

ENVIRONMENTAL PROBLEMS AND SUSTAINABLE DEVELOPMENT. STRATEGIC APPROACHES AND INSTRUMENTS.

Last decades of the past-twentieth century is marked by severe environmental problems affecting a growing portion of the world population. The majority of these problems are in fact a result from human activities: the destruction of rainforests, ozone depletion, ocean acidification, growing number of extinct animal and plant species. As a consequence, humanity is about to face problems endangering the survival of life on the planet. Climate change, increased share of deserts and semi-arid areas, scarcity of clean water, destruction of coral reefs, and loss of whole ecosystems are likely to cause hunger and malnutrition as well as the emergence of new, previously unknown diseases. World is coming to an ecological crisis. We are seeing climate anomalies and natural disasters that challenge us like never before. Currently, people are using 30% more resources than the planet can recover annually. Resources of the Earth are melting so fast that if the current way of life is maintained, by 2030 we will require the resources of two planets.¹

Amidst predictions of environmental crisis governments, business, and whole countries face serious challenges - to be sustained in a way that meets the needs of the present generation without denying future generations to meet their own needs. Otherwise, the consequences will not only be environmental, they will be related to security, political, economic, social, health and demographic aspects of development. There are three main types of global threats: military threats, economic and social threats and environmental threats. Environmental threat to the existence of human civilization is officially recognized at the highest international level, it is believed that scientific and technological progress has created a threat of environmental catastrophe. Therefore, an urgent need to review the scale of human values is required.

For the last century or so, the population of this planet has destroyed two thirds of its forests, two thirds of good quality agricultural soils are lost and the effects of human intervention in the world's oceans seem irreversible. People produce organic waste 2,000 times faster than nature, global pollution is the cause of the warming of the planet.¹ Many regions are experiencing a severe shortage of fresh water, while big cities are deprived of fresh air. Natural disasters such as floods and earthquakes are becoming more common. Extensive economic activities of mankind have been driven mostly by uncontrollable growth of production and consumption and caused uncontrolled spending of natural resources and energy without taking into account global environmental interests. In the U.S. alone, 25% of world oil production is consumed each year, 40% gas, 30% fuel and 50% from natural gas. Consumerism puts nature on the brink of extinction of life in it.¹

To deal with the looming crisis in the last three decades of the twentieth century, first in the industrialized countries, and then in other, legislation has been gradually introduced aiming to regulate activities of companies in the various sectors of economy. Milestones on the road of solving global environmental problems are the UN conferences on the issues of environment and development. The first one is held in 1972 in Stockholm and it focuses on the most important issues facing humanity. This event established new path - sustainable development. During the second conference in June 1992 in Rio de Janeiro participants involved heads of 114 countries, diplomats from 178 countries and representatives of 1,600 NGOs. The greatest achievement of this conference is the recognition that the problems of environment and development cannot be viewed in isolation.²

Solving this complex puzzle of global problems requires the search for unconventional approaches and instruments. Two interrelated approaches are identified as potential solutions. Firstly, there are the mitigation measures to avoid the conflict between economic growth and conservation of ecosystems; and secondly, implementation of a system of financial incentives for those businesses whose activities meet two basic criteria for sustainable development: environmental and social justice. Part of the financial incentives is strengthening economic sanctions on those who violate the criteria. Thus the 'corporate responsibility' has become one of the preconditions for the survival of the company in the new environment, especially in a global market where the environmental requirements for production and consumption are significantly increasing. This explains why issues of sustainable development are reflected in national government programs, in strategies of the World Bank, the European Bank for Reconstruction and Development, as well as investment policy of the leading commercial banks and financial institutions. European Commission stresses that one of the main goals of its program "Entrepreneurship and Industry" is the integration of sustainable development into Community policies to improve competitiveness, arguing that "the challenges of the environment are closely related to issues of economic development and any European business must play its role in promoting the concept of sustainability."⁵

