Letters to Editor

## The Programming of Environmental Protection and the Programming of Balanced Development in the Examples of Some Selected Districts

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## Abstract

The relationship between the programming of environmental protection and the programming of balanced development on the level of local communities has been shown in this paper.

In the development of both programs two planning formulaes, recommended by UNEP, may be applied, namely - masterplan and development scenarios.

Out of the analysis of some selected districts development programs numerous conclusions, as presented, may be drawn. The most important one states that the programming of environmental protection should not be treated separately, but as a component of a balanced development program.

Keywords: balanced development, masterplan, development scenarios.

In the last decade, a lot of districts in Poland have begun to elaborate programs connected with environmental protection and balanced development (ecodevelopment). For example, environmental protection programs have already been developed in Bytom, Radom and Elk. Ecodevelopment programs have also been created for The Federation of Szelmet district (Suwalk county), Krynki and Piecki districts (Bialystok county), the town of Rybnik, the town and district of Ruda Sla.ska (Katowice county), for Pilsko county, for towns and districts in Jeleniogorskie county, and most recently for the capital city of Warsaw [12], and for the town and district of Jastrze.bie Zdroj [1, 13]. There is no doubt that this tendency represents a step toward the accomplishment of Agenda 21, and we should underline that this tendency has been accepted and has become a general principle in the amended Law concerning environmental protection and formation from 31.01.1980 (Dz.U. 1997, Nr 133, pos 885). Article 90, point 3 of this law says: "The Ministry of Environmental Protection, Natural Resources and Forestry, voivodes and district councils elaborate programs of balanced development and environmental protection resulting from the country's ecological policy."

There are some facts that create the background for a deeper analysis of the programming of environmental protection and balanced development:

- this kind of programming is not the strong side of our districts. We can see this from numerous examples of ex perts hired from abroad in order to elaborate the program mes of environmental protection and balanced develop ment.

- It is quite characteristic, that in the amended Law for Environmental Protection and Formation (e.g. articles 11 and 90), the legislature differentiates environmental protec tion from balanced development. This is why the question about the effects created by the differentiation concerning programming processes is quite logical. What is the final relation between environmental protection programming for specific elements (air, water and earth waste) and the districts' balanced development programmes?

- People have made several trials to include ecology in economy throughout history. Those trials were carried out by physiocrats and representatives of classical economy, neoclassical economy and Keynesian economy on one hand. On the other hand, the Marxist thesis that value is created only by work and that earth, air, and water are free goods, leads to the omission of the environmental problem in the process of administration. At this stage, the basic tool that makes possible the registration of ecology in the administration process is represented by the well defined social and political consensus, which is reflected in conference declarations, validated conventions, etc. The expression of such a consensus from the local point of view are elaborate programs of environmental protection and balanced development (i.e. ecodevelopment) included. That is why it is a normal thing to ask to what extent those programmes fulfill the conditions of registration of ecology in administrative processes or (to express it in a different way) in what domain those processes integrate economic social and ecological processes and ensure a balanced development.

The following assumptions have been accepted in the matters presented below:

- the natural environment can be dealt with from two points of view (in socioeconomic processes): sectorial and integral. There is a basic and qualitative difference between the integral and the sectorial treatment of environmental protection.

The sectorial treatment of the natural environment is limited only to taking into account its infrastructural and natural elements, and it has its basis in the theory of economic growth. The integral treatment instead defines the natural environment as a component of balanced development and it is a component of its strategy.

- In the literature dedicated to balanced development (ecodevelopment), two approaches are presented:

- natural, which is very near to the sectorial treatment of the natural environment, and

- complex, which underlines the balanced strategy of development from an economic, ecological and social point of view. Ecodevelopment is interpreted exactly from this point of view in this article. It is defined as the ensurance of a permanent improvement of life quality of contempora ry and future generations, and this is related to the constant and integral connection between ecology and improvement of man's quality of life and environment [9]. That is the way ecodevelopment is understood by the amended Law of Environmental Protection and Formation [9]. It means that ecodevelopment should have economic, ecological, social, material, moral, spiritual and permanent dimensions [3, 4, 9]. Two types of tools (or two planning formulas) can be used in programming environmental protection and balan ced development, namely masterplans and development scenarios

Two environmental protection programmes have been under research:

- The National Programme of Activities for Protecting the Natural Environment in Radom and Elk [2], and

- environmental protection masterplan in Bytom [5],

and two programmes of balanced development:

- the socio-economic masterplan for Rybnik [6], and ecodevelopment scenario on the example of Piecki district in the functional area Green Lungs of Poland (ZPP) [7].

