THE PRINCIPLE OF ECOLOGY – THE CONDITIONS FOR GROWTH OF RESPONSIBLE AND SUSTAINABLE ECONOMY

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Abstract:

The must of constant economic growth (expressed as a quantitative indicator) has not brought the expected satisfaction and happiness to the civilization where we live. The technological progress and economic growth based on it have enabled (a smaller part of the world) large production and dynamic development, but also numerous troubles: wars, polluting the natural environment, moral crisis and so on. Therefore, it is necessary to redefine some elementary principles of science, especially social sciences, or establish new ones which would enable the survival of civilization on Earth. Education and spread of information is prerequisite for changes in human behavior regarding ecological responsibility of individuals as employees and their organizations.

Key words: principle of ecology, corporative and social responsibility, ecological ethics, ecosystem, economic growth, economic development

JEL classification: O 13, O 15

The principles have no right values except those well established

Mark Twain

1. The Unpleasant Warning "Collage"

The world is flooded, via different media, by terrifying data on the state on the planet Earth. Some of these data are the result of scientific research, some of them have not yet been confirmed by science, but they are evident. However, the greater part of world is worried about both of them, including and mobilizing all relevant and authoritative institutions, groups and individuals to enter actively in solving, if possible, and calling attention to the cruel truth to the following:

- 25,000 children in the world die every day before they are five because poverty, hunger, thirst or illness (UNICEF and the World Health Organization),
- By every species (the animal or plant) endangered we know, there are probably 100 those for which we do not have appropriate data,
- Between 1970 and 2003, the decrease of 31% of continental species was registered, 28% of freshwater, and 27% of sea species. According to the data in 2007, 16,306 species in the world have been dying out,
- Atmosphere pollution is dramatic (with consequences of increasing the average annual temperature on Earth, changes of the world's rainfall patterns, polar ice cap melting, and so on),
- Estimated supplies of traditional (fossil) energy sources are at an end.

2. The Question of Responsibility

Both scientific and nonprofessional opinions agree that those who spending more and exhausting natural resources are more responsible because:

- 16% of the richest world population spend over 80% of the world resources;
- In 2007, two the richest people in the world had more money than the total GNP of 45 the poorest countries in the world;
- Consumerism, as a way of life, and the imperative of constant growth are essential to the richest economies;
- Three billion of people live with less than \$2 a day;
- Negative trend illustrating the relationship between the rich and the poor is continuing. Thus, for example, 20% of the richest people in the U.S.A. have become for 50% richer than the society overall since the 1960s of the last century. In Asia, the most populated region of the world, millions of people have become richer, but billions of them have been poorer.

The Millennium Ecosystem Assessment, as an overall analysis of the environment, warns that almost the two-third of ecosystem services have been degraded or exploited exaggeratedly. It is the trend, which could be significantly aggravated in the next fifty years if the humankind does not change radically the way of its life. Namely, with this way of life, with the pressure on the Earth natural functions, as the consequence of the economic race, the Planet ecosystem will not be able to support/maintain the future generations, i.e. this process cannot be understood by itself any more.

Weakening and dying of the ecosystem will intensify many risks, which will significantly exert influence on business. It will certainly change priorities of both consumers and investors. The Millennium Ecosystem Assessment definitely calls business communities (corporations especially), as dominant business institutions, to take over the role in creating a sustainable society. Almost imperatively, corporations are asked to choose if they will do business in accordance with the principles of sustainable development and social responsibility or we will live worse and worse.

In the debate, which began on the problem of corporative responsibility for sustainable development, the term of responsible corporation was defined. Principally, it was emphasized that in creating a sustainable society, all firms - from the smallest shop on the corner to the biggest conglomerate – would have to make more efforts and become socially and ecologically more responsible. The responsibility of large corporations is bigger, regarding to their influence on resource control and use. They should show themselves as leaders in attempts to become responsible. It will help (and force) small and medium business to follow their example.

Specifically, aspects of responsible corporations (behavior in ecologically sustainable and socially useful way) mean:

- Prevention of ecological degradation,
- Creation of useful and healthy products,
- Fair and correct behavior to workers and domicile communities,
- Use of their own influence to improve the society well-being.