Sustainable development, in turn, is a globally recognized concept that meets the current needs of humanity, keeping the potential and resources to meet the needs of future generations. The way it works is by combining the objectives of economic and social development with the protection and improvement the quality of the environment. Sustainability indicators are economic prosperity, environmental protection, participation in global partnerships for sustainable development, social justice and cohesion. The principle of sustainability is based on three equally important concepts: social equality, environmental compatibility and economic efficiency.³

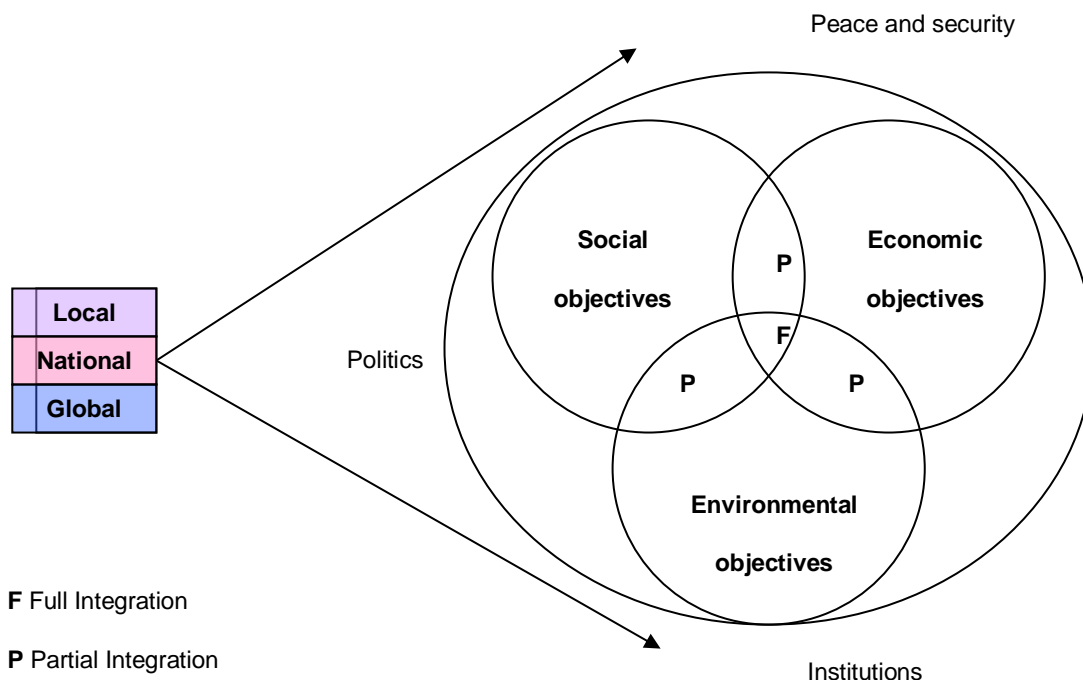


Figure 1. **Systems of sustainable development.** (Dalal-Clayton *et al*, 2002)

This concept involves sustained economic growth, poverty reduction, equal distribution of national wealth, improved public health and quality of life while reducing environmental pollution, to prevent future pollution and conserve biodiversity. There are four main steps to achieve sustainable development - a strategy for integrating environment and sustainability in all areas; policy change management of natural resources, promotion of partnerships with civil society and assessing progress towards the goals of sustainable development. Many communities have already developed their own strategies to move towards a greener lifestyle and actions. The European Commission (EC) takes note of some of the crisis points. Relevant policies have been developed to support the implementation of environmental legislation in all Member States of the European Union. Essentially, they include aims to meet the Kyoto targets on reducing carbon emissions, aims to ensure security of fresh water through the implementation of the Water Framework Directive, and aims to mitigate any adverse significant impacts from developments through the EIA Directive. EC pays particular attention to the preservation of biodiversity, marks towards establishing patterns of development, ensuring economic growth without compromising the environment.⁴

