WORLD NUTRITION AND DEMOGRAPHIC GROWTH

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There are relations of organic interdependence between nutrition and demographic growth, which appear directly or though other factors. For this reason, people have established on a global scale certain demo-alimentary interferences between demographic growth and economic growth, nutrition and natural increase in population, health, food consumption and work productivity, nutrition and mean life expectancy.

The degree of ensuring food security expressed through economic development acts on the typologies of demographic growth, on human behaviour, fertility, number of births and deaths, and these in their turn give a certain impulse in a negative or positive way to the economic and social development.

After analysing the data, one comes to the conclusions that more than 1&5 of world population presents a high demographic growth rhythm, of over 2.2%, while having only 4.7% of the World National Gross Product. One can notice that, the higher the general world fertility rate, the lower the development stage, and the nutrition level respectively. The countries which have the lowest income per person (543-577 US dollars) have the highest fertility (4-5 children).

The countries with the lowest development level, and consequently the lowest nutrition level, have the lowest life expectancy, under 55, while in the countries where the national gross product is over 20000 US dollars, life expectancy is over 73.

***Key words**: nutrition, demographic growth, economic development, life expectancy*

Human food is a particularly vast issue, since the right to eat is stipulated in the human rights. This can be explained by the fact that the human body needs nutritious principles for his vital functions which, in a state of deficiency, contributes to the degradation of the human being and even to death [2, 4].

In this sense, historical data record long periods of famine and their impact on the evolution of the demographic number and structure of the globe's population. Still at present, people are facing serious food safety issues; thus, FAO estimates that 2.5 billion people suffer from malnutrition, a phenomenon encountered in poor countries and particularly among children aged 0-5 [1,3 and 4].

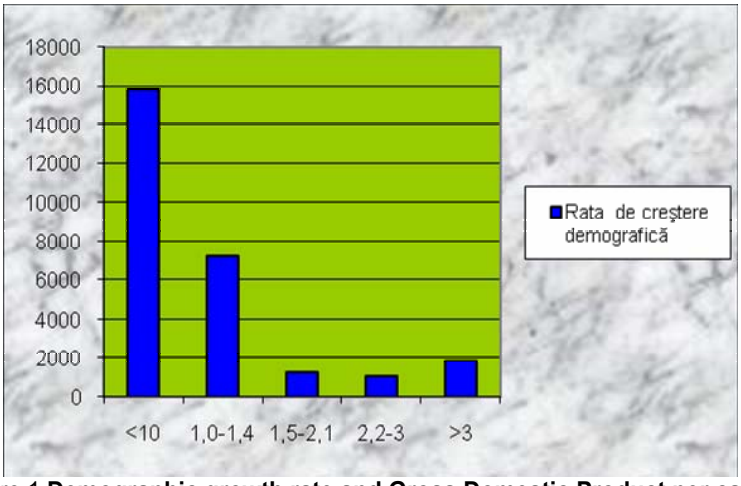

Figure 1 **Demographic growth rate and Gross Domestic Product per capita**
Source: *The World Bank 2006, World Development Indicators*

According to the data supplied by the World Bank, famine and malnutrition explain why fertility rate is high. We can see that, the higher the values of this index, the lower the level of development of the area, which is the result of nutrition below the necessary level of harmonious growth and development, which also results from the data presented in the table below.

Table 2

Fertility index and Gross Domestic Product per capita

Fertility rate	Number of economies	GNP in billion US $	%	Population in millions of inhabitants	% of the total	GNP per capita in US $
> 5 children	31	308	1.0	534	8.8	577
4.0-4.9 children	18	178	0.6	328	5.4	543
3.0-3.9 children	16	944	3.0	1.421	23.5	664
2.0-2.9 children	32	2,799	8.9	1,033	17.1	2,710
> 2 children	46	26,615	84.5	2,573	42.5	10,344

Source: *The World Bank 2006, World Development Indicators*

We can see that, between the level of development reached by a certain area expressed as the Gross Domestic Product per capita, and the fertility rate there is a direct correlation. The countries that produce the lowest Gross Domestic Product between 534 and 577 US$ per capita have the highest fertility rate and vice versa, the countries that reach 2,710 US$ per capita have a fertility rate of 2-3 children. In exchange, the countries with a fertility rate below 2 children have the highest Gross Domestic Product per capita (10,344 US$ per capita) as shown in the figure below.

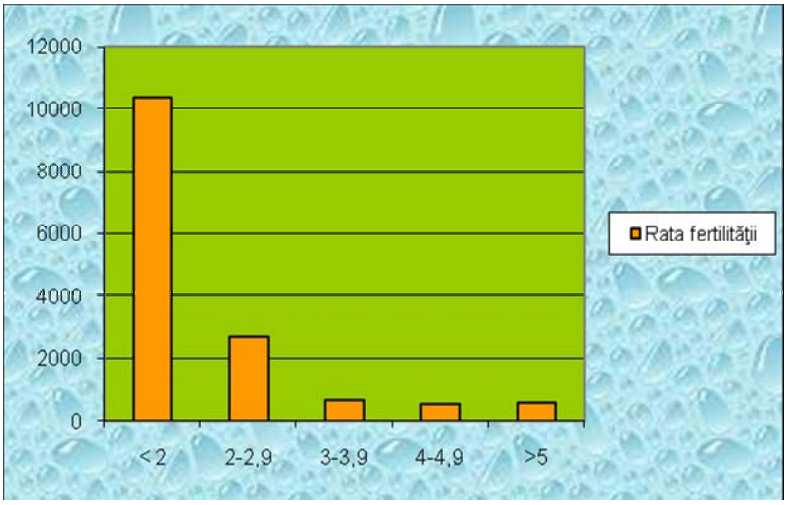

Figure 2. **Fertility rate and Gross Domestic Product per capita**
Source: *The World Bank 2006, World Development Indicators*

Life expectancy of the earth's population is influenced by food supply, i.e. the countries with a low level of development and with poor nutrition (436-498 US$ GDP per capita) have the lowest life expectancy (*table 3*).

Table 3

Level of development and life expectancy

Life expectancy	Number of economies	GDP in billions of US$	%	Population in millions of people	%	GDP per capita in US$
< 55 years	39	301	1.0	605	10.0	498
55-64 years	10	613	1.9	1.405	23.2	436
65-69 years	23	2,229	7.1	1,150	19.0	1,938
70-72 years	20	1,647	5.2	1,559	25.7	1,057
> 73 years	50	26,580	84.4	1,250	20.6	21,264

Source: *The World Bank 2006, World Development Indicators*

The countries with the highest life expectancy upon birth (over 73 years) produce a Gross Domestic Product of 21,264 US$ due to the fact that they can rely on a very good economic development.

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Balanced nutrition – quantitatively and qualitatively – results in a balanced demographic growth. The countries whose economies produce 44% of the Gross Domestic Product and have an average income per capita three times higher than the world average, have a fertility rate below 1%.

The countries with a speedy demographic growth rate (> 2.2%) only produce 4.7% of the national gross product at world level and have a lower life expectancy upon birth, i.e. between 55 and 64 years. The countries that produce the lowest income per capita (534-577 US$ per capita) have the highest fertility rate; in exchange, the countries whose GDP is above 10,000 US% have the lowest fertility rate.

Malnutrition in the first years of life influences both life expectancy upon birth and life average duration; the countries whose economies are developed and have a high GDP have a higher life expectancy level (> 73 years).

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