3. Encouraging Examples

Some corporations have already accepted responsible behavior and noticed benefits of it. However, it is considered that ecological reporting is not sufficient yet, regarding to the big problem and the level of urgency of its solving [The State of the World, 2006].

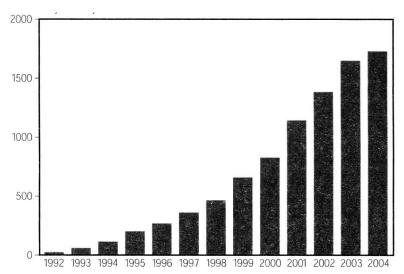


Table Corporative social and ecological reports, 1992-2004

In 2004, about 1,700 corporations and their branches reported on the problem of social responsibility, in contrast to the beginning of 1990 when no one did it. These reports included problems on working standards exerting influence on local communities for elimination of toxic gas release and gas emissions with the effect of glass gardens. Along with data, it is important to point to the fact that the greater part, now voluntary reporting, have not had the verification of the third independent party, causing suspicion about its authenticity.

Starting from the attitude that not every leader is the same, a specific sort of leadership competition is imposed: be leader among leaders. Namely, ecologically and socially responsible corporations often use this kind of reporting not only to disclose their own direct influence on the environment but also to promote their long-term strategic plans in the field. One of these companies is Starbucks, which used its annual reports in order to emphasize their decisiveness to reduce negative ecological and social influence by purchasing coffee grown in a sustainable way. In 2004, 14% of its coffee (19, 7 million kilograms) passed rigorous Coffee and Farmer Equity (C.A.F.E.) standards. It was 19.7 million kilograms more than in 2003. These standards, anyway, include 28 key indicators of sustainability as used quantity of water, energy and pesticide, how fair profit is distributed among employees, and so on. The aim of Starbucks was to increase share of cited coffee standards to more than 50% of production.

Leadership influence regarding to the environment has gradually gained greater legitimacy turning into the political influence putting requirements, which will give birth to one quite new kind of the corporative lobby system in the future – creating such a political climate, which will induce true and socially useful laws.

It is possible that such prediction now looks too daring or it is just the refection of too big wish to redirect the evident power of corporations to a good direction for all of us and for all employees in corporations, as well as for product users. Until then, benefits of socially responsible conduct are positive. They include the following:

- By reducing waste material and production inefficiency, companies can also reduce harmful influence on the environment and total business costs, which can cause competition increase.
- Responsible companies are generally advancing because they are able to attract and retain skilled labor,
- Responsible companies have benefits on the market, enjoying greater reputation, and the fact that they cause fewer damages in the environment behaving humanely with their employees, increase consumer satisfaction.
- Socially responsible companies can decrease three other forms of risks to be found to withstand the worst of many (new) regulations (1) to avoid worry of investors (2) to avoid many cost increase (3).
- Responsible companies alleviate themselves the way to new markets, because "ecological potential" of the company is one of the principal sources of income increase.

4. Ecological Attitudes of the Employees and the Social Responsibility of the Organization

According to the above cited, as well as the Millennium Ecosystem Assessment and the evident trends of its degradations and pollution, it is necessary to formulate the principles of ecology, which should be oriented to attaining the goal – advancement and preservation of the living environment as much as possible. The basic directives of this principle, and its goal, are founded on the ecological ethics as an introduction into ecological philosophy. This philosophy should answer numerous questions in this field as who and what should be done to enable the survival of life on Earth; whether the so-called ecological indicators are reliable and relevant; and what responsibility of organizations to sustainable development is, and so on.

Organizations, especially transnational companies, tens thousands of which have hundreds thousands of foreign branches, dealing in billions dollars, employing ten millions of workers, have special responsibility to the planet Earth and the life on it. They have a chance (from the angle of ecology) to prove themselves to be as true leaders and socially responsible and useful.

The sum of individual values and inclinations, based on the qualified majority, directs and forms (through their legitimate representatives) the frameworks and aims of a community's policy (state, region, local self-government) or an organization (enterprise, company, and corporation). In this way, therefore, generating and establishing the majority of the same valuable matrices, the same or similar awareness on any phenomenon, aim or sense, it is possible to exert influence or pressure to change behavior and found different valuable orientations and systematic shaping the rules of behavior and their organized groups and communities.

