#### **Management of Innovations**

**UDC 502.13** 

I. A. Aleksandrov,
Dr. Hab. (Economics),
L. O. Kravets,
post-graduate student,
Donetsk National University

# ANALYSIS OF THE APPROACH TO MARKET MECHANISM OF ENVIRONMENTAL QUALITY MANAGEMENT

It is evident that ecological system loses its recreation potential due to excessive anthropogenic load. The inhibitory factor is a lack of active economical and ecological mechanisms of nature management and absence of effective means of management of this process. Due to this fact the scientific studies, aimed at improvement of existing and development of new mechanisms of environmental quality management that create perspectives of stable society, become very significant. However creation of market relations in Ukraine requires new theoretical statements and adaptation of the approaches to formation of market mechanism of environment quality management with new paradigm, which is the object of the article.

Theoretical and practical study of this filed is carried out by many domestic scientists: Galushkina T. P. [1], Lukjanihin V. A. [2], Sadekov A. A. [3], Golyana V. A. [4], Balatsky O. F. [5], Veklich O. A. [6], Sinyakevich I. M. [7], Melnik L. G. [8].

For grounding of the approach to environmental quality management it is necessary to determine the complex of paradigmatic, syntagmatic and pragmatic structures and mechanisms, which are the basement of strategic management and compete between each other or in organization of life and human's activity [9]. For today, four the most significant approaches, which made a great contribution to development of the theory and practice of control, are discovered: situational, systematic, process and approach from a respective of determination of different schools [10 p, 58 – 94]. Thus, approaches of different schools to management include the following:

- School of scientific management search of the most efficient use of human and material resources, herewith the mechanistic understanding of a human, it's place in organization and the essence of its activity was the predominant one. The founders of the school consider that they may improve a lot of work operations, aiming at their effective fulfillment, by means of observation, measurement, logics and analysis.
- Classical (administrative) school considers the problems of improvement of organization in general as

opposed to the school of scientific management that studied separate production activities and management as a universal process that consists of several interrelated functions, such as planning and organization.

- School of psychology the essence of the school of humans' relations includes management of interpersonal relationships and use of psychology and sociology .
- Quantitative school of management includes replacement of verbal thoughts and descriptive analysis by models, symbols and quantitative values. The use of quantitative methods allows increasing of the efficiency of management solutions.

At the same time, process approach considers management as a process-series of interrelated continuous acts, known as management functions. Every function represents the process as it also consists of series of interrelated acts.

Systematic approach to the management is based on that fact that any organization is a system consisting of parts, every of which has its own aims, and situational approach in the management is aimed at binding of management methods and solutions with certain situation. For these purposes the situations are studied, systematized and recommendations are developed for every such situation.

However, under the influence of technological development and increasing of the role of labor management and its administration the existing classical approaches are supplemented by adapted approaches, including: administrative, procreative, dynamic, synergetic, integration, marketing, normative, purposeoriented, objective, functional, behavioral and quantitative [11]. Every separate approach doesn't ensure completely methodological characteristics of the study and is not fully adequate for making of effective management decision taking into account development trends of modern markets. That's why it makes sense not to use abovementioned approaches in their pure form but to go by combined approach - systemic and functional, functional and structural, special purpose program and system purpose approach.

The determinations of the essence of

Table 1.

# Characteristics of classical approaches to management

Approaches	Sign
1	2
Functional	The essence is determination of the elements of interaction of different subjects
	or elements and determination of their place and meaning (function).
Dynamic	It includes carrying out of retrospective analysis of objects' behaviors,
	determination of cause-and-effect relation and prediction of the development of
A 1	the object in temporary aspect.
Administrative	It determines the order of management organization; this the form of formal and
Purpose-oriented	bureaucratic management that are realized through orders and directions.
ruipose-orienteu	The system of methods and methodologies that ensure paramagnet orientation of management activity aimed at final results taking into account special and
	economic characteristics.
Behavioral	It is focused on study and interpretation of management process from there
	respective of predominant value of their behavioral characteristics
Quantitative	It ensures analysis of qualitative parameters of management by use of
	quantitative methods and qualimetry methods.
Normative	It determines norms in quality management, recourse intensity and effectiveness
	of the use of resources, special development, protection of environment etc.
Integration	It is aimed at use and strengthening of interrelations between individual
	subsystems and elements of management system;
Reproductive	It is aimed at constant reproduction of production in order to meet market demands.
Objective	It is aimed at reproduction of existing system (object) through execution of additional studies and their implementation in practice.
Synergetic	This approach studies events as self-organizing systems rise and change of which are based on random processes in their critical, unstable states.
Marketing	This method is aimed at consumers' demands, market segmentation, prediction of life cycle of future periods.
Structural	It studies dependence of subjects' behavior taking into account their state, place and role in the structures.
Systematic and	This method is aimed at investigation of the events as a certain systems and
functional	determination of functional relations of elements of the certain system, between systems, their surrounding environment [12].
Structural and	It determines structural elements in systemic objects and specifies their role in
functional	the system. Every element fulfils it own functions that "works" for functions of general system [13].
Special purpose	It includes distinct determination of the aims, formation and execution of the
program	program of acts, aimed at achieving these purposes.
Systemic-	It means scientific determination of system aims, their interrelations, and is
purpose-oriented	represented by creation of effective management systems on the basis of special
	standards and their further certification [14].

abovementioned approaches have multiple characteristics, shown on the table 1.

