

SOCIO-ECONOMIC PROBLEMS DURING NATURA 2000 SITE SELECTION PROCESS

Małgorzata Grodzińska-Jurczak, Mariusz Boćkowski, Joanna Cent,
Agata Pietrzyk-Kaszyńska

Institute of Environmental Sciences, Jagiellonian University
Gronostajowa str. 7, 30-387 Kraków, m.grodzinska-jurczak@uj.edu.pl

Summary. The following paper presents analysis of opinions on Natura 2000 sites delivered by local governments on the Polish Ministry of the Environment request. Studies were performed using qualitative and quantitative analysis of content examining opinions on 151 sites planned to be set in Poland. The key factors affecting objections regarding new protected areas were of economic nature, whereas fluctuations in term of remarks reported and perceived conflicts were related to variables such as administration level of entity, biogeographical type of planned area and its size.

Key words: Natura 2000, nature conservation management, public participation

INTRODUCTION

European Ecological Network – Natura 2000 practically from the very beginning of its introduction raised a lot of controversy in Poland. An intensive work on its implementation, particularly on the analysis of species and habitats which required a careful conservation, were undertaken long before an official accession of Poland to the European Union structures. In order to double opinion on proposed borders of protected sites, the Polish Ministry of the Environment asked local governments of various administration levels, for their judgments [Makomaska and Tworek 2003, Kronenberg and Berger 2010]. Such views were formulated in a written form (based on a formal resolution of local government board) and sent back to the Ministry. Governments did not receive any information afterwards, on whether their comments were in any way worth, and if so, to what extend were they included into a final shape of the Natura 2000 sites in Poland [Cent *et al.* 2010].

The aim of the following paper was to analyze opinions of local governments on the Natura 2000 sites proposed to be set on their municipalities area.

Analysis focused particularly on content of comments itself, mainly those providing information on character and intensity of conflicts potentially aroused between various actors (local governments, communities, stakeholders) and national bodies responsible for introduction of Natura 2000 programme over the country. Conclusions coming out of results of that analysis show a character of interactions between the following levels of administration as well as present relations between owners of lands included into Natura 2000 and type of economic activity they plan to perform.

MATERIALS AND METHODS

Within the following study a detailed content analysis of collective documents, obtained from the Institute of Nature Conservation of Polish Academy of Sciences in Cracow was performed. Documents contained commentaries of local government units on the proposed Natura 2000 sites required by the Ministry in the first phase of the programme introduction in the years 2005 and 2006. The main unit of analysis was a document review of the planned site.

Analysis of the documents began with distinguishing three main categories of responses: positive (understood as the acceptance of the proposal), negative (lack of acceptance), the request to change the boundaries of areas. Subsequently, the key categories of reported problems and potential conflicts with the proposed areas were highlighted. Then, summaries of the results by categories were created and their determinants in the context of socio-economic development were discussed. For this purpose, techniques of qualitative and quantitative content analysis were used. The first, consisting of initial open-coding the text, served the emergence of key variables and a list of codes corresponding with reported problems and conflicts [Mayntz 1985, Miles and Huberman 2000]. Coding was performed using QDA Miner software. The quantitative analysis was performed to compare categories of opinion and conflicts by variables characterizing each case (document review), such as the administrative level of reviewing entity, biogeographical region and the size of the planned site. Correlation (Pearson's test) between the size of the site and the occurrence of negative opinions and proposals to change boundaries were examined. Using the technique of hierarchical cluster analysis, codes coexistence within a single unit was calculated [Mark 1989].

RESULTS NATURE OF REVIEW WITH REFERENCE TO ADMINISTRATIVE LEVEL OF REVIEWING ENTITY

Negative opinions generally outweighed the positive ones. Entities located lower in the administrative hierarchy were more inclined to give an opinion either clearly negative or positive. And so, amongst the municipalities comments, the

evaluative, emotionally saturated assessments, often devoid of any substantive value were encountered. The regional government bodies were confined to the observations of a formal kind. Regional government entities advanced proposals of area expansion most commonly, while the municipalities suggested boundary changes due to the collision of the planned areas with existing or planned business activity.

The nature of review with reference to the area size and membership of a biogeographical region

Just as in general, negative opinions prevailed in both views on the alpine and continental areas, and a significantly higher percentage of negative opinions were expressed in relation to the alpine areas. At the same time, the percentage of requests to changes to the boundaries was lower in relation to the alpine areas. Negative reviews on alpine areas often took the form of categorical opposition, debarring possibility of negotiations.

The relation between size of the area and applications for a change of its borders

A weak correlation between the size of the site and the number of requests for changes to the boundaries was displayed ($r = 0.11$, $p < 0.05$). Hypothesis about potential relationship between the size of the site and the number of negative opinions was not confirmed. Analysis revealed no correlation between the number of negative opinions and the number of requests for a change of borders either.

