QUALITY OF LIFE AND THE EFFECTS OF ENVIRONMENTAL ISSUES ON HEALTH

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Abstract: Ensuring a good quality of life is essential, the human being is placed first in the objectives of sustainable development, involving possession of better living conditions in terms of health, education and income. Health is one link in chain between economic development - social development - environmental conditions between these three elements there is a connection. You can not achieve economic development if human health or the environment are affected. The World Bank has developed a system of indicators that measure the development level of a country. In terms of environmental data, human development is measured with indicators energy consumption per capita, water consumption per year, afforestation. This article discusses the negative effects of each environmental issues on health.

JEL classification: Q01, O44, I15

Key words: sustainable development, environmental issues, quality of life, health

1. INTRODUCTION

Economic development implies economic growth together with increased quality of life. If we talk about growth we refer only to macroeconomic indicators, while economic development considers increasing the quality of life, increased opportunities for food, education, health care.

The sustainable development aims ability of present and future generations to benefit from economic growth, maintaining ecological balance, reduce social inequality and poverty for long term.

2. OBJECTIVES

Health is one link in chain between economic development - social development - environmental conditions. Between these three elements there is a connection. A state can not achieve economic development if human health or the environment are affected.

3. METHODOLOGY

I processed data on health problems caused by various environmental by transverse and longitudinal research method.

4. ENVIRONMENTAL ISSUES AND HEALTH

Environmental marks during the period when the growth was the only desire of economic, characterized by unsustainable development are becoming more serious and very difficult to repair. Threats to the global environment are exposed to the following

issues: desertification is advancing with 60,000 square kilometers per year, deforestation amounts to 15 million hectares per year, and 2/3 of trees suffering from pollution, greenhouse effect, erosion, biodiversity disappears of 100 times faster than the annual rate[1].

In recent years, people have forgotten the principle of "hand in hand with nature"[2], and used unconsciously sources found in nature, damaging it.

Nature has many limits, so we realize we have passed only after the damage occurred and remained only a short time to repair their[3].

Population growth has led to increased consumption, environmental degradation has emerged as affecting quality of life. All environmental issues (GHG emissions, climate change, water pollution) have an impact on the population most vulnerable as children and elderly.

Protecting and improving health must become an essential condition for economic and social development policies, says author G.Georgescu in 1995 in the book entitled *Economic reform and sustainable development.*

The health of a nation is quantified by indicators of life expectancy at birth, infant mortality. There is an inverse relationship between GDP per capita and mortality. Thus, in high-income countries recorded the lowest mortality rate and developing countries have the highest rates of this indicator[4].

The World Health Organization estimates that as much as a quarter of diseases preventable risk factors are caused by physical, chemical and biological environment probably thirteen million deaths annually are related to the environment[5].

Negative effects on the environment occurred from uncontrolled development of the economy inevitably lead to health problems. Economy can not increase if the labor factor is unable to use their productive capacities.

The first principle of the Rio Declaration puts human being first. Human beings are the focus of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

Quality of life is essential for achieving sustainable development. However, with the increase in life quality, multiply consumer desires. Here comes the public awareness of unsustainable consumption effect on sustainable development.

The World Bank has developed a system of indicators that measure the degree of development of a country. In terms of environmental data, human development is quantified with indicators energy consumption per capita, water consumption per year, afforestation.

World energy consumption per capita has increased steadily since 1980 when it registered 2,280 kWh, in 1990 was 3770 kWh and more than another 10 years reached 5940 kWh[6].

