

STUDY CONCERNING THE AMPLITUDE OF APPLICATIVE-METHODOLOGICAL ELEMENTS IN THE MANAGERIAL DURABLE DEVELOPMENT PROCESS

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Abstract: *The durability concept has become lately very circulated, inclusive in the economic domain, because of a more accentuated concern of people for the continuous production and consumption growth, in the context of limited character emphasis of resources and environment constrains that are more and more pressing..*

It is considered viable, sustainable, durable development, only that development that satisfies the present generation's needs, without compromising the following generations' capacity to satisfy their own.

In durable development are included a series of elements that can not miss from this development, such as: equity, education, civil rights, culture etc.

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Durable development was and, more and more often, still is on the agenda of some international forums, parliaments and governs, and the concept of durable (viable) development, relatively new, extremely complex, gained a universal dimension and a wide international circulation, so are imposed certain clarifications and interpretations.

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The worldwide report concerning human development, named “Our common future”, presented by Brundtland commission at the United Nations Conference from Rio de Janeiro, in 1992, presents the durable development concept from which results, in essence, the following aspects (Grădinaru, I., 2000, p. 49):

- durable state is the one in which the utility does not decrease in time;
- sustainable economy is the one in which the consumption does not reduce in time;
- viable economy is the one in which the resources are assigned so that the same opportunities can be produced in future;
- a durable economic activity is the one in which the natural resources stock does not decrease in time;
- a sustainable development is the one in which the resources are used in such way to maintain a durable benefit of their exploitation;
- a durable state is the one in which are satisfied the minimum conditions of ecosystem stability and it’s recovering in time.

Each of the presented aspects has different comments and raises certain question marks that need proper answers.

It is considered viable, sustainable, durable development, only that development that satisfies the present generation’s needs, without compromising the next generation’s capacity of satisfying their own.

Durable development represents a continuous process, dynamic, of social change with the purpose to assure any opportunity to present and following generations to have a better life and is an option in the cooperation conditions at a global, regional and local level.

Assuring durable development represents, also, a responsibility of each person. Only the governmental action alone is not enough to put in practice a durable development. Each domain from the society must bring a scientific contribution, of learning and education in this sense. Also, it must involve through independent actions in promoting mass-media durable development and nongovernmental organizations. It is necessary a national and international cooperation that could mutually support in this field of great importance.

Durable development promotes, among others, the intergeneration equity principle, which targets two aspects:

- the level of living, satisfactions, incomes must be at least equal for the future generations compared with the present;
- the production consumption factors per inhabitant must not be now higher than that of the future generations.

In the same time with the intergeneration equity must also exist an intrageneration equity.

A durable development, in order to be accomplished, supposes certain minimum requests, as for example:

- resizing the economic growth;
- shifting to other material and energy sources;
- saving natural resources;
- growing processes' quality and safety;
- assuring controlled growth of population;
- cutting of poverty;
- the participation of more states in decisions taking.

In durable development there are a series of elements that can not miss from this development, such as: culture, equity, education, civil rights, etc.

Durable development has as a purpose preserving intellectual and cultural creativity from a generation to another, assuring some equitable parts from the new technology and natural resources, guaranteed equal rights in decision making and developing own cultures, progressive improvement and maintaining the population's wellbeing in correlation with the requirements of rational use of natural resources and of ecosystem conservation.

In the economic activity the durability need is based on a series of arguments of moral, ecologic, economic, etc. order.

The main reason of moral nature regards that the present generation does not affect the chances of the future generation under the aspect of wellbeing and resources volume.

The main reason of ecological nature concerns the fact that the man's activity must not threaten or reduce: biodiversity; ecological stability; biological integrity (the capacity of biological regeneration).

The non-questionable argument from the economic point of view is the one that a rational constant behaviour, continuous, of a human in production and consumption is more effective than one inconstant, because it maximizes the social wellbeing.

Social development, as another component of durable development, has as a purpose assuring a balanced distribution of wellbeing, fundamental

civil rights exertion and satisfying base needs through equilibrate participation in decision making and influencing the events' course.

