

## SOME ACTUAL ISSUES OF SUSTAINABLE DEVELOPMENT MANAGEMENT

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### Abstract

Human society is undergoing a more profound identity crisis period, economic development based on the waste of raw materials, fuels and energy, contributing greatly to this crisis, having as basis the premises of wrong priorities. In order to avoid an ecological disaster of proportions, a series of scientific personalities, and most ordinary people - have taken firm attitude towards the phenomenon of pollution, from which results the deterioration of our living environment. In these conditions arose the concept of "sustainable development". Management is certainly the main driver of economic development of the world of the twentieth century, world that increasingly uses scientific knowledge, management being itself the result of applied scientific knowledge. As a result - the sustainable development also can enjoy the advantages of using techniques, functions and general approaches of management regarding the overall development paths, in order to achieve maximum results in the proposed goals, set at the level of local communities, states or even globally, in terms of reducing material consumption and pollution, to achieve the goal of welfare for all, on a clean planet.

**Key words:** sustainable development, global issues, management.

The development without hindrance since the world entered the "industrial age" now more than 200 years, has started from the image of "unlimited" dimensions of our planet and its ability to ensure "forever" non-renewable mineral resources, excellent living condition and welfare for a rapidly expanding population, but also the planet's ability to take forever pollutants from industrial and non-industrial activity.

In the world literature numerous papers have appeared in recent decades, referring to "global problems" which human civilization faces now, at the beginning of 21st century. "Problems" are those who, at the Planet level, essentially influence all areas of social life, their non-resolving making impossible to address other problems, which also require a solution at global-planetary level.

Industrial and agricultural production has spectacularly increased, based on unprecedented progress in science and technology, which led to a deepening global division of labor, expanding international economic and trade relations, emphasizing the interdependence of all countries at worldwide level.

As a consequence of the process enlargement of industrialization, also increased the need of raw materials, energy and food, urbanization spread, reaching the maximum level of affordability of the planet, due to the limited mineral resources and the pollution phenomenon

which inherent accompany in the current development conditions of human society. Thus, it requires more and more an efficient management of natural resource use (Davidescu D., 2002).

### MATERIALS AND METHODS

Data and concepts from the literature were used as materials and methods, data which were processed and from which we have determined new original elements of interest, who came to support the things presented in the paper.

### RESULTS AND DISCUSSIONS

#### The concept of sustainable development

Lester Brown is credited to be the first to release – in the World watch Institute report in 1984 - the term "sustainable development" which then entered in the literature as a reference term and became the object of all studies and policy documents that address issues of contemporary social economic development, expressing the increasing concern of global communities regarding the fact that the current model of the global economic system is unsustainable in terms of resource use of the planet and the balance of environmental factors (Flavin C. 2002).

In the 1984 report, "sustainability" was defined as *the possible development in harmony*

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*with nature* - as an ecological concept with economic consequences, pointing out that a "sustainable society" is the one that shapes / adapts

its economic and social system, so that to ensure natural resources and life support systems not only for us, but for future generations.

