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# AGRI-ENVIRONMENTAL MEASURES, ANIMAL WELFARE AND AGROTOURISM - POLISH FARMERS' VIEW

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#### Introduction

Over 50% of the surface of Europe is used agriculturally. For this reason agriculture in European Union is one of the key-areas, not only from economical point of view. The agricultural landscapes are important habitats for wild animals and plants, very often threatened ones. On this base European Community pays special attention to deliver measures for agricultural production methods designed to protect the environment, nature and maintain the countryside. An interest of this subject in the scientific, economic, social and policy fields can be observed in last two decades (de Haan et al., 1997, Hertzman 1995, Johnson and Bouzaher 1995, Leach et al., 1999). This involves environmental planning in farming practice, promoting farming methods which are compatible with the protection of the environment, extensification, the conservation of farmed environments of high natural value, the upkeep of the countryside, the safeguarding of local breeds and the conservation of plant genetic resources under threat. After the Council Regulation (EC) n° 1257/1999 of 17 May 1999 such measures are called agri-environmental. This aid is calculated on the basis of income forgone, additional costs and the financial incentive needed to encourage farmers to make agri-environmental undertakings. They are the only compulsory measures for Member States, although they are optional for farmers. Other areas of interest given in this regulations are human resource, support for less favoured areas, investments in farm holdings, improving the processing and marketing of agricultural products, forestry. After joining the UE Poland has totally new opportunities in order to contribute to achieving the Community's objectives relating to agriculture, the environment and the welfare of farm animals. Especially agrienvironmental measures and animal welfare are a new quality in farming methods. Because big concern is given to sustainable economic growth in rural areas, all methods of increasing farmers' income are becoming more popular. Due to great conditions of environmental, natural and landscape values of Polish rural areas, one of activities that should develop rather

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fast is agrotouristic. This kind of use of natural, countryside resources can also have very important influence on the environment. The aim of study was to analyse the awareness of this topic between Polish farmers after one year of Poland's presence in European Union.

#### Material and methods

Studies were carried out after 1<sup>st</sup> of May 2005 in eastern part of Poland (Podlaskie Voivodship Advisory Center). The questionnaire method was used (see annex), what allowed comparing the farmers' knowledge in the field of connection environment - agriculture on the base of their current farming practices, economical and sociological situation. The questionnaire contained 20 simple questions with possible answer yes or no. The questions basically dealt with farmers' knowledge in following fields:

- law regulations on agriculture and environmental protection, both at Community and National level
- influence of agricultural practice on environment and nature (generally and in the case of one's farm)
- economical aspects of agrotourism
- influence of agrotourism on environment and nature

The farmers answering the questions were also asked to specify the voivodship the lived and total area of land they farmed on. All the results were analyzed for total number of investigated persons and in four groups depending on the area of farmed land (respectively areas: less than 10 ha, 11-20 ha, 21-50 ha, more than 50 ha).

The survey was conducted during agricultural fairs in Podlaskie Voivodship Advisory Center in May 2005. The data obtained from Podlaskie Voivodship Advisory Center database, concerning the number of farmers that have joined agri-environmental measures, ecological farms and agrotouristic households were also used to describe background for farmers' awareness on this subject.

#### Results

The total of 177 questionnaires were collected. The majority of farmers that took part in survey farmed on areas 21-50 ha (40% of total number). Respectively 26% farmed on areas 11-20 ha, 19% on areas bigger than 50 ha and 15% on areas smaller than 10 ha.

The specified results, showing positives answers to major questions, are shown in table 1.

Table 1. Percentage of positive answers to major questions.

Question\farmed area	0-10ha	11-20ha	21-50ha	More than	Total
				50ha	
Do you know what agri-environmental measures are?	50	61	90	85	76
Did you applied for agri-environmental measures support?	23	37	45	26	36
Are there any protected plant species living in your farm?	38	15	20	12	19
Are there any protected animal species living in your farm?	38	24	21	24	25
Is there an influence of farming methods on natural environment?	92	72	83	88	82
Do you know the idea of agrotourism?	81	83	85	88	84
Is there an influence of agrotourism on natural environment?	85	74	69	71	73
Do you use the help of agricultural advisor?	42	63	80	79	69

One can observe regularity in the highest number of positive answers to all questions in the group of owners of farms 21-50ha. All groups of farmers have rather small knowledge about presence of protected wild animal and plant species at their farms. Each group declare high awareness of agrotourism and its influence on natural environment (although during conversations with farmers mainly negative influence was mentioned). In total 76% of investigated farmers declare knowledge about agri-environmental schemes. But on the other hand less than 50% in each group applied for those measures. The highest number of applies was observed in group 21-50ha (45%), the lowest in group of smallest farms (0-10ha – 23%).

