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Integrated Environmental Quality Management as a Function of the Adopted Concept of Development

Franciszek Piontek

WSB University, Dąbrowa Górnicza, Poland

corresponding author's e-mail: f_piontek@wp.pl

1. Introduction

Environmental quality management is a complex category: management + environmental quality. Quality is a set of positive and negative attributes, which characterize the environment. By using the environment, man can change it to a certain extent, and by managing its quality, he can regenerate this quality. The question is how to manage quality to ensure positive effects from human and environmental points of view. Environmental quality management is a component of every concept of development. Depending on the adopted concept of development, its priorities (goals) and implementation tools can be and are highly diverse, and even opposing or separate. Such separation is determined by the separation of the concepts of development.

Two subsets of the concept of development can be distinguished:

1. based on sustainability processes (subset 1),
2. based on unsustainability processes (cf. point 1 in the text, and in a broad scope, in the work Piontek & Piontek, 2016, p. 39 et seq.; subset 2).

At this stage, in environmental quality management such priorities (goals) are adopted that are appropriate for concepts based on sustainability, and management tools (institutional solutions) appropriate for concepts based on unsustainability processes are used to implement them. It is an attempt to integrate (eliminate) separation resulting from the separation of the alternative concepts of development. This is confirmed by the analysis of the Declaration of the United Nations Conferences in Monterrey (2002) and Johannesburg (Piontek 2002, Piontek 2017, pp. 192-198).

Initiatives taken in environmental quality management in Poland also justify the need to discuss environmental quality management in terms of the promoted and functioning concepts of development.

The purpose of the paper is:

- to analyze and assess assumptions that determine the functioning of the category of environmental quality management,
- to present criteria and assumptions for integrated environmental quality management.

A research hypothesis is as follows: Effectiveness and efficiency in environmental quality management:

- is determined by the separation of the concepts of development,
- integrated environmental quality management requires:
  - acknowledging that environmental quality is part of the category of the quality of life,
  - limiting the functioning of the deregulation paradigm,
  - limiting the functioning of the free market paradigm,
  - applying the right institutional solutions and decision-making will.

The following methods were used in the discussion:

- descriptive and critical analysis,
- a deduction method,
- a coherence method.

The purpose and hypothesis determine the structure of the paper:

1) The alternative concepts of development and their assumptions for environmental quality management,
2) Environmental quality management in relation to the integration and separation of the alternative concepts of development,
3) Assumptions for environmental quality management and their effects in real terms,
4) Criteria for the integrated implementation of the concept of development and management for improving environmental quality in real terms.

In the available literature, the issue (a formal object) has not been raised. Partial studies address the issue in terms of effects (an end-of-pipe effect – an environmental protection concept). In addition to the scientific literature, journalistic publications have been indicated. They shape the virtual and real environment (paradigms and institutional solutions, decision-making will, environmental quality management and effects in real terms).

2. The alternative concepts of development and their assumptions for environmental quality management

In synthetic terms, the attributes that diversify the highlighted concepts of development are as follows:

- The basis for the concept based on sustainability (subset 1) is the rules of universal procedures, inscribed in the nature of human capital and to a certain extent, they determine its functioning, and the basis for concepts based on unsustainability (2) – institutionally formulated paradigms, which are relative,
- An attitude to different types of capital: taking into account three basic types of capital: economic, human and natural, with the primacy of human capital (1), and in the subset (2) – focusing on one superior, for example economic capital; other types of capital are only production factors,
- The growth process is treated as a component of development, like the management of natural capital in the subset (1); in (2), growth is an independent category, the result of which may be development, but there may also be inequalities in social and natural spheres,
- Shaping relationality (the structural order) is different: in subset (1) – one type of capital cannot develop or increase at the expense of others (cf. the principle of sustainable development, Article 5 of the Constitution of the Republic of Poland), and in the subset (2) – it is possible (free market).

Differentiation is manifested in relation to environmental quality management: in the subset (1), the ability of the environment to renew its quality should be preserved and used; in the subset (2), environmental quality management should be subordinated to the requirements of the free market and the use of institutional, technological and technological solutions

Sustainable development is a component of the first subset (1), whereas the process of globalization is a component of subset (2) (cf. Piontek & Piontek 2016, p. 37 et seq., Piontek & Piontek 2017, p. 35 et seq.).

