ANALYSIS OF THE EFFICIENCY OF AGRICULTURE IN THE CONTEXT OF THE REGIONAL ECONOMIC DEVELOPMENT DURING 2006-2011

ANAMARIA MORNA¹

¹ University of Oradea, Faculty of Environmental Protection, Oradea, Romania

Abstract: The Northwest region has seen during post-adhesion (2006-2011) an economic growth towards pre-adhesion period, with a slight decrease in 2009 amid the economic crisis registered nationally and worldwide. GDP's growth was however lower than that on the whole country, which has caused the input of regional GDP to national GDP to fall by 0.2 percentage points (from 11.8% in 2006 to 11.6% in 2011).

Key words: macro type indicators, economic efficiency, agriculture, Northwest Region.

INTRODUCTION

The Northwest region has seen during post-adhesion (2007-2011) an economic growth towards pre-adhesion period, with a slight decrease in 2009 amid the economic crisis registered nationally and worldwide. In 2011, regional GDP, expressed in nominal terms, had increased compared with 2006 with 64.5%.

The contribution of agriculture to the regional GDP decreased from 9,7% in 2006 to 7.4% in 2011.

At a national level, it is noted that the relevance of the agricultural sector in the Northwest region for the overall agriculture decreased by 1.7 percentage points, reaching to 13.1% in 2011.

The share of GVA in production value, less than that recorded at the national level and growing in the period under review, shows that agriculture in the Northwest region acquires a large part of intermediate consumption within the branch. Gross domestic product per capita has increased in nominal terms, but with an increasingly reduced level compared to values recorded at the national level.

MATERIALS AND METHODS

In this context, impact assessment shall be carried out taking priorily into account the effects of the adhesion on agriculture and indirectly the changes generated by these effects in the economy.

The overall impact of the adhesion onf the Romanian agriculture is reflected in the macroeconomic and sectoral indicators registered during the period 2006-2011.

RESEARCH RESULTS

The Northwest region has seen during post-accession period (2007-2011) a growth towards pre-accession period, with a slight decrease in 2009 amid the economic crisis registered nationally and worldwide. In 2011, regional GDP, expressed in nominal terms, had increased compared with 2006 with 64.5% (table 1).

GDP growth was however lower than that on the whole country, which has caused the input of regional GDP to total GDP country to fall by 0.2 percentage points (from 11.8% in 2006 from 11.6% in 2011).

The contribution of agriculture to the regional GDP decreased from 9.7% in 2006 to 7.4% in 2011. Overall, it is noted that the importance of the agricultural sector in the Northwest region in the total agriculture decreased by 1.7 percentage points, reaching 13.1% in 2011.

Added value dynamics in agriculture has exceeded the growth of production value, which shows a much more reduced growth of intermediate consumption in agriculture.

Table 1 Evolution of main macro type indicators in the Northwest region in the period 2006-2011

	MU	2006	2007	2008	2009	2010	2011	2011/2006
GDP, of which:	million Ron	40806.2	50724.1	58638.8	57900.2	59582.3	67112	164.50%
Agriculture (including forestry and fisheries)	million Ron	3970.2	3895.9	4456.5	4227.7	4022.3	4952.9	124.80%
Share of agriculture (including forestry and fishing) in GDP	%	9.7	7.7	7.6	7.3	6.8	7.4	-2.3 pp
Share of regional GDP / total GDP country	%	11.8	12.2	11.4	11.6	11.6	11.6	-0.2 pp
Share farming / agriculture country level	%	14.8	16.2	13.1	13.1	13.1	13.1	-1.7 pp
Gross value added in agriculture (GVA)	million Ron	3178.8	2924.5	3883.5	3726.4	3755	4195	132.00%
Value of agricultural production	million Ron	7555.9	7636.9	9258.8	8503.5	8356.9	9695.5	128.30%
The value of crop production	million Ron	4688.6	4888	6194.1	5022.1	5311.4	6156	131.30%
Share in value of agricultural production	%	62.1	64.0	66.9	59.1	63.6	63.5	1.4 pp
Value of agricultural production animals	mil lei	2826.9	2710	3022.5	3441.4	3003.3	3512	124.20%
Share in value of agricultural production	%	37.4	35.5	32.6	40.5	35.9	36.2	-1.2 pp
Agricultural Services	million Ron	40.4	38.9	42.2	39.9	42.2	27.5	68.10%
Share in value of agricultural production	%	0.5	0.5	0.5	0.5	0.5	0.3	-0.3 pp
Total Population	number	2730132	2725563	2722063	2718648	2716456	2711016	99.30%
Population employed in agriculture	number	336479	311315	292114	298549	334208	296970	88.30%

Source: based on INS data, available online at www.insse.ro [18]

Labor productivity expressed in GVA has increased more than that recorded at the country level (table 2). The indicator presents a special relevance, given that regional GVA increased by 32% compared to the one at the national level that has increased by 35.8%, while the share of regional GVA in the overall GVA has remained about 11-12%, even if we take into account the decrease in the amount of population working in agriculture with 11.7%.

The share of GVA in production value, less than that recorded at the national level and growing in the period under review, shows that agriculture in the Northwest region acquires a large part of intermediate consumption within the branch. Gross domestic product per capita has increased in nominal terms, but with an increasingly reduced level compared to values recorded at the national level.

