

DERREG





CASE STUDY CONTEXTUAL REPORT 9



Alytus County

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WP 5 Deliverable 5.2a

1. Introduction

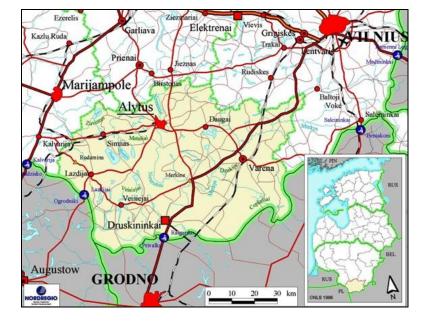
1.1 Location and Geography

Alytus county (Lithuanian: Alytaus apskritis) is one of ten counties in Lithuania, and is situated in the far south of the country within the Dainava plain, surrounded by the Suduva and Dzuku hills in the north, and the Eišiškiai plateau in the south (figure 1). The neighbouring county of Vilnius to the east contains the Lithuanian capital city, and Alytus county has international borders with Poland to the south-west and Belarus to the southeast. It shares strong cultural ties with the neighbouring border districts of Belarus and Poland, collectively forming the Dzūkija region, one of five Lithuanian ethnographic/linguistic regions. With an area of 5,425 km² (or 8.3% of the national territory), Alytus county is the sixth largest of Lithuania's counties by size and is its most forested, with forests and woodland covering 44% of the region's territory including much of the rural districts of Lazdijai and Varena where rich mushroom forests are located. The landscape also features several hundred lakes (about 400), especially in the western area of Lazdijai district, while Lithuania's largest river, the Nemunas, flows through the county. These natural features together with the region's vernacular folk traditions (art, architecture) mean that large areas are afforded protected status by the Lithuanian government.



Figure 1 (left): Location of Alytus county in Lithuania¹

Figure 2 (Below): Alytus county showing main towns and political borders²



Source: Wikipedia Commons. Available at: http://en.wikipedia.org/wiki/File:Alytaus_apskritis.png

² Source: Nordregio

In 2008, the population of Alytus county stood at 177,040 people, or 5.3% of the population of Lithuania, giving it a relatively low population density of 32.6 persons per km². As such, Alytus county is the fourth least densely populated of the ten DERREG case study regions and is categorized by Eurostat as 'predominantly rural'. The largest town and county seat, Alytus, is located on the River Nemunas, and has a population of 68,304 people, comprising 39% of the population of Alytus county. It is the administrative, cultural and commercial centre for southern Lithuania (figure 2). The next largest towns in the county are Druskininkai (16,241 residents) and Varėna (10,222), which together with Alytus comprise 54% of the region's population, with the remainder living in settlements of fewer than 5,000 people. These include the towns of Lazdijai (4,771) and Simnas (1,812), as well as 12 smaller towns and 1,129 villages.

Alytus county has a relatively low score of 7,870 on ESPON's accessibility index; the second lowest out of the DERREG case study regions after Pomurska. The region is bypassed by the major transnational highways of the E-Road network, yet has a dense network of local roads linking the main cities and towns as well as the Alytus - Gardinas (Belarus) highway, which stretches towards the east. There are also two important international border crossing points by road from Alytus county into Poland and Belarus respectively. Alytus county is also crossed by one of the major European rail corridors, route one, which connects Helsinki and Warsaw through Tallinn, Riga and Kaunas. The small town of Sestokai in southern Alytus county, close to the border with Poland, is an important location within this transnational railway network as the point where the European gauge meets the Soviet gauge railway line and is therefore a key transit point between the Baltic States and the Western Europe for both freight and passenger travel. Alytus county does not have any commercial airports, but it is around 100km by road from Alytus city to Vilnius International Airport which is the largest in Lithuania, handling around 2 million passengers in 2008 and with daily flights to major European cities such as Prague, Warsaw, Vienna and Copenhagen.