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[1] Stoica M., *Investment and Sustainable Development*, University Publishing House, Bucharest, 2005, p. 12, appud Berca Mihai, Engineering and resource management for rural development, 2003

[2] Gülfem Dilek Yurtta, Yusuf Sülün, *What are the most important environmental problems according to the pre-service science teachers?*, Procedia Social and Behavioral Sciences 2 (2010) 3412–3416, www.sciencedirect.com

[3] Brown L.R., *Plan B 2.0,* Publishing Bucharest, 2006, p.3

[4] Georgescu G., *Economic reform and sustainable development,* Economic Publishing, 1995, p. 96

[5] Morris G, *New approaches to problem framing in environmental health: Application to water,* 2010, www.sciencedirect.com, p. 512

If energy consumption is considered an indicator of living standards, high values would be gratifying. Growing demand for electricity leads to the issue of greenhouse gas responsible for global number one problem: global warming

It is essential to switch to a green economy, with care for the environment and health consequences, which proposes material Signals 2012-20 years after the Earth Summit.

The most dangerous and present greenhouse gas is carbon dioxide, which was in the following amounts expressed in tonnes per capita:

Table no 1 - Tons CO_2 per capita EU-27 and Romania during 2000-2009

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
UE-27	8,5	8,7	8,6	8,7	8,7	8,6	8,6	8,4	8,2	7,5
România	4,2	4,5	4,9	5,1	5,2	4,9	5,1	5,1	4,9	4

Source: Eurostat

There is an inverse proportional relationship between the degree of afforestation and CO_2 per capita. In 2000 every citizen of the European Union inhale 8.5 tonnes CO_2 and the value had fallen to 7.5 tonnes for 2009.

Degree of forestation has increased slightly according to data from the World Bank, as the EU forest area for 1990 was 34.59 percent, the percentage rose to 36.25 in 2000, and in 2010 reached 37.51%. As for Romania, the value started from 27.77% in 1990 to 28.57% in 2010[7].

Many people in Europe suffer from various health problems due to environmental issues.

Environment and Health Strategy SCALE (Science, Children, Awareness, Legal Instrument), the result of collaboration between DG Environment, DG Research, DG Health, was launched in June 2003. The new element brought is the focus on children's health. The first cycle 2004-2010 establishes the link between environmental factors and respiratory diseases, neurological development problems, childhood cancer, endocrine problems.

Acid rain does not distinguish by anything in terms of visual perception to clean rain. However, the pollutants that cause acid rain, sulfur dioxide (SO_2) and nitrogen oxides (NOx) damages human health.

These gases interact in the atmosphere in order to form sulfate and nitrate particles that can be transported over long distances by winds and inhaled deep into people's lungs. Many scientific studies have identified a relationship between elevated levels of fine particles and occupational diseases, increasing causes of premature death due to cardiac and pulmonary disorders such as asthma and bronchitis[8].

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[6]Energy. Resources and energy reserves. Production and Consumption, http://www.et.upt.ro/admin/tmpfile/fileK1330943017file4f549429e0d12.pdf

[7] http://data.worldbank.org/indicator/AG.LND.FRST.ZS?order=wbapi_data_value_2010+wbapi_data_value+wbapi_data_value-first&sort=asc

[8] http://www.epa.gov/acidrain/effects/health.html

Warming in annual growth in 2003 has made nine European countries losing 52,000 people. In Europe died 18 times more people during the heat wave of 2003 than died during the terrorist attacks on the World Trade Center in 2001[9].

The EU expected to increase by 1-4% mortality for each additional degree of temperature. For 2020 is expected to increase to over 25,000 cases per year of heat deaths[10].

Air quality is essential for maintaining human health, therefore nationally settled ways of keeping it on the disposal of pollutants into the atmosphere, the location of polluting industries away from city centers, increasing green areas.

Polluted air can affect health due to particles emitted and ozone. Particles can cause premature mortality, cardiovascular disease, respiratory disease, infant death. Transport is responsible for air pollution affecting health and the environment through emissions of CO_2, the most important greenhouse gas responsible for global warming.

Thus, GHG reduction programs have a positive effect on curbing climate change that brings improved health and biodiversity.

