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**Impact assessment of Local Action Groups –  
as an innovative measure of the Leader Programme –  
on the diversification of non-agricultural activities  
and encouragement for small entrepreneurs**

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# Introduction

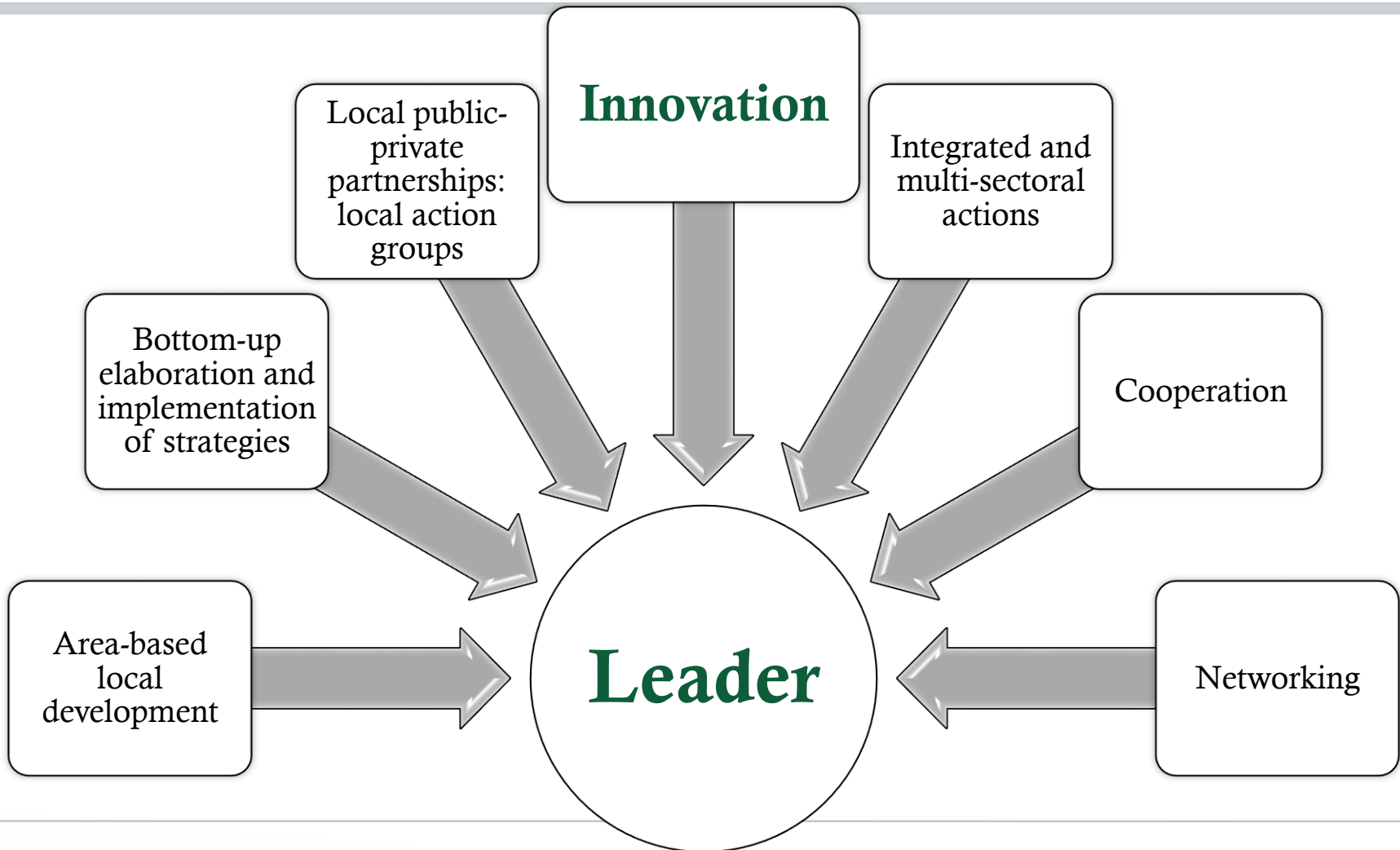
## Leader Programme

New approach to rural development  
philosophy, methodology and  
practice in the EU Member States

