

## **DETERMINISM IN ASSESSING THE CONSUMER'S ECOLOGICAL BEHAVIOUR**

**Monica Petcu<sup>1</sup>, Dumitru Miron<sup>2</sup> and Iulia David-Sobolevschi<sup>3\*</sup>**

*<sup>1) 2)3)</sup> Academy of Economic Studies, Bucharest, Romania*

---

### **Abstract**

The discrepancy between the amplitude of erosive processes set off in the environment and the level of the measures taken to stop or to counter-balance the pollution effects, limited by the way of life, technologies, knowledge and conscience, entails high demands for the society as a whole and for each individual. This approach aims the addressing of the issue of consumer's ecological behaviour as a process of conscious assumption of responsibilities for environmental preservation and manifestation of attitudes oriented to promoting the values of the ecosystem and delimitation of specific behavioural typology. In this respect, we proceeded at the holistic analysis of the domain's inherent and specific conditions that allowed detection of influencing factors of the adoption of an ecological behavior and their synthetic structure into three groups of determinants: economic, psychosocial and organizational. In these three major coordinates, there are designed types of ecological behaviour, their effectiveness being at the intersection of the projections of different degrees of intensity considered on the chosen axes. Based on deductive reasoning there can be determined orthoscopic actions that are focused on eliminating the cause that generated behavioural deviations.

**Key words:** ecological behaviour, determinants of ecological behaviour, typology of ecological behaviour, ecosystem relationship

**JEL Classification:** Q50, Q56

---

### **Introduction**

The individual and the needs hereof are the source and the purpose of each productive process. Each human is a consumer of goods supplied by nature, either raw, processed through simple or through extremely complex and polluting processes. Therefore, the contemporary civilization changes the human being into a polluter.

During the change and the use of natural resources to meet individual's needs, he/she discovered and acquired knowledge, abilities and new instruments for action. The enhancement of knowledge entailed the occurrence of new needs, while for meeting them

---

\* Corresponding author, **Iulia David-Sobolevschi** – [iulia.david@kgaudit.ro](mailto:iulia.david@kgaudit.ro)

new information was necessary. "Knowledge feeds the tendency to increase needs and, at the same time, it harnesses the resources more and more efficiently, searches for new ones, becoming an anti-competitor for entropy and the stiffening of a system" (Petcu, 2009).

The progress of technology and the low price of natural resources set the background for the development of mass industries (regarded as a genuine economic revolution), as driving force of consumption society and globalization, while production dimensions pushed the market to global levels. The encouragement of consumption, seen as a general solution for development and settlement of unbalances, crises and recessions, given the significant growth of the population and the planned-limited reliability of products, based on the permissive access to resources by the large producers and the facilities brought by the development of transportations, resulted in significant unbalances of the environment with an impact on the entire population, apart from improving the living standards of a part of the world population. The huge profits from massive outsourcing projects brought welfare to investors and enormous disadvantages to the environment and to those who bear the consequences.

The disarray of the eco-social holon induced by the accumulation of functioning deregulations, caused by the deviation from the conduct standards with respect to natural environment, will lead to general disintegration.

The cardinality of natural environment features preservation conditioning the existence of human kind and the awareness of great unbalances triggered upon the environment, as a consequence of the human activities, have equally toughened the scientific media and the public opinion, worldwide, generating a systematic, systemic and pluridisciplinary approach of pollution issues and mankind response to this major challenge.

From a theoretical point of view, the issue has been treated exhaustively in specialized literature asserting names as Scherhom, Commoner, Kaiser, Wolfing, Fuhrer, Doka, Hofstetter, Ranney (Stanciu, 1993; Commoner, 1980; Kaiser, Wölfing și Fuhrer, 1999; Kaiser, Doka, Hofstetter and Ranney, 2003). In the context of social welfare economics and general involvement, there is developed a range of studies, surveys and investigations on the ecological behaviour of the consumer – published in specialized magazines: *Journal of Environmental Psychology*, *Journal of Consumer Research*, *Journal of Environmental Education*. Focused on socio-human components, the approaches considered the correlation between man and the environment, the contradictions between the logics of ecology and the realities of contemporary society. Barry Commoner, the American biologist, claimed five decades ago that the environmental crisis is the consequence of social organization, of meeting requirements in conflict with those governing nature, that "we have to learn how to return to nature the wealth borrowed there from ..., that we are in the midst of a revolution occurred in the public attitude towards the acceptability of some levels of environmental degradation that have been long tolerated without any general discontent" (Commoner, 1980).

