Emerging Markets Queries in Finance and Business

The role and importance of educating youth regarding biodiversity conservation in protected natural areas

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Abstract

Conservation of nature is highly important for the good development of social and economic life. A serious contemporary problem is posed by pollution and environment protection. The changes going on with the planet ask for new solutions to maintain the ecological balance. The negative effects of this lack of balance can be seen especially in the scarcity of biodiversity. Studies show that thousands of species are endangered, whereas more than 300 species have already disappeared. It is therefore necessary to come up with ideas and implement projects for the conservation of biodiversity in protected natural areas to reduce the pressure over rare species. This is impossible without education, information, without raising awareness regarding the importance of protected natural areas. The costs of loss or degradation of biodiversity are hard to establish but studies show that worldwide they are substantial and growing. Education can help people of various ages and social standing to find out about values, motivation, skills and responsibility regarding maintaining the quality of the environment and human health.

1. Introduction

Realistically looking at the current situation of the environment globally, we can affirm that it is a sad and...
negative one. Lately, environmental education has focused on avoiding the promotion of negative attitudes with the youth, so that every environmental problem should be tackled starting with the causes of a certain phenomenon and moving towards positive alternatives and possible solutions. Most environmental problems are complex and when the Environment becomes the subject of your education, not only nature, but also society must be included, as well as culture, economy and politics. Environmental education is often confused with ecology. It must be stressed that environmental education is not limited to Ecology, Botany, Zoology or the study of other natural sciences. Learning about living organisms, their habitat, the ways they interact with one another as well as the environment they love in represent an important part of environmental education but this is not everything. The purpose of environmental education is to improve the quality of life, recognize the environmental values and clarify concepts regarding the environment. Environmental education can help people gain knowledge, skills, motivation values and an engagement needed to manage Earth’s resources efficiently and to take responsibility for maintaining the quality of the environment. Analyzing the problem globally, the objectives of environmental education are generally the same: to maintain and improve the quality of the environment in order to prevent future problems.

2. Environmental education – studies and perspectives

Environmental education is a concept that was first used in the year 1984 at the International Unit for the Conservation of Nature and Natural Resources Conference that was held in Paris. The development of the conception regarding environmental education was emphasized.

The most important step in defining environmental education has been the reunion in Nevada, USA, in the year 1970. The first ‘classic’ definition was formulated as follows: “Environmental education is the process of recognition of values and clarification of concepts having as purpose the development of skills and attitudes necessary for understanding and appreciating the interrelations of man – culture – environment and man’s biophysical environment. Environmental education needs practice in decision making and formulating a behavior code regarding aspects referring to the quality of the environment”.

Environmental education can help people gain knowledge, motivation and an engagement needed to manage the Earth’s resources and take responsibility for maintaining the quality of the Environment. Water, air, soil are permanently under pressure from entropic activity. The worsening of environmental factors’ quality leads to social and economic implications, with repercussions on the quality of life.

Environment protection appeared as an issue at the same time with the growth of technology that allowed man to conquer Earth; wealth and resources were affected, some are becoming scarce while others are being poisoned. Mankind cannot give up economic growth; it will however be necessary to preserve the environment while moving forward at a fast pace.

The first initiatives to conserve the planet appeared approximately 200 years ago in an attempt to save endangered species. Starting with 1970 clear signs of Earth’s precarious health conditions have been visible: the ozone layer is becoming thinner, global warming is happening, water, air and soil are being polluted.

Man’s responsibility to protect the environment is in taking attitude and adopting a behavior that is responsible to nature. People have begun to understand the need both individually and collectively to protect nature by collaboration at local, national and international level.

Care and hope have been given to those who will benefit from a healthy environment and who will maintain and improve Man’s relationship to Nature: the youth. The UN has declared that the decade between 2005 - 2014 should be a decade for SUSTAINABLE DEVELOPMENT EDUCATION. Chapter 36 of Agenda 21 refers to the importance of education in sustainable development under the following terms:

- the need to channel education as a promoter of sustainable development,
- raising awareness of the need for sustainable development,
- the importance of training.
In re-channeling education towards sustainable development those who design educational programs should find a balance between the knowledge of the future and the traditional mode of life. Many times the traditional way of life surprisingly finds ecological solutions to problems relating to the use of resources.

A few key tendencies can be emphasized in environmental education:

- the 70’s: education outside the classroom, using the natural environment to experience life, adventure education;
- the 80’s: global education, having a broader view on environmental themes;
- the 90’s: issues of poverty, communication, problem-solving and actions, solving social and environmental problems.

Mindru Cătălin, a trainer and counselor for ARACIP states about Outdoor Education that it is an organized form of education in open air that prepares the youth for life outdoors, based on the philosophy, theory and practice of experiential and ecological education. It has certain advantages over traditional education, such as: mobilization of mental and physical resources, sensitivity to nature, which prompts man to collaborate to face the challenges nature offers. These will produce strong educational effects in mastering the skills of handling complex situations, innovation, team spirit and communication.

3. Protected natural areas

According to data from MAPM, the total surface of protected natural areas in Romania reaches 1,234,710 ha, i.e. 5.18% of the country’s total surface. According to Emergency Ordinance no. 236/2000 regarding the status of protected natural areas, conservation of natural habitats, flora and fauna in the wild, in our country we find the following categories of protected natural areas: scientific reservation, natural reservation, national park, natural park, monument of nature, reservation of the biosphere, wetland, Ramsar site; site of the world’s natural patrimony.