Solution to the **sustainable**  
development of rural space



# The 7 key features



# Understanding **Innovation**

The introduction of a **new product**, a **new process**, a **new organization**

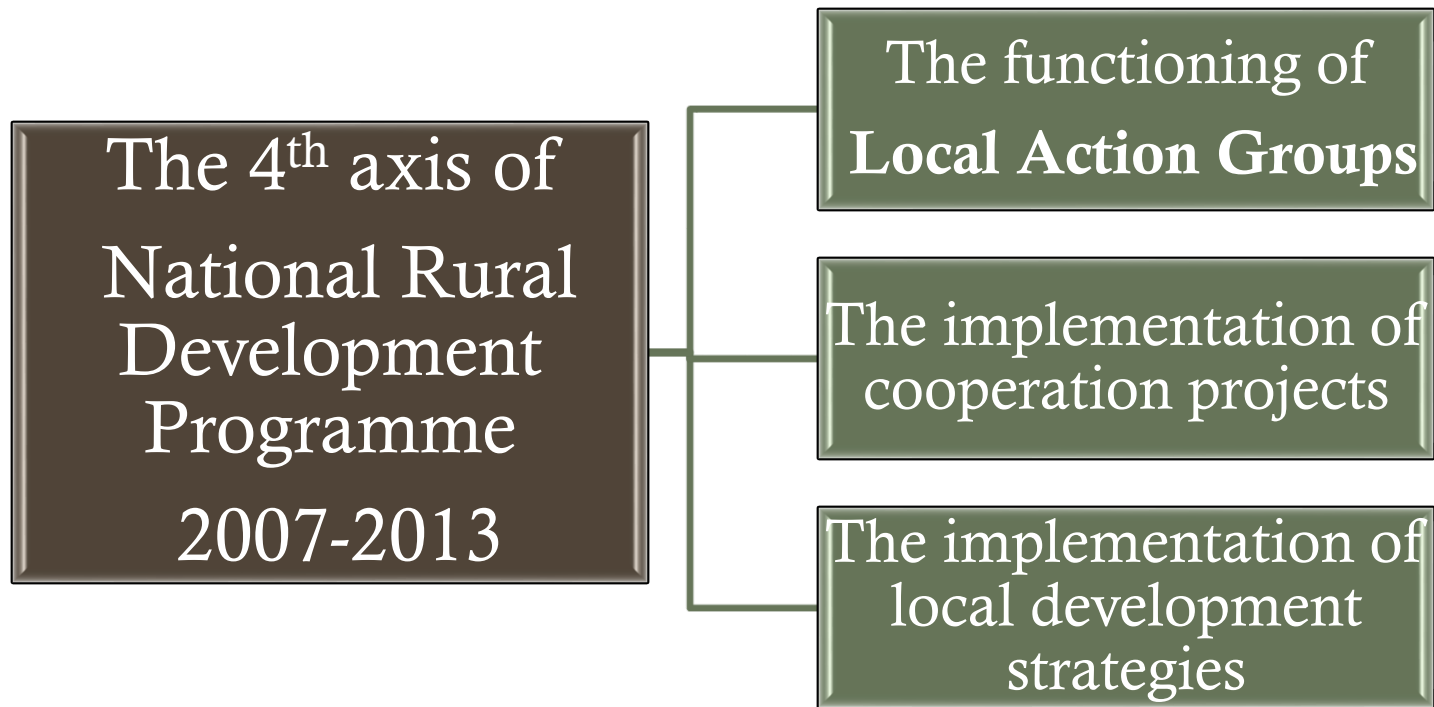
Creating a **new market**

**New and updated methods** of adding value to local resources

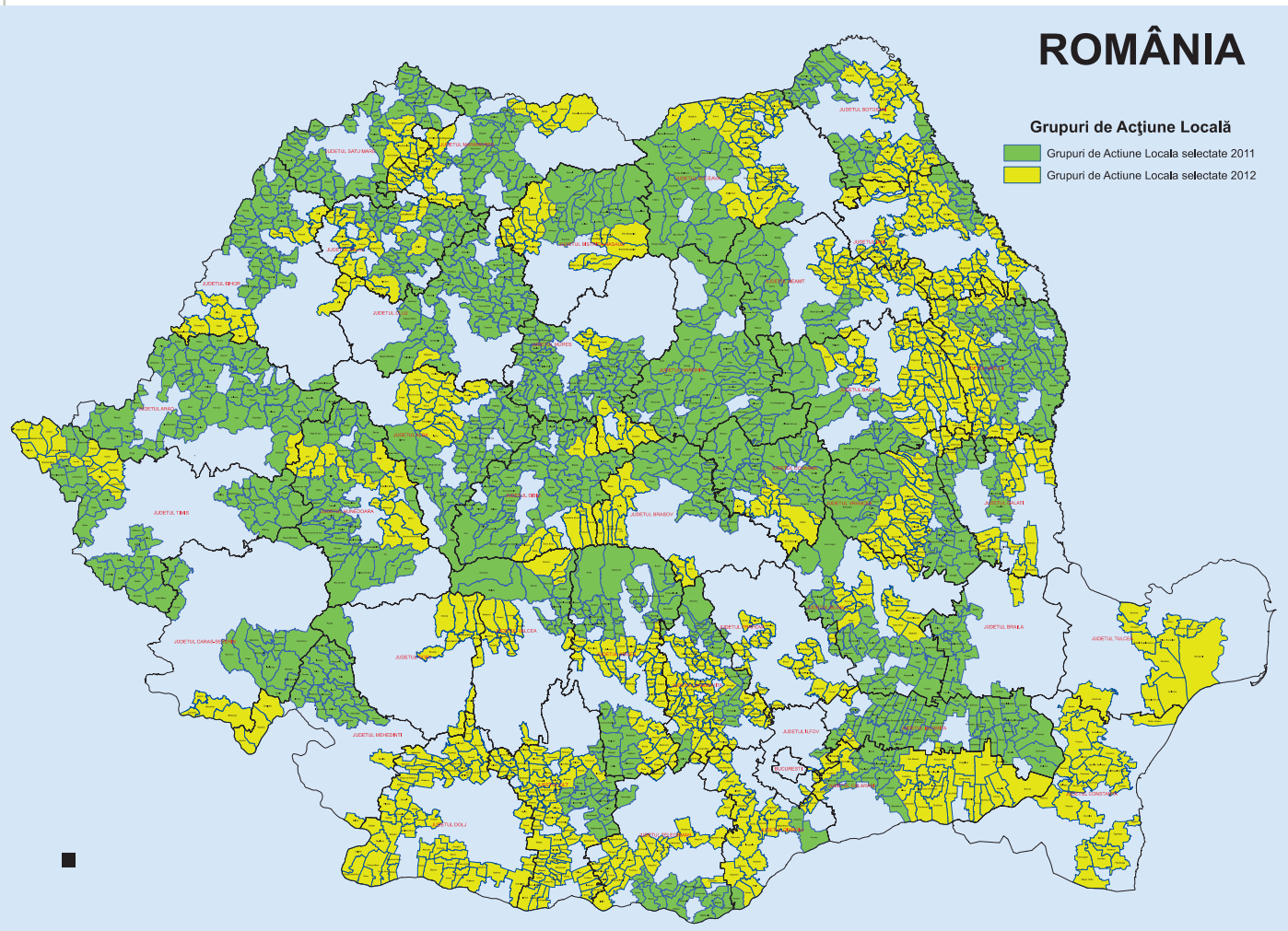
**Measures** that are not taken into account by other policies or complementary to other programmes

**Actions** to provide endogenous responses to the weaknesses and problems of rural areas

# The Leader Programme in Romania



# The creation of LAGs in Romania between 2011-2012



81 LAGs in 2011

82 LAGs in 2012

A surface of  
142000 km<sup>2</sup>

63% of the eligible  
territory

58% of the eligible  
Leader population

# The research context



**Local Action Groups** established in Romania were successful.

The projects undertaken **did not show a very innovative character.**

They were **rather similar to those conducted through the National Rural Development Programme 2007-2013.**

# The research aim

The **impact assessment** of projects implemented by Local Action Groups on:

- **the diversification of non-agricultural economic activities;**
- **the encouragement of small entrepreneurs in rural areas;**
- **the number of employees in non-agricultural enterprises.**



# The research area



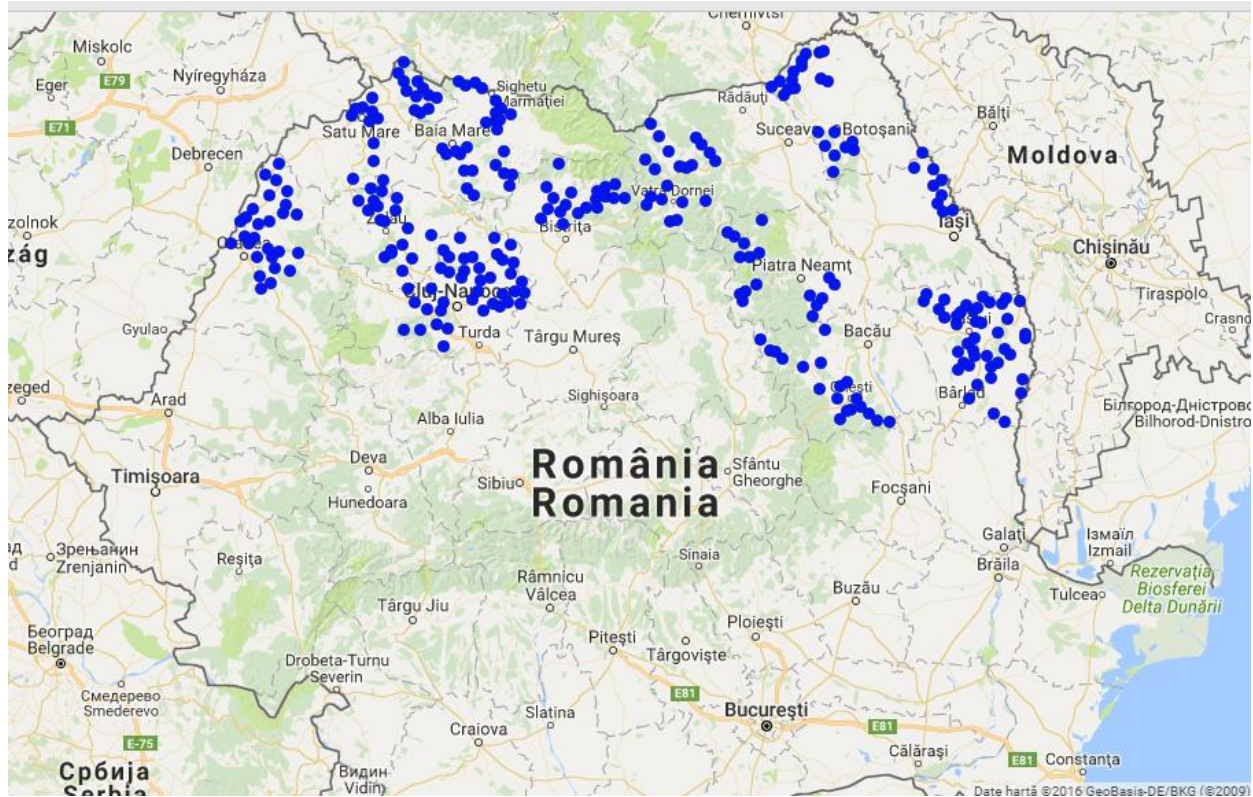
North West  
Region

North East  
Region



The choice of the two regions was due to their large gap in terms of socio-economic development.

# The research area



In North West and North East regions, we identified 82 LAGs, including 282 rural UATs (commune).

# The research methods

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**Propensity Score Matching:** quantitative analysis method was used to assess the impact of implemented projects on the establishment of small and medium non-agricultural enterprises **and the increase in the quality of life** for the areas under study.

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**The main arguments** for using this method were: the data availability for both categories – LAG members or non-members, the advanced stage of projects implementation, the relevant dimension of the sample.

The first step = the calculation of **Propensity Score**, by using the SPSS program, on the basis of following confounders

**housing** infrastructure:  
number of houses,  
housing area, the  
existence of  
drinkable/portable  
water, sewage and gas  
facilities.

**population** structure:  
age, external/internal  
migration.

infrastructure of  
**education**: school units,  
school-age population,  
classrooms, class  
laboratory, PC in the  
school, libraries.

infrastructure of  
**health**: sanitary units,  
medical staff.

