Sustainable Development of the European Union—Role of Sustainable Management in Creation of Future European Society

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Abstract.—The European Union’s entry on the pathway towards sustainable development is a response to global ecological and social threats resulting from man’s economic activity. Their main cause is growing production and consumption of material goods, which is a consequence of demographic changes in the world, technological progress and growing standard of living. The Earth’s natural environment cannot withstand the excessive exploitation of resources and the effects of the growing pollution with harmful substances, which is proved by the values of the ecological footprint and living planet index. Global threats endanger the prospects of development of future generations. The European Union is taking concrete actions towards sustainable development to limit those unfavourable phenomena. One of the most important undertakings is the socio-economic programme adopted by the European Council in 2010, called Europe 2020 Strategy. These actions are not sufficient. It seems necessary to accelerate the transformation of consumer societies into sustainable societies based on sustainable consumption and production. A key role in the process is played by sustainable management, which should be implemented on four levels: the European Union, the Member States, organizations operating in those countries, households. The essence of sustainable management is a simultaneous orientation on achievement of economic, ecological and social objectives. Special role in its implementation is played by leaders: managers employed in mega- and micro-organizations and household leaders. Development of sustainable attitudes and behaviours of that group of people is the first and foremost condition of faster formation of sustainable European societies.

Index Terms—Sustainable development, sustainable management, sustainable society.

I. INTRODUCTION

Attitudes and behaviours of contemporary consumers and producers oriented solely on attainment of economic targets (homo oeconomicus) pose a threat to the natural foundations of the life on Earth. From the perspective of future generations (our children, grandchildren, great-grandchildren etc.) constant never-ending growth of production and consumption is impossible. Earth is an isolated system with a limited quantity of resources, powered from outside with solar energy only. Upsetting the natural balance in the system can lead to a global disaster. To stop the destructive activity of consumers and manufacturers, profound changes are indispensable, inspired by the sustainability concept. Their aim is to transform consumer societies into sustainable societies based on sustainable citizenship. The sustainable citizenship prefers responsible consumption and production, contributing to the balance of intergenerational needs. Growing interest in global threats began to be noted in the 1960s, in consequence of which ecological and social threats started to be added to traditional economic conceptions. As a result of those changes the economics of sustainable development came into being, representing a new field of science called sustainable science. Being now at the initial stage of its development, sustainable science not only integrates economic, ecological and social aspects of economic activity but also changes paradigms. The paradigm of growth is replaced with the paradigm of sustainability. This approach revolutionizes the approach to modern consumption and production.

The European Union takes various initiatives related to sustainable development. However, in the opinion of the authors of this paper, progress in transformation of European consumer societies into sustainable societies is too small as compared to the growth rate of ecological and social threats. The transformation process has to be accelerated. In the proposed model solution the authors attribute special role in creation of the European Union sustainable society to sustainable management and to those implementing it—managers in mega- and micro-organizations and household leaders.

II. GLOBAL THREATS

People as manufacturers and consumers of material goods and services create threats to their own life and to the existence of future generations. Earth, being an isolated system powered from outside only by solar energy, cannot bear the excessive exploitation of resources and consequences of growing pollution with harmful substances. Human demand on the Earth is rapidly growing, which is confirmed by the values of the ecological footprint, which indicate that “by 2030 humanity will need the capacity of two Earths to absorb CO2 waste and keep up with natural resource consumption” [1]. Unfavorable changes of the living planet index indicate rapid decrease in biodiversity on our planet. The global index “shows that vertebrate species population declines by almost 30 per cent between 1970 and 2007 [1].”

Man’s negative pressure on the Earth will continue to grow together with the population growth. In 2010 our planet was...
inhabited by ca. 6.9 billion people and in 2050 the Earth’s population will reach the number of 9.1 billion [2]. The average lifespan is increasing in many region of the world. The demographic changes entail not only growth of the global demand for food, tangible goods and services, but also greater demand for water, clean air and other natural resources being a sine qua non of the survival of the human species. The population growth aggravates the interference with the natural environment because it involves greater demand for developed and urbanized areas. The growing global society creates greater and greater demand for material goods and services. Production and consumption become a source of the greatest threats for the contemporary world and future generations. Consumption of resources and emission of harmful substances will double every 28 years, which means that after 280 years they will be one thousand times bigger than today [3]. On the global scale currently the exploitation of nature exceeds its capacities by about 20% (the world population uses 20% more resources than the nature is able to regenerate) and this phenomenon will continue to increase [3]. K. Lee and S. Carter point out to definite consequences of the environmental devastation: greater number of very hot days on Earth, floods and droughts, changes in the frequency and intensity of hurricanes, by 2100 increase of global sea level on average by 50 cm and global temperature increase on average by 1 – 3.5 degrees Celsius [4]. Many manufacturers and consumers do not realize the fact that damage inflicted to nature is irreversible and the availability of natural resources is limited. The Earth is a closed thermodynamic system, which does not grow physically – the economy together with man is only a part of it [5]. Moreover, man’s relation with nature is asymmetrical: nature can exist without man but man cannot survive without nature. Distortion of these relations leads to a global ecological disaster. H. Rogall concludes: “today we have considerable certainty that the limits of the negative environmental impact have been exceeded, it is only not quite clear to what degree” [3].