The awareness of this serious problem led to searching for economic, technological and legislative solutions. In the beginning, the attention was focused on production as a trigger factor of instability as result of both uncontrolled exploitation of resources and massive pollution. A first course of action was the reduction in consumption of raw materials and energy used per unit of product, determined rather by market forces marked by the sustained competitive process than by the imperatives of stopping the abusive exploitation

of the environment. Another course of action, wherein environment protection is explicit and normative-imperative is the internalization of all costs of production, distribution and consumption. The English economist A.G. Pigou notices the accumulation of major negative externalities and suggests partial solutions by internalities such as taxes and by subsidizing the positive ones, price being the final goal (Commoner, 1980). On this action vector, the elaborated legislation has particular importance, containing a series of regulations governing business processes, from the start-up during the exploitation by technologies control of the emissions of toxic emissions and waste, until the completion of the activities with the obligation of setting the initial condition of the environment and affected area. Anti-polluting technologies do not increase production value and do not contribute to production growth, inducing additional costs that are difficult to be covered through prices. The rising of prices due to internalization of environment expenses and the use of anti-polluting technologies rebound upon the poor, who will become even poorer, simultaneously with the dramatic decrease of consumption and, therefore, of production. Maintaining the prices can only be taken into account if other categories of expenses are cut, such as labour cost. An increase in the poor's number and the drop of salaries, as alternative solutions, would aggravate conflicts between the employer and the employee, as well as conflicts on social ladder, between the rich and the poor.

### **1. Research methodology**

Based on the evidence of frequent discrepancies between declarative and effective, this approach is meant to detect major coordinates of determining various degrees of assuming the ecological behaviour by the consumer.

The objective points at the phenomenology qualitative, emphasizing the need for intervention mainly with causes (creating the conditions for the actual environmental assuming behaviour of the consumer) and subsequently, the effects (rules, sanctions), depending on the degree of assuming the actual environmental behaviour, taking into account that the laws of generating a phenomenon, as well as its intrinsic causal relations have a probabilistic feature.

Enrolled in social and behavioural issues, the approach appeals to the methodology of the empirical socio-human research (the constant observation of behaviour, the gathering of information transmitted through various channels of mass communication, the analysis of the results of many studies published in professional journals). Thus, the construction and development of the research are based on two principles: the cognoscibility and the determinism in the system approached. The relevance of the study focused on the relationship between subject and the object of knowledge, involves the correlation of the intuitive approach of the social with the deterministic one.

The research methodology, in its conception of expression of the critical, self-reflexive and constructive consciousness, uses qualitative methods, which includes: the preliminary documentation (review specialized literature on environmental protection and consumer behaviour, the study of international and national regulations in the field), setting referential area, critical analysis of the concepts in the field, of the determination relations between them and the synthesizing the useful ideas for the issue. In conjunction with the approach of comprehension and explanation, it was addressed the correlation between ascertaining and evaluative judgments regarding the ecological behaviour of consumer. Based on deductive

and inductive mechanisms and on the comparative analysis, there were correlated the conclusions of the theoretical approach with the concrete aspects of objective observation of the specific realities identifying certain states. In this context, there are established the determinants of the environmental behaviour and a model of framing various levels of actual undertaking is elaborated thereon.

## **2. Meta-system (ecosphere) and element (man) interrelation**

The ecology, re-interpreted from a systemic perspective, emphasizes the interdependencies and the complementarities of biosphere, the ecosystem relation integrating two open systems, man and nature, where each is part of the other, together forming a whole – the ecosphere. Most ecosystems are so complex that the cycles create a network, a web of multiple ties that support and strengthen the system's resistance in a reiterative process, totally inter-related. At the same time, the ecosystem feedback features trigger considerably ample and intense processes. "The system poises due to its self-compensation properties, but the same properties, if overstrained, can lead to a spectacular collapse". (Commoner, 1980).

From an ecological point of view, human activities are subject to rationality not only through the economic efficiency but also through the ecologic efficiency, respectively securing the regeneration of the fundamental cycles of the nature. In this approach, the natural system is a provider of inputs in the human system, affected by destructive feedbacks caused by the means of exploitation, processing and use of undertaken resources. In compensation, the human system should generate outputs designed to preserve biodiversity, existing biocoenoses, the conditions of perpetuation and their natural evolution.