The focus is on two important pieces of legislation - "Climate - Energy" and "Sustainable consumption and production". Through their implementation the European Commission seeks to develop new production and consumption systems and models, so that they do not exceed the capacity of the ecosystem restoration. "Climate - Energy" aims to encourage the break of link between economic growth and increase in production and consumption of fossil fuels, which is the main reason of increase in greenhouse gases and climate change. The alternative of business as usual is green economy through the development of low-carbon and energy efficient production, maximizing the use of eco-innovation and environmental technologies. "Sustainable Consumption and Production" aims to break the link between economic growth and environmental impact associated with consumption, resource use and waste generation. These two regulative instruments provide additional features and tools to achieve the key priorities of the EU sustainable development - climate change, clean energy, sustainable transport, sustainable consumption and production, better management of natural resources, combating poverty worldwide.⁴

Through these acts of governments and politicians a solution is looked for, particularly to learn to live in harmony with the environment and continually improve its quality, by abandoning the stereotype of consumer behavior with respect to nature and to merge with it. Indeed, improving the quality of the environment, people would improve the quality of life. Thus, in the context of universal culture appeared a new category - environmental awareness.

Promoting civic engagement in environmental issues for real environmental action begins with environmental literacy. Most people do not know the nature of environmental problems and opportunities to participate in overcoming them. Environmental literacy means understanding how human decisions and actions affect the environment. People need knowledge and skills to find solutions to maintain the level of public health and the quality of the environment. This gradually leads to the need for environmental education.³

Environmental, economic and social perceptions must be changed in order to achieve sustainable development. Therefore, the challenge facing the countries of the world is to introduce the concept of 'sustainable development' in the educational processes. Environmental education is central to the process of change towards sustainable development. It is interpreted as knowledge, aiming at forming ecological culture, environmental awareness and environmental behavior in their mutual connection and unity in order to preserve the balance. It also focuses on laws to maintain the natural harmony and a healthy lifestyle. Emphasis is further placed on the responsibility of man and society for their compliance; build a culture and patterns of behavior, respect the environment and promoting sustainable development. In a global context, this type of education can be seen as a key part of a broad social movement in order to achieve sustainable development of a country or even the world as a whole. Education is a vital

prerequisite for promoting sustainable development worldwide. It includes issues of environmental protection, efficient use of natural resources, the maintenance of the ecosystem and responsible attitude among members of the public and business community. Therefore, environmental education is an integral part of sustainable development. An effective way to build public awareness and environmental responsibility is the separation of waste. As an everyday routine, it opens the door to the establishment of a consistent pattern of behavior.³

Environmental problems are everywhere: pollution from industrial and municipal wastes, soil erosion, acid rain, ozone hole, fires, deforestation, loss of biodiversity and many more. Processes and challenges surrounding are among the most severe in the early 21st century and are valid for the whole world. Adverse environments impacts may affect all business sectors and aspects of life. They spread beyond the borders of a country, and any potential benefits of a common environmental policy are obvious.⁵

Bulgaria's strategy, as part of the common policy of the European Union, takes into account the growing need for environmental protection and enhancement. Together with economic and social development environmental protection will continue to be one of the pillars of sustainable development. The strategy outlines objectives and actions for the conservation, restoration and regeneration of the natural environment, maintaining the diversity of living nature, prudent use of natural resources and other resources in the context of sustainable development. The document is based on the concept that prevention of negative changes and disruption in ecosystems is needed.⁶ This is the key to achieving the overall objective of the policy on sustainable development - improving the quality of life and well-being of present and future generations, through creation of sustainable communities able to manage and use resources efficiently and to develop environmental and social potential of the economy. Moreover, if properly implemented, the strategy will ensure prosperity, environmental protection and social cohesion. In this sense, the strategy aims not only environmental sustainability, but also a better quality of life.⁷

Twenty one years after the world initiative in Rio which aimed to ensure a global sustainable development, progress has been made with regards to identifying the direction which countries have to follow in order to achieve sustainability. Important issues have been addressed and the need to meet the relevant targets has been recognized on national levels within the adopted strategies. The effective implementation from theory to practice, however, still remains a challenge which can be overcome with better understanding of the interconnected nature of environmental, social and economic factors, public awareness, better political commitment and institutional coordination and integrated realistic approach.

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