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DILEMMAS OF ENVIRONMENTAL PROGRAMMING IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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ABSTRACT: The analysis of the existing dilemmas as well as methods of environmental programming indicates clearly that radical change is needed, not only procedural, but above all in institutional management. This change should be linked with the proposed by the Ministry of Regional Development reform, with almost revolutionary development management system change. It should be achieved by adequate strategic planning of the development of Poland. Equally important is to organize the substantive content of the various “green” policies. Cardinal factor causing disorder in the Polish strategic programming is the lack of guidance document, a document which is kind of foundation of the whole edifice of development programming. It should be a strategy for sustainable development of the Poland. Without it, “we are all lonely rudder and sailors”.

KEYWORDS: strategic programming, sustainable development, programming environmental policy

Introduction

Comparative studies of environmental policies for 21 European Union countries and the United States, Mexico and Japan – conducted for the year 1970, 1980, 1990 and 2000 – indicate that Polish environmental policy in the context of the adopted criteria have been the last stragglers in above group (Lieverink et. al., 2009; Millard, 1998). In all analysed periods of time the situation was similar. Environmental policies leaders were (are) the policy of the countries of northern Europe, and the stragglers countries of Central and Southern Europe.

That brings fundamental question on the status and quality of environmental programming in Poland. An attempt to answer this question is outlined below. Paper presents theoretical basis of environmental programming as well as dilemmas of that programming. At the same time it pointed out certain solutions for creating environmental policy in the context of strategic programming and sustainable development.

Theoretical basics of environmental programming

Preventing, removing or limiting damages and destructions of the environment are main goals of environmental programming. History of environmental programming starts in the mid-twentieth century and became the determinant and the basis for the new type of policy, referred to environmental policy. Contaminants are everywhere, from the environment a human subject, through the lithosphere, hydrosphere, atmosphere, and ending up on Earth orbit. Therefore, the scope of environmental policy must apply to the entire biosphere and to many spatial horizons (Maczka et. al., 2016; Cent et. al., 2014).

The development of civilization was a causative factor for enlargement of the environmental policy scope, the following sectors of human activity has been added: industry, energy, transport, agriculture, as well as forestry, tourism, and consumption, needs to be considered while environmental programming. Thus, the human is a subject and object of environmental policy in each of its multiple roles as, for example: consumer, politician, producer, trader, planner, as well as designer.

Due to the scale of the environmental damages, objects of environmental policy have to be and are determined by different entities ranging from individual citizens by non-governmental organizations, businesses, municipalities and cities, regions, states, and ending with the entities transnational. In accordance with the principle of subsidiarity, environmental policy should

be carried out at all levels, from local through national, the European Union, or even global level.

These circumstances constitute the general assumptions of environmental policy, namely activities of those causative factors who are able to make informed and rational sovereign decisions to prevent, remove or limit the resulting environmental damages by appropriate means.

Environmental policy that has begun in the twenty-first century is the weave of the three streams of the case: environmental education, reactive adaptation and active anticipation. The first stream, although it is already implemented by the environmental policy of almost all countries, is and should be the goal of general education policy.

Another element which is reactive adaptation should be understood as the environmental policy in the strict sense. Rule, *prevention is better than cure* also applies to environmental policy. The eighties of the twentieth century, was a period of emerging of new rules, new general guidelines for this policy. Those new rules reinforce proactive anticipation, and usage of over-taking feedback mechanism

Third part which is active anticipation is de facto intertwined with the general policy of the state and with the policy of sustainable development. It can be termed as environmental policy *sensu largo*, as it refers to the whole of human's activity. The last layer is pragmatic anticipation of the environmental impact of the fulfilment of human needs.

Environmental policy should be rationalized process of planning, programming and execution of non-random actions and decisions relating to the environment and socio-economic factors causative of human pressure. It should be implemented systematically and systemically by entities deliberately focused on prevention, but also on remediation and removal of the negative environmental effects, in cultural context. Environmental policy can be conducted only by an entity with a permanent ability to make sovereign and rational decisions and actions.