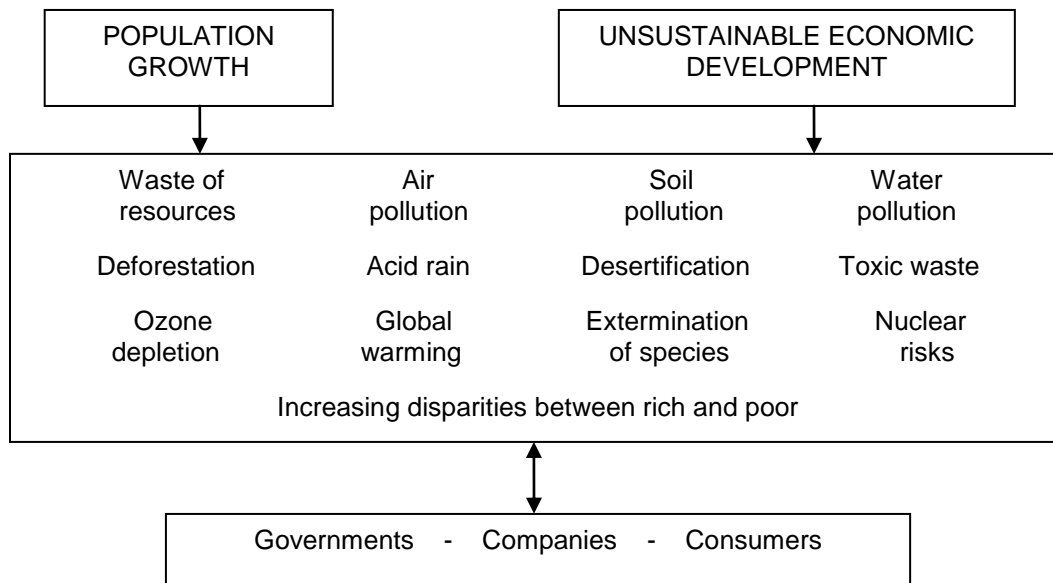


Figure 1 The main "global issues" in present

*Gro Harlem Brundtland* (woman) Prime Minister of Norway presented the report entitled "The future of us all" in the UN Commission on Sustainable Development (1987). The report highlights the problem created by the "demographic explosion", the unbalanced geographical distribution of population in connection with the available resources of the planet and the need of efforts to eliminate poverty, raising levels of culture and the development of human capacity to improve the efficient use of available resources.

Regarding species and ecosystems, it highlights the need to maintain genetic diversity and the introduction in this target, in the center of political programs, the problem of protecting endangered species and ecosystems, proposing a protection program of tropical forests and developing an extensive international cooperation.

In this sense, *sustainable development* can be defined as the development that can be sustained (maintained) in time with the limited resources we have.

Essential components of a strategy for sustainable development include:

- Stabilizing population and ensuring a decent life for all,
- Maintaining the natural fertility of soils,
- Protect the planet's biological systems, maintain biodiversity,
- Recycling, reducing consumption of mineral resources.

Regarding the demographical explosion, according to UN statistics, in October 2011 we passed the border of 7 billion people, triggering a new alarm that the world would move towards a Malthusian crisis, by depletion of natural resources, mainly drinking water and food crisis, overall environmental degradation etc.

However we can say that the alarm is inappropriate, because the growth rate of world population slows, although the last 3-4 billion came in an accelerated pace, 1 billion in 12-15 years, see Table 1:

Compared to 1 billion people, the growth rate of world population declined in the last 60 years from 20.83 million annually, to 13.88 million, which represents a decrease in the percentage of population growth with 33.36%, despite increasing life expectancy recorded in this period.

Table 1

Dynamics of world population year			
Year	World population	Annual absolute increase	Annual increase to 1 billion
1956	3 mld.		
1972	4	62,51*	20,83
1987	5	66,67	16,67
1999	6	76,90	15,38
2011	7	83,33	13,88 mil.

Source: Calculated by N. Raboca „*European Geography*”- 2011

\* population growth, in million inhabitants

In the latest UN projections, the growth rate of world population will decrease to zero at the middle of this century. But the greatest challenge that the world will face in future is aging. It is known that the developed world is already experiencing population aging, due to falling birth rates and rising life expectancy. In the coming decades this phenomenon will include also developing countries.

However, increasing to 10 billion people on our planet will be a very difficult exam to ensure decent living conditions: food, water, housing etc..

#### Particulars of sustainable development management

*Management* is certainly the main driver of economic development of the world of the twentieth century, world that increasingly uses scientific knowledge, management being itself the result of applied scientific knowledge.

A number of authors including Richard Farmer said that "management is one of the key factors that explain why a given country has become rich, or remained poor."

The managerial process must begin with a correct determination of objectives, operating both with strategic objectives and tactical elements, to support achievement of the strategy. Depending on the nature and importance of the set objectives, arise the other functions.

In defining management usually have to consider three essential components:

- Setting the correct objectives,
- Selecting methods and tools for achieving them, and
- Follow to fulfill the purpose of achieving established performance.

Decisions are made by analyzing the likely changes in the activity, according to the company profile, the decision being based on the optimal choice of the many possible ways. Determination of the optimal solution, is the key issue of the decision - after all, all management functions are subordinated to the same purpose - namely to take correct decisions.