All abovementioned approaches are observed at company level and are classical in management science that's why they indirectly relate to the problem of formation of market mechanism of environment quality management. So it is recommended to use the approaches of ecological management, including departmental, resource, pool, klasterial, ecosystem approaches (Fig. 1).

Complex approach includes consideration of the objective rules of functional unity, administrative, and

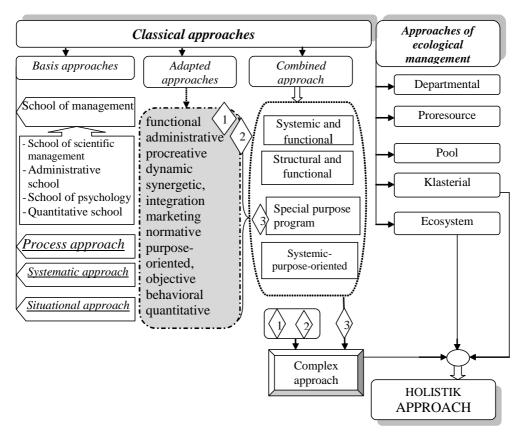


Fig. 1. The approach to market mechanism of environmental quality management

purpose-oriented program approaches in the process of management of economical activity. This is conditioned by the fact that achieving of above-mentioned aims through purpose-oriented program approach is impossible without use of additional administrative means and without centralization of funding function.

Mistakes in placement of the industry, undervaluation of the consequences of economical activity, narrow-departmental approach results in deterioration of the quality of environment. At the same time departmental approach stimulates development of mineral resources, coordinates technological schemes of deposits development, and imposes specific financing of social sphere of life and also measures in the field of environmental protection. It affects the organization characteristics of environmental quality management system [15]. However local governmental bodies continue to deal with ecological problems "in accordance with leftover principle".

Resource approach has historical origin in environmental management and is fixed in corresponding organizational structures. The essence of this approach is represented by the principle that every type of natural resources corresponds to specific form of economic activity with its own management system that directly influences on formation of market mechanisms of environmental quality management system [16].

At the same time pool approach is characterized by the number of ecological, economical and biological factors. Pool approach is an aggregate of methods in geographical and ecological researches, where aqueous runoff plays a role as the main integrating factor [17]. This approach includes territorial aspect into control of nature management but, considering abovementioned, more likely corresponds to the tasks of environmental quality management. However it is focused on one type of natural resources, where balance settlements take place – water resources [20].

Cluster approach considers territorial and productive combinations of different levels and classes. The necessity of this approach is conditioned by economical transformations: increase of the significance of ecological aspect in the development of economy, complex development of territories instead of specialization, and also historical, national and special peculiarities that determine the necessity of complex development of the territory. Cluster approach takes into account the specific of coordination of environmental protection means and regional peculiarities of municipal organizations and is used as a basis for approval of effective and reasonable decisions with respect to environmental quality management [18].

At the same time ecosystem approach may be described as strategy of complex management of land, water and living resources, aimed at their protection and sustainable use on the basis of equity principle. Thus, it allows balancing of three tasks: protection, sustainable use, equity distribution of profits, which are obtained due to use of biological resources[19].

So, analyzed above-mentioned approaches affect the use of market mechanism of environmental quality management. However it is worth to propose new

approach that should include elements of other approaches and consider all aspects of management activity and principles of constant development. This approach is based on complex, cluster and ecosystem approaches and called as "holistic approach" to the formation of market mechanism of environmental quality management (Fig. 2).

In order to achieve the balance and maintain it in a complex system "human – environment" it is necessary to use holistic approaches during formation of market mechanisms of environmental quality management.

### Complex approach

Administrative and politic management through orders, directions and determination of interaction elements of different subjects with aiming on achieving of determined goals.

# Cluster approach

It considers the activity of economic agents as complementary network of institutions interrelated during formation of additional value, that is like a vital activity of the groups of living organisms

## Ecological systems

It means determination of interrelations not only inside natural systems but also integration of their natural relations with social and economical aims and tasks of environmental quality management.