1.2 Government and Politics

Alytus county is one of ten Lithuanian counties (*Apskritys*) which are classified as NUTS3 administrative regions (Lithuania does not have any NUTS2 regions). Alytus county is comprised of 5 municipalities (*Savivaldybės*), including one urban municipality, Alytus city, and four rural district municipalities: Alytus district, Lazdijai district, Varėna district and Druskininkai district (figure 3). Each of the district municipalities is named after its largest town and administrative centre. Alytus city is the administrative centre for both the city municipality and its corresponding rural district municipality.



Figure 3: Municipalities of Alytus county³

3

³ Source: http://regionai.stat.gov.lt/en/alytaus_apskritis.html

Alytus county is administered by a governor (apskrities viršininkas), appointed by the central government in Vilnius, who has limited powers in terms of self-government with their main duty being to oversee the activities of the municipalities in accordance with Lithuanian law. Some responsibility for regional development is held at the county level through the Alytus Regional Development Council. The municipalities, of which there are 60 in total within Lithuania, are therefore the primary tier of local government and are responsible for the majority of public service provision. Each municipality's government is elected in democratic elections to municipal councils held every four years, including the election of a municipal mayor. Municipalities are further subdivided into districts called elderships (Seniūnija) which are the smallest administrative division of Lithuania, with 518 in total, varying in context from a grouping of small villages, to a single town, to a neighbourhood of a large city. Alytus county contains 36 elderships (table 1) that are responsible for managing small scale local matters, such as repairing pavements/dirt roads and keeping records on all families living in the eldership.

NUTS 1	NUTS 2	NUTS 3	LAU 1	LAU 2
Lithuania		Alytus county (Alytaus apskritis)	Alytus (city) Alytus (district) Lazdijai Varėna Druskininkai	1 elderships 11 elderships 14 elderships 8 elderships 2 elderships (36 in total)

Table 1: Hierarchy of administrative/statistical units for Alytus county

These administrative subdivisions have been subject to considerable change throughout Lithuania's history, as the former Grand Duchy of Lithuania (whose territories included present-day Belarus and parts of Poland and Russia) became part of the Russian Empire throughout the nineteenth and early twentieth century, before Lithuania regained independence following WWI. This was short-lived and Lithuania was again occupied by the Soviet Union in 1940, followed briefly by Nazi Germany, before the Soviets regained control in 1944 and brought the country's administrative system in line with that of other Soviet Republics. The political and economic development of Alytus county and Lithuania in general has thus been shaped by the legacy of nearly half a century of Communist government and a centrally planned economy. The growth of a strong anti-communist independence movement saw Lithuania became the first Soviet Republic to declare independence in March 1990 and the country has maintained strong democratic traditions.

During the 1990s, political support swung between left- and right-leaning parties, before the emergence of a centre-left coalition in 2000 between the New Union and Social Democratic parties. Lithuania's most recent general election in 2008 saw a shift back to the right, with victory for the centre-right Homeland Union (Lithuanian Christian Democrats) who gained 19.7% of the national vote and formed a coalition government with the Liberal Movement of the Republic of Lithuania and the National Resurrection Party. Within Alytus county, support varied across the region's 3 constituencies, with the National Revival Party polling most support in Alytus city and district constituency, while the Homeland Union Party won in Lazdijai – Druskininkai and the Electoral Action of Poles in Lithuania (AWPL) party, a centrist party representing the Polish minority, won in the border constituency of Varena – Eišiškės.⁴

⁴ Source: http://www.electoralgeography.com/new/en/

2. The Regional Economy

2.1 Economic History

Socialist government in the post-war period led to the nationalization of Lithuania's largely agricultural economy and the intensification of agricultural production, while economic integration with the USSR brought a period of intense industrialisation and urbanisation as forms of heavy industry were established in Lithuania. Following independence in 1990, Lithuania faced a difficult transition from a centrally planned to a market economy which saw the country's GDP contract significantly as inflation ran at 1000% and thousands of jobs were lost from inefficient heavy industry. Agricultural production also declined due to difficulties in sectoral restructuring. However, by the mid-1990s change was under way, with widespread economic reforms, including the privatization of state owned assets and the establishment of a new Lithuanian currency, leading to a period of relative economic stability and diversification into new EU electronic, chemical and manufacturing markets. By 2001, the Lithuanian economy was regarded as one of the world's fastest growing, with high levels of domestic service sector growth as well as proving to be an attractive location for foreign investment due to the country's low operating costs, skilled workforce and its status as a transport hub between East and West. This period of economic expansion was also encouraged by Lithuania's accession to the WTO in 2001 and the EU in 2004.