The results of the above mentioned four programmes are presented in this article.

The selection of these programmes was the result of their accessibility. One has to admit that from the angle of the district they stand for, a certain representativeness emanates. The titles of the quoted works show that in order to plan environmental protection and balanced development in chosen local systems, both planning forms were used, that is masterplans and development scenarios.

Apart from the mentioned planning forms, the developing strategies are being elaborated [1, 12, 13]. It should be underlined that the development strategy is not always a programme of balanced development. That is the case of "The Strategy of Development of Warsaw up to the Year 2010". The direction of this strategy, which we do not evaluate in this article is, above all, the creation of an European metropolis, even a universal one. This strategy is not equal to balanced developments. It treats environmental protection in rather a sectorial way. But if we take into account development, it is said that "socioeconomic development is going to differ for many years from the idea of balanced development" ([12], vol II p 136).

Two ideas appear as a result of the above:

- the obligation to elaborate a balanced development program was given to districts by the amended Law for Environmental Protection and Formation, article 90, point 3,

- the strategy of metropolis development is connected with the formation of determined structures and ecodevelop ment. It is normal to ask how much the social cost of the necessary changes will be after some years.

It is not our aim to discuss in detail those articles .There are papers tackling the problem [8, 10].

Analysis of the mentioned programs allows us to draw the following conclusions:

- both planning formulas, i.e. masterplan and develop ment scenario, fulfill the demands that UNEP makes the balanced development programme, so they include:

- natural valorization,

- demographic valorization,

- estimate of environmental endangerment,

- scenario of district ecodevelopment,

- directions of development and the specifications of detailed activities,

- conditions, means and tools of accomplished ecodeve lopment in the districts.

Similar requirements, indispensable for ecodevelopment programs, were formulated a bit differently and in an enlarged field in paper [9], i.e.:

- the economic, ecological and social valorization of the local systems in which the ecodevelopment is to take place,

- the choice of priorities (production-consumption, eco logical material and nonmaterial) taking into account eco nomic, ecological and social criteria,

- the balance-sheet of gains and losses resulting from the choice of given priorities, meaning the usage of sozoeconomic calculum,

- the creation of conditions, the specifications of finan cial sources, and the tools that ensure the accomplishment of settled priorities, and compliance with economic, ecolo gical and social criteria of profitability [9].

The usage of sozoeconomic calculum, which makes possible the evaluation of gains and losses compared to the choice of selected priorities in a direct way, was recommended by "The Environmental Protection Programme Activities" [11].

Analysis of practical programs for chosen districts leads to the conclusion that the masterplan was used in programming ecoprotection and ecodevelopment in districts that have a complicated socioeconomic and ecological structure. A development scenario was used in districts with a less complicated structure, lying in ecologically clean, non-polluted areas. It seems that the masterplan is a less complicated and laborious formula, which, if means are limited, is very relevant, especially for areas with a more complicated structure than a ZPP functional area.

The priorities to be met which were settled as a result of the elaboration of the balanced development masterplan can be compared quite easily (of course a bit simplified) to the balanced development scenario. For example: if there are 20 ranked priorities on the list Xi(i=l,2,3....20), the first five priorities at the beginning of the ranking list can represent, for example a pessimistic scenario Xi(i=l,2,3,4,5),15 priori ties-moderate scenario Xi(i=l,2,3....15),and all the priorities together Xi(i=l,2,3....20) - an optimistic scenario (Figure 1).



Fig. 1. Development priorites ranking list and development scenarios.

As a result of the analyzed programs, during balanced development programming (especially at the stage of valorization and diagnosis as well as established priorities) the method of consecutive approximation is used (or society experts (programming team) and so-called "brain-storm" surveys. The method was, in fact, quite modified in practice. In all the analyzed programs prepared for districts, diagnosis of ecological and socio-economic life was treated very widely (according to UNEP recommendation). It was also given the set of accessible information concerning the districts in the programs for Radom and Elk.

In the ecodevelopment programmes that were analyzed, the scenario of chances and threats are interpreted in different ways. They are supposed to indicate:

- the evaluation of potential limitations of ecological risk (Radom, Elk),

- internal and external impediments in accomplishing the program (Piecki district),

- weak and strong parts of the town (Rybnik).

The generic structure of the established priorities was determined by the specific socio-economic and ecological structure of the given communities. It so happens that the priorities list is identified with the activity plan (Radom, Elk). In the remaining programmes, the priorities and strategies are differentiated from operational activities (Bytom, Rybnik).