The two concepts distinguished for the purposes of analysis are explained by numerous definitions (Piontek 2002, pp. 16-26, Piontek & Piontek 2016, p. 48).

The author's definition of sustainable development is as follows: *it is the process of transformation, changes, transition to states or more perfect forms, subordinated to human capital* (which serves man) *and satisfying the criteria articulated by the rules of universal procedures* (norms of the Constitution of the World, Piontek & Piontek 2019). They are part of the achievements of civilization, and to a certain extent, they are articulated by national constitutions.

Environmental quality management as a component of the quality of life is a component of the concept of sustainable development.

The definition which shows the essence of the process of globalization is *the river of free capital* (loans; Martin Schumann 1999, p. 38-41). This definition is specified by S. Solomon: *a stream of stateless (private) money* (Solomon 2000, p. 16). Annexes to the loans are adjustment programs: they shape the economic structure of the borrower, and sometimes the request for specific changes in environmental quality management is used to make changes in the economic and social structures of borrowers. To a certain extent, an example can be the demand to ensure sales (demand) for gas or other energy in significant quantities. This statement does not exclude gas import practice, etc.

Such programs, annexes, are subject to financial engineering. Their compliance with the constitution of a given country is not examined. However, it can be important for ensuring the sovereignty of the country's economy in the long term.

The comparison of both concepts requires a reference to the foundation of the functioning of the world. It is *the principle of diversity* (dualism, pluralism), which accepts *the substance diversity of beings*. It is confirmed by the achievements of civilization: the Bible (Gen. 11.1-9), Koran (5/48), research in the world of nature (identified biodiversity), and research in the field of medicine (J. Eccles – Nobel 1963).

According to *the principle of diversity*, the concept of sustainable development promotes the primacy of human capital at the expense of other types of capital. It is a concept "inscribed" in the nature of the World and defining its functioning, in accordance with *the principle of diversity.*

The principle of homogeneity (materialistic and spiritualistic monism) is a denial of *the principle of diversity* (antithesis). This principle is not "inscribed" in the nature of the functioning of entities. Both materialistic and spiritualistic monism is a purely institutional "product" (an intellectual being). The concept of development, which is a process of globalization (based on the principle of homogeneity -economic monism), is also exclusively an institutional "product".

The different nature of these concepts – natural in the subset (1) and institutional in the subset (2) – determines that environmental quality management in the process of globalization process can be (and is) subordinated to economic monism and other institutionally formulated paradigms, in particular:

- a deregulation paradigm,
- a free market paradigm,
- it is possible to change the subject scope of the category of environmental quality management (natural and virtual environments),
- search for product excellence in technology – based environmental management,
- industrial efficiency in agriculture,
- diversified treatment of environmental components such as land, air, and noise,
- the primacy of environmental quality over the quality of life.

The paradigms determine the separation of assumptions in environmental quality management. It is necessary to make attempts to integrate these separations, which is generated by the different nature of both concepts, to effectively and efficiently manage environmental quality.

3. Environmental quality management in relation to the integration and separation of the alternative concepts of development

The purpose of point 2 is to indicate the theoretical foundations for the diversification of the concepts and methods of environmental quality management in the implementation of the process of globalization and sustainable development in practice.

The need for such reflection is justified by the following:

- A discipline of management emerged from the field of science: economics,
- In the early periods, economics was based on the laws of physics ("hard" laws), and at the same time referred to natural law (a component of the rules of universal procedures) (Smith 1989, Blaug 2000, p. 78). Economics had a normative (evaluative) character,
- Economics became a discipline in the current classification of science. It also gradually lost its normative character and became positive economics describing economic phenomena,
- The modern classifications of science do not include logic, epistemology and the methodology of science, either and philosophy (history of philosophy) is classified as a positive science. Management as a discipline has no relation to the theoretical foundations in economics or philosophy. Environmental quality management requires the identification of theoretical assumptions,
- The accepted classification of management types distinguishes several subsets:
  - In terms of functions performed:
    - ✓ management understood broadly (*sensu largo*): management, administration and public management include the functions of planning, organizing, motivating and controlling,
    - ✓ systemic management – processes occurring in systems (companies) and in the relationship to the environment, which ensure the efficient functioning of systems (processes),
  - as a set of procedures:
    - ➢ it can be a component of institutional solutions (building an organization and defining procedures or regulations for its functioning),
    - ➢ it can be classified as technology (technologies are procedures; Ritzer 1999, pp. 174-178),

– As a concept for the strategy of the organization (enterprises):
  - Benchmarking – equalling the highest achievers in a given, also environmental field, (Zimniewicz 1999, p. 36),
  - Outsorcing – a new look at the functioning of supply; it also includes service activities (also outsourcing of harmful production to other companies and countries (Zimniewicz 1999, p. 48).