**workforce**: number of  
employees, number of  
unemployed.

**dwelling**s: places of  
living.

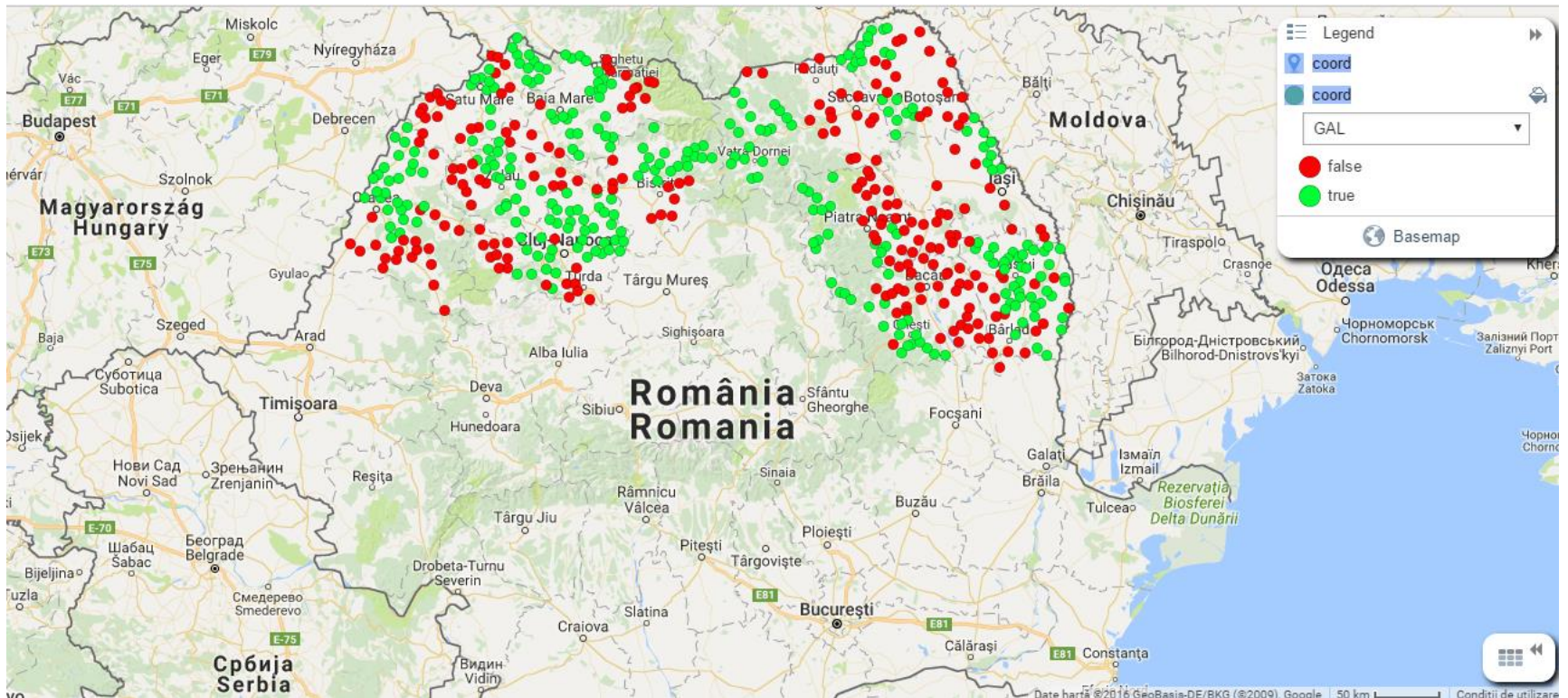
# The regression equation used for the calculation of Propensity Score

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	945,044 <sup>a</sup>	0,181	0,287

- The quality of the regression equation used for the calculation of propensity score is given by the indicators **Cox & Snell R Square (0,181)** and **Nagelkerke R Square (0,287)**
- The two values obtained are **medium-low** level, which demonstrates that the calculation model of propensity score is reasonable, but it could be improved by adding new indicators.

# The second step = matching UATs from intervention group and control group



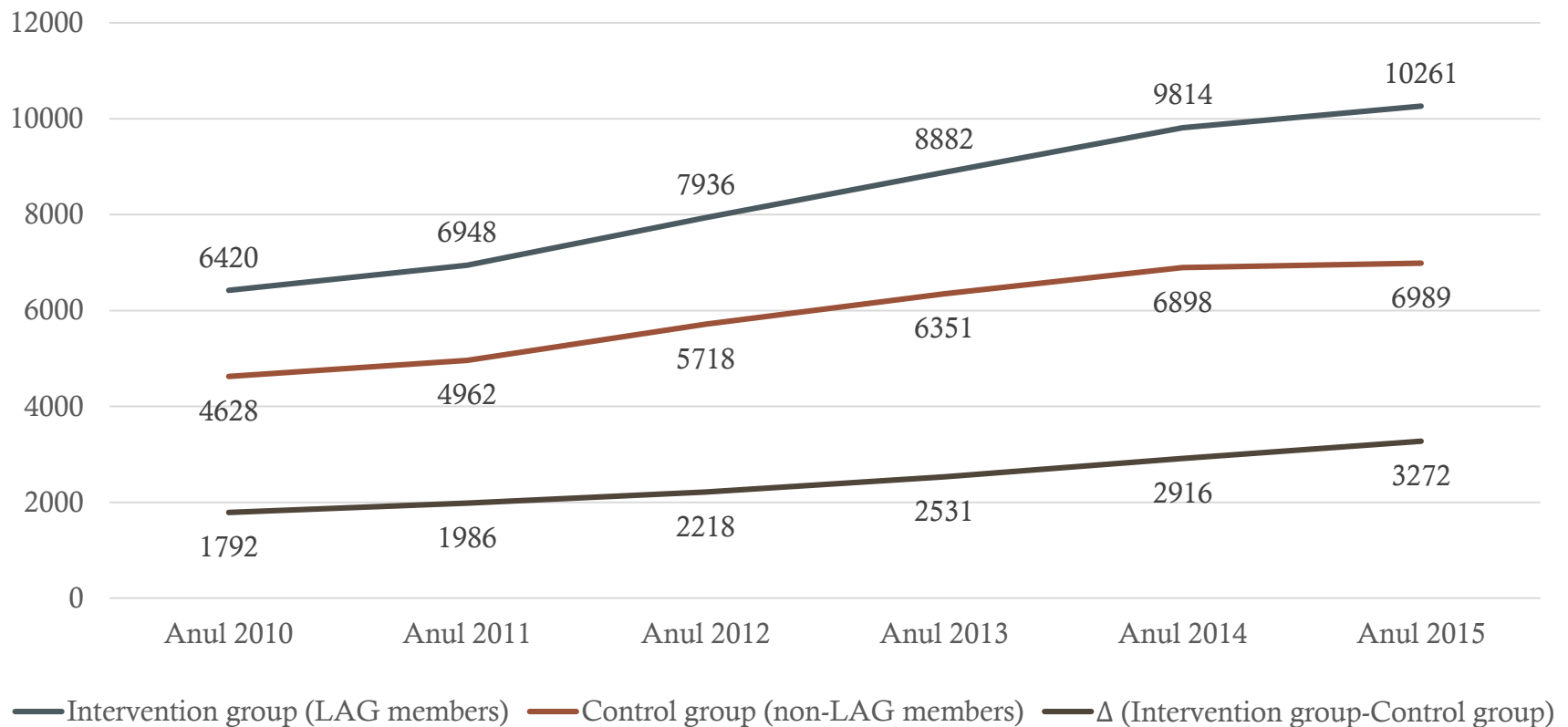
After estimation of propensity score, using method “the nearest neighbour”, for each UAT from intervention group (UAT from LAG) was matched an UAT from control group (non-LAG member). In total, 564 UATs were included in our sample.