Due to infertile soils across large parts of Alytus county, agricultural land covers only 38% of the total land area. This is the lowest figure among the Lithuanian counties, with below average agricultural yields meaning the region has lagged behind economically. At the same time, vast areas of pine forest left intact or grown instead of agriculture mean the region has a strong forestry sector. Industry, construction, and market services are also very important sectors within county's economic structure. Alytus county suffered as did most of Lithuania from decreasing employment in the early 1990s and although the situation began to slowly improve from around 1996, employment figures struggled to regain their pre-1992 levels. Between 1994 and 2001, overall employment in Alytus county decreased by 12% compared to an average decrease of 9% across Lithuania. Yet there are significant local variations within this figure, with the district of Alytus being worst as employment decreased by over 40% due to economic restructuring. In contrast, employment stagnated in the highly forested Varena district and rose in the resort town of Druskininkai.⁵

The economic situation in Alytus county has been improving over the past decade, with the major beneficiaries of growth being the service and industrial sectors. The Gross Value Added (GVA) of the service sector increased by nearly 300%, from €98.4 million in 1995 to €387.1 million in 2005, while industrial GVA increased by around 210% from €82.3 to €255.6 over the same period. The primary sector expanded at a lesser rate of just under 50% over the same period (figure 4). Despite this sustained growth, levels of sectoral GVA remain comparatively low both within Lithuania and a European context. In 1995, the combined GVA of all economic sectors in Alytus county placed it 8th out of Lithuania's 10 counties, with a 4.6% share of the national GVA. By 2005, Alytus was still placed 8th but its share of national GVA had declined to 3.4%, suggesting a lesser rate of economic growth than that being experienced in other Lithuanian regions.⁶

Between 1995 and 1998, the number of people employed in agriculture decreased sharply by 19.4% compared to a 9% decrease nationally. This decrease was partly offset by the largest rise in industrial employment (19.7%) experienced in the county, and by an above average rise in service-sector employment (16.5%, as against 8% nationally). This resulted in a different sectoral balance of employment compared to the national picture, with Alytus county having the highest percentage of industrial employment in 2002 at 43.5% and below

⁵ Source: http://circa.europa.eu/irc/dsis/regportraits/info/data/en/lt001_emp.htm

⁶ Source: Eurostat

average service sector employment.⁷ The balance between service sector and industrial employment has shifted in recent years, with employment in service occupations increasing by around 30% since 2003 to 39,700 following a period of decline prior to this. Overall industrial employment increased by 22% between 2001 and 2007 yet this was mainly concentrated in the construction industry, while other forms of industrial employment declined along with agricultural employment (figure 5).⁸

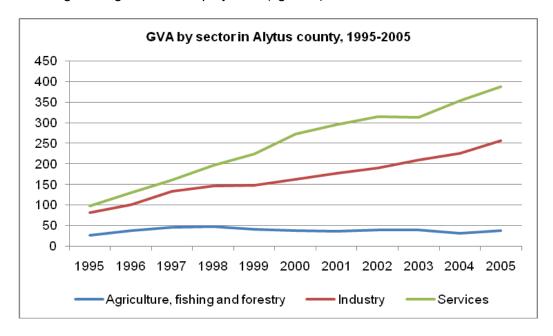


Figure 4: Gross Value Added (GVA) by sector in Alytus county, 1995-2008. Source: Eurostat

