### **EUROPE – A DESERT "NOAH'S ARK" - RISK OR CHALLENGE!?**

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#### **Abstract**

Holocene is warmer. Sahara expands to Europe. Climate changes raise the sea level, they floods coastal cities and many islands. The global life framework narrows. The northern hemisphere floats as an ark on "desert water". Lovelock warns that seven billion inhabitants of the planet will decrease to only two. Globalization offers sustainable development for the selected ones. "Desert selection" turns Europe into a boat for samples of all races and people, types of plants and animals. If there are no sudden changes, evolutionary sustainable development on the northern hemisphere will have three continents "black-white" (Europe), "white-yellow" (Asia) and "yellow-white-black" (North America), one religion (scientism) and one culture (conquering and protecting the living space). Social development and politics are already moving in this direction.

**Keywords:** climate change, desert, environment, sustainable development, social changes.

### Introduction

Behind the biblical legend of Noah's Ark the environmental disaster is hidden that occurred as a result of increased water level and the creation of the Bosphorus Strait, at the beginning of the Holocene. Following God's instructions Noah built the ark in which he placed a pair of all species of the old age and thus preserved biodiversity after the withdrawal of water. And after this "case" other environmental disaster happened on a planetary area, but none has had such a strong impact on the global population in the monotheistic world civilization. The legend was preached with religious

purposes until the 20th century, and then it was actualized in ecology. The meeting with Noah's Ark came through the suppression of anthropocentrism in ecology and the promotion of ecocentrism. More specifically, it came after the development of instruments and the adoption of global policies for the measurement of data on climate and the perception of planetary climate Holocene is becoming increasingly warmer. <sup>1</sup> Planetary changes. consequences are manifold: the erosion of arable land, desertification, air pollution, atmospheric ozone holes, melting ice at the poles, the occurrence of strong winds, the increase in vulnerability of biodiversity, declining opportunities for present and future generations ... Vienna Convention on the Protection of the Ozone Layer (1985), The Montreal Protocol on Harmful Substances that Deplete the Ozone Layer (1987) as amended 2, the Convention on the Transboundary Movement of Hazardous Wastes and their Disposal (Basel 1985-1989) and the Kyoto Protocol (1997) gave hope that good policy can prevent climate change. After the adoption of the Intergovernmental Panel on Climate Change (Intergovernmental Panel on Climate Change-IPCC) in 1988 under the auspices of the Environment and Development Program and the World Meteorological Organization and the observations of about 2500 scientists and experts (1990) that climate change is dramatic, it finds itself in the spotlight of the World Summit of Heads of State and Governments on Environment and Development (Rio de Janeiro, 1992), Second World Meeting at the highest level dedicated to sustainable development (Johannesburg, 2002) and fourteen thematic international

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At the First World Climate Conference (Geneva, 1979) the declaration which calls on world governments to work on predicting climate changes and preventing the negative impact of human factors on climate was published. With the adoption of the World Climate Programme (World Climate Programme - WCP), an international global climate policy was established. The Programme is managed by the World Meteorological Organization (World Meteorogical Organization - WMO), the Programme for the Environment of the United Nations (United Nations Environment Programme - UNEP) and the International Council of scientific unions (International Council of Scientific Unions - ICSU).

<sup>&</sup>lt;sup>2</sup> Amendments to the Montreal Protocol were achieved as the international agreements in London (1990)., Copehnagen (1992) and Vienna (1995 and 1996).

conferences.<sup>3</sup> Here the participation of the European Union is particularly notable which by its appeal and example was prepared to fulfill its obligations. At the same time, some developed and developing countries, particularly the USA, Russia, Canada, India and China ignored their obligations, using economic reasons as justification. The appearance of the British climatologist James Lovelock with a pessimistic statement that it is too late for any action because climate changes cannot be prevented, and that much of the world will become a desert is an evil omen only for optimists.<sup>4</sup> The European Union, Russia, China, USA, Canada and other developed countries have long based their development strategies on this assumption.