#### **Discussion and conclusions**

Because number of investigated farmers was not high one can only conclude in general that still there is insufficient knowledge about environment (species, habitats, etc.). But on the other hand majority of farmers declare consciousness of farming methods influence on environment.

The results show great need of carrying out scientific researches focused on relation agriculture – environment. This seems to be an important issue in countries that recently joined the UE (Clarke et al. 1999, Light & Dumbraveanu 1999) but was also investigated and pointed out in other UE members (Braband et al. 2003, Cobb et al. 1999, Copus & Crabtree 1996, Zalidis et al. 2002). On the other hand a lot should be done in spreading the results of

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such studies to steakholders of various kind (farmers, institutions involved in agriculture, agricultural advisory, environment protection, agrotourism etc.).

#### References

- 1. Braband D., Geier U., Köpke U. 2003: Bio-resource evaluation within agri-environmental assessment tools in different European countries. Agriculture, Ecosystems and Environment 98 (423–434).
- 2. Clarke J., Denman R., Hickman G., Slovak J. 2001: Rural tourism in Roznava Okres: a Slovak case study. Tourism Management 22, 193-202
- 3. Cobb D., Feber R., Hopkins A., Stockdale L., O'Riordan T., Clement B., Firbank L., Goulding K., Jarvis S., Macdonald D. 1999: integrating the environmental and economic consequences of converting to organic agriculture: evidence from aa case study. Land Use Policy 16. 207-221.
- 4. Copus A. K., Crabtree J. R. 1996: Indicators of Socio-Economic Sustainability: An Applicatio to remote Rural Scotland. Journal of Rural Studies, Vol. 12, No 1, pp. 41-54.
- 5. de Haan C., Steinfeld, H. and Blackburn, H. 1997: Livestock and the Environment: Finding a Balance, Commission of the European Communities, Brussels.
- 6. Hertzman, C. (1995), Environment and Health in Central and Eastern Europe, World Bank, Washington, DC.
- 7. Garcia-Ramon M. D., Canoves G., Valdovinos N. 1995: Farm tourism, gender and the environment in Spain. Annals Tourism Research, Vol. 22, No. 2, pp. 267-282.
- 8. Hagedorn, K. et al. 2001a. Institutional Arrangements for Environmental Co-operatives: a Conceptual Framework. Paper presented at the 64th EAAE-Seminar "Co-operative Strategies to Cope with Agrienvironmental Problems", Berlin, October 27-29, 1999. In: Hagedorn, K. (ed.) (2001c): Environmental Cooperation and Institutional Change: Theories and Policies for European Agriculture. Cheltenham: Eward Elgar
- 9. Johnson, S.R. and Bouzaher, A. (eds.) (1995), Conservation of Great Plains Ecosystems: Current Science, Future Options, Kluwer, Dordrecht.
- 10. Leach, M., Mearns, R. and Scoones, I. (1999), "Environmental entitlements: Dynamics and institutions in community-based natural resource management", World Development 27(2), 225-47.
- 11. Light D., Dumbraveanu D. 1999: Romanian tourism in the Post-communist period. Annals Tourism Research, Vol. 26, No. 4, pp. 898-927.
- 12. Mathijs E. 2003, Social capital and farmers' willingness to adopt countryside stewardship schemes. Outlook on Agriculture, vol. 32, no. 1, pp. 13-16(4).
- 13. Toma, L., 2002, Analysis of Environmental Impact of Farming Systems in Romania. Discrete Choice Modelling for Deriving Institutional and Policy Alternatives, paper presented at the CEESA international workshop Alternative Concepts for Agri-environmental Sustainability, April 2002, Bled, Slovenia.
- 14. Zalidis G., Stamatiadis S., Takavakoglou V., Eskridge K., Misopolinos N. 2002: Impacts of agricultural practices on soil and water quality in the Mediterranean region and proposed assessment methodology. Agriculture, Ecosystems and Environment 88. 137–146.