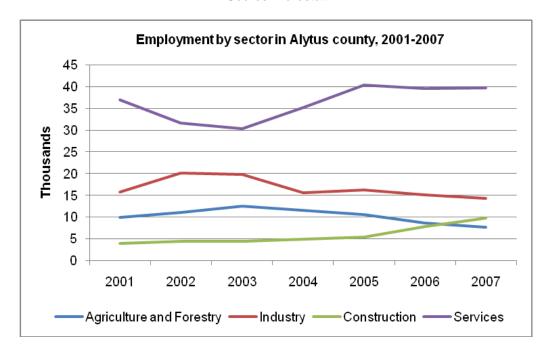


Figure 5: Employment by sector in Alytus county, 2001-2007.
Source: Eurostat

8 Source: Eurostat

⁷ Source: http://circa.europa.eu/irc/dsis/regportraits/info/data/en/lt001_emp.htm

Economic growth since the mid-1990s has increased the GDP per capita in Alytus county by over 300%, from €1,200 in 1995 to €5,500 in 2007 (figure 6). However, Alytus county significantly lags behind the national average GDP per capita of €8,500, placing it amongst the weakest of Lithuania's regions in terms of economic development. This 2007 figure is also the lowest across the DERREG case study regions and is only 22% of the EU average, and 57% of the average for the 'Accession States' of Central and Eastern Europe.

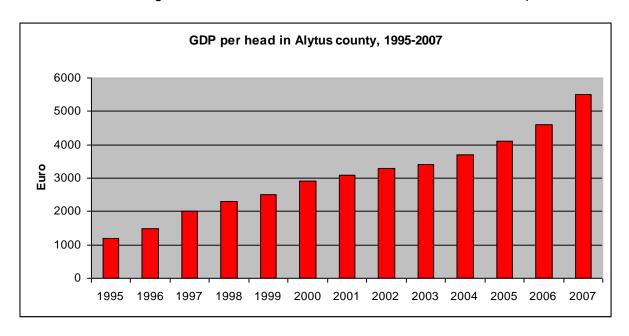


Figure 6: GDP per head in Alytus county, 1995-2007 Source: Eurostat

2.1 Present Economic and Employment Structure

The service sector is now the most important area of activity in the economy of Alytus county, as measured by employment and contribution to GVA, but there remains a strong industrial sector. Services employed 39,700 people or 55.4% of the working population in 2007, compared with 33.8% in industry (with 13.7% specifically in the construction industry) and 10.7% in agriculture and forestry. The balance between the services and industry is similar in terms of GVA, with the service sector contributing 56.8% (€387.1 million) of regional GVA in 2005, compared with 37.5% (€255.6 million) from industry and 5.7% (€38.6 million) from agriculture and forestry. Compared to the national proportion of GVA from services of 62.7% in 2007, Alytus county has a smaller service sector combined with larger than average industry and construction, and agriculture, fishing and forestry sectors.

As overall GVA in Alytus has increased since the mid-1990s, economic sectors which have benefited most include construction, wholesale and retail trade, hospitality, transport and public sector employment (public administration, health, educations). The region's main industrial products are refrigerators and freezers (produced by the joint stock company "Snaige"), cotton fabrics and yarn (joint stock company "Alytus tekstile"), sparkling and still wines (joint stock company 'Alita'), fodder, meat and milk products. In Lazdijai and Varena municipalities, the wood-processing industry is dominant, as these municipalities are rich in forests, wooded areas covering respectively 36% and 66% of their territories. These districts also have been developing food industries, such as processing and canning of mushrooms and forest berries, carried out by small enterprises. The spa resort town of Druskininkai is

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⁹ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

also a major economic resource in the county, offering year-round and health treatment facilities and tourist attractions.

In 2001, over a quarter of the workforce were employed in skilled manual or craft and trade occupations, then just under a quarter in semi- and un-skilled manual work and slightly less again in professional and managerial occupations. Less than a sixth are employed in clerical and non-manual (service) jobs and only one-tenth in technical occupations (table 2):

	Number	%
Senior officers and managers	4372	7.0%
Professionals	7886	12.6%
Professional and managerial occupations	12258	19.6%
Technical and associate professionals	6488	10.4%
Clerical and secretarial workers	2572	4.1%
Service and retail workers	7110	11.3%
Clerical and non-manual occupations	9682	15.5%
Skilled agriculture and fishery workers	6978	11.1%
Craft and related trade workers	9873	15.8%
Skilled manual and craft occupations	16851	26.9%
Plant and machine operators and assemblers	8874	14.2%
Elementary occupations	4609	7.4%
Semi- and un- skilled manual work	13483	21.5%
Armed Forces	441	0.7%
Not described	3451	5.5%
Total workforce	62654	