Main concerns of the local communities with regard to Natura 2000

Qualitative analysis emerged a set of arguments against the creation of protected areas that are in the five thematic groups, namely: (1) a negative impact on economic growth (concerns about investments handicap, i.e. nuisance procedures, extended accomplishment times and increase the costs of investment), (2) conflicts with other plans/strategies/acts (blocking implementation of local development plans, strategies of community development, etc.), (3) lack of scientific basis (questioning the value of nature in the planned areas), (4) existing forms of nature are sufficient, (5) social conflicts (potential for social conflict mainly against the background restriction of the right of ownership, direct financial implications for the residents, including rising unemployment, disillusionment and distrust of local communities to the authorities).

Hierarchical cluster analysis revealed three groups of arguments and comments often concurrent with each other within a single document review: (1) lack of guaranteed compensation, lack of regulation, ignoring the needs of residents, (2) residential construction, the change of the boundaries of the area, conflict with other plans/strategies /legislation, tourism, negative impact on economic growth, negative opinion, infrastructure, (3) a short time to take opinion, insufficient information on the Natura 2000 program, illegible maps (scale) investment areas (generally), inability to comment on the enclosed materials, opinion postponement, positive opinion.

Presence of potential economic conflicts and their relationship to the biogeographic region

The most common remarks on the possibility of economic conflicts related to housing construction (areas already built and planned for development), tourism (including rural tourism) and transport infrastructure. Quite frequently appeared also as other areas of disagreements such as water management and mining. A relatively small proportion of the remarks was those related to agriculture and industry. Differences were found in the occurrence of conflicts between alpine and continental areas. Tourism and residential construction provoked more controversies in the alpine region, while continental areas generated significantly more conflict in the field of power industry and agriculture.

Relation of potential economic conflicts with the size of the site

Categories of potential economic conflicts were in relation to the size of the commented sites. The results show a significant increase in the participation of categories of housing, tourism and infrastructure in areas of greatest range. The same relationship applies to waste management, land investment, services and trade. In most areas there were no conflicts in contact with the fishing, although some contain marine waters or the lakelands. Noting the above growth trend for greatest areas, the correlation between the size of the area and the amount of perceived conflicts over economic and social life was examined. However, no such relationship was confirmed. The emergence of economic conflicts was, however, significantly correlated with the occurrence of those social ones ($r = 0.12$, $p < 0.01$).

DISCUSSION AND CONCLUSIONS

In opinion of majority of Polish local governments, Natura 2000 programme has been and still is as a hindrance rather than a tool potentially raising attractiveness of a particular region. Reasons of such attitudes are complexed and have a historic, social and economic character [Kluvankova-Oravska 2009, Pietrzyk *et al.* 2009, Kloskowski 2010, Grodzińska-Jurczak and Cent 2011]. Results of the following study prove such views, at least in socio-economic context.

It is worth to note that comments of local governments, were often formulated under pressure of time and were subjective judged from their own perspective and needs. In managing human-nature conflicts at least two perspectives need to be taken into consideration. First, comprises situations to be problematic from communities point of view [Wätzold *et al.* 2010], whereas the second regarded as conflictual by both sides (human and nature) [Keshkamat *et al.* 2009]. In each case, factors and priorities vary, and are shaped by different groups of interest. Not appropriate evaluation of such variables decreases chances for effective conflict management [Byron *et al.* 2008]. That is why, it seems necessary to try to include public into decision making process (via e.g. organizing open

consultations), no matter whether their potential conflicts are real or stem just from lack of knowledge and information [Długosz and Wygnański 2005, Eben 2006].

Although selection of Natura 2000 sites in Poland has been practically completed, results of the following study are still worthy. They can be used for deep risk and costs assessments of protected areas functioning. Moreover, considering biological factors, a standardized evaluation model for economic and social costs of protected areas introduction can be developed. Few of such models have been already build and had a strong applicable usage [Atkisson 2010]. Although constructing a model of universal character seems to be not possible at the moment, enough flexible ones for a preliminary evaluation of Natura 2000 sites in two bioregions of Poland would be realistic. Further detailed procedure would depend on local circumstances. Such model would have a practical usage while development of management plans for the following each Natura 2000 sites.

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PROBLEMY SPOŁECZNO-EKONOMICZNE PRZY WYZNACZANIU OBSZARÓW NATURA 2000 W POLSCE

Streszczenie. Niniejsza praca przedstawia analizę opinii o 151 projektowanych obszarach Natura 2000, wydanych na prośbę Ministerstwa Środowiska przez jednostki samorządowe. Kluczowym czynnikiem wpływającym na obawy samorządów co do wdrażania programu Natura 2000 były kwestie ekonomiczne, a proponowane zmiany zależały od poziomu administracyjnego i rodzaju zgłaszanego obszaru oraz jego wielkości.

Słowa kluczowe: Natura 2000, zarządzanie ochroną przyrody, partycypacja społeczna