

AGRICULTURE AND FOOD SAFETY

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Abstract

Ensuring the food necessity and safety for the population of the Earth was and will be a main concern of the international organisms of this area. Realizing a food production which could ensure the consumption of the population of the entire planet, according to the demographic increase, registered mainly in the poor countries, means to maintain the permanent characteristic for the main resource categories: water, soil, forest, solar energy, etc. At international level we can notice important gaps both quantitative and qualitative of the products and services, according to the development level of each country. These gaps are higher as the development level of the country is lower.

Food safety involves food availability, accessibility and food quality. The evolution of the Common Agricultural Policy (CAP) related to the food safety, was due not only to the changes from the agriculture but also of the incomes as a response to the needs of the society. Among these we can mention the increasing concern regarding the hygiene and the food safety and the wellness of the animals. In these areas, CAP and other policies of the European Union and the consumer's protection, were considerably consolidated starting with 1990.

The increase of food safety remains an important topic for the European Union. The new agricultural policy of the European Union is mainly focused on the food safety, durable agriculture and rural development. After 2013, the objectives of CAP will be focused on three main topics: food safety and markets supply, insurance of a durable administration of the natural resources and the support for the agricultural production on the entire European territory and not only in the preferred areas from the agricultural point of view.

Key words: malnutrition, underfed persons, food crisis

Concerning the issue of insuring the food needs for the entire population, a main objective of the Common Agricultural policy is represented by the availability of the products, the supply for the markets in adequate quantities, high quality food products and diversified products.

The problem of food safety, the problem of markets supply with food products remains and has to remain a strategic objective of the European Union, even more in the international context this problem is still a topic of the political and economical discussions.

MATERIAL AND METHOD

Insuring food safety is strictly related to the realization of a lasting balance between the international food production (depending on international food resources), the constantly increasing population and the incomes and the food demand.

The scientific evaluation of the food safety both conceptually and pragmatically cannot be realized without analyzing an series of global indicators, both physical and economical: international food production and per person,

cereal stocks, food product prices and population incomes.

So, the first indicator allows creating a clear image on the international availability degree of the food products, while the second indicator shows if the production is higher than the consumption or the production is lower than the consumption. Both indicators are physical and can be easily measured and compared from one country to another or from one geographic area to another, considering different periods of time.

RESULTS AND DISCUSSIONS

The new EU policy will help the developing countries to consolidate four the food security pillars, both in the development context and for emergency situations:

- Increase of the products availability;
- Improvement of the products accessibility;
- Improvement of the quality and the insurance of an adequate nutritional value;
- Increase of the efficiency in preventing and administrating the crisis.

EU will be focused also on a higher efficiency of the international organization of the

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food safety. So, the Commission proposes the following:

- Focusing on the support for the small farmers, especially women in order to intensify the efficient agricultural practices from ecological point of view;

- Substantial increase – 50% till 2015, of the support for research, extension and innovation in the agricultural domain according to the demand; Common initiative with the African Union in order to accelerate the appliance of the orientations concerning the land policy in Africa;

- Support to establish or to extend some social security systems flexible, adapted and focused on local needs;

- Promotion of a better integration of the nutritional aspects in the development policies, included also in education and health department and consolidating the necessary capacities;

Support for the food safety committee reform at international level in order to become the pilot institution for food safety.

The events from the last years highlighted the international food safety vulnerability to major shocks – on the international agricultural markets and at international economical level. The crisis of the food process and the economical crisis reduced the purchasing power of some large segments of the population in many developing countries, the important reduction of the food accessibility, undermining the food safety.

The food crisis, followed by the financial and crisis and the international economic recession increased the number of hungry people to unheard limits, reaching more than 1 billion in 2009. On the international markets for food products, the process for food and agricultural products remained high but with a small decrease versus the maximum level, registered in 2008.

Nevertheless, there are increasing concerns regarding the high volatility of the market. These were consolidated in the period June – October 2010, when the process for cereals – mainly corn and wheat – increased as a consequence of the drought from the Russian Federation, of the high temperatures and rains from SUA. All these phenomena of nature determined the decrease of exportations.

The tendencies of malnutrition

Taking into consideration the improvement perspectives of the global economy and the price decrease for raw materials for food, the FAO projects show that the number of underfed persons will decrease in 2010 to 925 million people compared to 2009 when the number was 1,023,000,000 persons (figure 1).

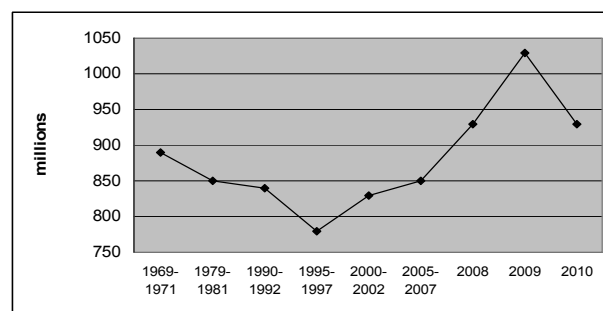


Figure 1 Number of underfed persons

Despite this reduction, the underfed persons' number remains unacceptably high, positioned on the 2nd place on the FAO survey. The decline in 2010 represents a reversal of an ascending trend noticed since 1995 – 1997. Indeed, after a constant decrease, a slow one, during '70s – '71s till '95s – '97s, the following years registered a constant increase of the underfed persons in the world. The ascending trend was suddenly accelerated, in 2008, during the crisis of the food prices. The number of underfed persons increased in 2009 as a consequence of the financial crisis and of the persistence of the high level of prices for food on the domestic markets of many developing countries.