Table 2: Occupational structure of the Alytus county labour market, 2001 Source: Eurostat

During the period 1998 to 2008, overall levels of employment in Alytus county decreased by 8.5% from 78,400 people in 1998 to 71,700 in 2007, although recent years had shown signs of growth from a low of 66,700 in 2001. There are, however, regional variations within this overall trend of decline, with employment decreasing in Alytus city municipality, Druskininkai municipality and Varena district municipality between 1995 and 2007, but increasing in Alytus district municipality and Lazdijai district municipality. Both Druskininkai municipality and Lazdijai district municipality were formally identified as problematic territories by the Lithuanian government in 2007 due to high levels of unemployment and social benefit claimants. The country of th

According to Labour Force Survey data, unemployment rose sharply from the mid-1990s reaching a critical level in 2001 of 19,500 or 22.6% of the working population, compared to the national average of 17.4%. Male unemployment at this time was particularly high amongst former industry, construction and trade workers and corresponded to a low in the employment rate of 52.8%. Since 2001, the unemployment rate has been decreasing; falling to only 3.3% (2,400 people) in 2007 which was lower than the national average of 4.3% and

¹⁰ Source: Statistics Lithuania (http://www.stat.gov.lt/en/)

¹¹ Source: DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure

the lowest across DERREG case study regions (although the employment rate in Alytus county remained lower than nationally, at 61.1% in 2007 compared to 64.9%). However, in 2008-2009 Alytus county experienced a large rise in unemployment again resulting from the impact of the global economic recession, with the rate rising to 15.6% in 2009 (13.7% for the whole of Lithuania). Youth unemployment (age 15-24) has followed a similar trend, reaching a peak of around 40% in 2001 before dropping off sharply in subsequent years to only 5.7% in 2007, again the lowest rate across DERREG case study regions at that time, before increasing again to 30.6% in 2009. 13

Alytus city is the largest centre of employment in the region being the educational, cultural and administrative centre of Alytus county. The major part of Alytus, its centre and most significant industrial enterprises, are on the left bank of the Nemunas river, whereas the right bank is a residential area. It is the location for approximately 50% of all business enterprises in Alytus county (1,632 out of 3,234 in 2009). Private enterprise has expanded in Alytus county since economic liberalisation, although levels of entrepreneurship have been lower than in many other parts of Lithuania. There have also been fluctuations in business growth due to the changing economic climate, with the number of enterprises falling from 2,984 in 2002 to 2,880 in 2006, before increasing by 12% to 3,234 in 2009. The business sector is dominated by sole-trader and micro-firms (between 1 and 9 employees) of which there were 2,396 in 2009 accounting for 74% of all firms in 2009, compared to 613 (19%) small to medium sized enterprises (10-49 employees) and 225 (7%) larger firms (50+ employees). Only 0.5% of firms had more than 250 workers. 14

Between 2002 and 2008, overall business closures outstripped business start-ups by 2,099 to 1,720, although the balance between them varied within different years as shown in figure 7 below. Over 50% of the new business start-ups over this period were in Alytus city municipality, followed by Druskininkai municipality with 16.6%, while the least were in Lazdijai district municipality (7.0%). While the economic sectors experiencing the greatest business growth during this period were construction (increasing from 94 to 188 firms), hotels and restaurants (76 to 101), realty, rent and other business activity (217 to 281) and education, health care and other communal and social service activity (844 to 1072), post and telecommunications (7 to 11). While the number of firms decreased in agriculture, hunting, forestry and fishery (116 to 95), manufacturing (329 to 294), wholesale and retail; repair of engine vehicles and motorcycles, repair of personal and household tackles (924 to 792), transport and storage (315 to 282).