In this metasystem, the human being appears at least in three fundamental hypostases (figure no. 1):

- element of the ecosphere, taking over all the effects of the changes thereof, including pollution;
- element of society, playing the role of the trigger, coordinator and beneficiary of productive processes, including the pollution effects
- the individual, that singularly has minor influence.

The conclusion borders on the absurd. The one who triggers everything in society can only do little as an individual. But, on the other hand, the synergistic of these individual influences can profoundly affect the meta-systems which integrating it.

As an element of the eco-society, the human being became aware of the unbalances in the global ecosystem caused by environmental overburdening both by massive exploitation of resources and by pollution, which determined the international community to approach this theme in an integrating manner. The Stockholm Declaration and the Action plan, adopted following the 1972 Conference, are considered the core stone of the joint program addressing the environmental problems. In 1983, the United Nations established the World Commission on Environment and Development (the Brundtland Commission) that published in 1987 the report "Our common future" (the Brundtland Report), being the foundation of Agenda 21 and of the 27 principles of the Rio Declaration, adopted following the United Nations Conference on the Environment and Development, in June 1992, which

set the goal of sustainable development – “development that meets the needs of the present generation without compromising the ability of future generations to meet their needs” – a concept that integrates economic development and environment protection. The materialization of this goal “involves both structural and metabolic changes in each of the three system elements – economical, social and environmental – seen as a whole” (Dinu, Curea, 2009). The European Union endorsed the sustainable development as a fundamental goal, one of the greatest challenges of this structure being the forming of the “European citizen” who is aware of the absolute necessity to adopt a pro-ecological behaviour. The paradigm at the beginning of the third millennium expands and includes concepts, statements and methods specific to all the systems holonically included at planetary level and disciplinarily integrated, providing models much closer to the reality where society and individuals evolve, the success in the implementation thereof also depending on assuming an actual ecologic behaviour.

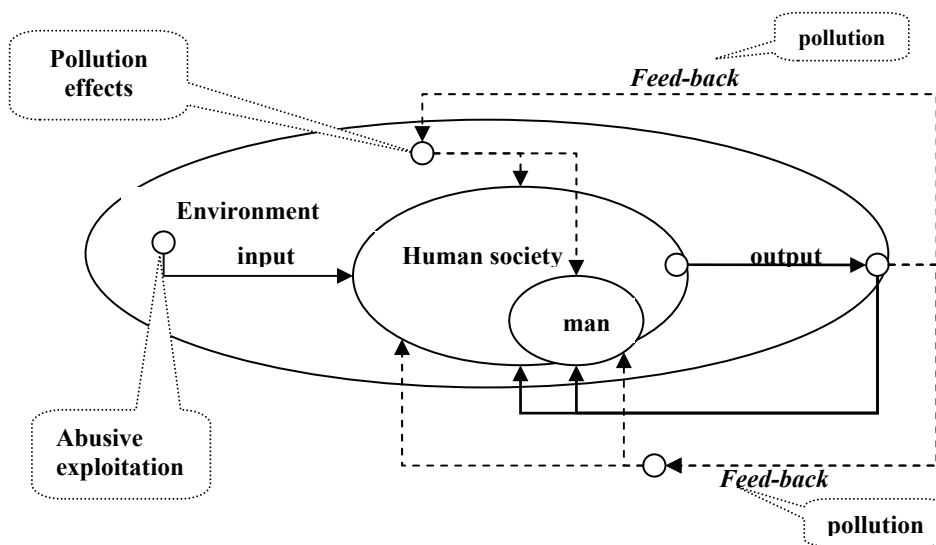


Figure no. 1: System of unbalances induced by human activities in the environment

“Environmental management is a modern method of involving the environment issue in all the stages and procedures of managing an activity, a project, a plan or a program, at local or regional level, in the short, medium and long term” (Rojanschi, Grigore, Ciomos, 2008). Effort integration at macro and micro social level marks a first step towards the approach of a vital interest field for every element of the Earth and, first of all, for the human being.

### 3. Referential conceptualization of consumer’s ecological behaviour

In each of the emphasized aspects, the individual, as a determining element in implementing the environment policies and restoring the balances, behaves differently.