# The sampling

- The selection of UAT was stratified in accordance with the number of UAT from each Development Region:

	North East	North West	Total
Intervention group	129	153	282
Control Group	129	153	282
Total	258	306	564

# The number of the non-agricultural businesses

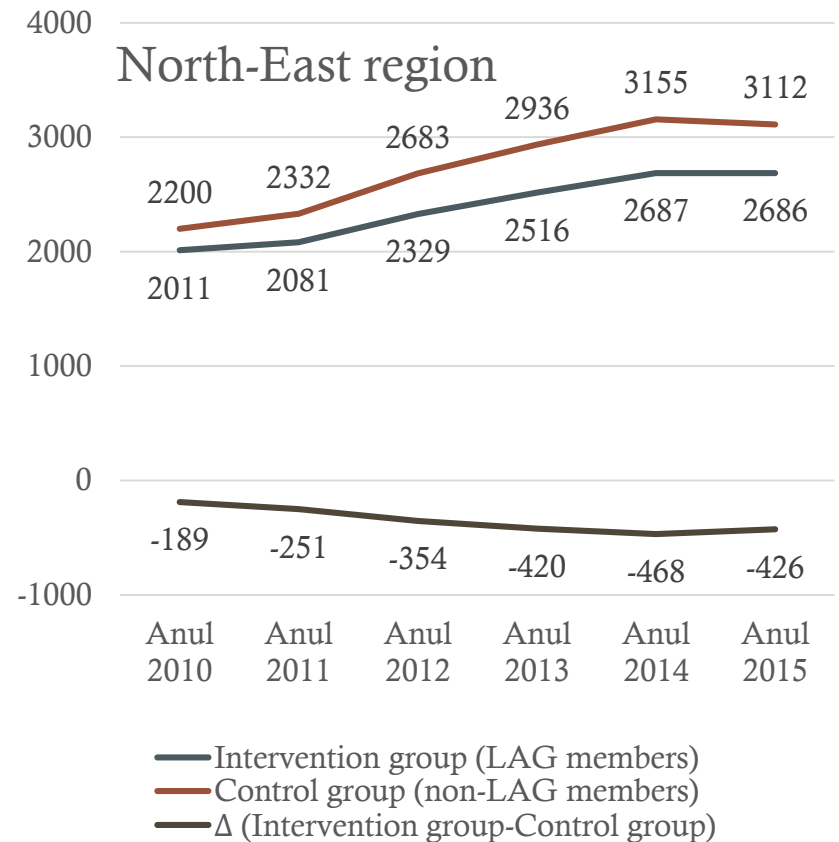
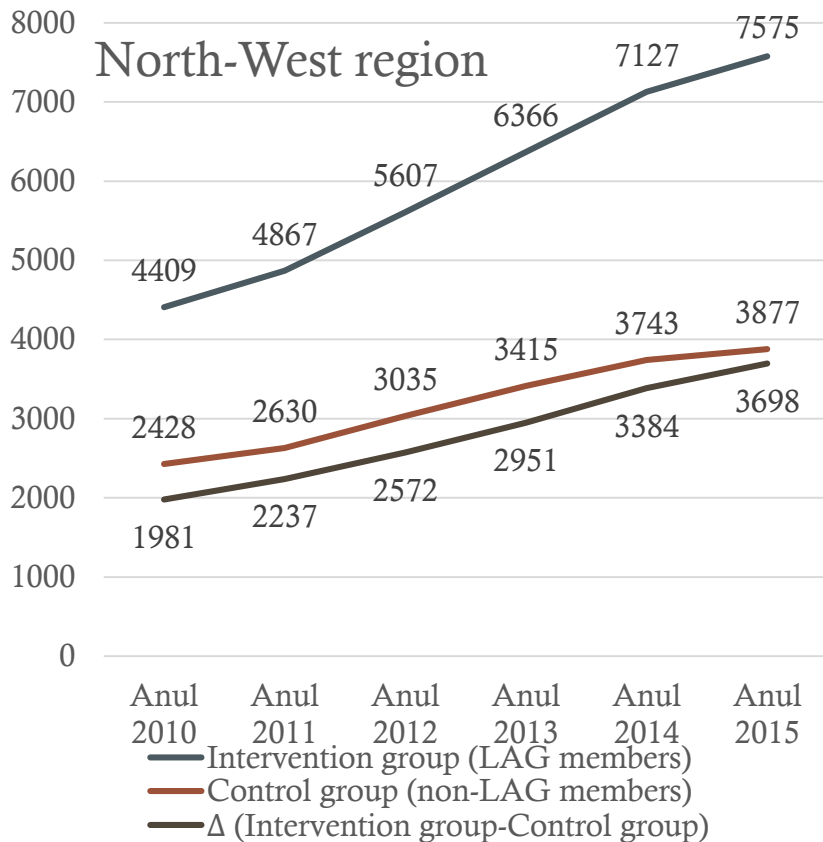




# The number of the non-agricultural businesses

- In both groups, the number of non-agricultural businesses increased. The trend is quasi-linear for both groups.
- In intervention group, the increase was higher than the control group. The impact of LAG was an amount of 1.500 businesses, an increase with 23% from 2010, before the intervention.