Concerning the analysis of production value on components, it is noted a significant reduction of agricultural services (31.9%) and an increase of the production value in the vegetable sector over the animal sector, which shows a development of vegetable industry at a regional level. Structurally, the value of agricultural production is represented in proportion of 63.5% by the crop production and 36.2% by the animal production.

Table 2 Economic efficiency in the agriculture of the Northwest region in the period 2006-2011

	UM	2006	2007	2008	2009	2010	2011	2011/ 2006
Labour productivity in agriculture calculated on the value of agricultural production	Ron/ person employed	22455.8	24531.1	31695.8	28482.8	25005.1	32648.1	145.4%
Labour productivity in agriculture calculated at VAB	Ron/ person employed	9447.2	9394.0	13294.5	12481.7	11235.5	14126.0	149.5%
Share of GVA in the value of agricultural production	%	42.1	38.3	41.9	43.8	44.9	43.3	1.2 pp
Gross domestic product (GDP)/nominal	Ron/ person	14947	18611	21542	21297	21934	24755	165.6%
Value share in total crop production value production	%	62.1	64.0	66.9	59.1	63.6	63.5	1.4 pp
Animal production value share in total production value	%	37.4	35.5	32.6	40.5	35.9	36.2	-1.2 pp
Share of services in total value of agricultural production	%	0.5	0.5	0.5	0.5	0.5	0.3	-0.3 pp

Source: based on INS data, available online at www.insse.ro [18]

CONCLUSIONS

In conclusion, the Northwest region is characterized during the post-accession period through an economic growth lower than that registered at the country level. Agriculture, although in a positive evolution, presents a slower development within regional economy, the contribution of agriculture to regional GDP being steadily declining. However, amid the decrease in the population working in agriculture, there has been a significant increase in labor productivity.

Also, though it is noted a decrease in the intermediate consumption in agriculture, the input of gross value added to the value of agricultural production remains quite low, proving that agriculture acquires its resources in particular within their own sector. Structure of agricultural production value proves that, within the region, vegetal production remains the most important sector of agriculture.

REFERENCES

- **1. APRODU, I.C.**, 2006, Decalaje agricole și dezvoltare economică regională în România, Teză ASE;
- **2. ARMSTRONG M., TAYLOR J.**, 2000, Regional Economics and Policy third edition, Blackwell Publishers, USA, ISBN 0-631-21713-4
- 3. DONA I., 2000, Politici Agricole, Editura SEMNE, București, ISBN 973-40-0743-2
- 4. DONA I., 2000, Economie rurală, Editura Economica, Bucuresti, ISBN 973-590-102-1
- **5. DUMITRESCU S., NIȚĂ I., CIOCHINĂ I**, 2002, Uniunea Europeană, Editura Independența Economică, Pitești, ISBN 973-8112-38-9
- **6. FRANDSEN S., GERSFELT B., JENSEN H.**, 2002, Decoupling Support în Agriculture Impacts of Redesigning European Agricultural Support, the Fifth Annual Conference on Global Economic Analysis, June 5-7, 2002, Taipei, Taiwan.
- **7. FUNCK B.**, 2003, European Integration, Regional policy, and growth, World Bank Publications, ISBN 0-8213-5395-0
- 8. GĂMAN, V., 2011, Dezvoltarea IMM-urilor în spațiul rural, Teză ASE;

- 9. GIURCĂ D., LUCA L., HURDUZEU G., 2007, Scenarii privind impactul măsurilor de dezvoltare rurală asupra structurilor agricole românești după aderarea la Uniunea Europeană, Impact studies, IER, accesibile online la www.ier.ro
- 10. GIURCĂ D., RUSU M., HURDUZEU G., SALASAN C., 2006, Sectorul agricol în perspectiva aderării României la Uniunea Europeană: implicații asupra sistemului de plăți, Impact studies, IER, accesibile online la www.ier.ro
- **11. TOMA E., ALEXANDRI C., DACHIN A**. (coord), 2009. Agricultura României în procesul de integrare europeană, vol I, Editura Cartea Universitară, București, ISBN 978-973-88932-9-0
- **12. VALARCHÉ J**, 1970, Le Plan Mansholt et l'avenir de l'agriculture européenne, Swiss Journal of Economics and Statistics (SJES), vol. 106, issue II, pg. 173-187
- **13. VANAGS A.**, 2002 The Economic Impact of EU Accession for Latvia: A Computable General Equilibrium Approach, Riga, Baltic International Centre for Economic Policy Studies.
- **14. VICKERMAN R., SPIEKERMANN K., WEGENER M.**, 1999, Zuganglichkeit und wirtschaftliche Entwicklung in Europa, Reg. Studies 33, 1-15.
- **15.** ***European Commission, The Common Agricultural Policy after 2013, available online at http://ec.europa.eu/agriculture/cap-post-2013/index en.htm
- **16.** ***Eurostat, accesibil online la http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/
- 17. ***HG nr. 497/2004 privind stabilirea cadrului instituţional pentru coordonarea, implementarea şi gestionarea instrumentelor structurale (MO nr. 346/20.04.2004) care a modificat HG 1555/2002
- 18. *** Institutul Național de Statistică, baza de date Tempo online, accesibilă la www.insse.ro
- 19. *** Institutul Național de Statistică, Recensămintele Generale Agricole 2005-2010