In general, human behaviour is regarded as free and conscience driven, subject to the fact that conscience is more of an intermediary variable than an absolutely independent one. At

present, social and psychological sciences incline to argue the role of the subconscious and unconscious as generating factors of the behaviour, influenced by objective factors, and that it is only partially conscious. On the other hand, however, the role of the knowledge level in the process determinism and the importance of education to adopt a certain behaviour are admitted. The American psychologist Harold Leavitt thinks that the essential elements that define human behaviour are: the stimulus (the cause), the need (the materializing desire) and the goal (the aim).

Each discipline addressing the behaviour defines it from its own perspective. Psychologically speaking, behaviour means what is objectively noticeable in the global reaction of the individual, independently of what he states, of his thoughts and psychological attitudes. Sociologically speaking, behaviour consists of the activity of the subject in a given social situation. The American Marketing Association defines the consumer's behaviour as an interaction of impression and perception, of conduct and natural common events through which human beings direct the changes occurring in their own lives. For the purpose of this undertaking, we consider it is necessary to present the general characteristics of the behaviour, as a fundament of the ecological behaviour approach. To this end, the following were emphasized: the complexity of the behavioural mechanisms, the diversity reaching uniqueness of the behavioural responses (individual's uniqueness generates behaviour's uniqueness) to the same stimuli related to the determinism of the personality development, the inclusion of a decisional approach in the taking-up, the dynamic and situation adjusted character, the interrelation capacity. If diversity and uniqueness limit the efficiency of some forming collective processes of ecological behaviours, the interrelation and adaptation capacity amplifies any formative action in this direction. The historical dimension of behaviour shows the role of the social – economic conditions in the effectiveness of a certain type of behaviour and the capacity of human beings to take-up the most productive one.

Ecological behaviour implies the preservation and protection of the ecosystem and biodiversity, including attitudes and activities oriented towards the conservation and promotion of natural environment values, in any situation, as well as the ability to influence its adopting by other individuals in the group and society.

The consumer's ecological behaviour sets the area of interest around the final user, as individual or as household. This assertion defines the economical behaviour using two coordinates:

- ecological behaviour as consumer;
- ecological behaviour as element of the ecosphere (some studies reveal on this coordinate: the attitude towards the environment; the attitude towards the ecological behaviour).

The ecological behaviour as consumer implies rationality both in choosing and monitoring the costs of usage and in the destruction phase.

Using a diagram that presents the life cycle of a product (figure no. 2), the phases involving the consumer's ecological behaviour are emphasized: the period of use and the destruction phase.

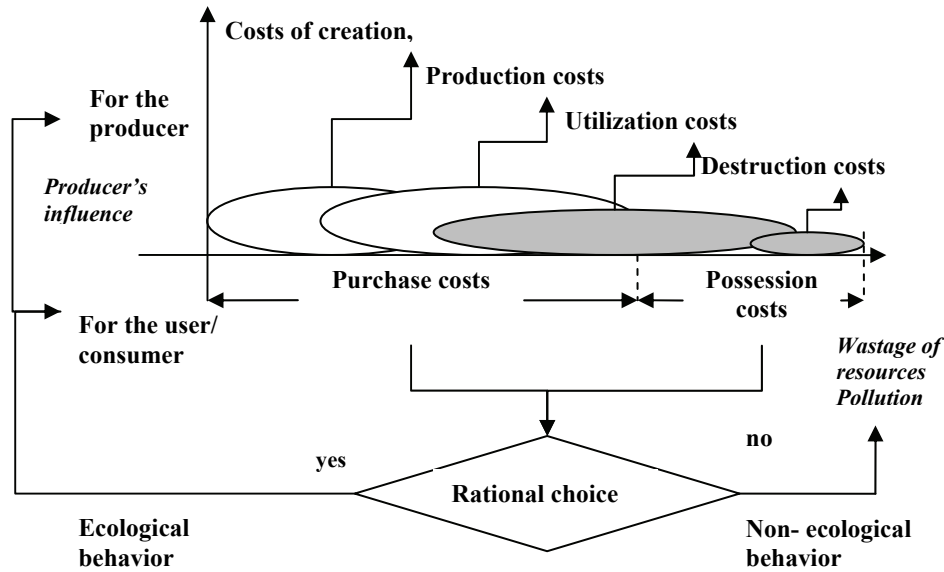


Figure no. 2: Phases of the life cycle of a product involving the consumer's ecological behaviour

During the period of use, the ecological behaviour is displayed in the rational use of the asset, which implies reducing the power consumption, the consumables, etc., related to the usage thereof. When purchasing an asset, a rational consumer shall choose the asset whose average cost (average: purchase cost – cost of consumables during the lifetime of the product) is the lowest (this reasoning also applies to the total cost).