Society and the economy are contributing factors influencing human pressures on the environment, and thus environmental programming must be highlighted by:

- environment,
- causative factors,

to which entity should apply the policy in two ways:

- anticipatory (preventive, precautionary),
- repair (rehabilitation, revitalization, remediation, renaturalisation; so-called »re« category).

This creates four classes of basic environmental goals:

- behaviour modification of causal factors,

- shaping for improvement of the environment (corrective actions, revitalization, restoration, restoration of degraded, depleted, polluted environment),
- anticipation shaping of the environment (creative shaping of the environment, its spatial structure and function of each subspace),
- anticipating impact of the causal factors (proactive causing, preventive measures, functional, structural and development).

Corrective environmental objectives relate to the existing reality are determined by the tyranny of circumstances. The primary goal is focused on changes, repairing, and improvement of the reality. This approach is only necessary when there are already losses and environmental damages. In contrast to the previous, anticipation environmental goals should be always relate to shaping the environment and socio-economic development through planning and fulfilling the existing paradigms (Sprinz, 2009; Lempert et. al., 2009). The last goal can be also referred as the objectives of sustainable development, as its essence affect (have influence) on socio-economic factors.

Environmental control is not controlling in real time, however, it should be continuous and systematic process, it should be done on periodical bases. In the case of a well-functioning political system generating of environmental policy agenda should be done on cycles base. It means the end of the <n-1> program must be the beginning of the <n> program.

Examples of such solutions are the environmental programs of the European Union, which since 1973, the year the emergence of Community environmental policy, lay down the following programs: I program – 1973–1977 II program – 1977–1983, III program – from 1983 to 1987, IV program – 1987–1992, V program – 1993–2000, VI program – 2002–2013, VII program – 2014–2020.

The rational approach is the programming that corresponds with decision-making process. This process can be described as a multi-phases one, where each phase has multi-steps and requires multiple, interactive improvement. This should take in accordance with the system analysis. This should take in accordance with the system analysis (Findeisen, 1985). In terms of time the life cycle policy is divided into four basic phases (Adriaanse et. alt., 1989):

1. problems identify ,
2. program creation,
3. implementation,
4. verification.

The different phases of the life cycle environmental programming should be characterized and are characterized by diverse political validity. Theories

of the policy and system analysis clearly indicates that the most important phase should be creation the program. Phase of the creation and selection of variants requires a creative activity and a knowledge of the essence of things. Designing of program requires numerous iterations, the revision adopted the proposal, as well as analysis and evaluation of the effectiveness of the proposed solutions. Highly important is the recognition phase of the problem, determine the context, identify objects, which will be affected by the proposed decision.

Both phases of the life cycle can be characterized by a wide field of discrepancies and doubts regarding the proposed ways and methods of problem solving. That happens as searching of the solutions is wide and there is a multiple choice. That was already pointed out by Simon (1981) *here is no chance to find the optimal solution*. Using of appropriate iterative procedures allows generating of satisfactory solutions. That helps to permanently narrowing the field of uncertainty and to identify options for action and decision of the management.

Like the relative importance of the different phases of the life cycle policy, the same should shape the relative size of the resources allocated in a particular phase of the cycle. It should also be noted that the phase control and enforcement should be characterized by a relatively high amount of funds allocated by the control, as only process which is controlled is able to guarantee efficiency and effectiveness. Complementary solution – from the point of view of the entity control – located becoming more widely used, also in Poland, is ceding part of the duties of monitoring and self-control.

Dilemmas

Our interactions with the surrounding environment has two different types. On one hand there are positive aspects of human activities, naturally on other hand there are negative aspects. It means that human activities may cause the contamination, or even degradation of the environment. In these context environmental policies becomes priority not only for this, but for also for future generations. This also applies to Polish environmental policy. At the same time, given the context, which is the adoption of the paradigm of sustainable development, it is observed the process of evolution or even revolution relating to this policy.

Poland, at the end of the second decade of the twenty-first century, environmental programming is a bit substantive, institutional “shaky”, as well as the entire system of strategic programming. The analysis of Polish environmental programming can be included in the form of manifest dilemmas. Some of them are shown below.

Below are presented three articles principles of environmental programming in Poland from the Act of 27 April 2001 Environmental Protection Law. Those articles indicates that the legislator has introduced two separate categories: state *environmental policy* and *environmental protection program*.