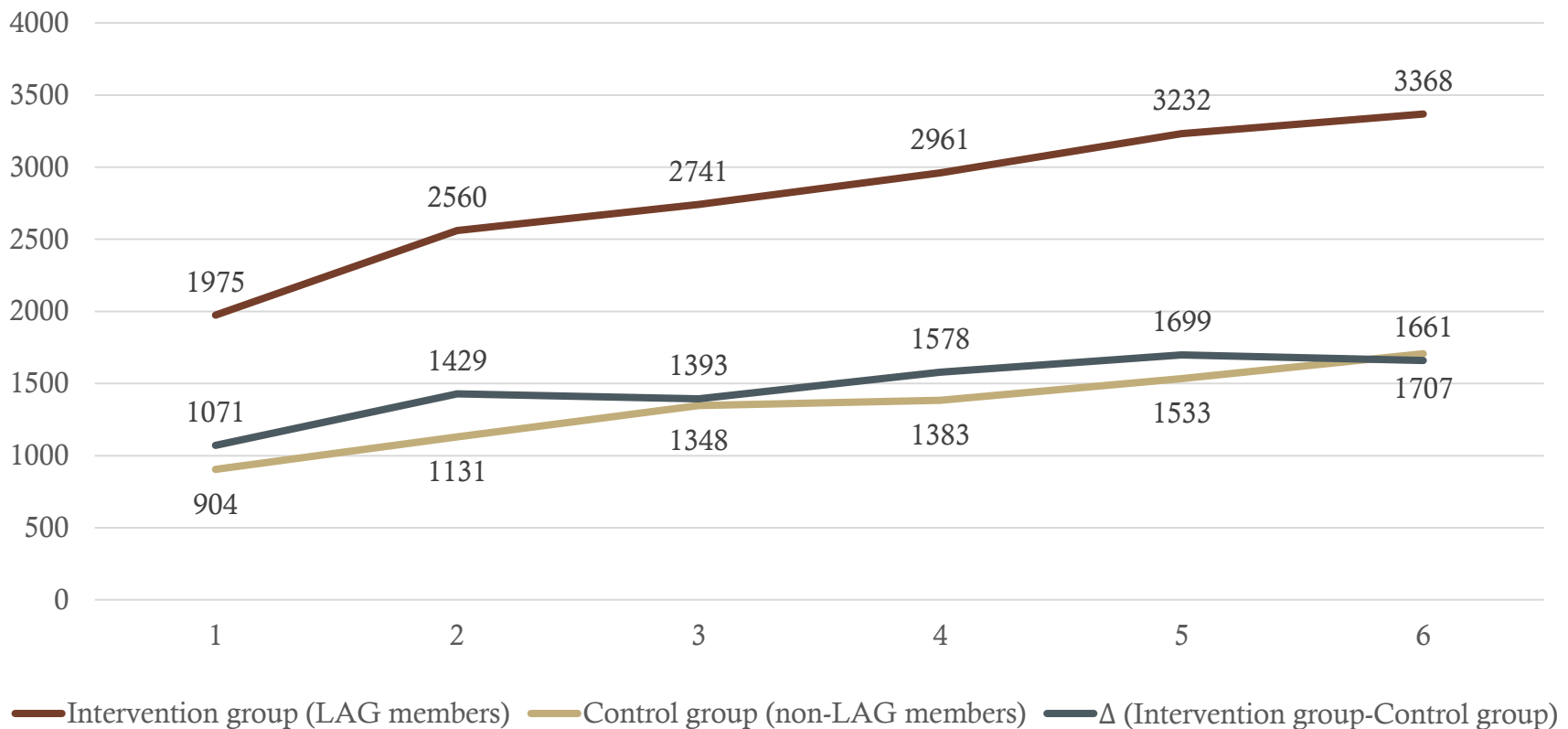
# The number of the non-agricultural businesses by regions



# The number of the non-agricultural businesses by regions

- In North-West, the impact of LAGs is real and positive, LAG membership is associated with an increase of 39%, which is the number of non-agricultural businesses, meaning 1.700 businesses.
- In North-East, the impact of LAGs is rather negative, LAG membership being associate with a decrease of 11% in the number of non-agricultural businesses, meaning a decrease of 230 businesses.

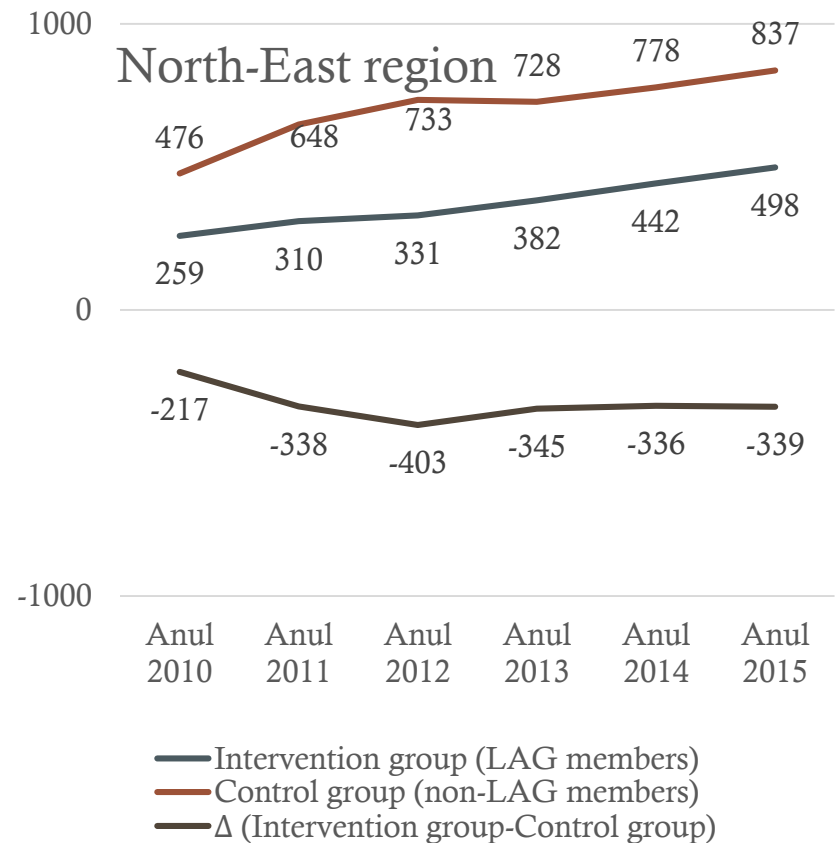
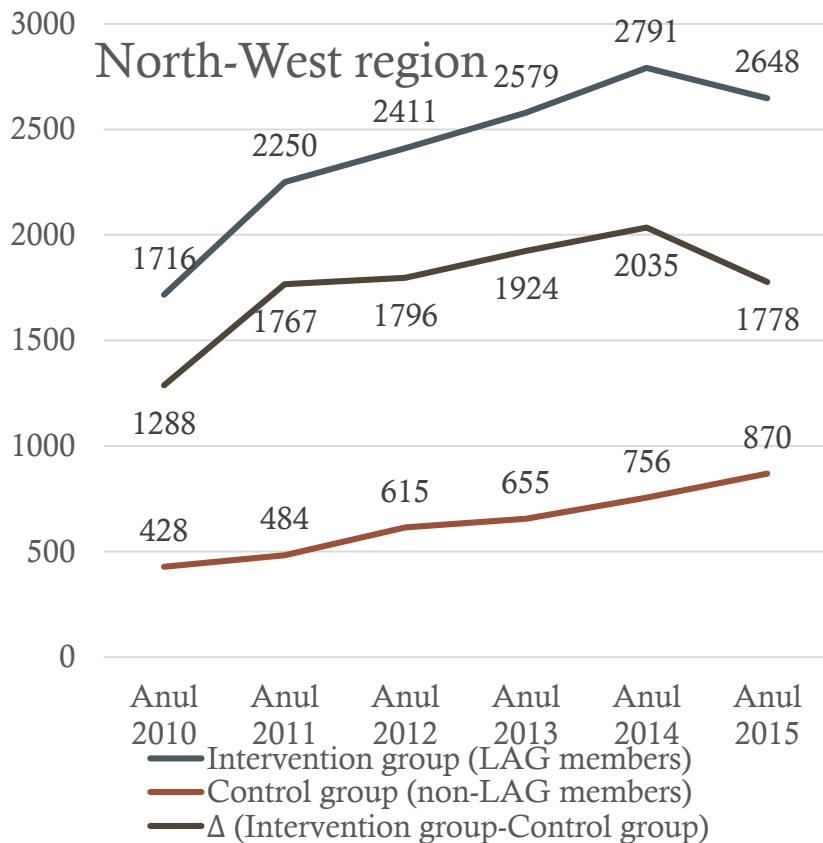
# The total turnover for non-agricultural businesses (mil. €)



