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

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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 of 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**

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

Source: based on INS data, available online at [www.insse.ro](http://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.
**Economic efficiency in the agriculture of the Northwest region in the period 2006-2011**

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

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