Article 14

- “1. On the basis of the current state of the environment, the national environmental policy shall lay down in particular:
- 1) the environmental objectives,
 - 2) the environmental priorities,
 - 3) the types and timetable of actions for environmental protection,
 - 4) the measures indispensable for the achievement of the goals, including legal and economic mechanisms and financial resources.
2. The national environmental policy shall be adopted for four years, with the qualification that the prospective actions envisaged therein shall cover another successive 4 years.

Article 15

1. The national environmental policy shall be adopted by Parliament on request from the Council of Ministers.
2. Having obtained the opinion of the Voivodship Marshalls, the minister responsible for the environment shall draw up the draft national environmental policy.

Article 17

1. In order to implement the national environmental policy, the Voivodship, Powiat and Gmina Boards shall draw up, respectively, the Voivodship, Powiat and Gmina environmental protection programmes, meeting the requirements laid down in Article 14”.

The *environmental protection program* is to be structurally the same as the *national environmental policy*. As well program as the policy should include following elements:

- the environmental objectives,
- the environmental priorities,
- the types and timetable of actions for environmental protection,
- the measures indispensable for the achievement of the goals, including legal and economic mechanisms and financial resources.

Regional and local environmental policy is referred by different term – environmental protection programme. Thus, the following specific distinction between subject and terminology of environmental programming document appearance. For many Polish citizens that can be very confusing. This

creates dilemma how these two types of documents differ in terms of content. Common sense brings to conclusion that those documents should be different, perhaps environmental policy is more broadly than environmental protection program. With the understanding of the essence of the latter term because that refers to corrective action, restoration, or simply protection.

The content of environmental (ecological, environmental protection) strategy (policies, programs) in European countries is in process of continuous evolving. Year 1992 was breaking point. Since then, the program has been enlarged and it refers to multifaceted of sustainable development issues. It becomes a cross-sectoral, integrated and oriented towards sustainable development. On the other hand, there is also a return to strong sectoral program content and engaging above all environmental objectives and issues repair (actions »re« category).

An example of this process is the environmental policy of the European Union (Benson, Jordan, 2010; Janikowski, Krupanek, 2000). The second program has updated and expanded the targets of the first program (predominantly repair). The third programme has already implemented preventive approach. That requires from enterprises to take economic and social responsibility, that helps to avoid the emergence of environmental problems. The situation has changed quite dramatically with the adoption of the fourth action program for the period 1987–1992. The Single European Act, which came into force on 1 July 1987, the Community has acquired a legal legitimacy to the activities in the field of environmental protection. In implementing the fourth program to protect the environment, the European Union (then Community) clearly changed its policy goals, that is, moving from activities aimed at the elimination of the effects of pollution and remediation to prevention.

The fifth program entitled “Towards Sustainability” is the European Community Programme of policy and action in relation to the environment and sustainable development, originally covered the period 1993–1997. It was extended to the year 2000 and the essence of the policy is sustainable development.

During the implementation of the fifth program, the nature of EU action for the protection of the environment has changed quite fundamentally. Since that time EU use a horizontal approach for the first time. Priority areas were indicated as follow: sustainable management of natural resources, integrated combat pollution and waste prevention, reducing the consumption of non-renewable energy, comprehensive measures to improve the environment in urban areas, raising the level of health and public safety, with particular reference to the risks from industry and nuclear installations. The main attention was paid to the five sectors contributing significantly to the environment

and at the same time essential for economic development. Those sectors are: industry, energy, transport, agriculture and tourism.

The sixth action program on the environment is titled *Environment 2010: Our Future, Our Choice*. Adopted for the four priority areas: climate change (greenhouse effect); conservation of nature and biodiversity (increase in protected areas, including marine); care for the environment and health (higher standards) and the economical use of natural resources and effective waste management (recycling). The program introduced five main methods of action: to ensure implementation of existing environmental law; taking into account the needs of environmental protection in all areas of Community policy; work closely with business and consumers to find optimal solutions; provide better and more easily accessible information on the environment to all EU citizens; and develop more conscious – from the point of view of environmental care – approach to the use of the land (Kelemen, 2010).