Despite the increase of the underfed persons in the period 1995 – 1997 and 2009, the ratio of the underfed population in the developing countries is decreasing very slowly after 1995 – 1997 till 2005 – 2007, then in the following two years there is an increase which will reduce in 2010 (figure 2).

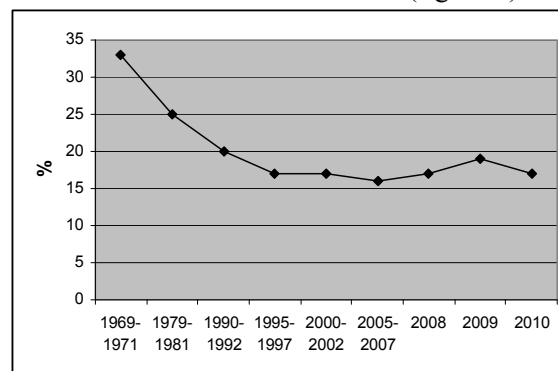


Figure 2 The underfed population ratio in the developing countries

In 2010, 16% of the population from the developing countries was underfed, with a decreasing trend from 18% in 2009, but still over the limit established by the Food and Agriculture Organization of ONU to reduce by half, meaning 10%, the underfed population ratio in the period 1990 – 2015.

The largest part of the underfed population of the world, 925 million people, meaning 62% live in Asia and Pacific, the most populated

regions of the world, followed by sub-Saharan Africa, 26% (figure 3).

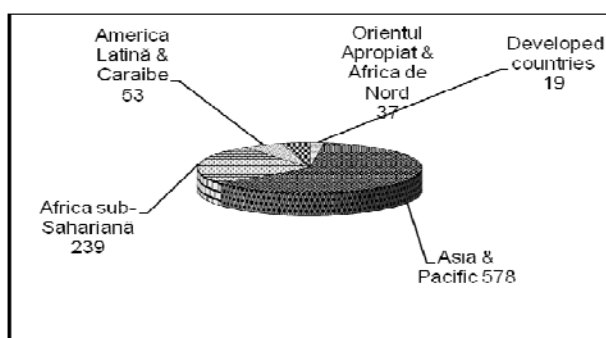


Figure 3 The total number of underfed persons, at international level, per geographic region, 2010

The highest level of malnutrition is in sub-Saharan Africa, in the case where in the period 2005 – 2007, 30% of the total population was estimated as underfed, even if there are high variations between the countries. While the malnutrition situation in the world is: 16% Asia and Pacific, 9% Latin America and Caribbean region, 7% Near East and North Africa, with high variations from one region to another and to one country to another.

Almost 166 million underfed persons live in the countries with extended crisis. Almost 20% of the total number of underfed persons lives in the countries with extended crisis, or one third of the population if China and India are excluded. Not all the countries with extended crisis have high levels of malnutrition, in some of the countries the crisis are localized to certain regions or areas. The number of underfed persons is almost three times higher in the countries with extended crisis than in other developing countries (figure 4).

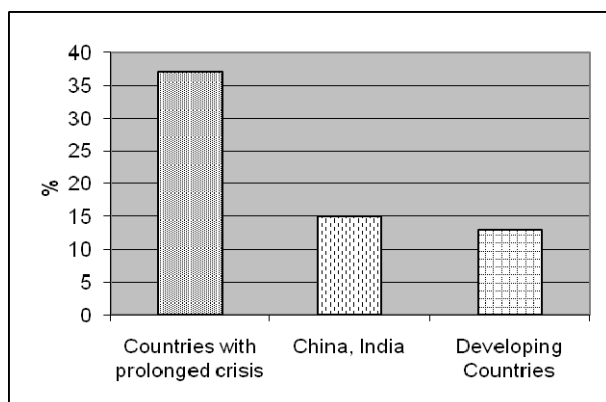


Figure 4 The ratio of underfed person's vs total number of population

The recent tendencies in food at global production, consumption and trade level

According to the information and the available estimations from the middle of 2010, the increase rhythm of the global index for food

production (measured in constant prices) slowed down to almost 0.6% in 2009, after an important increase of 2.6% in 2007 and 3.8% in 2008, during the food prices crisis.

In the same time, the global agriculture was affected by shocks, like the drought from Russian Federation, in the summer of 2010, which made the production of the country and the wheat exportation to decrease dramatically. Only an increase of 0.8% is foreseen for 2010.

The international food production must be increased with 70% till 2050, in the context of population increase to 9.1 billion persons, from approximately 6.8 billion in the present, according to FAO reports.

