IMPACT ANALYSIS OF THE COMMON AGRICULTURAL POLICY ON FARMERS INCOME IN NORTH-EAST REGION

George UNGUREANU[1], Stejărel BREZULEANU[1], Mihai STANCIU[1], Eduard BOGHIŢĂ[1]

e-mail: ungurgeo@yahoo.com

Abstract

Aim of this paper is to highlight the fact that changes in agriculture and rural development are reflected in the economic downturn, the emergence of demographic problems (increased distances between work and home, decreased rural population), social structure changes, refocusing on systems values, pressures occurring in ecosystems, destruction of cultural heritage areas, and reducing income disparity, changing habitat preferences (secondary residences in the village). Integrating agriculture into the market economy, technical and economic modernization is achieved with great difficulty for various reasons: lack of capital and a well organized credit system, inadequate material resources, dependence on upstream, due to high prices of input -sized industrial and agricultural nature, but also downstream, due to disruption of agricultural contracting system and deepening "price scissors ". Price liberalization and restriction of state intervention in agriculture cannot be similar to the situation in other areas of economic activity. Agricultural support by States is and will remain a necessity in the future economic, political, social and environmental. Policies and support techniques are variable according to variation of supply and environmental policy. Professional aspect concerns the economic organization of farmers, in order to protect revenue and influence government policies. Administrative bodies are agricultural (state) or professional (producers).

Key words: policy, rural, economic, development, integrating, agricultural.

MATERIAL AND METHOD

In the Inspection has resorted to traditional research methods and techniques: analysis of scientific literature, statistical data analysis, database use, surveys, polls, measurement techniques used in marketing research (semantic differential, Likert's scale, correlation method ranks, Fishbone - Rosenberg model, etc.). Data processing methods were used for statistical analysis and graphics.

Specify methods and computational techniques in preparing an optimization study is particularly important because it enables the assessment of whether an investigated phenomenon is included and analyzed.

RESULTS AND DISCUSSIONS

Recent research shows that changes in agriculture and rural development are reflected in the economic downturn, the occurrence of demographic problems (increased distances between work and home, decreased rural population), changes in social structure, refocusing on value systems, pressures arising ecosystems, destruction of cultural heritage areas, and reducing income disparity, changing habitat preferences (secondary residences in the village).

Integrating agriculture into the market economy, technical and economic modernization is achieved with great difficulty for various reasons: lack of capital and a well organized credit system, inadequate material resources, dependence on upstream, due to high prices of input -sized industrial and agricultural nature, but also downstream, due to disruption of agricultural contracting system and deepening "price scissors".

Price liberalization and restriction of state intervention in agriculture cannot be similar to the situation in other areas of economic activity. Agricultural support by States is and will remain a necessity in the future economic, political, social and environmental. Policies and support techniques are variable according to variation of supply and environmental policy.

Professional aspect concerns the economic organization of farmers, in order to protect revenue and influence government policies. Administrative bodies are agricultural (state) or professional (producers) . Administrative bodies collaborating farmers congestion on State and State supports and

[1] University of Agricultural Sciences and Veterinary Medicine of Iaşi

through their market- oriented agricultural structures. According to regulations under this scheme, the direct payment per hectare is calculated by dividing the national ceiling for direct payments to eligible agricultural area.

SAPS application is appropriate for a period of time to ensure the restructuring of farms and grow their relationship with the market. The transition from the single payment scheme involves a high degree of development and stabilization of production and diversification to benefit Romanian agriculture. Romanian agriculture benefit, like other Member States, and other forms of support, including semi-subsistence restructuring, community support from structural funds for investment in agricultural and other economic activities in rural areas, substantial support for rural development and environmental protection. These benefits multiply the effects of support granted per hectare per animal.

Direct payments to farmers can be completed by Romania with additional payments from the national budget (mechanism "top up") by 30 % over the level granted by the Community.

But this money can be allocated without being conditional, temporary (2011).

Table 1

Calendar of allocating amounts for direct payments from the EU budget and the budget of Romania, during 2007-2016

Specify	2007	2008	2009	2010	2011	2013	2013	2014	2015	2016
% of direct payments ceiling increase	25	30	35	40	50	60	70	80	90	100
% growth from the national budget	30	30	30	30	30	30	30	20	10	0
Total annual payments (%)	55	60	65	70	80	90	100	100	100	100

Source: Commission Regulation (EC) no. 1290/2005 on the financing of the CAP expenditure menus, Commission Regulation (EC) no. 1698/2005 on support for rural development from the European Agricultural Find Rural Development and the National Strategic Plan 2007-2013, prepared by MAPDR, June 2006.

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Table 2

Estimation of direct community support and additional amounts of Romania's budget for the period 2007-2016

Specify	2007	2008	2009	2010	2011	...2016
Annual percentage of the amount allocated by the EU. - (%)	25,0	30,0	35,0	40,0	50,0	100,0
Direct payments under negotiation results (million)	440	527,9	618,2	706,4	883	1766
Maximum support from the national budget (%)	30,0	30,0	30,0	30,0	30,0	-
(mil. euro)	529,8	529,8	529,8	529,8	529,8	-
Total amount earmarked for the Community budget and the national budget -% annually	55,0	60,0	65,0	70,0	80,0	100,0
mil. euro	969,8	1957,7	1147,8	1236,2	1412,8	
Amounts calculated annually per hectare eligible for direct payments to:	98	108	118	128	133	200
- - Community support € / ha	48	58	68	78	83	-
- - National support € / ha	50	50	50	50	50	-

Romanian agriculture benefits as the other Member States and other support, including semi-subsistence restructuring, community support from structural funds for investment in farm agricultural and other economic activities in rural areas, substantial support for rural development and environmental protection and so on.