The way this function (decision) is realized highlights the true value of the manager, through the qualities that he has: competence, balance, judgment, courage, moral integrity, foresight etc.

*Human resource management*, includes all management decisions and practices that influence directly people, regarding the sustainable development of those working in organizations concerned to improve environmental performance and for others who, being in the adjacent area, are affected by lack of economic performance or environmental conditions etc.

In these conditions, of course that the sustainable development process can enjoy the advantages of using techniques, functions and general approaches of management regarding the overall development paths, in order to achieve maximum results in the proposed goals, set at the level of local communities, states or even globally, in terms of reducing material consumption and pollution, to achieve the goal of welfare for all, on a clean planet.

#### Management functions in sustainable development

**Planning function** - answering the question: "*what do we want and what can be done in the sustainable development process*" - allows us to result in terms of setting objectives, resources, means and methods (strategies) necessary to accomplish the objectives, elaboration of solutions and determine in advance the future problems (Burtică M., 2010):

*What do we want to realize in the sustainable development process:*

- When establishing the objectives, participation is based on the occupied position on the issue addressed, some objectives in the sustainable development process can be:

- Progresses in eco-technology domain to eliminate waste of resources,
- Providing decent material and spiritual living conditions to the whole population,
- Measures taken to give future generations a natural environment as clean and healthy as possible etc.

*What can be done, in the technological conditions that we have:*

- Our possibilities give us confidence that in reasonably time all these goals can be satisfying achieved, provided that those responsible at all levels, including global level, to want to achieve these objectives.

**Organizing function** - the question: "*Who and how contributes to achieve the objectives of sustainable development*" - means all the management processes through which the activities to achieve the best possible conditions of the anticipated objectives are established and determined.

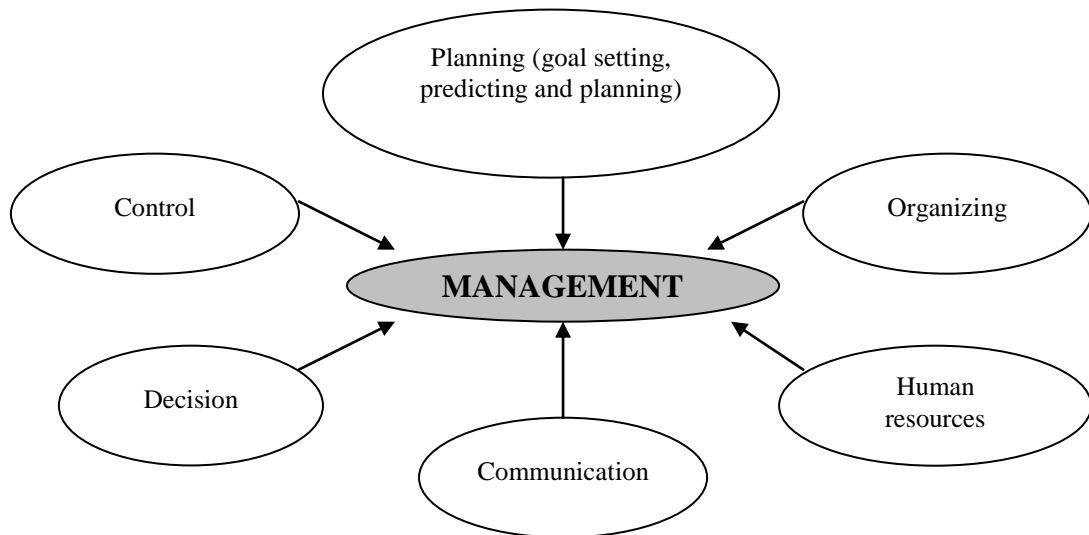


Figure 2 **Management functions applied in the sustainable development**

In order to achieve the objectives, participate those responsible for enforcement of the programs decided by those entitled to this end, participation is based on their position on the issue concerned (economic unit accused, companies responsible for implementing the action plan, nongovernmental organizations, people etc.) implementation consisting as appropriate:

- Compliance with the legal norms of environmental protection,
- Completion of the ecological rehabilitation of degraded areas,
- Use of eco-technologies, avoiding waste,
- Progress in line of alternative resources exploitation,
- Economic development of states and backward areas, the strategy of raising the living standard of population etc.