In the analyzed programs, different criteria of ranking priorities are used:

- the degree of real ecorisk for the specific kind of degradation of environmental elements (Radom, Elk),

- minimum and maximum cost as well as environmen tal pressure of inhabitants and the quality level of their standard of living (Piecki district),

- accessibility to financial means and improvement of living standards (Bytom).

When priorities were selected, the balance-sheet of gains and losses connected with the choice of a specific priority was not taken into account although it is recommended in "The Activity Program Concerning Environmental Protection" [11]. The elaboration of balanced development masterplan for Rybnik town was the only one that preceeded the realization of the sozoeconomic calculum concerning the functioning of the "Chwalowice" colliery in the proportion district-colliery.

It should be stipulated that the enrichment of the methodology of ecodevelopment programming with the sozoeconomic calculum because it facilitates the elaboration of such a ranking priorities list on which the projects on higher position (on the list) will ensure (directly or not) the financial realization of tasks for later periods.

In the analyzed programs the social potential is quite used, the social conscience (ecological) as a basis for programming and introducing balanced development. The financial cost of program introduction was quite exactly calculated only in the programs for Bytom and Piecki districts.

The obligatory regulations in the domain of tenders led to such situations that in some cases the evaluations of costs concerning specific project tasks were delayed for the time of program realization (Rybnik).

In the analyzed programs the authors express their critical opinion on the theme of legal and economic tools conditioning the introduction of those programs. But all of them underline the need for current usage of the possibility of districts to decide.

The analysis of selected programs of environmental protection (Radom, Elk, Bytom) as well as ecodevelopment (Piecki district, Rybnik and Pilskie counties) confirm the thesis that the introduction of environmental protection is possible only by programming the strategy of balanced development. It is unequivocally stated by the programs for Elk and Bytom, which, however sectorial, are connected to balanced development programs. Yet it does not mean that one should resign from environmental protection programs because the ideas they include should be a component of the priorities ranking list established in the balanced development program. One can say that environmental protection programming and balanced development programming are activities aimed to include ecology in the socioeconomic process of our communities. Both approaches are different and this important difference is of quality and quantity

The sectorial treatment only of the environmental protection programs creates specific threats. For example, in the name of excessively interpreted environmental protection investments in desulphurizing installations can be made, though the level of emission is only 50% of the allowed level or investments in importing energy when there is a surplus of energy in the country and the deficit in foreign trade is considerable. In the analyzed environmental protection programs such lapses were not noticed, but it is worth underlining that they are efficiently eliminated through balanced development programming on a broad basis.

## References

- 1. Analiza strategiczna Miasta Jastrzebie-Zdrój. Raport zbiorczy, Jastrzebie-Zdroj, wrzesien **1997.**
- 2. Biuletyn "Rad-Elko" Krajowego programu działan na rzecz ochrony srodowiska. Instytut na rzecz Ekorozwoju nr 1, 2, 3, 4 i 5.
- 3. JAN PAWEL II. Solicitudo rei socialis, Wroclaw 1995.
- 4. KEATING M. Szczyt Ziemi, Globalny program dzialan, Agenda 21, Warszawa **1995.**
- 5. Masterplan ochrony srodowiska, Bytom Arahem 1995.
- 6. Masterplan zrownowazonego rozwoju Miasta Rybnika. Praca zb. pod red. F. PIONTKA.

- OLENSKA J., PAJDA R., POSKROBKO B. Podstawy wdrazania ekorozwoju w gminie Piecki, ZPP, Bialystok - Krakow 1996.
- 8. PIONTEK B. Programowanie zrownowazonego rozwoju spoleczno-gospodarczego w wybranych ukladach lokalnych, AE, Katowice **1997**, (maszynopis).
- 9. PIONTEK B., PIONTEK F., PIONTEK W. Ekorozwoj i narzedzia jego realizacji, Białystok **1997.**
- 10. PIONTEK F., PIONTEK B. Metodyka opracowania programu ekorozwoju gminy, AE, Katowice **1997**, (maszynopis).
- 11. Program dzialan na rzecz ochrony srodowiska dla Europy Srodkowej i Wschodniej. Skrocona wersja dokumentu przyjetego na Konferencji ministarialnej w Lucernie, Szwajcaria, 28-30 kwietnia **1993.**
- Strategia rozwoju Warszawy do 2010 roku, Etap I: Raport o stanie Warszawy, Warszawa 1997; Etap II: Uwarunkowania, cele strategiczne i operacyjne rozwoju Warszawy oraz zadania realizacyjne, Warszawa, luty 1998.
- Strategia rozwoju wspolnoty (segmentu) Jastrzebsko-Zorskiej. Zrownowazony rozwoj mikroregionow 2010, Jastrzebie Zdroj, Mszana, paidziernik 1996.