area at rest* was *953 thousand hectares*. Utilized agricultural surface decreased with 875,000 hectares, from the 13.93 million hectares in 2002 to 13.05 million hectares at the end of 2013 [19] *(***2013, Ancheta Structurală în Agricultură 2013, INS)*. Romania holds the 7.6% of the utilized agricultural area at European Union level, being exceeded by France, which uses 27.8 million hectares (16%), by Spain, with 13.6 million hectares (23.75%), by the United Kingdom, with 9.7 million hectares (16.88%), by Germany, with 16.7 million hectares (9.6%) and by Poland, with 14.4 million hectares (8.3%). Although using a much reduced area, Romania holds now about one third (31.5%) of the total number of farms in the EU, i.e. 3.63 million, downwards with 6 percent in 2013, compared to 2010. In 2013, Italy owned 13.2% of EU farms, Poland had 12.3% and Spain 8.1% [20] *(Ghinea, 2015)*.

"**Natural limiting factors for agricultural crops in Romania** is **water,** which, alc **capital,** led to obtaining, for two and a half decades (1990-2013), a vegetal productior

the average EU-15. The average use of the production capacity of natural organic resource was only 0. main **threat** on the yields of primary agricultural production" [14] *(Otiman, 2014).*

Romania has *the highest share of the population resident in rural* from the EU (44.9% of total population) [21] *(*** 2014, INS).* Most municipalities with fewer than 50 inhabitants/km² are located in the West of the country, as opposed to areas in the East and South, where predominates densities of rural population over 100 inhabitants/km². *The demographic dynamics in rural* is intensely negative. So, the main trend being the massive depopulation of villages, in the coming decades, we shall see the massive decrease of the population working in agriculture. Demographic decline is caused both by disrupting the demographic structure continuities, through aging, but also by migration across the border, and less towards the Romanian urban of younger generations. The decreasing of rural population in Romania was somewhat slower than in other countries (employed population in agriculture is decreasing, in these years, with only 800,000), also as a result of the returning of many retired people, residents in the urban area, to the subsistence agriculture, in the 1990s (Table 6).

Table 6. Employment of population in agriculture
in some European countries
(% from total population)

Country/Year	1980	1990	2012
G. Kingdom	2.6	2.1	1.2
France	8.4	5.6	2.9
Italy	14	8.8	3.7
Hungary	22, 10	18.2	5.2
Bulgaria	24.4	18.5	6.4
Poland	...	25.2	12.6
Romania	29.8	29.1	29

Source: [22] World Bank cited from Mihai Adelina, Sorin Pâslaru, 2014, *O treime din populaţia ocupată lucrează în agricultură, la fel ca în anul 1980,* http://www.zf.ro/eveniment/o-treime-din-populatia-ocupata-lucreaza-in-agricultura-la-fel-ca-in-anul-1980-13133308

According to the NIS Romania [21] *(*** INS, 2014),* in Romanian villages, 66.1% of families do not realize enough income for daily living.

The child nutrition state in Romanian rural area

In a social research, coordinated by World Vision, in 2012 (128 communes from 8 counties), on the quality of life, were gathered the following information:

- Although they are interested in assuring good development conditions for their children, a third of the parents consider the food they offer is not qualitative, even if they can assure three meals a day;
- 3% of parents consider they cannot offer their children sufficient food;
- Results are in direct relation with children's answers: a quarter consider that the food received is not sufficient, or qualitative or that they even have days when they go to bed hungry.

Source: [23] extract from Bădescu Gabriel, Niculina Petre, 2012

'Analysis report concerning the contracting of social services in the context of national and European ' achieved in the framework of a project of the Federation of non-governmental Organizations for child (FONPC) and UNICEF Romania, shows that nearly *one-third of the families of children in rural areas do not have sufficient income for daily living* [24] *(Nistor, 2015).* As result, the population of working age is migrating and *the phenomenon of aging* accentuates. The share of the population over 65 years and over, in rural area, amounted to 18.3% from the total population in 2012 (with almost 5% more than in 1990).

Table 7. Number of persons occupied in agriculture Romania

Year	Number of persons in agriculture (mil.)	% of population	Year	Number of persons in agriculture (mil.)	% of population
1950	5.23	74	1989	3.06	28
1960	6.25	65	1992	3.44	33
1970	4.87	49	2000	3.57	41
1980	3.09	29	2012	2.68	29

Source: [25] Murgescu Bogdan, 2010, *România și Europa. Acumularea decalajelor economice (1500-2010)*, HISTORIA, INS, http://www.zf.ro/eveniment/o-treime-din-populatia-ocupata-lucreaza-in-agricultura-la-fel-ca-in-anul-1980-13133308

The employment in agriculture (29% in 2012) returned after a long period (32 years) of raising employment in Romanian agriculture, on the background of the dramatic decline of employment in other sectors of the economy (Table 7), including the economic crisis, when Romanians got back to practicing subsistence agriculture.

Looking at the Romanian *human capital,* the share of the population occupied in agriculture, ranks Romania last among European countries (holds the highest share of the population occupied in agricultural production in the total population), the figure

relating to year 2012 indicating in fact a reversion of the Romanian economy. But for over three decades, Romania's agriculture stagnated, at least in terms of decreasing employment. For now, the situation in Romania is similar to that of countries like Ecuador, Guatemala, Kazakhstan, or Philippines. While European countries have developed industry and services, on behalf of the efficient use of the available workforce, Romania, in the lack of more favorable economic alternatives, retain yet a third of the population employed in agriculture, where through her heavy work this generates only around 6% of GDP.