¹² Source: Source: Statistics Lithuania (http://www.stat.gov.lt/en/)

¹³ Ibid

¹⁴ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

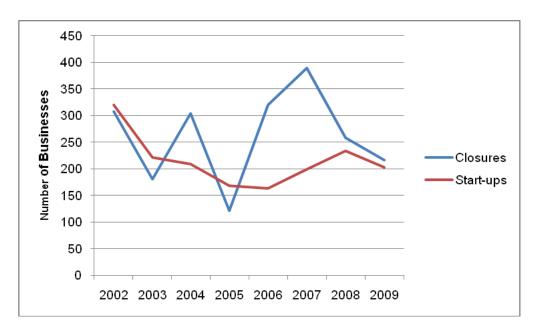


Figure 7: Business start-ups and closures (firms with 0 to 250 employees) in Alytus county, 2002-2008. Source: Statistics Lithuania

In recent years, several branches of manufacturing – alcoholic spirits, sparkling wine, mineral water, refrigerators and freezers, wooden windows and doors, prefabricated construction elements, furniture, plastic products – have been developing especially rapidly in the county. 45.5% of production manufactured in Alytus county was sold on the domestic market, while 54.5% was exported. In Alytus county, large public companies such as Snaigė (the only manufacturer of refrigerators in the Baltic States) and Alita (a well-known manufacturer of sparkling wine and other alcoholic beverages) are successfully operating. Other large and rather well-known manufacturing enterprises located in the county include: private company Vita Baltic International (polyurethane foam), private company Druskininkų rasa (manufacture and sale of mineral water and PET bottles), private company Lisiplast (plastic products), public company Astra (industrial equipment), private company Merkys (textiles), public company Dainava (clothing), private company Alseka (windows and doors), public company Alytaus gelžbetonis (ferroconcrete and environmental protection products), private company Stora Enso Timber (timber), private company Sofa Brands (furniture) private companies Varenos pienelis and Pienalita (dairy products).

2.3 Rural Primary Industries

As noted above, the relative significance of agriculture in the regional economy of Alytus county has reduced since the mid-1990s despite remaining an important regional employer. Although primary sector (agriculture, fishing and forestry) GVA increased from €26.3 million in 1995 to €38.6 million in 2005, with a peak of €48.2 million in 1998, its share of regional GVA fell over the same period from 12.7% to 5.7%. Similarly, although there was a 25% increase in agricultural employees between 2001 and 2003, the overall trend has been downwards from around 10,000 full-time equivalent workers in 2001 to around 7,700 in 2007; comprising 10.8% of the workforce.

In 2005, there were 20,910 farms in Alytus county which is a 5% decrease from 2 years earlier. Small farms predominate, with 52% of farms having holdings of less than 5 hectares and 75.3% with between 5 and 20 hectares. Only 3.5% of farms had holdings of greater than 20 hectares, giving an average farm size of 7.6 hectares which is the second smallest

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¹⁵ Ibid

across Lithuania's ten counties and shows little evidence of the legacy of Socialist collectivised farming practices. There is a degree of regional variation, with the largest farms tending to be located in Alytus and Varena district municipalities and smaller farms in Druskininkai municipality, giving the latter an average farm size of 4.9 ha in 2007. The majority of farms in Alytus county are owned by individual farmers, with a very small number owned by agricultural companies and enterprises. Just over 40% of farmers are aged over 65 indicating the traditional nature of the agricultural sector and its likely continued decline, as only 20.5% of farmers aged under 45. Four in ten farmers are women, which is the second largest proportion of female farm ownership out of the DERREG case study regions after Galicia.

Based on data for 2005, agricultural land covers 203,546 hectares or 37.5% of the total land area of Alytus county yet only 157,820 hectares of this is recorded as utilised agricultural area (UAA). This is the smallest amount of UAA across Lithuania's ten counties, with only 4.7% of the Lithuania's agricultural production grown in Alytus county in 2006. The land is of mixed quality, with 63.7% of farms in 2005 located within 'less favourable areas' (LFA). These farms are concentrated in particular parts of the county, with the district municipalities of Lazdijai and Varėna and two *seniunijos* (NUTS5 areas) in Alytus district municipality classified as LFA by the Lithuanian Ministry of Agriculture based on critieria including the yield of cereals being less than 80% of the national average.²⁰