The global food consumption, which registered an increase up to 2% per year, decreased during the economical recession from 2009. The increases in the trade area were approximately 4-6% per year before the financial crisis from 2009 but for 2010 there is foreseen a decrease (figure 5).

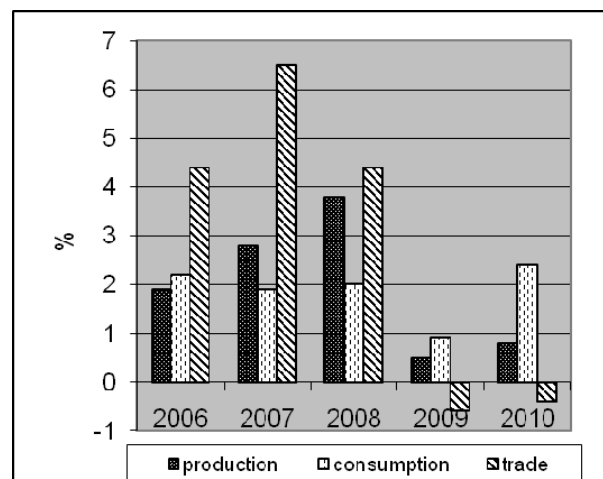


Figure 5 The annual increase rhythm of the food production, consumption and trade, at international level

Compared to December 2009, the cost of food increased with 25% because of the increasing demand of China, of the most serious drought of the last half century from Russia, of the high prices of the fuel, but also because of the corn usage in the ethanol production. The food prices can raise more if the crops do not increase significantly at international level this year.

The food consumption per inhabitant term of region

The faster increase in the consumption per inhabitant for the basic food, in the last years was registered in Easter Europe, followed by Latin America and Caribbean region, then Asia and Near East and North Africa. In these regions, the consumption per inhabitant, in general,

continuously increased even during the recession. An exception is Easter Europe which registered a decline of approximately 2% in 2009, when the region was very affected by the economical crisis.

The food consumption per inhabitant remained constant in the developed regions from North America, Western Europe and Oceania. In sub-Saharan Africa it increased in the period 2000 – 2007, but it is estimated that they decreased somehow per inhabitant.

In the period 1981 – 2009, the region with the largest number of countries which are facing emergency situations were Africa, followed by Latin America and Caribbean region, Easter Europe, The Community of Independent Countries and Oceania. The high incidence from Africa can be explained mainly by the high number of countries from the region, but also by civil disturbances from many countries and also by many slow disasters. The number of African countries facing emergency situations varied from 15 – 25 annually, except the end of 1980, when the number was closer to 10. Among the 23 countries analyzed in the Asian region, the number of countries facing emergency situations increased from approximately 5 annually in the period 181 – 2002 to almost 10 in the period 2003 – 2009. The number of affected countries in Latin America and Caribbean region is relatively low, but it fluctuated during the analyzed period, whilst in Easter Europe and the Community of Independent Countries was decreasing.

As the effects of the economical shocks on the famine do not totally disappear when the prices are stabilized and the economical increase starts again, the impact of the crisis can persist for a long time. The countries in extended crisis are confronted with a very difficult situation. According to the food uncertainty, 22 countries are presently considered to be in an extended crisis. The extended crisis periods are characterized by recurrent natural disasters and/or conflicts, the long time of food crisis, the breakdown of subsistence means and the institutional capacity to react in times of crisis. These countries must be considered as a special category with special needs regarding the development community interventions.

The food production per region

In the last decade the lowest food increase rate was registered in the developed countries, which are OCDE members. The two geographic regions, which registered the highest increase in the food production in the last decade – Easter Europe and Latin America and Caribbean region –

had mixed experiences during the prices increase for the food products and the financial crisis. The countries from Easter Europe, after implementing the protection limit in 2008, faced the impossibility to maintain the potential increase in the following years, the drought from 2010 had as consequence very low production levels in the region.

Latin America and Caribbean region suffered weather difficulties in 2008, but recovered in 2009 and 2010. In Asia, the food production increase remained strong in the last decade, in general 2-4% per year, but registered a slowdown in 2009 and 2010.

The food production did not manage to increase in sub-Saharan Africa, registering an increase of 3-4% in the previous decade, but for 2010 it is foreseen a temperate increase. The region which registers the lowest food production increase in the last years is Western Europe, in case where the production for 2010 is foreseen to be only 5% higher than in 2000.

In 2007 and 2008, the production increased because of the high prices and the fields taken out from the agricultural circuit, but decreased with almost 2% in 2009, as a consequence of low prices and unfavorable weather conditions.

CONCLUSIONS

To overpass the international food crisis it is needed to establish national and international action plans which should start with the assumption that the food quantity needed for the population consumption means the increase of the agricultural production of the developing countries by using high quality technological procedures and this should become the “highest economical priority of the world”. It means also, important national and international action plans taken to increase the efficiency of the production factors from the developing countries, to reduce the wastes of the arable field and to introduce new fields in the agricultural circuit, making sure that the agricultural production increase is higher than the population increase.

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