Economic recovery can not be conceived without a coherent approach of interdependency between the economic reform and durable development, and economic development, as a result of the economic reform is possible only on a durable ecological base. Among the important approaches of the economic reform can be named: developing and adapting new technology far more rational-ecological, base changes in consumption customs, values, and way of life.

Durable development can be considered a creator of authentic values if it can lead to an economic and social development in harmony with the environment. More of the issues of this economic reform period have a global character. For example, the global climatic change, as a result of human activity, affects not only the ones that have generated the pollution process, but also the other planet's citizens, because, in this case, no other nation or state has its own atmosphere. It is an example of the globalization of the economic process, but also of the collective responsibility, and the solution of these problems imposes common actions.

In the economic literature there have been attempts to measure the durable development, in a smaller sense (as for example, GDP per inhabitant), or in a larger sense (as for example, the economic-social wellbeing that could cover education, wealth, etc. aspects).

An example is represented by G. Atkinson and D. W. Pearce (Atkinson, G., Pearce, D. W., 1993, p. 3), who have computed the viability index after the following formula:

$$Z = S / Y - \delta M / Y - \delta N / Y \quad (1)$$

where: S - internal economies; Y - GDP;
 δM - depreciation value of created capital;
 δN - depreciation value of natural capital;
Z - viability index.

Based on the presented parameters in the formula (1), the two specialists have computed the viability index Z for different states. In function of the resulted values of the viability index, the countries can be framed in one of the three categories established by the authors of this index:

- viable countries;
- limited viability countries;
- non-viable countries.

An economy is considered viable if its savings are higher than the created depreciation capital and of the natural one.

The formation of a viable economic behaviour will need sustained and concerted measures at the level of human being and firm, also at local, national or regional level, for rational actions in resources use, stopping of major pollution risk, avoiding ecological irreversibility limit overcome and more others.

The environment protection is one of the current concerning of the modern society. It is observed a quantitative pollution aggravation, and also a change of background in ecological problems.

Adapting the durable development concept supposes procuring appropriate information referring to economic and environment activity.

The majority of specialists consider that durable development is a solid concept that must be taken into consideration in strategy establishment of environment protection, for exhibiting temporal valences that this concept has.

Environment protection represents in this moment a major problem of the humanity. It is imposed in this idea as economic development to take into account a series of ecological concepts with temporal sense, such as: incertitude, deterioration limit, exhausting degree, irreversibility, stability, shock resistance of environment etc. So, the environment will represent a key variable for durable development.

Like any science the environmental economy protection operates with a series of concepts, notions, specific terms (ecolanguages) without which the interrelation problems of economy-environment can not be understood and analyzed.

In this way there must be taken into consideration a series of general concepts such as: natural patrimony, public goods, economic value of environmental goods etc. and also some specific notions, that divide into many terms that make possible understanding the environmental protection of the economy problem, notions that refer to: natural patrimony; public goods; environmental advantages; environmental externalities; environmental indicators; environmental monitoring.

The state, in report with the patrimony, plays a mediator role in promoting some environmental managerial models, that take into consideration, both present and future generations' interests.

Investments in the environmental domain base naturally upon resource allocation, a process in which is imposed cost and advantages evaluation and comparing.

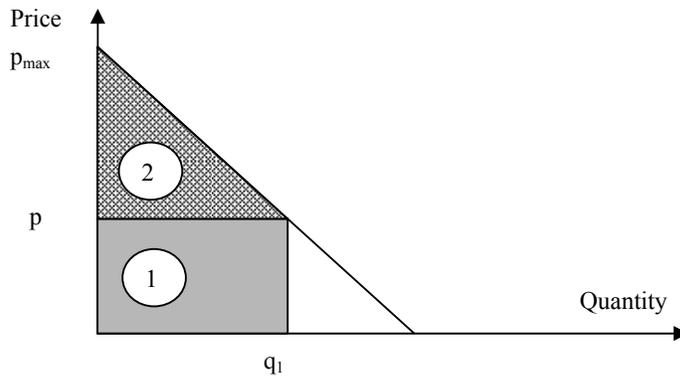
The environmental improvement cost is expressed in monetary terms, but it must take place around the given value of a collective for used material and human means.