Education and information have the key role in these processes.

The living environment (nature) intensively starts to call attention of the public in the second part of the 20th century, becoming, at the end of the century, the topic of all-important political meetings in the world or regional frameworks.

Contemporary generations, logically, pay their "ecological attention" to the quality of living, which "means the repeated establishing of the lost life. Ecology, for the young, is

something that is closely connected with life planning and the future, with the knowledge about oneself, with new forms of the mutual life and solidarity" [Andevski, 2006].

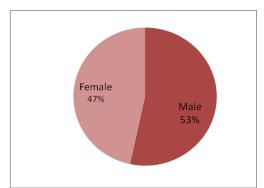
This, the above-noted phenomenology, encroaches on the questions of the aim and sense of the human activity as a multiple and compound being, but it exceeds the framework of this work, and encroaches on philosophy, the science just looking for the answer "why?"

Other social sciences, especially humanistic ones, searching for answers to the question "how", join to the attempts to solve now dramatically accumulated "ecological problems", testing mutual influences of humans and their natural and organizational environment, so the educational matrix could be a more objective reflex of the living environment problem.

The education system (and upbringing, too) is the key lever in forming and defining ecological awareness and actions based on it with a view of solving the set (or one at least) of problems relating to the living environment.

Starting from the fact that ecological awareness includes ecological knowledge, ecological attitudes, ecological values and ecological behavior, we have researched personal attitudes of the employees about the ecological awareness in organizations (enterprises) in Vojvodina, the most developed region in Serbia, and we have found the following (interesting) data.

Reagarding the gender and age of the employees in the organizations where the poll was conducted, 53% were male and 47% were female, where more than a half (208) of the (387) employees aged between 36 and 55.



250
200
150
125
100
50
0
Number of employees

**less than 20 **21-35 **36-55 **56-65 **over 65

Figure 1. Gender share

Figure 2. Age distribution

The answers given in response to the question whether employees consider ecology as a study of the environment, showed that majority (72%) of the employees often thinks about ecology as a study, while 20% do that always.

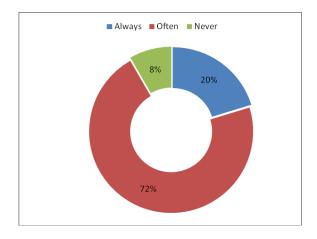
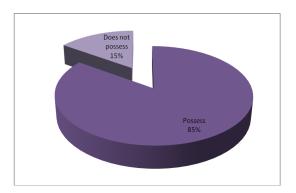


Figure 3. Share of the employees consider ecology as a study of environment

Majority (85%) of the employees stated that they possess knowlegde of ecology. Only one third declared gaining knowledge through formal education, where as two thirds learned about ecology through self-initiative. Regarding the question how employees get information on ecology and environment protection, daily press (51%) and internet (34%) are the main sources.



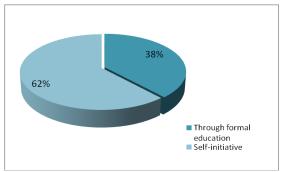


Figure 4. Employees and knowledge of ecology

Figure 5. Sources of Knowledge

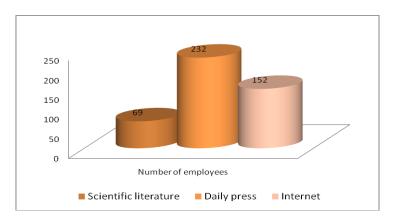


Figure 6. Information sources

The answers given in the response to the question whether the ecological attitudes, ecological values and environmental problems are the topics in the organizations (enterprises), 73% of the employees gave positive answers.

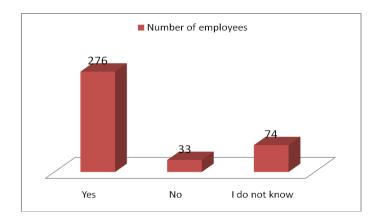


Figure 7. Environmental problems are the topic in the organization

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