# Geopolitical aspect

The Planet. Today more than 1/3 planetary land (148,939,100 km²) is under desert. The data can be made more interesting when we learn that only 10-12% of planetary land (40,600.000 km²) is used for food production, and that 9.7% consists of forest ecosystems. Ten world's largest deserts cover an area of 13.4 million km². The desert environment (about 550,000 km²) and the polar planetary frame (127,000 km²) are now virtually unusable or insufficiently usable for the world's population, which are over 6.75 billion people. According to the statement of Luc Gnacadja, Executive Secretary of the UN Convention for Combating Desertification (Bonn, 27 May 2008), the desert environment is spreading along with climate changes because each

<sup>&</sup>lt;sup>3</sup> After the summit in Rio de Janeiro World conferences on climate were held in Berlin (1995)., Buenos Aires (1998.), Bonn (1999)., The Hague and Bonn (2000. And 2001.) Marrakesh (2001)., New Delhi (2002.), Milan (2003.) Buenos Aires (2004.) Montreal (2005.), Vienna (2007.) Denpasar - Jimbaran (Bali, 2007.) and Poznan (2008).

<sup>&</sup>lt;sup>4</sup> The electronic edition of the magazine "24 hours" dated 26<sup>th</sup> February 2009 contains Lovelock's apocalyptic prediction in which this 89-year-old supporter of geaethics says: by the year 2040 the summer temperatures in major cities will rise to 43°C, the soil will turn into desert, the Sahara will spread to Europe. Lack of food and drinking water will cause a lack of proper environment. After reaching seven billion the world population will decline to two billion. Efforts to reduce the transmission of carbon dioxide into the atmosphere are futile because the Earth cannot cool down and even when the temperature is cut down to zero. (Michael McCarthy:"Why Gaia is wreaking revenge on our abuse of the environment").

year 2000-5000 acres of land are destroyed by erosion. If these climate changes continue up to 2050 the desert "ocean" could exceed an area of 600,000 km². If we add to this the possibly submerged coastal areas because of growing seas and oceans, the water surface (361,126,400 km²) could grow from 70.8% up to 72-75% and further narrow the living environment on earth. The planet would not lost surface (510,065,600 km²), but the structural changes would be reflected in the assumptions for the present forms of life and biodiversity as we know it. In such circumstances, let us try to observe the position of Europe. To the south it extends to Africa from where threatens the "Saharan storm" and to the north to the cold Arctic, where melting ice threatens to increase the water level.

Sahara (Arabic, sahara-desert, rocky desert) is a flat plateau, about 3,500 years old 5 with an average altitude of 500m, and towards the Mediterranean Sea the altitude is only about 200m. The desert has the highest temperatures (up to 57°C) and the greatest temperature amplitudes (below 0-57°C). High temperatures, especially during daytime and during the period when the sun is high and the days long, warm the winds that come from the sea, mostly from the northeast. Winds that carry moisture over the desert blow as dry winds. Shaping relief with temperature amplitudes which encourage a mechanical breakdown of rocks, the winds are responsible for the bare rocks, gravel and clean surfaces that make up the largest part of the Sahara. The sandy desert area is only about 1.8 million km<sup>2</sup> or 20%. In this region there are about 12 million people or 1.3 per km<sup>2</sup>. Although calculations that Sahara could be made more appropriate for life, especially by means of reforestation, are becoming louder the lack of moisture and adequate solutions delay that project for another time, if it occurs at all. With climate changes the saharization spreads. The reduction of living space – through the erosion of arable land and an increasing lack of potable water in a wider area - now threatens North Africa, Middle East and the southern

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<sup>&</sup>lt;sup>5</sup> Before climate changes, about six thousand years ago, the Sahara was a vast area of subtropical forests. Therefore, it is a good natural sample space for scientific hypothesizing on climate changes for the sake of those areas where there is still a possibility to prevent saharization.

borders of the European Mediterranean. The saharization indicators in southern Europe are: temperature growth and the frequency of drought years, more frequent extreme weather conditions, rising sea levels and more frequent floods, increasing water consumption in agriculture, the threat to biological habitats and biodiversity (especially from foreign and unknown diseases and species), economic problems and declining social welfare, etc.

The Arctic is now an inhospitable continent. On the surface of land and sea (26 mil. km<sup>2</sup>) temperatures go down to -78°C (Omnicom). Polar vegetation is notable only in short intervals during the year. Specific fauna is somewhat richer, especially the ocean world. Ozone holes and melting ice would change that picture. Predictions that the Arctic could be left without ice in this area by 2040 would result in the formation of a large ocean. The current average warming of 0.8°C is most evident on Greenland (2°C), which threatens to melt the ice and cause an increased water level of seven meters. This can only be slowed down, says Schellnhuber, by reducing emissions of CO<sub>2</sub> by 80-90%.6

