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**Rudyshyn Serg D. (Ukraine, Hlukhiv)****GOLDEN SECTION : ENVIROMENTAL DEMENTION OF SUSTAINABLE DEVELOPMENT OF «BIOSPHERE –SOCIETY» SYSTEM**

Today there is no an alternative to the concept of sustainable development. Co-evolutionary paradigm is a theoretical and methodological basis for sustainable development of the “biosphere – society” system that is possible through creating the biosphere reserves, ecological network, reserve management, and use of renewable resources (solar, wind, wave, geothermal). Establishing an ecological network actually improves the condition biogeocenosis of Ukraine due to: stabilization of the hydrological regime (protection of surface and groundwater), stop of erosion, improvement of soil, conservation of renewable resources, maintenance of the balance in the natural processes, support of the natural migration of species and biota, reduction in pollution of the environment. However, we can expect positive changes in social and economic plan: historic preservation and development of environmentally friendly forms of farming (apiculture, fish farming, organic animal husbandry, and horticulture), optimization of the use of different areas and their spatial location in the environmental context, creation of comfortable for health living conditions [1-4; 6; 7].

What is advisable to do ? It is important for society to have time to realize that the reduction of the natural landscape and biological diversity to buffer threshold value eliminates the stability of the environment that can be restored only through the creation of sewage treatment plants, low-waste production or organic farming.

According to the analysis of literary sources the Fibonacci numbers and the regularity called «golden average»/«golden section» were analyzed [5]. Cybernetic principle of ecosystems genetic memory as biotic diversity was characterized. The combination of the gene pool of biodiversity within the biosphere should be interpreted advisable as a regulatory mechanism for maintaining homeostasis of this mega ecosystem. The first time the possibility of transition to sustainable (balanced) development of «biosphere – society» system based on the principles of the «golden section» was researched, which provides for mandatory the ratio between cultural and natural landscapes at 62% and 38% respectively. It means that biosphere reserves of biological and landscape diversity (resuscitation area of the biosphere) should be created on 38% of the territory of the planet), and other 62% should be occupied by artificial agro and urboecosystems with balanced nature usage.

It is advisable to stick to the concept of natural «golden section», which mandates the relationship between cultural and natural landscapes of the planet at 62 % and 38 % respectively. Humanity must go to the autotrophy. Today it is growing the adapted to adverse environmental conditions plants and receiving high-calorie, high- protein foods. The most important fact is that a human is destined to go down the food chain including the consumption of soy protein rather than to lose 90 % of the energy of food to feed the animals.

**References**

1. Концепція переходу України до сталого розвитку. – [Електронний ресурс]. – Режим доступу: [http://www.greenparty.ua/news/development/development-news\\_13880](http://www.greenparty.ua/news/development/development-news_13880).
2. Моисеев Н.Н. Коэволюция природы и общества. Пути ноосферогенеза / Н.Н. Моисеев // *Экология и жизнь*, 1997, № 2–3. – С. 3 – 15.
3. Реймерс Н.Ф. Экология: Теория, законы, правила, принципы и гипотезы. / Реймерс Н.Ф. – М.: Россия молодая, 1994. – 366 с.
4. Рудишин С.Д. Основи біогеохімії : навч. посібник [для студ. вищ. навч. закл.] / Рудишин С.Д. – К. : ВЦ «Академія», 2013. – 248 с.
5. Слюсаренко В. Числа Фібоначчі та золота пропорція // *Математика*, 2008.– №8(452). – С. 18-24.
6. Rudyshyn S. Development of Unsversity Students’ Ability to Undestand the World Scientific Pattern / Rudyshyn S., Koreneva I. // *The Advanced Science J. United States*. ISSN 22219-74X, 2014. – ISSUE 5. – P.7-12.
7. Rudyshyn S. Strategy of Coevolution Between Biosphere and Society : Ukrainian Dimention / Rudyshyn S. // *The Advanced Science Journal. United States*. ISSN 22219-74X, 2014. – ISSUE 2. – P.90-94.