The priority objectives of the Seventh Framework Programme, among the others underline the need to make the Union a efficient resource user. According to the programme EU should be green and competitive in low-carbon economy as well protection of citizens from environmental pressures and risks to their health and welfare is strongly recommended. One of the key elements of the program is to adapt to climate change, combined with many other environmental aspects, such as soil conservation, sustainable urban environment, sustainable protection of water and the marine environment. The Seventh Framework Programme also includes the vision for the year 2050 when the citizens are to enjoy a good quality of life, taking into account the ecological limits of the planet, as well as the closing the loop – an EU action plan for the circular economy.

The content's dilemma of environmental programming is expanded by the authors of numerous reports and scientific studies, who does not feel the difference and have problems with distinguishing between categories such as environmental policy and sustainable development policy, or treat it as a conjunction. An example would be the following statement. "The main objective of the eco-environment policy is to bring to such a state that provides durability of its use by current and future generations. The realization of the idea of sustainable development can be done by doing the following economic and environmental: (...)" (Sasinowski, 2009, p. 77).

The researches and the works conducted by(former) Ministry of Regional Development confirm institutional and managerial disordered. in particular disorder was identified relating to strategic documents or quasi-strategic. In the two decades after 1989 more than 400 such documents have been prepared. "The review of strategic documents shows, inter alia, that the resulting documents still lacks consistency. It seems that part of sectoral strategies

were developed in isolation from other strategies, although some contained therein issues were common, or of a similar nature. Few documents dealt with long-term perspectives; most focused on the problems of short-term and medium-term, and many of them were general in nature-directional. The documents have been developed in a very different convention, which was associated with the lack of practices and experiences. Many of these documents did not contain specific information on financing, performance indicators, as well as a system for monitoring of operations" (Ocena ..., 2007, p. 5). In the context of consolidated strategy of programming, the following strategic documents were adopted: *Long-term National Development Strategy*, *the Medium-Term National Development Strategy* and *the National Spatial Development Concept*.

The main question in this dilemma is one on the role and place of Environmental Ministry in shaping of environmental programming. The next question and the dilemma is a multi-level coordination and management in relation to a number of isolated from each other horizontal and vertical environmental programs of individual municipalities (*gmina*), counties (*powiat*), provinces (*województwo*) and national environmental policy.

The democratic countries adopts the principle of subsidiarity, which is based on the decisions that are taken at the level closest to the citizen. This was reflected also in the organization of the state-reform in Poland, which resulted in the currently strong subjectivity and autonomy of municipalities, counties and provinces (Kudełko, Suwała, 2003; Mazurski, 2002). On the other hand, it should be stressed emphatically, there are whole classes of environmental problems that require coordinated locally, regionally, continentally or globally. Therefore, the principle of subsidiarity must be closely associated with the scale of environmental problems, and thus with sufficient multi-level coordination of policies (programs) environmental protection (Hełdak, Raszka, 2013; Banas, 2011).

The term's dilemma has been widely discussed and commented by K. Górka (2010). It is *de facto* policy dilemma for an object referred to as environmental policy, as well as the Polish legislator's dilemma. The term ecological policy is indeed peculiar, Polish name of environmental policy. It seems that in the framework of organizing the strategic programming would leave the category (term) ecological and use category unambiguous, namely environmental protection and management.

According to the theory of control, the objective to be significant must include input and output, which affect the desired effects (results). That gives knowledge what kind of resources are necessary to achieve targets. In addition, each policy should be associated with the appropriate executive program in which they are written out details of the funding and the schedule of

material and time, as it was rightly pointed out by J. Famielec (2010). The *National Environmental Policy for 2009–2012 with a view to 2016*, is a document without indicating both the size of funds and their sources. This policy was adopted by the Polish Parliament after the global financial crisis from 2008. In addition, there is still no appropriate executive program, which would contain detail tasks (Brown, Angel, 2000).

Summary

Documents of the Ministry of Regional Development recognize the level of “mediocrity” in Polish strategic programming, including environmental one. It is necessary to finish the generation of documents that do not cause, due to their nature, any change in the existing reality. The process of environmental programming at all levels of government should meet the principles of theory of strategic programming (Janikowski, 1998).

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