# The total turnover for non-agricultural businesses (mil. €)

- After an increase of the number of businesses, of course, in both groups we identify an increase of the total turnover, resulted from non-agricultural businesses.
- In the intervention group, the increase was higher than in the control group. The impact of LAGs was an amount of 590 million €, with an increase of 30% from 2010, before the intervention.

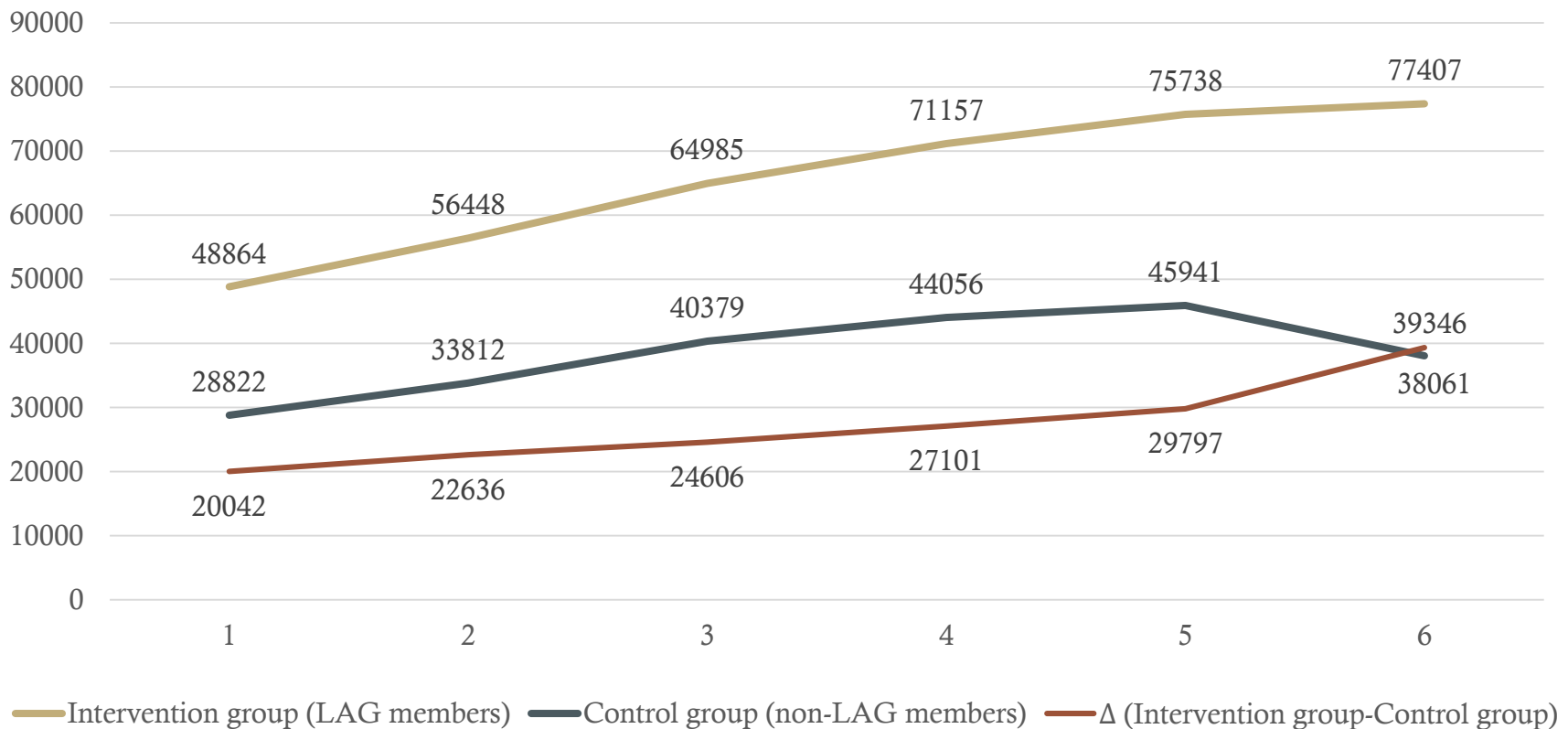
# The total turnover for non-agricultural businesses (mil. €) by regions



# The total turnover for non-agricultural businesses (mil. €) by regions

- In North-West, the impact of LAGs is real and positive, LAG membership is associated with an increase of 29%, to the total turnover for non-agricultural businesses, meaning a plus/increase of 490 million €.
- In North-East, the impact of LAGs is rather negative, LAG membership is associated with a decrease of 47% in the total turnover of non-agricultural businesses.