However, the consumer's rational behaviour implies adequate information. To this end, the correct information requires the participation of the authorities, of the government agencies responsible for the consumer protection and the environment protection. These agencies have the authority to demand the distributors and the producers to supply the necessary information and to directly provide information and mass media education services.

During the asset destruction period, the rational behaviour is displayed by looking for possibilities to recycle/reuse parts of the asset and by using the less noxious modalities to destroy the irrecoverable parts. Choosing an asset that involves the lowest costs of use and destruction, thus streamlining the demand, influences, more closely, the producers.

The consumer's behaviour as element of the ecosphere implies ab initio that the consumer should become aware of the fact that he is a receiver of pollution, and of the precariousness of his existence given the major in full fling unbalances.

The studies conducted during the last decades (Kaiser, Wölfing and Fuhrer, 1999; Kaiser, Doka, Hofstetter and Ranney, 2003; Axelrod and Lehman, 1993; Kopnina, 2011; Dunlap, Van Liere, Merting and Jones, 2000), analyze the ecological behaviour from several points of view, trying to find the most efficient steering lines to explain this:

- the approach in terms of attitude and its three components: stimulus (cause), knowledge and intent which would prefigure the behaviour, either separately or

collectively, or approached by sequences. With respect to this approach, we need to underline that, although certain researchers claim that the attitude rests with a certain probability of producing a type of behaviour in a given situation, there are cases when it has no behavioural effectiveness. Moreover, it was found that the changing of the behaviour triggers the changing of the corresponding attitude. Hence, we could infer that imposing a certain behaviour builds a new attitude which, in its turn, strengthens the behaviour. We could conclude that imposing an ecological behaviour by means of norms and coercion would lead to the establishing of an ecological attitude which would consolidate the ecological behaviour and would allow moving up to a new stage in the evolution thereof;

- other approaches, also using the attitude – behaviour relation, are grounded on the theory of reasonable actions, bearing on a planned behaviour, the theory of normative believes or using other criteria, such as concern, and put together the affective behaviour and intentional behaviour;

- the new environment paradigm (NEP) is one of the latest approaches, explicitly revealing

- the unsatisfactory relation between the “ambient attitude” and the ecological behaviour, recognizing at the same time, the innovative capability of humanity.

To sum up this undertaking, we note the following:

- behaviour is adaptable to the given historical and social conditions (stimuli) that circumscribe the needs and objectives thereof;

- behaviour can be altered by educational and informational formative processes;

- a multitude of factors work on behaviour, factors that amplifies one another:

- social – cultural factors: family, social status, social class, referential groups, affiliation groups, culture, education;

- psychological factors: perception, motivation, learning, attitudes, convictions;

- personal factors: age, gender, profession, life style, personality;

- economic factors – consumer’s income and personal wealth are essential factors with respect to the taking up of a certain behaviour and, especially, of the ecological behaviour.

Figure no. 3 graphically presents the media that influence the consumer’s ecological behaviour: family, social group, society, the interrelation system between these and the individual with the following observations:

- the closer the environment is to the individual, the stronger the influence is, and it becomes rather a persuasive than a coercive type, while the freedom in complying with the normative believes is smaller;

- the further the environment is, the more the influence becomes a norms, coercions like influence rather than a persuasion and free consent kind of influence, however, the possibility to deviate from the standards is greater due to the impossibility or the ineffectiveness of control.



These assertions are useful for ecological behaviour formative programs as well as for implementing the environment policies.