Out of the utilised agricultural area in Alytus county, 52.3% is under arable production and 46.3% is permanent grassland for livestock grazing, with a further 1.4% of permanent crop areas including orchards and berry plantations. The majority of farms are of mixed farming types, with 97% of holdings including some arable land (cereals and root crops) and 91% keeping some livestock. Livestock production makes up a significant proportion of the agricultural economy in Alytus county yet the number of livestock is the lowest across Lithuania, with heads of dairy cows and goats decreasing in recent years while sheep farming has increased. The major share of arable production is made up by cereal grain crops including barley, wheat, and triticale, and these are mostly grown in Alytus and Varena district municipalities, with 37.4% of the formers total land area under grain crops in 2007 and 33.1% of the latter. However, the productivity of grain crops is lower than the national average and amongst the lowest across Lithuania's counties. Potatoes are also an important crop in Alytus county, making up around 9% of arable production.

Forests and woodland cover 44% of the territory of Alytus county, which greatly exceeds the national average of 28.7%. Forested areas are particularly concentrated in areas of more limited agricultural production, including the district of Varena in the east where forests cover over two-thirds of the land area, as well as large parts of Lazdijai district in the west and surrounding the resort town of Druskininkai in the south of the county. While the significance of agriculture has been decreasing over the past decade, forestry therefore remains an important economic sector in Alytus county with links to related industries such as construction and the manufacture of wooden products. In Varena municipality in particular, the forests are also economically important for the harvesting of mushrooms and berries, as

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¹⁶ Source: Eurostat Rural Development Report, 2008

¹⁷ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

¹⁸ Source: Eurostat

¹⁹ Source: Eurostat Rural Development Report, 2008

²⁰ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

²¹ Source: Eurostat

²² Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

well as related craft businesses (e.g. carpentry), tourism and recreational activities. There are also resources of iron ore at a depth of 300-500 m.²³

2.4 Tourism

Tourism is already an important economic sector with Alvtus county and has been identified as a key growth area for future regional development, emphasising the diverse natural landscape, with many protected areas rich with biodiversity, as well as the distinctive cultural heritage and traditions of the Dzūkija ethnic region. Tourist numbers have been growing significantly in recent years, increasing by over 50% in 2 years from 134,792 in 2005 to 212,297 in 2007 (figure 8). Domestic tourists account for the majority of visitors, with only 27% of visitors to Alytus county in 2007 coming from outside Lithuania although this is a marginal increase on 23% in 2005.

Based on these 2007 figures, Alytus county ranked third in Lithuania in terms of tourist popularity after Vilnius and Klaipeda counties. Indeed, between 2001 and 2007 the number of guests who stayed in the county's accommodation establishments grew by a factor of 4 compared to the national average growth of 2.5 times.²⁴ The tourist infrastructure of Alytus county has expanded rapidly a result, with the total number of bed places available in the county increasing by nearly 200% between 2000 and 2006 from 1,209 to 3,526.25 The hotel sector of Druskininkai municipality has been developing particularly rapidly. The number of hotels there increased from 7 in 2003 to 19 in 2007. The services of Druskininkai's recreation and health centres are becoming increasingly popular among Lithuanian residents who made up 72.2% of all accommodated guests in 2007, compared to 59.6% in 2001. While the major share of international guests who had stayed in Druskininkai accommodation establishments were from Poland, Russia, Germany, and Belarus. Alytus county is also famous for its rural tourism farmsteads. The number of such farmsteads in the region grew from 40 to 76 between 2003 and 2007, while the number of guests increased 4 times. The highest number of rural tourism farmsteads is in Lazdijai district municipality.²⁶

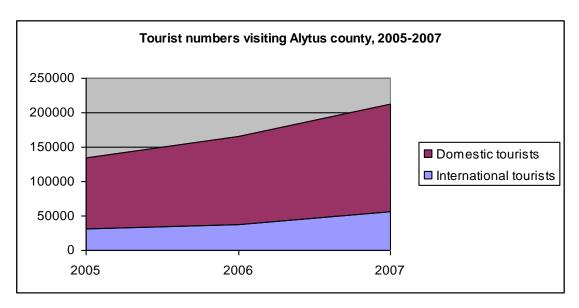


Figure 8: Domestic and international tourist visitors to Alytus county, 2005-2007. Source: Statistics Lithuania