Currently, over half the total surface of protected natural areas in Romania benefit from own administrative structures. 51% of the total surface of protected natural areas can be managed individually but only three areas have selected their own administration. In the year 2000, at the start of the LIFE projects actions were taken to set management programs that will reduce the anthropic pressure on protected natural areas.

According to environmental laws a protected natural area is an area of land, water, underwater, and/or mine with an established parameter having a special protection and conservation status where there are species of animals and wild plants, bio-geographical elements and formations, landscapes, geology, paleontology with high ecological, scientific and cultural value.

In Romania the legislation is set by Government Order O.U.G. no. 236/2000 approved with modifications through Law no 462/2001.

In Romania, protected natural areas are classified as follows:

I. Categories at national level that include scientific reservations, natural parks, monuments of nature and natural reservations SCI.

II. Categories set by community and international regulations that include national sites in the universal patrimony, wetlands, special conservation areas and special bird and plant protection areas, as well as biosphere reservations, SAC, SPA.

4. Creation of a framework of management and monitoring of protected natural areas – an important premise in the education of the youth regarding conservation of biodiversity

Conservation of nature depends over the long term on the social and economic welfare. An important problem nowadays is pollution and the protection of the environment. Modifications at global level regarding the quality of the environment ask for solutions for maintaining ecological balance.
The negative effects of this are seen in the lessening of biodiversity. A study indicates a total of 243013 species of plants are under surveillance, 33418 species are constantly threatened by extinction and 380 species have disappeared.

Biodiversity comprises the diversity of the ecosystem and the genetic diversity in that ecosystem and can be either vegetal or animal.

According to Emergency Ordinance regarding the Protection of the Environment no. 195/2005, biodiversity represents the variability of organisms within terrestrial, marine, continental aquatic ecosystems and ecological complexes; it includes intraspecific and interspecific diversity and the diversity of ecosystems. Every year on May 22 the World Biodiversity Day is celebrated.

Romania’s natural capital is important for the European Union also due to the rich plant and animal world, climate and landscape our country offers. In spite of this fact, there are many species of plants and animals that are endangered because of the fragmentation of their habitats and the excessive exploitation of natural resources coupled with pressures caused by economic growth.

The European Union ratified the Convention regarding Biodiversity on 21 December 1993, and in order to implement its provisions, it took responsibility as an international leader, adopting a series of strategies and action plans meant to contribute to the prevention of loss in biodiversity.

The costs of loss or degradation of biodiversity are hard to establish but studies show that they are growing. In the first report that evaluated the economy of ecosystems and biodiversity at international level, published in 2008, it is estimated that the annual loss of ecosystem services amounts to the equivalent of 50 billion euro. As such, it is necessary to implement projects for the design of management plans at the level of protected areas so that corresponding measures for the conservation of biodiversity can be taken. By implementing such projects it is desired that education, information and awareness of youth is reached about the importance of protected natural areas at local, national and European level. Activities can be carried out, such as:

- Audio-visual media campaign at local, regional and national level to raise interest and awareness of visitors and the local community on the problems regarding the protection of nature, releasing pressures on species and habitats of interest and importance.
- Implication of local and regional factors in debates and seminars in order to increase awareness levels about the need to preserve biodiversity in protected areas.
- Making of documentaries for youth to present issues found in protected natural areas and to ask for support by presenting the benefits to the local community, sustainable development, health, etc.
- Creation, launch and permanent updating of web pages for the public that uses the Internet
- Elaborations and spreading of leaflets and informational/educational materials.
- Making photo albums that present the existing species in protected natural areas.
- Organization of workshops at the end of the projects’ implementation period.
- Creation and promotion of a permanent structure for consultation of interested factors.

5. Conclusions

Education in the educational institutes is the most important factor in the development of one’s personality. Schools not only build specialists but shape people and for this purpose all educational factors must contribute efficiently, must collaborate and complete one another when needed.

Modifications everywhere in the world in the quality of the environment require that new solutions be found to maintain the ecological balance and the negative effects visible now can be seen in the loss in biodiversity.

Thus, it is imperative that the institutional system that ensures quality control, application of laws and implementation of management plans at the level of protected natural areas works properly. The objective is to ensure proper management of protected natural areas for the prevention of degradation of biodiversity and natural resources.
Economic analyses regarding the funds needed to ensure the management of protected natural areas estimate costs that range between approximately 8 euro/ha, necessary to apply basic management and 12 euro/ha, necessary to apply optimal and efficient management application.

Development of the management and monitoring framework for protected natural areas, especially of Natura 2000 sites demands that important actions and measures be taken such as: development of administrative structures, elaboration/revision of management plans for protected natural areas, creation of specific infrastructure, studies, inventory, mapping, conservation of species and natural habitats, campaigning to inform and raise public awareness.

By the National Strategy and the Action Plan for the Conservation of Biodiversity 2010 – 2020 priority actions were set in accordance with the seriousness of the threats, the vulnerability of biodiversity components and the need to meet international and community requirements in biodiversity conservation.

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