Also, scientists, NGOs and all population interested can participate to achieve these objectives.

**Coordination function** - representing the process of dynamic organization, consists of all activities through which the decisions, of the ones

that are entitled, harmonize, in order to optimize the sustainable development results.

Coordination function, answering the question: "*how can we maximize the program effects, by optimizing the activity correlation of the ones involved...*" depends largely on managers potential to maintain a favorable atmosphere of communication and collaboration of the ones involved in the established action regarding the sustainable development, success being assured by their knowledge and training.

The need for management coordination process, mainly results from:

- Dynamic processes involved in sustainable development
- But also from the complexity and diversity of stakeholders' relations, demanding a permanent operative "feedback", which would ensure adequate correlation and decision of the planned activities. Due to the scale and complexity of processes and to the many factors involved, coordination imposes the optimization correlation of actions.

**Directing function** - as a management function, it includes all activities that stakeholders

in the process of sustainable development are motivated and determined to contribute to the objectives set.

Directing function, answers the question: *"How to motivate stakeholders involved in the sustainable development process so that their results to be maximum?"*

Stages of decision process, according to the normative methodology of substantiation and elaboration of decisions and the complexity of issues addressed are:

- Identifying and defining problems to solve,
- Developing possible solutions,
- Analysis of proposed solutions and choosing the most favorable,
- Implementation of the solution,
- Analysis / evaluation of results / outcomes of the decision taken.

*Motivation*, involves the correlation of satisfaction of the own interests of the factors involved in the sustainable development, with objectives achieving and tasks set. Motivation can be of various forms, for example:

- Tax incentives for upgrading outdated technology,
- Constraints caused by the payment of pollution charges to reduce emissions,
- The community residents must take a firm attitude against pollution produced by the economic incriminated agents,
- Taking a firm attitude by the community residents against pollution of economic agents incriminated,
- Or incentives to increase production or for new investment to advantage the community under the social aspect of sustainable development etc.

**Control function** - aims *"the results of the activity included in the sustainable development program..."*

Control is the final link in the chain of management. Control is important because it leads to notification of any deviations, the causes that made them and establish measures to address the deficiencies, to improve work results.

Control helps all those involved in sustainable development to recognize distractions factors in achieving goals, helping them to improve specific performance.

By highlighting in time the violations of any kind, premises of possible, prompt and efficient interventions in order to remedy the deficiencies are created, keeping the chances for achieving the objectives originally set.

Starting from the premise of "good faith" of all those involved in attaining the goals of sustainable development process, factors entitled to perform control, have also the role of guiding to

respect the standards prescribed by law and improving the performance of those accused of violating the established rules, this way the function of guidance and control practically doubles its effectiveness in achieving sustainable development process.

### **Managerial methods**

**Managerial methods** - which can be found in the process of sustainable development, are based on the multitude of situations that may occur in this process.

Management methods and techniques that can be efficiently used in this process are those that best fit the characteristics and peculiarities of sustainable development, namely:

- Management method by objectives,
- Responsible management method of creating a new product,
- Management method by budgets,
- Management method through participation etc.

### **CONCLUSIONS**

This paper takes to discussion "the concept of sustainable development", concept led out of the major global problems more pressing, bringing in support of finding solutions, management science, certainly the main driver of vertiginous economic development of the present world, a world that uses more and more scientific knowledge, management being itself the result of applied scientific knowledge.

To apply the principles and methods of management in terms of sustainable development, it is necessary customizing their fields depending on the specificity of these activities.

The effectiveness of management functions, used to support sustainable development programs to maximize the effects, depends largely on managers potential to maintain a favorable atmosphere of communication and collaboration of those involved, the success being provided by their knowledge and training.

Thus, to achieve the objectives of sustainable development, of decided programs, can and must participate besides the administration officials, and scientific personalities, NGOs and all those interested from the population. Only in this way, interacting on the wishes of all, working together we will succeed to develop in conditions of sustainable development concept requirements.

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