Europe. With an area of 10,520,000 km² and 700 million inhabitants the today's Europe is stretching from the Mediterranean climate of the south to the arctic area. The altitude of Europe is 340m, which makes it much lower than Asia (1000m with which it extends as a single land at northern latitudes. Plains are extending up to ¾ of the European area<sup>7</sup>, and mountain ranges of east-west direction give it the appearance of the rims of the "Noah's Ark." The line of the southern mountains from west to east: Cantabrian Mountains, Pyrenees, Alps, Apennines, Dinarides, Carpathians, Caucasus, and particularly closing depressions (Po Valley, Pannonian, Wallachia), with timely reforestation could be a significant habitat and be a preserve from southern winds carrying the "Saharan" sand. The second "line of defense" from desertification are the old fault mountains in the west- east direction (the French Massif Central - Arden - Vosges - German and Czech mountains - Highlands in Poland). This shield is porous with rivers. The east-west arrangement of the mountains is suitable for the defense from

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<sup>&</sup>lt;sup>6</sup> Climate change is taking place faster than expected, www.rtv.rs, 29.12.2008. year.

<sup>&</sup>lt;sup>7</sup> The largest lowlands are: East European, Pannonia and Wallachia. Significant area is also occupied by lowlands in Poland, Germany, France and the Atlantic coast.

southern winds, but it is not a guarantee of prevention from the raising of the level of the Atlantic Ocean and the flooding of coastal cities. Climate changes directly and indirectly endanger the 41,000 km of European coastline. Their adverse influence of warming threatens the soil structure, biodiversity and human life itself on the Iberian Peninsula, southern France, Italy, Turkey, Greece and parts of the Balkans. In this region 250-300 million people live.

## **Following Lovelock**

Lovelock perceives that the planet is a living organism, and accordingly he understands movement as a development of some and a disappearance of some other structure factors. The structure of the today's European "ark" is made up of states, which Brzezinski divides into main players and main headquarters. If the climate change followed the predictions of modern climatology, by the end of the millennium the European Noah's Ark would be structured in two directions: 1) to keep the state structure, but with changed players and headquarters, or, 2) that differently emodeled parts take over the role of states (social associations) and to re-identify the main players and headquarters. If Europe remains a continent of national states the following would be found in adverse climatic conditions: a) because of saharization - Mediterranean countries and, b) due to rising water levels and different modes of action of the Gulf Stream - coastal countries of western Europe (particularly the Netherlands, parts of France, Britain) and slightly less some Mediterranean cities (especially Venice).

1) Saharization would with time dictate the economic decline of the southern countries of Europe, migration to the north and the pressure on

<sup>&</sup>lt;sup>8</sup> The European coastline with 4.1 km on 1.000 km <sup>2</sup> is continentally more rugged than the North American and Asian coasts. In North America it is 3.1 km and in Asia 1.7 km on 1000 km<sup>2</sup>.

<sup>&</sup>lt;sup>9</sup> Speaking about the geostrategic players and headquarters, Brzezinski called players all the states and forces that have the ability "to exercise their power and influence beyond their borders", and he called headquarters those states that have sensitive positions so their potentially vulnerable condition can cause effects on the behavior of geostrategic players. (Zbigniew Brzezinski:"Great chessboard", p. 42).

neighboring states. Traces of civilization known to us would have remained in the "sand". France would lose a major player role while Germany, due to favorable climatic conditions, would be one of the main players of the European Union. The problems of Germany in maintaining their living space from the pressures and the migration of Spaniards, Italians and French would lead to the closure of the southern borders, which would cause conflicts in Western Europe or the end of the European Union. Central Europe would become the main pivot for which Germany and Russia would fight. Since Hungary, Slovakia, the Czech Republic and Poland do not have the dose of sovereignty that would make them "players", the region would experience either mixing of the population or mass suffering caused by military conflict. Germany could, at least initially, feel responsible for the salvation of the European Union, so in an effort to reduce pressure on the southern borders, it would attempt economic and political expansion to the east. In that case Russia would, at least from the need for a "buffer zone", try to challenge the ambitions of the Germans and the creation of a powerful alliance in the west.

Following Lovelock it is possible to predict the changes in the religious structure of Noah's ark. European migrations would have particular effect on the migration of Catholics (150 million) towards the present areas of Protestants and Orthodox Christians. The economic power of the Vatican would break up in support of mass migration or would lead to the reduction of the Church into marginal groups by surrendering the Catholics to the elements. So the Vatican today already operates on the preparation of space on the northern and western parts of Europe, especially in Great Britain and Scandinavia. The European Noah's Ark is certainly not counting on "drunken sailors", but from the aspect of religion it could potentially pose a "powder keg". The war in Bosnia and Herzegovina was the only touchstone of the European clash of civilizations.

