The MEA-Scope Project

International Researches at the Department Okf Environmental Economics, Szent Istvan University*

The 2003 reform of the CAP aims at stimulating the European agriculture´s development towards more competitiveness on global markets, but also towards ensuring environmental soundness, supporting rural viability and to better meeting consumers demands. For that purpose, from 2005 on direct payments are decoupled from production. An increasing share of agricultural incomes are expected to be realized by individual contracts, e.g. for agri-environmental measures.

The project Micro-economic instruments for impact assessment of multifunctional agriculture to implement the Model of European Agriculture (acronymed MEA-Scope) funded by EU Framework 6 (STREP SSPE-CT-2004-501516) was launched in May 2004 analyses in how far policies lead to a change the farm structure of a region, or influence farmers decision making on cropping or husbandry management practises, and the economic, environmental and social impacts.

The research consortium consists of 11 partner institutions from 9 European countries.

Typical farms of a region (up to several hundred) are identified from databases available at EU level, and spatially distributed in a landscape map. The agent-based model AgriPoliS simulates the structural change induced by policy scenarios over a time period of 10 year. The farm model MODAM delivers the likely changes in cropping patterns and the resulting impacts on farm economic and environmental performance More detailed information on losses and surpluses of energy and matter flows (e.g. nitrate, green house gas emissions) are gained from the third linked model, Farm-N/FASSET. The MEA-Scope tool links the three models by creating technical interfaces for the data flow and provides a procedure to combine geodata information, statistical data and detailed management practice simulations from decision support approaches for a multifunctionality impact assessment at different scales. This is carried out by the use of a set of indicators for NCOs.

Future land use scenarios were transformed into possible future policy settings and implemented in a modelling approach. The modelling procedure builts on three linked micro-economic/ environmental models: AgriPoliS (IAMO, Halle, DE), MODAM (ZALF, Muencheberg, DE), FASSET/ Farm-N (DIAS, Tjele, DK). A specifically developed upscaling procedure allows for reading in geoinformation data into the models for a chosen region.

The MEA-Scope tool will be online accessible within the year 2007. Exemplarily for the 7 European case study regions, it will allow for balancing the strengths and weaknesses of different policy options.

For further information please visit the project website: http://www.mea-scope.org/

KATALIN BALÁZS
Szent István University Department of
Environmental Economics

*The aim of the series is to give information for the wider professional public about the multitute of ongoing international research activities at our Department.