# The total number of employees in non-agricultural businesses (mil. €)

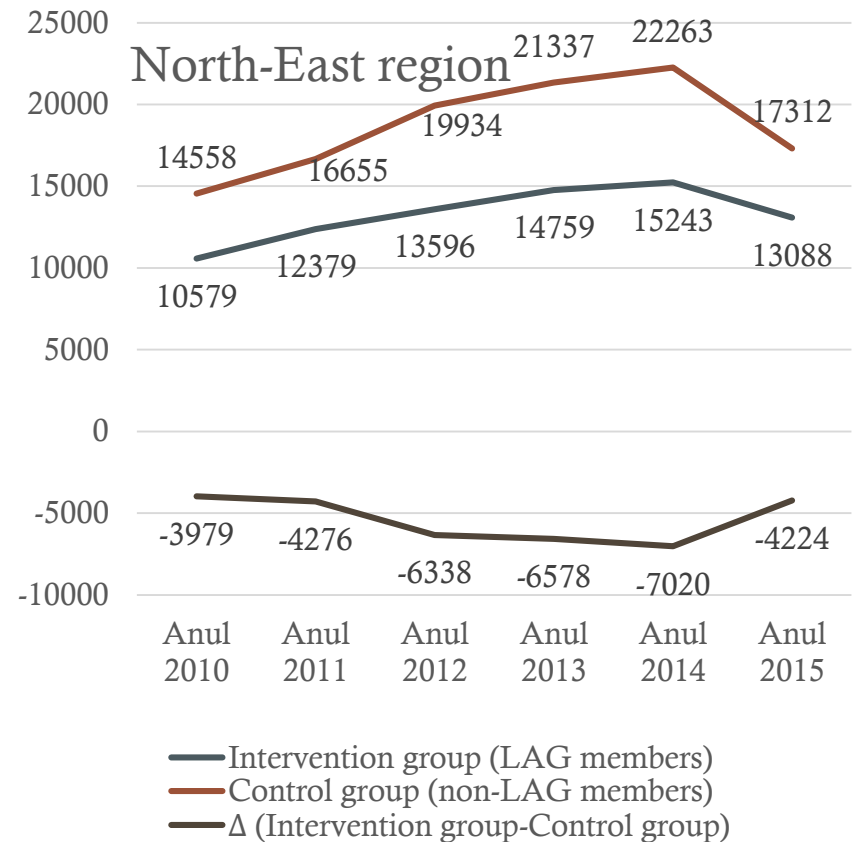
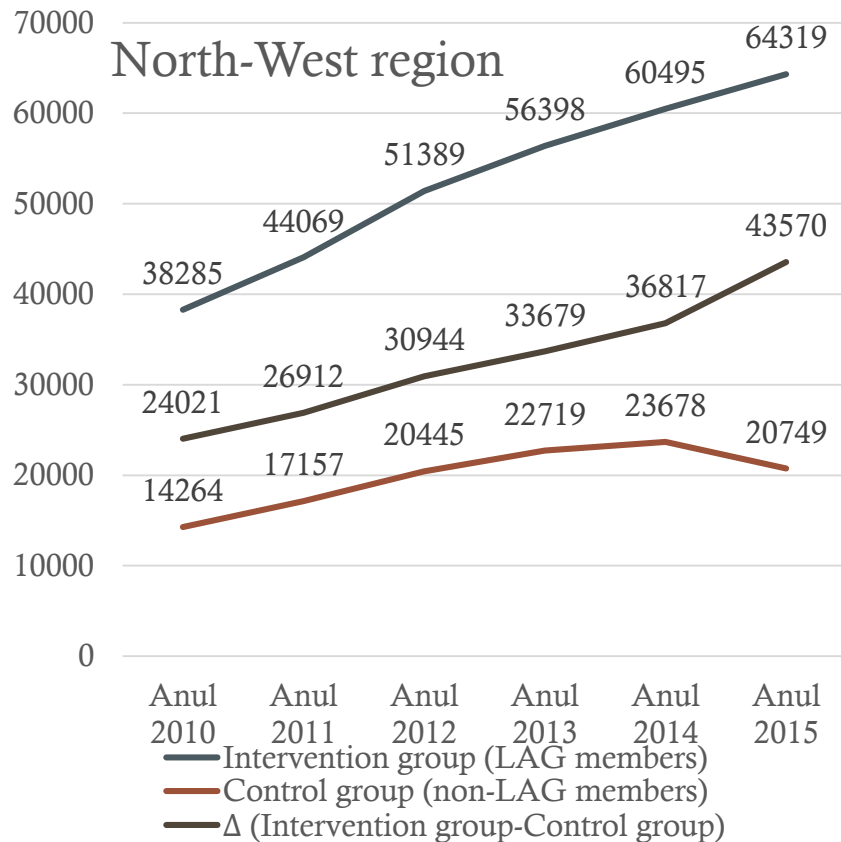




# The total number of employees in non-agricultural businesses (mil. €)

- The number of employees in non-agricultural businesses also increased, for example:
  - in intervention group from 49.000 to 77.500.
  - in control group, the increase was from 29.000 to 46.000; however, in the last year we observed a decrease to 38.000.
- In terms of impact, LAG membership means a plus of almost 20% employees in non-agricultural businesses, which meaning 10.000 employees were added.

# The total number of employees in non-agricultural businesses (mil. €) by regions



## The total number of employees in non-agricultural businesses (mil. €) by regions

- In North-West, the impact of LAGs is real and positive, LAG membership is associated with an increase of 33%, to the total number of employees of non-agricultural businesses, meaning a plus/increase of 13.000 employees.
- In North-East, the impact of LAGs is rather negative, LAG membership is associated with a decrease of 47%, in the total number of employees of non-agricultural businesses, meaning a decrease of 3.000 employees.

# Conclusions

- The impact of LAG membership, in those regions, regarding the starting of new non-agricultural businesses was real and significant.
- The number of new businesses increased fast and the trend was positive. In the last year, data shows a slower rate.
- The turnover, also, increased linearly in intervention group. The number of employees also increased, at a faster rate than in the control group.
- At regional level, in North West Region, the impact is positive, while in North East Region it is rather negative.