The world and Europe are facing not only ecological, but also social problems, the examples of which are unemployment, poverty and lack of access to safe drinking water. According to the International Institute for Labour Studies, unemployment in the world reached in 2010 the record level of 205 million people [6]. 1.1 billion people live in absolute poverty based on the criterion of their purchasing power being less than one dollar daily [3]. In 2010, 1 billion people lived without access to an adequate supply of freshwater [1].

III. ACTIONS OF THE EUROPEAN UNION TOWARDS SUSTAINABLE DEVELOPMENT

Ecological and social problems of the contemporary world and the resulting threats to mankind have inspired development of new economic conceptions and scientific fields, in which the paradigm of growth has been replaced with the paradigm of sustainability. Sustainable development has become their common platform. This term was used for the first time in the Brundtland Report (1987) prepared by the UN Commission on Environment and Development [4]. The Brundtland Report (WCED 1987) defines sustainable development “as that which meets the needs of the present without compromising the ability of future generations to meet their own needs” [7]. However, it was not until 1992 that at the United Nations Conference on Environment and Development in Rio de Janeiro sustainable development was given the appropriate significance and recognised as a priority objective of mankind. Now the next Earth Summit 2012 is being prepared, called Rio+20.

The European Union Sustainable Development Strategy was formulated in 2001. Now it is reflected in the document entitled Europe 2020 Strategy, which was adopted by the European Council on 17th June, 2010. It is a new long-term socio-economic programme, which replaced the Lisbon Strategy implemented from the year 2000. It presents a vision of development of the 21st century European market economy based on stable economic growth, ensuring high level of employment, productivity and social cohesion. Europe 2020 puts forward three mutually reinforcing priorities: smart growth (developing an economy based on knowledge and innovation), sustainable growth (promoting a more resource efficient, greener and more competitive economy) and inclusive growth (fostering a high-employment economy delivering social and territorial cohesion) [8]. An integral part of the Europe 2020 Strategy is the Climate and Energy Package, which was adopted by the EU in 2008 [8]. It sets a series of quantitative targets known as 20/20/20 formula, which refers to: a reduction in greenhouse gas emissions of at least 20% below 1990 levels, a reduction in primary energy use by 20% compared with the EU projected levels for 2020, increase to 20% of the proportion of renewable energy to overall energy consumption [8].

The European Union has also set ambitious social targets for itself. One of the flagship initiatives of the Europe 2020 Strategy concerns fight against poverty and social exclusion. The measurable target is to reduce the number of people threatened by poverty by 20 million [8].

The European Union not only creates sustainable development programmes and legislation but also has definite achievements in this field, which is evidenced by positive values of many indicators characterizing this sphere and e.g. energy intensity of the economy, renewable energy consumption, resource efficiency, greenhouse gas emissions. Despite many positive actions taken for sustainable development, societies of the European Union (and of the world) still show a high level of unsustainability, which is an alarming phenomenon, considering the constantly growing ecological and social threats. It is necessary to accelerate the transformation of consumer societies into sustainable societies. Management plays a major role in this process.

IV. SUSTAINABLE SOCIETY OF THE EUROPEAN UNION

A sustainable society is to a considerable degree the opposite of modern consumer societies consisting mainly of asocial consumers and manufacturers, oriented on economic targets only (homo oeconomicus). The basic component of the sustainable society is a sustainable citizen, who plays two roles: of a sustainable consumer in the private life and of a
sustainable employee in his workplace.

A characteristic attribute of sustainable consumers is a triple orientation – focus on their own needs and on social and economic needs of the present and future generations. The sustainable consumer is a synthesis of three personalities: economic, ecological and social consumer. People of this type get involved in responsible consumption, being aware of long-term effects of their decisions connected with purchase, use and disposal of used products. They understand ecological and social problems of their communities. They take actions to prevent the threat of a global disaster brought about by devastation of the environment, climate changes and growing social problems. Sustainable consumers prefer products which are safe to use, durable and energy efficient. They are interested in the possibility of used product recycling and degradation according to the environmental protection standards. They are ready to reduce their consumption needs and even give up buying certain products. They are keen on product-sharing because it leads to sales reduction and thus limits the negative environmental impact. Their social sensitivity is manifested by concrete charity and volunteer work.

