

SYSTEMS RESEARCH INSTITUTE,  
POLISH ACADEMY OF SCIENCES, SZCZECIN DEPARTMENT  
AGRICULTURAL UNIVERSITY OF SZCZECIN  
FACULTY OF ECONOMICS AND ORGANIZATION OF FOOD ECONOMY

# MODELLING OF ECONOMY IN SPECIALLY PROTECTED REGIONS

*Proceedings of the international conference  
held on 9-11 june 1994 in Drawno, Poland*

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**Editor: Bogdan Krawiec**

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# ENVIRONMENT PROTECTION POLICY IN POLAND

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## 1. Problem identification

The European agreement on association of Poland with the European Communities was signed on December 16, 1991. Its trade part came to practice on March 1, 1992 in the form of an interim agreement. This decision was made by both sides considering the sophisticated ratification procedure of the main agreement. It should have been recognised by Polish Parliament, European Parliament and Parliaments of all member countries of the EC. Polish Parliament made the ratification decision on July 4, 1992<sup>1</sup> and European Parliament on September 16, 1993. But the recognition process in other member countries of the European Union lasted almost until the end of 1993. This is the reason why practical introduction of the association agreement was delayed until February 1, 1994.

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<sup>1</sup>Bohn P., Russel C.S., Comparative Analysis of Alternative Policy Instruments in A.V. Kneese J.L. Sweeney 1985, p. I p. 395.

One of the main foundations of the association agreement was economic reason relating to the need of modernization and structural changes of the Polish economy including agriculture. It means efficiency improvement, the creating of modern bank and financial systems, improving Polish products competitiveness, especially their quality. In a structure of Polish export 14% goes to food products, so output manufactured on the basis of natural resources. Thus, one of the main tasks considering adjusting activities will be the introduction of a complex system of an environmental policy compatible with European standards.

## 2. Global policy

Natural environment protection needs global conception and widespread cooperation. The first step in this direction was made by General Secretary of U N O *U Thant* in his report. Main menaces were identified and the schedule of the international conference was prepared in this document. The conference was held in Stockholm to work out the principles of the natural environment protection policy. The results weren't quite successful, because of difficulties in joining the growth tendency of developing countries and growth constraints connected with environmental protection.

The first compromise document was prepared and recognised in 1980 (World Conservation 1980) and this date can be defined as the beginning of the global environment protection policy, although it's not a real practical activity but rather a general accepted idea. The first worldwide strategy of natural environment protection was made by the International Union for Conservation of Nature, organization including Poland and all



countries of the European Union which exists as an international ecological cooperation institution. There are 3 main specified purposes of the W C S:

- maintaining of basic ecological processes and systems being life foundation,
- keeping of the variety of genetic material,
- ensuring of long-term usage of the ecosystem and natural species.

These principles as well as other inland and global solutions determine in a direct way the economic practice, which mainly uses 6 different types of ecological policy:

- 1) price instruments,
- 2) market of permission,
- 3) deposits,
- 4) legal responsibility of,
- 5) ecological norms and prohibitions and technological standards,
- 6) moral insist.

- **ad.1)** The usage of price instruments means that goods and services of the natural environment are sold on the free market on the economic bases. There are common fees in use at the same time.
- **ad.2)** Permissions market solutions mean that first the range of environment use is established and then market mechanism is involved for efficient allocation of available goods among competitive users.
- **ad.3)** Deposit institution is to create commercial incentive fulfilling certain rules of activity (eg. in case of fee for package the rule is to give it back to manufacturer).

- **ad.4)** Legal responsibility is an efficient factor in discouraging environmental harm, although sometimes it's not very successful.
- **ad.5)** The ecological norms and prohibitions (of emission dropping, draining or fuss) and technological standards are probably the most common instruments of environmental protection in the European Union Countries. They fulfill the ecologization rule (it means the copying of the movement principle observed in nature) and they are obligatory although not always properly economical in obtaining the needed state of environment.
- **ad.6)** Moral insist, seemingly not-efficient, sometimes seems to be the only instrument of ecological policy.

### **3. Polish practice**

The policy of ecology in Poland is based on the legal foundation enacted by parliament in 1991 termed the law of natural environment protection as well as many detailed acts and decrees of the Polish government. There is an obligation in the association agreement with the European Union to adjust our ecological law to the legal status in the Union. Moreover, Poland has signed an international convention concerning trans-national results of damages and ecological disasters in 1992. Since 1989 there has been national fund for environmental protection and water management which supports investments in the field of ecology directly or indirectly (by Bank of Natural Environment Protection) quaranteeing credits on preferential conditions with the interest rate of 0,2 - 0,8 of refinancial credit. There is an association for healthy food manufacturers - ECOLAND, which



tries to - encourage farms running their business without chemical means (like fertilizers, plants protection means etc) and - limit an irrational level of animal husbandry which creates sewers of organic origin.