Comparing the costs with the environmental advantages represents their expressing in monetary terms. According to the marginal theory there must be equivalence between the marginal cost and the marginal advantage with the scope of establishing the level of resource allocation and maximization of total net advantage (taking into consideration the restrictive character of resources availability).

The real situations indicate the fact that not all the advantages can be measured. The advantage notion in this context has a special sense given by the principal according to which the measuring base advantage must represent what the population desires (individual preferences).

The effective individual preferences for a good or a service are the consent expression of paying that good or service. The consent, the concept of paying offers a monetary indicator of preferences. When certain persons are available to pay more than the market price, in this case it means that they beneficiate of a higher advantage than the one expressed by the market price, the surplus being called "the consumer's surplus".

Supposing that the market price of an established product through negotiation and consent is p , and the required quantity to this price is q , the sum that the individuals are paying on the market for the product is given by the delimited area of rectangle 1 (figure 1). There are situations when a higher payment for the first product (P_{max}) is accepted, and than the price begins to decrease until it reaches the market price (p), for the last product bought. In this case the paid sum is higher than in the previous case. This surface delimited by the triangle 2 (figure 1) represents the consumer's surplus, which expresses the additional satisfaction that the successive acquisitions of a good, bought by an individual, brings to a given effective price.



*Figure 1 - Correlation offer-demand
 (1+2) – represents the consent to pay gross
 1 – represents the consent to pay net*

Concerning a realistic evaluation, the manager must take into consideration the economic and social aspects that make the durable development core. The durable income, from an economic point of view, is a maximum level of expenses that an individual must do in a goods acquisition matter in a period of time, expecting to spend the sum in the following period (Rojanschi, V., Bran, F., Grigore, F., 2004, p. 148).

A cost-benefit analysis implies picking a variant that brings the highest net winnings, costs and benefits being defined in connection with satisfying the needs or individual preferences for a certain thing.

There are in general, two measuring situations of resulted advantages after environment improvement and two, of lost evaluation (damages) made by environmental degradation:

- the consent of paying to obtain an advantage;
- the consent of giving up an advantage;
- the consent of paying to avoid a damage;
- the consent to support a damage.

The “monitoring” activity of environment represents an assembly of operations concerning surveillance, evaluation, prognosis and warning in the scope of operative intervention for maintaining the environmental balance state.

This activity, as a management instrument in the environmental domain, must assure an informational flow, structured on specific sectors (water, air, soil, etc.) and also intersectorial (sources of pollution, environmental quality, natural resources state etc.).

To this fundamental elements which hold the ecolanguages resort can be attached very many notions, concepts, terms with which operates the environmental protection economy such as: ecoenergetics, environmental costs, environmental accounts, inputs and outputs referring to environment (environmental flows), natural capital, ecocodevelopment, ecobehavior, pollution, ecological economy, ecological expenses, energetic yields, environmental norms, ecozone costs and many others.

It is expected that, as long as the environmental protection economy progresses, like the other sciences with which it is in interdependency, the ecolanguages sphere will enlarge in order to explain deeper and more nuanced the new phenomena and processes that will be discovered in this domain of great future for mankind.

References

1. Atkinson, G., Pearce, D. W., (1993), *Measuring Sustainable Development*, The Globe Issue, nr. 13, U.K. GER Office, Swindon
2. Grădinaru, I., (2000), *Protecția mediului - abordare previzională*, Editura Economică, București
3. Năstase, G., (2003), *Managementul inovării. Inovare științifică și tehnologică*, Editura Performatica, Iași
4. Nica, D., (2002), *Economia protecției mediului - elemente introductive*, Editura Pro Transilvania, București
5. Petrescu, I., (2009), *Dezvoltare durabilă a managementului*, Editura Expert, București
6. Rojanschi, V., Bran, F., Grigore, F., (2004), *Elemente de economie și managementul mediului*, Editura Economică, București