

ALIMENTARY SAFETY

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Abstract

Between developed and developing countries there are big differences regarding medium alimentary consumption per capita. Alimentary consumption in developed countries is balanced and stable. In the European Union consumption structure reflects a healthy and balanced alimentation. In the developing countries the alimentary consumption reveals deficiencies, mostly on the quality and quantity levels.

Key words: alimentary safety, consumption, population growth, agricultural production

INTRODUCTION

The global issue of alimentation captured the attention of the international scientific community, because it influences the present situation, as well as the evolution of many other economic, social and political issues of our century. Despite all the past warning signals, the present status of the global alimentation and its immediate perspectives are not reassuring at all. During the last decades, the alimentary issue has become more stringent and acquired new features and dimensions from a qualitative point of view. ***Being at the beginning a national or regional issue, it has turned into a global issue now.*** [3]

Given the present circumstances, the big and growing global differences act like a vacuum, the only difference being that in the complex systems, like the social ones, the consequences are less predictable than in the case of the simple systems. Therefore, it is in the interest of the whole mankind to act and think rapidly.

In order to deal with this situation, the most important step is now to understand where we are, where we are going to and where is mankind going if the actual state of facts continues.

One can not deal with global issues individually, because they depend on each other and are amplifying themselves, becoming a real threat for human condition. It is mandatory to analyze the validity of our ways to develop, of our ways to manage the world. Confronting the unprecedented demographic rise and present technological evolution, human system will

become so immense and complicated that *the holistic approach and evaluation* will be indispensable[10].

Another problem is that of the imbalance we cause to ecosystem, by its devastation and pollution, by intensifying pasturing and fishing, by clearing the woods and overexploit the soil. Soil resources are running short exactly when world population and its needs are exponentially growing. Environment issues are to deal with at once. Therefore, it is necessary that the relationship between technical man and nature to be reconsidered with an unparalleled maturity and responsibility.

In order to decently provide with food a population of 7 billion people, global agricultural production has to be carried out mainly in the developing countries, where alimentary needs will double in the next years.

Through constant efforts and an efficient utilization of the available natural and human resources, alimentary and agricultural production of the developing countries can be at least doubled. This aspect will not do to end starvation and malnutrition. It is necessary a better distribution of the product per capita, especially of the income of marginal, disadvantaged segments of society[11].

MATERIALS AND METHODS

We have to mention that the notion of alimentary safety is mostly based on the wrong principle that gives the developed countries the responsibility to provide food products for the developing countries, without taking into consideration the role of the developing countries in solving the problem. The developing countries proved that, by growing their reciprocal alimentary commerce six times, from 2.4 billion dollars in 1970, to 15.3 billion dollars in 1980 [4]. During this period, the total trade with agricultural products of the developing countries has grown with a similar rate, from 3.4 billion dollars to 21.5 billion dollars in 1980. These data powerfully certify that world alimentary strategy can not be conceived without taking into consideration the decisive factor that the deloping countries will have to play. [7].

The growing number of the deloping countries taking part to solving alimentary issues, a problem that affects more than 6 billion people since 2000, implies careful examination of the financial resources impact over alimentary production.

The main issue concerning the food providing for the world population is if this can be done without destroying the ecological base of agriculture during this process. The model of intensive agriculture has certain limits and the research workers consider the ecological agriculture a solution for the future both in the developed and developing countries[8].

The studies carried out by FAO certify that we have an unbalanced alimentary regime in the world, opposed to the physiological needs of the human body. The quantitative and qualitative differences in the world alimentation show that where the food is insufficient, it is also lacking the necessary qualitative structure.

Worldwide, the energetic availabilities per capita have grown in 21 years (1990-1992/1969-1971) from 2440 kcal to 2720 kcal (an annual growth of 0,5% in two decades). Two tendencies manifested during this period [9]:

- Slowing down the growing rhythm of the energetic food products availabilities worldwide, in the poor countries especially;
- Diminishing of the energetic alimentary availabilities in the big countries of the world and a slow growing rhythm in the developed countries overall.

Table no 1

Evolution of energetic availabilities per capita -Calories-

	1969-1971	1979-1981	1990-1992	2002-2009
Developed countries	3190	3280	3350	3420
Industrialized countries	3120	3220	3410	3470
Transition economies	3330	3400	3230	3350
Developing countries	2140	2330	2520	2800
Latin America and Caribbean	2510	2720	2740	3050
Saharan Africa	2140	2080	2040	2400
The Near East and Northern Africa	2380	2850	2960	3120
East and South-West Asia	2060	2370	2680	2980
South Asia	2060	2070	2290	2760
Economical groups of developing countries				
Less developed countries	2060	2040	2040	2330
Low income and low standard of living countries	2060	2230	2450	2780
Low income countries	2060	2210	2430	2760
Medium income countries	2360	2670	2760	2980
World-wide	2440	2580	2720	3020

Source:www.fao.org 2010

The evolution of energetic availabilities per capita, period 1979/81 compared to 1969/71 shows a 0.3% growth in the developed countries, during the period 1990/1992 compared to 1979/81 the growth is of only 0.2%. The period 2002/2009 shows a slower growth, in the developing countries it was of 0.9%, respectively 0.7%, reflecting a slower growth of energetic alimentary availabilities per capita in these countries [5]. Milk and

lacteous products are the most important components of alimentary share in EU, followed by vegetables, fruits, meat etc. If we cumulate meat and fish we have 108 kg/capita, milk and lacteous products 132 kg/capita, eggs 13 kg/capita, resulting in a very high protean consumption. The sugar consumption is also high (33 kg/capita).

World protean availabilities per capita, on regions and groups of countries, clearly show that the nutritional state of population is strongly connected with the social-economical growth.