Conclusions

Currently, food security from Romania may be threatened by a number of risks and deficiencies regarding the availability, affordability, and stability of national agrarian sector.

Very many economic vulnerabilities or other unmanaged or poorly managed can be added as the risks of food security - for example, the failure of the development of the infrastructure, lack of the storage facilities in seasons with low prices on exports (domestic capacity of grain storage and others) means selling them without profit or with small profit.

After Romania's accession to the EU, and after the process of restitution of ownership on agricultural land, agriculture in Romania did not carry out other notable steps in relation to the objectives of the restructuring and reforming through European PAC. Where, however, changes were adopted they remained without major consequences or have even had negative consequences with regard to the improvement and modernization of the agro-food system. European Community agricultural policies have proven difficult to be assimilated into a chaotic and extremely stiff national system, with a low degree of mobility and openness to new experiences. The difficulty to attract European funds for both rural development and agricultural practices was composed with low accessibility of the Romanian agricultural products on European agricultural market, but also on the domestic market, where they entered in the competition with imported European products.

Although food security in Romania exists as future strategic development objective, at present it is affected by various risks and threats. Ecological and economic risks of the Romanian agro-food sector deepens and complicates in relation to the Common Agricultural Policy by competitive type, which only exacerbate the structural disadvantages and historical gap between Romania and Europe agriculture.

Also extremely low capacities of negotiation within the European structures, implementing or maintaining domestic agricultural production, as well as protecting the strategic interests of Romania's economy (i.e., the absolute unfair competition from EU level, where agriculture gross added value is minimal - 6.5% from the total GAV - negatively influences the balance of food security in Romania).

On the other side, to develop the sustainable ecological balance of the Romanian rural space is also a real challenge. Forest Cover net loss at the national level, so vital in the

present conditions of the climatic regime, gets every day a growing ecological threat for Romania. The level of afforestation and green coverage is already, from several years ago, under the European average cover. However, legal or illegal, the cutting of the woods that should not cut in Romania continues, and too often, wood take the road of abroad, despite all the laws and authorities which ensure that this does not happen. On the other hand, in the cities, there is a struggle for life and death of the civil society with various staff members of the local administration who want to disband public parks in order to build any hotel.

Compared with a national average of green cover of 48% (20% natural meadows, 2% plantations and 27% forests), for instance, in the Danube Plain and Dobrogea – where there are the most extensive agricultural areas of the country - the green coverage is of only 14-15% [14] (Otiman, 2014). So how will we be able to change this reality, when we know that the new law and conditions of the ownership over the land and especially forests contain no commitment means to make the owners responsible for what they allow to takes place on their property?

The serious deficiencies of the irrigation system at national level constitute also a threat to the food security, taking into account the adverse climate change forecast for future years, and the intensely competitive environment and unfavorable to financing/co-financing agricultural activities at national and community level.

Underdeveloped transport infrastructure, linked to the lack of spaces for the storage of agricultural production, increase prices of food especially in periods of off-season or crises. Development of optimal investment in this field should be an absolute priority if we really want to guarantee the food security of the population.

Food security is already affected, but not so much through lack of food, but because of the increase in imports, the low purchasing power of the population and by consequence, in the relatively low level of domestic production and consumption, in the lack of competitiveness of the agricultural sector, amid the lack of a coherent strategy applied for sustainable and long-term development. Romania is a net importer of agro-food products (60-70% of food consumed), suggesting an inability to exploit own agricultural resources and an increased vulnerability to fluctuations in prices on the foreign exchanges.

Thus, we see that currently Romania enjoys a precarious food security due to: low yields of agricultural production, lack of the necessary infrastructure for modern agriculture, economic and social vulnerability of human capital employed in the agricultural sector, the lack of a minimum required infrastructure for activities of storage, transportation and marketing of agricultural products, the existence of vast areas of land uncultivated or rudimentary worked and, and last but not least, the relatively low purchasing power of consumers of food from Romania.

Any prime initiative to improve food security in Romania involves three categories of main activities, which are designed and employed specifically at national and local level:

1) raising the educational and vocational training for people from rural areas, in order to increase productivity in agriculture and to facilitate Romanian labor force transition from agriculture to other sectors of the economy;

2) intensification of awareness activities of the rural population, with regard to the need to preserve and improve the quality of the natural environment from the Romanian villages, including practicing a sustainable management on all areas from agriculture and forestry;

3) modernization of farming practices, forestry and associated processing industries, to increase productivity and improve the competitiveness of the agro-food sector in general. The national rural development plan (NRDP) of Romania provides a conceptual instrument and a tool for the integration of the Romanian agriculture in the EU's agro-food economy.

We still believe that in spite of the actual rather difficult economic and social conditions, Romania has good opportunities for developing a modern agriculture. But although the world seems pretty worried and make rather pessimistic predictions with regard to globally food security, the opinions of specialists and business people, in terms of whether or not the situation of Romania is under favorable auspices are contradictory. Some specialists say that Romania, should actually be supplying and not importing food security, especially through its agricultural potential, apt to feed a population several times more numerous than that currently living in Romania. However, in 2014, imports of agro-food products of Romania were 4.895 billion euro [26] (*** 2015, La ce valoare se ridică importurile...), which speaks for itself about the degree of meeting the domestic demand for food, of the Romanian agriculture today. Agro-food goods supplied by the domestic market must, in the first place, be available as logistics, accessibility (purchasing power) and quality, so they satisfy the nutritional-metabolic needs of consumers.

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