Road traffic is responsible for health problems due to carbon monoxide which decreases the ability to focus and proper functioning of the nervous system, nitrogen oxides is propitious asthma, respiratory infections, hydrocarbons cause eye irritation, cough, lead hinders intellectual development of children.[11]

In 2008, in Europe there were 10,960 cases of respiratory infections for men and 109,787 women were affected in the same case. Most affected by air pollution are children and the elderly, so the males were affected 13,993 children aged 0-4 years and 20,486 aged 70-79 years. Respiratory diseases are another problem caused by emissions of pollutants into the air. A number of 225,247 men and 151,588 women were affected in 2008.

Table no 2- Respiratory problems in men for 2008, Europe

Age	Respiratory infections	Respiratory diseases
0-4	13993	1293
5-14	832	315
15-29	1851	1793
30-44	3800	4626
45-59	14783	19401
60-69	11016	34743
70-79	20486	77556
80+	43199	85519

Source: www.who.int

[9] Brown L.R., *Plan B 2.0,* Publishing Bucharest, 2006, p. 57
[10] Environmental signals 2011, *Globalization, environment and you*
[11] Ciobotaru, V., Socolescu A.M, *Pollution and the Environment*, Economic Publishing House, 2008, p. 34

The same situation exists within the female persons, the elderly are the most affected by air pollution.

Table no 3- Respiratory problems in women for 2008, Europe

Age	Respiratory infections	Respiratory diseases
0-4	11047	956
5-14	708	202
15-29	1204	925
30-44	1710	1995
45-59	4726	8220
60-69	4876	14201
70-79	15389	39379
80+	70127	85702

Source: www.who.int

Percentage of population who suffered from asthma in 2009 was highest in France - 7 percent, followed by Germany and Hungary with 5.3 Romania had 1.6 percent of people with this health problem. Most people affected by lung disease in 2009 were Hungarians 4.7 percent, followed by French with 4.3 percent, 1.7 percent of the Romanian and the minimum value was reached in Malta - 1, 2 percent.

Climate change affects water quality, quantity and illnesses resulting in polluted water contamination.

Water safety is closely linked to the global warming problem. For some regions, drought and famine starter disasters, migration, fire, and other areas facing storms and floods. Besides climate change, land use change and agricultural practices can make a negative impact on water quality and availability.

Official documents for water safety are Agenda 21 and the Millennium Declaration which target is to halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. Polluted water in 2004 caused 57 million cases worldwide per day, of which 11 million middle-income countries and 53 million in per capita income countries less than $ 825.

Infected water can cause hydric epidemics, infectious diseases, typhoid, dysentery, cholera, hepatitis, polio, parasitic diseases. On the prevention of water pollution in Romania sectoral programs have been developed to ensure the quantity and quality of drinking water in urban and rural areas, expanding sanitation systems, building water treatment facilities, aquatic pollution reduction, protection of waters against pollution from agricultural pesticides.

Waste disposed improperly affects health and the environment by polluting water and soil, especially since each of Europeans throw 520 kg municipal waste per year. Waste containing toxic, flammable, explosive and toxic industrial substances, pesticides, solvents. From an environmental perspective, storage is the least desirable option in waste management hierarchy. However, it is still the most common method of waste disposal in some countries, including Romania, despite the most adverse effects on the environment and human health.

Pesticides used in agriculture have a direct effect on health, in 2010 there were 260 cases of pesticide poisoning and 15 deaths. The National Development Plan has a strategic goal of protecting and improving environmental quality in the context of sustainable development: improving living standards by providing public utility services quality and quantity standards in the water, waste management.

5. CONCLUSIONS

Sustainable development is a form of economic development that takes into account human health and the environment. Objectives of sustainable development through the eyes of environmental and social relationship are maintaining human health by reducing greenhouse gas responsible for global warming, environmental standards for appropriate preservation of the environment water, soil, air, public access to clean water, proper sanitation. Air quality is essential for maintaining human health. Althought, in 2008, in Europe there were 10,960 cases of respiratory infections for men and 109,787 women were affected in the same case. In 2000 every citizen of the European Union inhale 8.5 tonnes CO_2 and the value had fallen to 7.5 tonnes for 2009.

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