In the developed regions of the world lives 24% of the global population, consuming 71.1% of the energetic availabilities, 66% of the protean availabilities and 57% of the lipid availabilities[7].

In the developing regions of the world lives 76% of the global population, consuming 29% of the energetic availabilities, 34% of the protean availabilities and 43% of the lipid availabilities[7].

During a 20 years period, energetic consumption of the underfed population did not significantly improved in the poorer countries and regions of the world.

If we compare the qualitative structure of consumption in the poor countries to that of European Union and North America, there is a major gap and the perspectives are not too optimistic. In the poor regions and zones, dominant in the average consumption per capita are cereals (224 kg cereals/capita in Northern Africa compared to 118 kg/capita in EU).[8]

Table no 2

Average cereal consumption on different regions and countries
worldwidePeriod 1993-1995-2009

Consumption per capita		
	1993-1995	2009
Developed countries	118	119
USA	98	100
EU	112	113
Transition countries	153	159
Romania	175	220
Polonia	175	173
Bulgaria	136	114

Source:www. FAO.org 2010

In Romania and other transition countries, population consumption has diminished during the past years. According to statistic bulletins (CNS), in 2009 the cereal consumption per capita was of 218.33 kg, potato consumption 89.75 kg, fruits 46.07 kg, vegetables 137.32 kg, meat 42.27 kg, sugar 22.73 kg, oil 9.8 liters. The average daily consumption, expressed in calories, was of 2872 kcal/capita in 1994, its level and structure expressing a significant gap compared with the average in EU. [1]

RESULTS AND DISCUSSIONS

Through the primary food resources it has, our planet can feed a population of several times higher than that which exists today. But food resources of the earth are on one hand insufficiently known and capitalized and on the other hand unfair distributed. For example, between the 35.000 plant species identified by botanists, 3000 are used in alimentation, but only 150 are more widespread and cultivated in greater proportion. Among these, 3 species - wheat, rice and corn - cover half the food needs of humanity.

Demand for food in order to meet the food necessities of population depends on many factors [9]:

- economical (supply, income, prices);
- demographical (population number and structure on age and sex, profession, level of culture and education);
- sociological (fashion, social environment, socio-professional mobility);
- organizational (commercial activity quality, promotional actions);
- seasonal;
- conjunctural.

The extension, as well as limited access to food sources, is the result of joining together the factors of exogen nature – formed from the availability of income and aliments themselves, having nutritional value and involving the emotional tonus – and the factors of endogen nature – of physiological, sensorial, psychologically.

With all the progress made, the food situation worldwide is far from being solved, both in developing countries, as well as in those developed. It is a certain fact that the food issue can not be approached in an isolated way, but in close connection with other phenomena and processes which define the contemporary world economy, with other global issues: population, energy, international trade, technical and financial development support.

World alimentary supply is likely to improve only by applying well substantiated agricultural, alimentary and nutritional policies, aiming at restoring food imbalances due either to deficiency, or to plenty [4].

The share of overfed population from industrialized countries has increased in recent years, a large part of the people in these countries going from a traditional alimentation, rich in cereals and vegetables, to a “modern” alimentation, rich in fats and sugars. This "transition" of alimentation was determined by changes in society (income increase, migration to cities, lack of spare time, emancipation of women), which led to a reshape of the alimentary behavior.

At the opposite pole are the poor and weak industrialized countries, where the share of underfed population reaches alarming proportions sometimes, due to the alimentary availabilities deficiency.

We can say that world population is divided, from a nutritional point of view, in two categories – under fed and overfed – both categories suffering from malnutrition, with major impact on health.[5]

The underfeeding issue constitute a permanent point of interest worldwide, a more complex approach being imperative, because of its multiple causes, but also because the difficulty of practical implementing solutions. This approach requires passage from a simple physical distribution of aliments to a closely study of economical, political, social and technical factors at a macro and micro-economical level.

Thus, at the World Food Summit in June, 2002, organized by FAO, it was reiterated the major objective which was established during World Food Summit in Rome, in 1996, respectively reducing up to half of the world underfed population until 2015 [4].

With all the measures taken and recorded progress, the number of underfed is only decreasing with 8 million people per year. This decline is insufficient for the Summit to achieve its objective, 22 million people annually. In this context, FAO believes that the development of agriculture represents the essential factor for eradication of poverty and strengthening alimentary safety. During the meeting it was pointed out that hunger is both a cause and a consequence of extreme poverty, which prevents poor people to benefit from opportunities of development. Therefore, it was reaffirmed that starvation eradication is a vital step in reducing poverty and inequality. Also, 70 % of the poor population and with an insufficiency in alimentation lives in rural areas and depends entirely on the revenue coming from agriculture. This will be added to the fact that a rapid increase of the number and proportion of population takes place in urban areas affected by poverty, starvation and malnutrition. Under these circumstances, it was underlined

the importance of measures to increase productivity in agriculture, to a more efficient use of natural resources [2].

In my opinion, food insufficiency will constitute a major problem of a new era, which started in the 90's and continue at present. New era can also be called "environmental stage" and brings changes in the alimentary issue worldwide compared to the period 1950-1990, that can also be called the „economical stage". Adopting the issue of food sources impairment from multidisciplinary perspectives makes possible, during the environmental stage, to trace causes under different aspects and find solutions less limited than in the past.

CONCLUSIONS

In conclusion, I consider that there is a direct link between food crisis and alimentary safety. The lack of alimentary safety can generate food crisis. The food crisis is a phenomenon affecting, generally, the developing countries and countries in transition. In the developed countries the phenomenon of food crisis is less spread and aims mostly at the population having low income or socially assisted. In the developing countries crisis affects wide sections of the population.

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