**Holistic approach** is aimed at the organization of management and integration of natural relations with social and economical aims of economic agents as complementary network - through orders, directions that are necessary for increase of environmental quality

Fig. 2. The essence of holistic approach to formation of market mechanism of environmental quality management

#### References

1. Галушкіна Т. П. Екологічний менеджмент та аудит рекреаційних територій (концептуальні засади та організаційні механізми): Монографія / Т. П. Галушкіна – Одеса: Видавництво ТОВ "ІНВАЦ", 2006. – 184 с. 2. Лук'янихін В. О. Екологічний менеджмент в системі управління збалансованим розвитком: Монографія / В. О. Лук'янихін - Суми: ВТД "Універсальна книга", 2002. – 314с. 3. Садеков А. А. Механизмы эколого-экономического управления предприятием: мон. / А. А. Садеков. – Х. Издательский дом "ИНЖЭК", 2004. – 224с. 4. Голян В. А. Інституціонально – економічні механізми регулювання природокористування // Формування ринкових відносин в Україні. – 2006. – № 2. – с. 24 – 29 5. Балацький О. Ф. Екологічний менеджмент: проблеми і перспективи становлення/О.Ф.Балацький // Економіка України. – 2000, № 5. – С. 236 – 242. 6. Веклич О. О. Удосконалення економічних інструментів екологічного управління в Україні / О. О. Веклич // Экономика Украины. – 2008. – № 9. – С. 65 – 74. 7. **Синякевич І. М.** Концепція щодо формування системи інструментів національної екологічної політики [Текст] / І. Синякевич // Экономика Украины. -2002. -№ 7. - C. 70 - 77. 8. Мельник Л. Г.Экономика и качество окружающей природной среды / О. Ф. Балацкий, Л. Г. Мельник, А. Ф. Яковлев. – Л.: Гидрометеоиздат, 1984. – 190 с. 9. Советский энциклопедический словар: / Гл. ред. -А. М. Прохоров; редкол. А. А. Гусев и др. – 4-е – М.: Советская энциклопедия, 1987. – 1600 с. 10. Кнорринг В. И. Теория, практика и искусство управления: Учебник для вузов по специальности "Менеджмент" / Кнорринг В. И. – М.: HOPMA, 2001. – 528 c. 11. **Райз**берг Б. А. Управление економикой / Фатхутдинов Р. А., Райзберг Б. А. – М.: ИНФРА-М, 1999. – 783 с. 12. **Ан**друшків Б. М. Основи менеджменту/ Б. М. Андрушків, О. €. Кузьмін. – Львів, Видавництво "Світ", 2004. – 294 с. 13. Дафт Р. Менеджмент./ Р. Дафт – СПб.: Изд. "Питер", 2000. - 612 с. 14. Дойль П. Менеджмент: стратегия и тактика./ П. Дойль- Спб.: Изд. "Питер", 2003. – 560 с. 15. Разумихин Н. В. Природные ресурсы и их охрана/ Н. В. Разумихин. – Л.: Изд-во Ленингр. гос. ун-та, 1987. – 269 с. 16. Титенберг Т. Экономика природопользования и охрана окружающей среды./ Т. Титенберг – М.: Олма-Пресс, 2001. – 591 с. 17. Кейз Д. Использование водных ресурсов речных бассейнов / Д. Кейз // Доклады Британско-советского семинара по водным ресурсам и сточным водам. - М, 1988. - С. 215 - 232. 18. Біла С. О. Державне регулювання екологізації виробництва в Україні: реалії та перспективи [Текст] / С. О. Біла // Наукові праці Донецького національного технічного університету. - Випуск 33-2 (128). - Донецьк: ДонНТУ, 2008. - С. 19 - 26. - Серія економічна. 19. UNEP/CBD/SBSTTA/11/7 31 August 2005. http:// www.biodiv.org/doc/meetings/sbstta/sbstta-11/official/ sbstta-11-07-ru.doc) 20. Александров І. О. Підходи до реалізації принципів сталого розвитку в охороні транскордонних водних ресурсів / І. О. Александров, О. В. Половян, М. Ю. Тарасова // зб. наук. пр. – К.: ВПЦ "Київський університет", 2008. – Вип. 15. – C. 153 - 163.

# Александров I. О., Кравець О. О. Аналіз підходів до ринкового механізму управління якістю навколишнього середовища

У статті досліджено еволюцію класичних підходів до управління для формування ефективного механізму. Запропоновано класифікацію підходів до управління, а також холоністичний підхід екологічного менеджменту, щодо підтримки екологічної рівноваги шляхом застосування ринкового інструментарію.

*Ключові слова*: підхід, еволюція підходів, класифікація підходів, холоністичний підхід.

# Александров И. А., Кравец Е. О. Анализ подходов к рыночному механизму управления качеством окружающей среды

Исследовано эволюцию классических подходов к управлению для формирования эффективного механизма. Предложена классификация подходов к управлению, а также холонистический подход экологического менеджмента по поводу поддержания экологического равновесия путем применения рыночного инструмента.

*Ключевые слова*: подход, эволюция подходов, классификация подходов, холонистический поход.

# Aleksandrov I. A., Kravets L. O. Analysis of the Approach to Market Mechanism of Environmental Quality Management

Evolution of classical approaches to management was studied in order to form effective mechanism. The classification of approaches to the management as well as holistic approach of ecological management relating to maintenance of ecological balance through use of market instruments was proposed.

*Key words*: the approach, evolution of approaches, classification of approaches, holistic the approach.

Received by the editors: 14.03.2012 and final form 20.11.2012