The types (concepts and methods) of management do not exhaust the components of the distinguished subsets. Marketing is also a subset of management. In its extreme form, it may involve managing people's consciousness and stimulating their ecological and anti-ecological choices.

For example, the distinguished types (concepts and methods) of management can be used in environmental quality management: in the process of globalization and sustainable development. The problem, however, is that they were built on the basis of broadly understood economic capital and the free market paradigm. They include other types of capital (human and natural), but define their functioning within the free market. The result may be the primacy of the quality of the environment in relation to the quality of life.

The distinguished types (concepts and methods) of management are primarily focused on increasing economic capital: maximizing profit, reducing costs, searching for new markets, and improving operational efficiency.

Their use in environmental quality management may be justified, but requires:

- limiting the separation of the concepts of development (the process of globalization and sustainable development; see point 1),
- determining the acceptable range of their application. Institutional and technological solutions cannot exclude the natural ability of the environment to renew its quality (and generate unnecessary costs),
- identifying assumptions that are important for environmental quality management, institutionally (intellectually) formulated based on the paradigm of the primacy of the process of globalization over sustainable development. The adopted and unverified assumptions subordinate natural capital to economic capital in environmental quality management.

4. Assumptions for environmental quality management and their effects in real terms

The implementation of the process of globalization and sustainable development as separate concepts (cf. point 1) in practice requires different (separate) assumptions for management in general, including environmental quality

management. The question is: What enables broadly understood freedom in the formulation of assumptions and in the choice of concepts and methods of environmental quality management?

In our opinion, it is necessary to pay attention to the civilization code, which is the principle of contradiction:

$$\text{YES} \neq \text{NO}$$

It determines the foundations of civilization: truth ≠ false; good ≠ evil; and beauty subordinated to human tastes should serve truth and goodness.

The Group of Lisbon mentions *deregulation* as one of the principles of the process of globalization (G.L. 1996, pp. 65-67). This paradigm consists of breaking the civilization code. In the language of logic, it is written as follows:

$$\text{YES} = \text{NO} = \text{CAN BE}$$

The broken civilization code is the theoretical foundation for accepting other institutionally (intellectually) formulated assumptions. It is not limited to the process of globalization, but it covers civilization. In environmental quality management, it allows for the limitation of procedures for evaluating and integrating the formulation of priorities regarding environmental quality.

The following are the examples of the effects of separation in environmental quality management:

- In the field of changing the subject scope of the human life environment:
  - Postulating the improvement of the natural environment (or its component) while neglecting undertakings aimed to protect the virtual environment
  - Using the virtual environment to shape and motivate human choices in order to limit public activities to comply with Art. 74 and 76 of the Constitution of the Republic of Poland (health, healthy food production, improving the quality of life) while ensuring the defense of the interests of specific economic endogenous and exogenous institutions,
  - Promoting the priority of animal protection while not mentioning their death to maximize the supply of meat production. The scale of this phenomenon is illustrated by Ph. Lemberg in the book entitled *Dead Zone Where the Wild Thing Were*: [...] every year the amount of meat corresponding to the weight of twelve billion farm animals is disposed of [...] (quoted after Hołownia 2018, p. 29). In whose interest?
  - In the field of diversified treatment of the natural environment:
    - Justified motivation to protect the quality of air, while not taking action on noise protection and postulating dynamic space development (cf. Seym draft acts; Piontek 2013a, pp. 7-26; Piontek 2013b, p. 63 et seq.),

  - Practice regarding consent to the import of waste, which is related to its retention, storage, contamination of land, as well as its fires and the degradation of air quality,
- Differences related to subordinating the quality of life to the requirements (paradigm) of the free market:
  - Food products and their relation to health prevention, higher prices of so-called organic products (cf. Article 68 (1) of the Constitution of the Republic of Poland),
  - Medicine and pharmacy on the free market (shortened trial period, replacement products). This is justified by the paradigm: *wealth is not gained today by improving what is known (...) but by introducing product and marketing innovations* (statement by K. Kelly, quoted by Sobczak 2019). Hence, many products are tested by the patient.