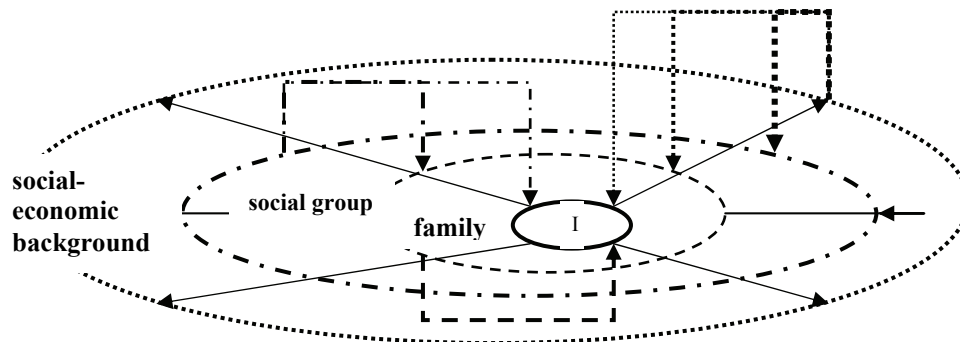


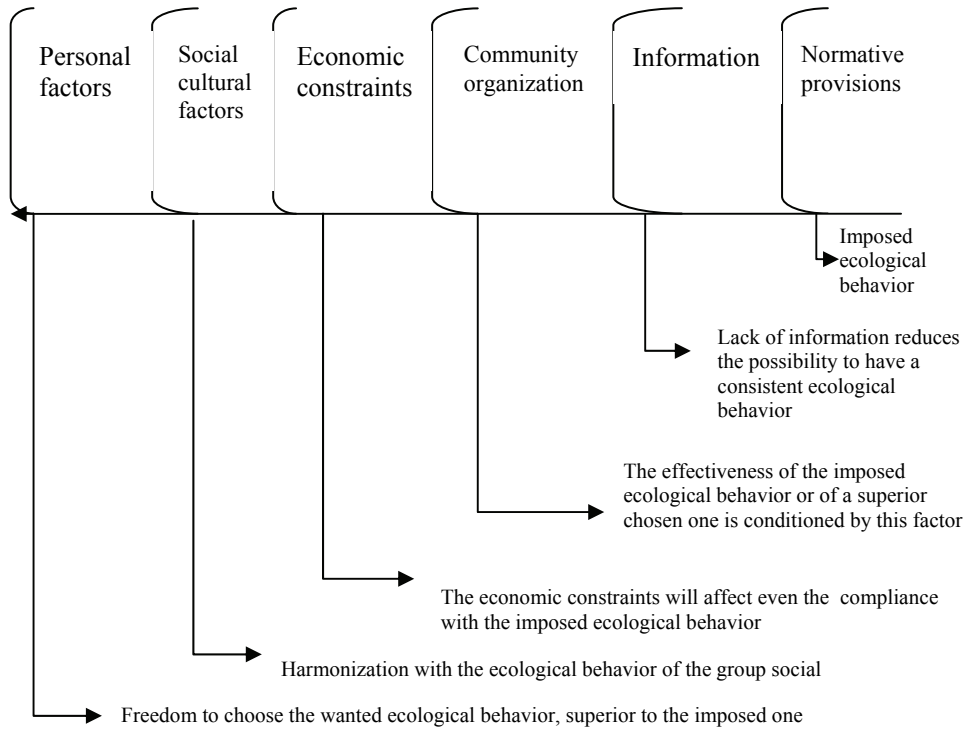
Figure no. 3: Interrelation system of factors influencing the consumer's ecological behaviour

#### 4. Determinants of the ecological behaviour of the consumer. Representation of behavioural typology

The ecological behaviour in relation to oneself is subject to a system of conditionalities. Showing on an axis the constraints in which the consumer needs to adopt an ecological behaviour, we notice that the behavioural freedom hereof is restricted by exogenous and endogenous variables (figure no. 4):

The consumer's life standard is of great importance in adopting an ecological behaviour in relation to oneself. Regarding the relationship between behaviour and living standards, we mention the 6 axioms formulated by Gerhard Scherhom (Stanciu, 1993):

- the axiom of preferences – which imposes a prioritization of the multiple needs of the consumer within the available resources;
- the axiom of obligation – which imposes a behaviour corresponding to one's lifestyle or to the lifestyle of the affiliation group;
- the axiom of integration – which imposes a behaviour corresponding to the family and to the affiliation group;
- the axiom of the level of aspirations – which explains the continuous changes in the behaviour of a consumer depending on the changing of his aspirations, of the aspirations of family or of the affiliation group;
- the axiom of behaviour plasticity – which reflects the bi-univocal flexibility of the needs with own resources of fulfilling these needs, both undergoing a continuous movement;
- the axiom of standardization – which imposes the harmonization of the behaviour with the values and the standards of the affiliation and reference group.