These benefits multiply the effects of support granted per hectare per animal.

Estimating total support to Romania is difficult before completing preparatory measures for accession (completion Register farms, crops and supported the establishment of the national budget, etc.).

The direct payments for arable crops not only provide a partial decoupling of production.

Total support to farmers due depends on national priorities for certain crops, farm size, re following good agricultural practices and conditions marketed product quality etc.

Revenues by farmers depend mainly on the competitiveness of the products on the market.

Community and national support is only part of this revenue, or certain expenses incurred claim amounts. On the other hand, the support of the

national budget depends on the availability of existing and priorities for arable crops and livestock.

From estimates made that, in 2014, might assign a total support of 160 euro/ha (about 720 £/ha). It is anticipated an additional sums from the EU budget, in accordance with decisions of the Commission (May 2013).

Behavioral simulation of model building

Based on the marginal production function parameters determined and observed data at the system level analyzed (technical and economic factors; allocations surfaces) builds positive mathematical programming model. The optimization model is to obtain the allocation of the land area of the base year, thus respecting the whole complex causal decision maker acting on agriculture, including how he reacts to environmental changes.

Whether following simplified situation identified at a farm in one year basic thought:

Table 3

Simplified situation identified at a farm

Item Name	Units	Wheat	Oat
Production price	Euro/t	2,98	2,20
Average cost	Euro/ha	129,62	109,98
Average production	Tons/ha	69	65,9
Gross margin calculated	Euro/ha	76	35
Land area in the base year	Ha	3	2

At the farm level is intended to build a simulation model of farm behavior where such behavior to provide agricultural decision-maker in terms of agricultural credit policy change.

Table 4

Gross margin obtained at branch level in 2012

Crops	Area	Total production	Agerage price	Main product value	Grants and compen-sation	Value products	Seeds	Fertlizers	Plant Protection Products	Other costs	Leased equipment	gross Margin /HA
	Ha	Tons	Rol/ton	Rol	Rol	Rol	Rol	Rol	Rol	Rol	Rol	Rol/HA
Common wheat	367	1640	450	737.954,4	60.974,1	0	96.360	132.120	55.050	323.606,2	96.611,20	259,35
Barley	116	363	330	119.739,8	1.667,7	0	16.704	41.760	17.400	109.713,5	8.801,40	233,44
Maize	20	51	2.000	101.590,5	0	0	1.000	7.200	3.000	41.131,9	5.691,20	2178,37
Rape	37	74	600	44.323,2	0	0	92	6.660	5.550	33.207,8	6.518,50	601,59
Sunflower	164	399	725	289.284,4	11.924,5	0	10.660	44.280	19.680	180.272,3	9.412,39	225,03
Soy	257	332	700	234.575,6	8.315,9	0	16.448	92.520	51.400	298.398,7	17.645,54	136,34
Other	9	1	500	503,8	0	0	72	0	0	7321,9	324,72	47,98

Using the data presented in the previous tables constructed a simulation model of farm behavior. To be used in modeling positive mathematical programming method. In this algorithm supposes three consecutive steps to determine the objective function. After processing performed simulation problem behavior farm becomes:

Table 5

Introducing simplified simulation problem behavior

Item name	Units	Common wheat	Barley	Corn	Soya bean	Sunflower	Rape	Others
Production price	Rol/t	450	330	2000	600	725	700	500
The average cost	Rol/ha	1917,57	813,61	2901,16	598,41	1611,61	808,76	52,29
Average production	tons/ha	4,47	3,13	2,55	2	2,43	1,29	0,11
Gross margin calculated	Rol/ha	259,35	233,44	2178,37	601,59	225,03	136,34	47,98
The land occupied in 2012	ha	367	116	20	37	164	257	9

To examine the impact of policies on resource allocation and agricultural income, we estimate the effect of price intervention on yield primary factors (ie re ¬ value added activities) explaining the effect of the intervention on prices of products and inputs (consumption) intermediate (internationally traded) . Value added is defined as the difference between the gross output and value of inputs (consumption) intermediate or in terms of factor payments, the return of land resources of labor and capital. It should be noted that the cost structures available have not been adjusted for the impact of changes in relative prices of inputs trade on matrix inputs (ie hypothesis coefficients) . Such an adjustment is conceptually possible but not covered by the present study because it requires sophisticated data on inputs and a clear notion of the relevant production function. The consequence

is that the coefficients assumption could overestimate the relative costs of real inputs.

CONCLUSIONS

The results obtained can draw the following conclusions:

¬ fact that Romania has joined the European Union will continue to lead to lower revenues Romanian farmers . The decrease of these farm incomes depends on the situation. The farm where the technology practice resource consumption is important shock of joining the European Union will be important (30% decrease in net income / hectare obtained) ;

¬ bonuses decoupled single hectare leads to support farmers' income. The ability to recover income losses vary by state farm. For those farms that are not very influenced by the new market even anticipated net income growth of farm;

¬ farm crop rotation will be confused by joining the single market. The phenomenon of specialized farms into more efficient production. For productions that the new market is expected to become non-performing technology achieve change;

¬ the influence of financial parameters revealed that access to credit has a more important influence on farm income and crop rotation on the structure than the interest rate . This result is supported by the way in which the absorption of pre-accession funds EAFRD.

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