The examples of separation in environmental quality management are available in the media and generally well-known. They do not require additional confirmatory research.

5. Criteria for the integrated implementation of the concept of development and management for improving environmental quality in real terms

An attempt is being made to formulate criteria for alternative concepts and management:

- On the side of unsustainability-based concepts (including the process of globalization):
  - Recognizing environmental quality as a component of the quality of life,
  - Accepting the verifying functions of the rules of universal procedures (including the principle of contradiction YES ≠ NO) in creating institutional (organizations, procedures) and technological solutions for environmental quality management. The specific rules of universal procedures are articulated by national constitutions, including the Constitution of the Republic of Poland,
  - Control of technologies is demanded by many authors, for example A. Toffler in his book "Future Shock" (Toffler 1970). An example of a technology that subordinates human dignity to environmental quality management is the technology developed by the Swedish scientist S. Wugh-Masakk. (Walat 2002, Polityka No. 28) and technology offered by Life Gem (Domańska 2002, Wprost),

  - Limiting the functioning of the deregulation paradigm (breaking the civilization code), enabling, to a large extent, the replacement of the rules of universal procedures with unverified institutional and technological solutions,
  - In environmental quality management, promoting such types of management that are open to the rules of universal procedures and the criterion of improving the quality of life and the environmental quality,
  - Limiting the functioning of the free market paradigm and observing the structural order in the market – environment relationship (also the technologies – environment relationship),
- On the side of the concepts of development based on sustainability processes:
  - The use of such solutions from the process of globalization in environmental quality management that are "open" to the verifying function of the rules of universal procedures (also those included in the Constitution of the Republic of Poland),
  - The use of such technical-technological and institutional solutions (organizations, projects developed under unsustainability-based concepts, law) that contribute to improving the quality of life and environmental quality.
- On the side of management:
  - Knowledge of the achievements of concepts based on sustainability processes,
  - Knowledge of the achievements of concepts based on unsustainability processes,
  - Knowledge of the rules of universal procedures (including rules articulated by the Constitution of the Republic of Poland),
  - An ability to evaluate and the decision-making will.

6. Conclusion

The reflections presented in the paper allow for the formulation of a conclusion in synthetic terms: Integrated environmental quality management requires:

- The verification of institutional solutions functioning between the alternative concepts of development and between the concepts of management (a necessary condition),
- The decision-making will which accepts the verification, its assumptions and criteria (verification criteria have been presented in the text) – a sufficient condition,
- Limitations of the *consent* paradigm, based on the deregulation paradigm (breaking the civilization code) – a necessary and sufficient condition

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Abstract

The purpose of the paper is:

- to analyze and assess assumptions that determine the functioning of the category of environmental quality management,
- to present criteria and assumptions for integrated environmental quality management.

Hypothesis: Integrated environmental quality management requires:

- a necessary condition – the verification of institutional solutions functioning between the alternative concepts of development and between the concepts of management,
- a sufficient condition – the decision-making will which accepts the verification, its assumptions and criteria presented in the text.

A final conclusion: Limitations of the *consent* paradigm, based on the paradigm of deregulation (breaking the civilization code)

Keywords:
alternative concepts of development, environmental quality management, civilization code, deregulation paradigm

Zintegrowane zarządzanie jakością środowiska – funkcją przyjętej koncepcji rozwoju

Streszczenie

Cel artykułu:

- Analiza i ocena założeń decydujących o funkcjonowaniu kategorii zarządzanie jakością środowiska,
- Wskazanie kryteriów i założeń zintegrowanego zarządzania.

Hipoteza: Zintegrowane zarządzanie jakością środowiska wymaga:

- warunek konieczny: Weryfikacja rozwiązań instytucjonalnych i techniczno-technologicznych funkcjonujących między koncepcjami rozwoju i między koncepcjami a zarządzaniem,
- warunek dostateczny: wola decyzyjna akceptująca weryfikację i jej założenia i kryteria, wskazane w tekście.

Wniosek końcowy: Ograniczenie paradygmatu *przyzwolenie*, opartego na paradygmacie *deregulacja* (łamanie kodu cywilizacji).

Słowa kluczowe:
alternatywne koncepcje rozwoju, zarządzanie jakością środowiska, kod cywilizacji, paradygmat deregulacji