**Figure no. 4: Conditionings of ecological behaviour**

The axiomatic system elaborated by Gerhard Scherhom allows us to understand the behavioural diversity under identical conditions and could represent the grounds of the ecological behaviour forming policies.

Marking out the conditionings of consumer's ecological behaviour can be used to show effective behaviour types in a certain combination of factors. To this end, consumer's ecological behaviour was regarded as a variable determined by three groups of factors, in a synthesizing projection of the main factors previously detected, featured on the three coordinates of a diagram (limited to the representation possibilities), as follows:

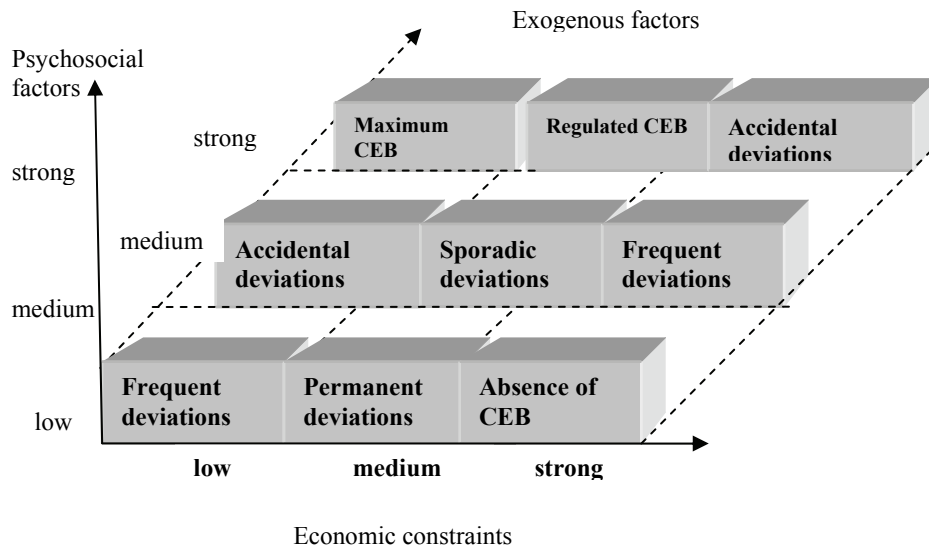
- psychosocial factors – that include social factors (family, group, statute), psychological factors (perception, motivation, learning, attitudes, believes);
- exogenous factors (normative framework, community organization, information);
- economic factors (namely constraints).

These factors were given various manifestation intensities in the consumer's environment: low, medium and strong.

Figure no. 5 shows several types of consumer ecological behaviours (CEB), depending on the combination of factors and on the intensity thereof:

- maximum CEB – behaviour that excludes any form of wastage of resources and pollution;
- regulated CEB – behaviour within the limits imposed by the normative framework;
- accidental deviations – behaviour that is possible and exceeds the legal requirements but has random deviations in case of strong economic constraints or in case of medium intensities of the psychosocial and exogenous factors; for this type of behaviour there are useful persuasive measures, to support and maintain the ecological infrastructure at the appropriate level;
- sporadic deviations – behaviour in a regulated framework, from which deviations occur from time to time; in this case, additional to support measures, the appropriate information and a better community organization is necessary;
- frequent deviations – behaviour that usually deviates from the regulated level; this type of behaviour is based on inadequate attitudes towards the environment, under the conditions of poor community economic conditions infrastructure, it generates repeated violations; the appropriate measures are both at the level of exogenous factors, by requiring to the local officials the achievement of the appropriate ecological community infrastructure and educational actions as well as sanctions;
- permanent deviations – behaviour with continuous deviations from the legal and ethical standards; on the background of extremely diminished or absent pro-ecological attitudes, of deficiencies in community organization and average economic constraints, there are permanent deviations from the rules, imposing corrective measures on local responsible persons and sanctions for those who commit them;
- absence of CEB – behaviour that wastes and pollutes exceeding any limit of the legal and ethical standards; the imperative measures are placed on the locally responsible persons and aims at achieving the environmental infrastructure, educational actions, support in approaching and maintaining the ecological behaviour, and only subsequently, the implementation of sanctions.