The sustainable consumer turns into a sustainable employee in his workplace. Sustainable employees recognize responsible manufacturing as a foundation of enterprise development. Clean production is one of the most important aims of their pro-ecological activity. They select such technologies and machinery as to minimize damage to the natural environment and wastage of resources. They also get involved in various social campaigns. Sustainable employees are the basis for development of sustainable enterprises, which contribute to the development of sustainable societies [9]. Business partners and suppliers of such economic entities also have to demonstrate ecological and social sensitivity.

V. MANAGEMENT IN THE PROCESS OF CREATION OF THE EU SUSTAINABLE SOCIETY – MODEL APPROACH

Sustainable management is of fundamental importance to the creation of sustainable societies of the European Union. Sustainable management should be implemented on the following four levels: The European Union, the EU Member States, organizations operating in those states (including also industrial enterprises) and households. Because of the limited length of this paper, we will not explore in detail organizational and power structures of those mega- and micro-organizations. The notion of sustainable management is understood as management oriented simultaneously on economic, ecological and social targets. The main functions of management, namely planning, organizing, influencing, controlling, implemented on the top management, middle management and supervisory management levels are subordinated to the attainment of those targets. Household management has a special character. We introduce this notion because a household is an organization with a distinct division of duties and leadership. Figure 1 shows the hierarchy of sustainable management of the particular areas and its directions enabling the creation of the sustainable management of the European Union.

![Fig.1. Areas and directions of sustainable management contributing to creation of the EU sustainable society. Source: own work](image)

The European Union and its Member States, sustainable management provides a framework for the sustainable management of organizations and households in those countries. It is affected mainly by implementation of sustainable development strategies and programmes and introducing legislation to compel adherence to sustainable development principles. Production enterprise sustainable management should first of all be aimed at manufacturing of safe, efficient and durable products in clean production processes. Reduction of the production volume is also advisable because it would reduce the negative environmental impact. Such actions combined with participation in social campaigns are the foundation for sustainable production.

In market economies the production volume and assortment are influenced by demand. Consumption, therefore, plays a particularly important role in the creation of sustainable societies. The basis for sustainable consumption is working for reduction of purchases and buying safe, efficient and durable products. In consumer markets products and services are purchased for household needs. These households always have their leaders e.g. husbands who are heads of their families. Decisions of the leaders to a considerable degree determine the quantities and types of purchases made for the household needs.

In the centre of Figure 1 there is man, as man plays double role in the creation of the future sustainable society. In his private life an individual is a consumer being a part of a particular household (where he might also be a leader), whereas in his workplace he can hold define managerial positions: in the structures of the European Union, his state or enterprise. The rate and scope of formation of the EU sustainable society, based on sustainable consumption and sustainable production, depends of proecological and prosocial attitudes and behaviors of those people. It is the leaders who develop strategies and programmes of operation of the entities subordinate to them, make major decisions, have impact on the people under their authority. Subordinates often observe their leaders’ behavior and try to follow it. Thus, the leaders’ involvement in sustainable development will spread to the operation of the organization and actions of the personnel. Therefore, first of all proecological and prosocial attitudes and behavior of managerial circles in mega- and micro-organizations and of household leaders should be promoted.

The spheres of sustainable consumption and sustainable production shown in Figure 1 are interrelated. A decrease in
demand leads to a reduction of production volume (lack of demand for certain products or services forces enterprises to discontinue their production). Rising demand for safe, efficient and durable products induces higher production of such goods.

VI. CONCLUSIONS

Concentration on the life and fate of the present generation only is a sign of short-sightedness and lack of social responsibility. This responsibility is manifested in the concern for future generations, that is people (including our descendants) who will live in 100, 1000, 5000 years’ time. Is our present economic activity building or destroying the basis for their existence? Research and analyses indicate the prevalence of destructive forces. To change this negative trend, the process of creation of sustainable societies should be accelerated. The European Union is a positive example of taking important initiatives and actions in this area. The sustainable society is based on sustainable consumption and sustainable production. Sustainable consumption has a crucial meaning because demand triggers production decisions. Special role in the development of the EU sustainable society is to be played by leaders located on the levels of the European Union, Member States, organizations operating in those counties and household leaders. It is their attitudes and behavior that need to be changed in the first place to make sustainable management possible. Managers and leaders make strategic, tactical and operational decisions in their organizations and shape the attitudes and behavior of people under their authority. Therefore, the directions of development and the current activity of these communities depend on them, also in respect of balancing intergenerational needs.

REFERENCES