2) It is much more likely that Noah's ark of European future would be built by *new alliances*, not by national states. The new alliance building Noah's Ark consists of: a) Russia and the European Union, b) transnational corporations c) secret planetary alliances. Changes in Russia at the end of the millennium were heralded as the establishment of unique "house rules"

of the European Noah's Ark. When it was realized that it led to anarchy and lawlessness, "putinization" was the only way out. The strengthening of the president's role and the role of the government headed by the Prime Minister led to the restraining of the tycoons and the life in Russia was partially normalized. Russia has remained a powerful force, although not the super power the Soviet Union was. On economic and political plan the European Union imposes as a supranational community, aided by and in the solid alliance with the United States. It has already spread to Russia's borders and become a geostrategic player.

Secret planetary alliances which are often referred to under unofficial names Bilderberg Group, the Committee of 300, Masons, or under publicly recognizable names- The International Monetary Fund, World Trade Organization, G8, United Nations and the like -managed to implement their own interests in all global decisions, from declarative to economicenvironmental and political. When in 1988 at the conference in Austria Igor Panarin, Russian academician and dean of the Diplomatic Academy in Moscow, said that there were already 45-55% assumptions about the breakup of the United States by 2010 the geopoliticians ridiculed him. However, the U.S. has long since ceased to be a sovereign country although it has a status as the only superpower in the world. Major decisions are made behind the back of the American public, and politicians only represent the top of the iceberg. The representatives of most developed companies, science, military and political powers are in the secret planetary alliances. This "alliance" is far from homogeneous, as can be imagined, and it does not have a monolithic interest. This further sharpens the question of European security in Noah's Ark.

If Noah's Ark of the past is scientifically questionable, the European ark of the future is uncertain. <sup>10</sup> Lovelock's thesis of delayed environmental

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<sup>&</sup>lt;sup>10</sup> The Biblical tradition of a wooden boat that is 140m long is being questioned due to technical defects of wood (poor insulation) and primitive tools (Copper Age). There are scientific hypotheses that Noah's Ark is actually Mount Ararat (4663 m) in eastern Turkey, where people and animals climbed during The Deluge. Jewish and Christian books tell us that Mount Ararat was a port to which the boat arrived. Koran and the Epic of Gilgamesh mention the mountain Judy (Al-Judi) as a port, south of Ararat.

action has an effect on global politics. Constant awareness of climate change and the expectations that as early as in 2040 the Arctic could run out of ice made it attractive to the geopolitical ambitions of the countries that have a claim on it: Russia, Denmark, Norway, Finland, Sweden, Iceland, Canada and the USA. When the crew of the Russian expeditions Mir 1 and Mir 2, under the leadership of Arturja Čilingarova in 2007 raised the flag far beyond the Siberian coast with its coastline 11, the Minister of Foreign Affairs Sergey Lavorov claimed that the Lomonosov underwater mountain ridge is part of the continental Russia and that by raising the Russian flag at the bottom of the Arctic Ocean Russia only formally confirmed the sovereignty of part of its territory. Since this valley, rich in oil, natural gas, stone coal, platinum, gold, copper, nickel, tin and manganese, extends to the limits of Greenland and the Arctic, Russia has effectively promoted the right to control the Northwest passage and to use the natural resources.

### **Summary**

Technological progress gives us the right to hope that part of population migrations will be realized on the platforms of the Atlantic and Arctic oceans, desert oases, the moon and so on. Noah's Ark can be "a floating continent" similar to the medieval visions of the Earth. By 2016 the United Arab Emirates will try to make the first green city in the desert (Masdar), and the Chinese intend to raise the first of nine environmental cities (Dongtan). This experience will be invaluable for the European Noah's ark. Warming will not destroy life, but will be significantly modified in relation to current understanding of it. Nature will give less and less, but the technological solutions can offer compensation for the growth of the nature costs.

Along with the geopolitical understanding of Noah's Ark scientific hypotheses about the overemphasis of human impact on climate change are developing. They are the result of the colossal movements in space or within

<sup>11</sup> According to the UN Convention on the Law of the Sea of 1982 year, to 370 and more miles, if they can prove that these areas continue their continental shelf.

the Earth's structure (particularly volcanic eruptions), and in accordance with it the planetary atmosphere is shaped.