This approach enables the systematization of the environmental analyses of the consumer on the three major vectors for determining behavioural typologies, the analytical examination of the factors integrated in each coordinate and the settlement of the effective causes to intervene upon, as well as the settlement of the opportunity of a priori estimation of the prevailing behaviour typology in a particular community.



**Figure no. 5: Three-dimensional representation of various types of ecological behaviours of consumers**

**Conclusions**

The actual ecological behaviour is, in the dynamics of its synergistic, an important goal in achieving the objective of sustainable development of the humanity. The determinants of the ecological behaviour detected are structured in this approach on three levels of interest: exogenous factors (the legislative, community organization, informing), psychosocial factors and economic factors. Adopting an ecological behaviour is in a holistical relationship with the characteristics of the environment that includes the consumer, the organization of the entire society, as the local communities having an undeniable role in the construction, encouraging or inhibiting this dynamic, but not always evolutionary process. As the result of the action of psychosocial factors that are specific to each human being, the assumption of an ecological behaviour enforces a major subjective side, which individualizes the responses to external alike stimuli. The configuration of external and psychosocial determinants allows the organizing of behavioural typologies under economic constraints. The commitment to an ecological behaviour of maximum tightness at consumer level materializes in adequate measures for the situation versus the ideal of stopping any pollution, with exemplificative and formative significances at the affiliation group level and at society level, forming into opinion trendsetters in favour of the ecosphere's homeostasis.

**References**

- Arpinte, D., Scoican, N.A., Theotokatos, H. and Koumalatsou, E., 2008. *Economia socială în Europa*. București: Editura Expert.
- Axelrod, L.J. and Lehman, D.R., 1993. Responding to environmental concern: what factors guide individual action?. *Journal of Environmental Psychology*, Iss. 13, pp. 149-159.
- Cătoișu, I. and Teodorescu, N., 2005. *Comportamentul cumpărătorului*. București: Editura Uranus.
- Commoner, B., 1980. *Cercul care se închide*. București: Editura Politică.
- Dinu, E. and Curea, C., 2009. Locul și rolul indicatorilor de sustenabilitate în procesul de tranziție către un model de dezvoltare durabilă. *Economie teoretică și aplicată*, Supliment, pp.20-27.
- Dinu, V., 2008. The Ethical Dimension of Business. *Amfiteatru Economic*, X(23), pp.7-8.
- Kaiser, G.F., Wolfing, S. and Fuhrer, U., 1999. Environmental Attitude and Ecological Behaviour, *Journal of Environment Psychology*, [online] Available at: <<http://www.ideallibrary.com>> [Accessed 1 September 2011].
- Kaiser, G.F., Doka, G., Hofstetter, P. and Ranney, M.A., 2003. Ecological behaviour and its environmental consequences: a life cycle assessment of a self-report measure, *Journal of Environment Psychology*, [online] Available at: <[http://www.elsevier.com/wps/find/homepage.cws\\_home](http://www.elsevier.com/wps/find/homepage.cws_home)> [Accessed 10 September 2011].
- Goleman, D., 2009. *Inteligența ecologică*. București: Editura Curtea Veche.
- Lopez, A.G. and Cuervo-Arango, M.A., 2003. Relationship among values, beliefs, norms and ecological behaviour, *Psicothema*, [online] Available at: <<http://www.scribd.com/doc/41927400/Relationship-Among-Values-Beliefs-Norms-and-Ecological-Behaviour>> [Accessed 12 September 2011].
- Marder, E., 2008. *Comportamentul cumpărătorului*. București: Editura Teora.
- Petcu, M., 2009. *Analiza economico-financiară a întreprinderii*. București: Editura Economică.
- Petre, M. and Petre, V., 2009. *Dicționar explicativ de ecologie*. București: CD Press.
- Vladimir, R., Florian, G. and Vasile, C., 2008. *Ghidul evaluatorului și auditorului de mediu*. București: Editura Economică.
- Vladimir, R., Bran, F. and Florian, G., 2004. *Elemente de economie și managementul mediului*. București: Editura Economică.
- Soroceanu, V., 2010. *Creșterea economică și mediul natural*. București: Editura Economică.
- Stanciu, S., 1993. *Marketing*. București: Universitatea București.