All these activities make the foundations of complex strategy of environmental protection, although Poland is at the beginning of the way leading to ecological awareness of the manufacturers, consumers and economical power.

The Council of the European Communities and the representatives of all countries members of European Union prepared a project of activities in the field of environment protection which describes the general strategy of the optimal usage of natural resources.

The first principle of this strategy is to charge expenses of environment recovery to all the users. It is to limit the extent of pollution as well as to introduce new products and new technological solutions more friendly for environment. It will allow to obtain optimal structure of free market economy. The rule "pollution maker should pay" is usually gained by a set of fees and productional standards although there is a system of subsidies in the programme of recovering natural resources. There is national inspection of environment protection in Poland which is responsible for controlling and executive activity connected with pollution fees.

The second principle of the European Union's strategy is the integration of undertakings and data referring to the environment with the basic economic activity. There is no method of proper calculation of ecological costs and profits connected with improving the state of the environment. This is needed to prepare ways of valuating the environment quality and take into consideration expenses and profits in the economic analysis of

particular enterprises. There is a proposal of including environment protection costs to the General National Product (GNP).

One of the main topic in the field of natural resources prevention is managing in a proper way the land and its prevention. Land is one of the most desirable and limited natural resources. The way of using land has a great influence on the environmental quality. For this reason spatial planning concerning agricultural activities must take into consideration conservation policy. The basic European Union rules in this field are:

1. more efficient prevention and conservation of the areas, which have special important functions in the ecology or in the culture (natural and seminatural ecosystems, landscapes, arable lands of the first class, zones of water protection),
2. ensuring of integrated managing of the regions, which are highly sensitive with regard to their ecological importance and attractiveness for investors like some coast areas or mountain areas,
3. increasing positive influences of agriculture and decreasing of its negative influence, because agricultural lands together with woods and forests cover about 80% of total Union area. It is recommended to estimate ecological results of main projects and programmes in the early phase. As far as food economy is concerned there is a recommendation of the Council of European Communities referring to the evaluation of results of some of private and public ecological enterprises, which command obtaining ecological permission in the following economic activities:
  - restructuring and creating of land enterprises
  - using of nonarable agricultural land or land of less - intensive way managing

- undertakings connected with water administration in agriculture
- primary afforestation, which can lead to ecological detriment changes as well re-cultivation of the land in order to use it in another way
- poultry farming
- installations on swine farms
- breeding of salmon
- reclaiming land areas from the sea.

There are three main menaces to lithosphere in Poland:

A. Pollution by harmful substances of different origins.

B. Degradation of physical structure as well as a chemical one, erosion, wild elements acting, compactness of the soil ruined by hard agricultural equipment.

C. Improper managing and wasting of large areas of land resulting from e.g. abnormal rural structure.

Food economy is unfortunately a serious pollution maker in the Polish natural environment. It's especially visible in the conditions of unstable legal status of many companies under process of privatization where valuation and control is very difficult to do. It is, however, necessary, in the context of association agreement and European Standards, to undertake definite activities in several fields at the same time:

First, it is needed to strengthen the coordination of various enterprises to a more efficient system of soil and land protection - especially in the rural policy on the micro and macrolevels.

Second, it is recommended to reduce disadvantages (damages) in the ecological infrastructure caused by agriculture by limiting the intensity mainly in animal husbandry and creating agricultural waste processing (ecologization of agricultural production).



Third, it is recommended to prevent soil erosion and quick flows of surface waters (including the identification and showing on the maps the areas of land susceptible to erosion).

Fourth, is identification and clearing the places of waste stocking and encouraging recultivation and re-using of polluted soils and non-arable lands (eg. old industry areas). Moreover it is needed to decrease land pollution by current known methods of rendering wastes harmless.

Fifth it is highly recommended to encourage all the companies and institutions to improve and use new techniques of protection as well as exchange know-how.

Defined in that way priorities of ecological policy need large amount of money. In the last studies of Council of European Communities there is a state that during 12 years, it is necessary to put 1 bilion ECU yearly to clear all the polluted areas (by industrial or agricultural activity). So that there will be a great need for external sources of financing of conservancy undertakings in Poland. But their using must be under strict control and be the result of detailed business planning projects or scientific programmes.

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