²³ Source: http://regionai.stat.gov.lt/en/alytaus_apskritis/varenos_rajono_savivaldybe.html

²⁴ DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and

Source: Source: Eurostat Rural Development Report. 2008

²⁶ DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure

2.5 International Integration

The international integration of the economy of Alytus county was constrained during the Communist period, with industry and agriculture collectively developed to meet national needs. Since economic liberalisation, foreign trade has become crucial to Lithuania's economic growth due to the country's relatively small size. The majority of Lithuania's international trade is through the EU, with 60.3% of total exports and 57.6% of total imports during 2008. However, the single biggest trading partner is Russia, on whom Lithuania was reliant for almost 30% of all imports in 2008 including commodities such as oil, gas and metals. Although Alytus county has lagged behind other regions of Lithuania in terms of economic development, increasing production volumes in the county's manufacturing enterprises over the past decade has led to a rapid growth in exports. In total, goods manufactured in Alytus county accounted for 3.3% of exports of Lithuanian goods. The bulk of exported goods were accounted for by refrigerators and freezers, timber and plastic products.

Lithuania has been successful at attracting foreign investors in part because of a small tax burden, but also because of a skilled workforce and well-developed. Cumulative foreign direct investment (FDI) at the beginning of the year 2009 was approximately €9.2 billion, with the manufacturing sector receiving the largest share of 28% of total FDI followed by real estate and business activity sector with 20% of total FDI, while top country-investors include Sweden, Germany and Denmark.²⁹ Lithuania also has a particularly well-developed information and communications technologies sector, with transnational companies including Microsoft, IBM and Siemens having established a presence in the country. However, the majority of FDI has been concentrated around the capital city Vilnius, with Vilnius county receiving 59% (LTL³⁰ 20,855.2 million; €6 billion) of FDI into Lithuania in 2008.

FDI in Alytus county in 2008 was LTL 445.4 million (approx €129 million) which was just 1.3% of the national total, placing Alytus sixth out of Lithuania's ten counties in terms of FDI. The largest share (72%, or LTL 321.8 million) of the total FDI in Alytus county was invested in Alytus town municipality, giving a per capita FDI of LTL 4,711 compared to only LTL 188 in Lazdijai municipality and LTL 289 in Varena district municipality. The bulk of investment in Alytus county was made by Estonian, Finnish and UK investors, with key foreign-owned companies in the region including Coca Cola Bottling Lietuva (USA), Stora Enso Timber (Finland, Sweden), Graanul Invest (Estonia), Litalka Elektronik (Germany) and Sofa Brands (UK).

In Alytus county, as of 1 January 2008, the bulk of investment was made in manufacturing (LTL 352.1 million, or 79% of the total FDI), wholesale and retail trade (LTL 64.4 million, or 14%). In manufacturing, the bulk of the FDI was made in the manufacture of wood and wood products (33%), rubber and plastics products (28%), machinery and equipment (25% of the total FDI in manufacturing).³¹

²⁷ Source: Statistics Lithuania

²⁸ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

²⁹ Ibid

³⁰ LTL - Lithuanian Litas; currently the litas is pegged to the euro at the rate of 3.4528 to 1. It is expected that the litas will be replaced by the euro by 2013.

³¹ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

3. Population and Migration

3.1 Population and Development

The population of Alytus county has been consistently declining over the past two decades, with a decrease of 20,400 people (10.3%) between 1990 and 2008 (table 3). This is partly due to a natural population decline caused by a falling birth rate, which has seen deaths exceeding births by a greater amount in every year between 1994 and 2007. In the latter year live births reached a low of 1,487, leading to a natural population decrease of 1,127 persons. However, the birth rate has started to increase again in 2008 and 2009. At the same time, this population decline has been exacerbated by a net population loss through migration. Between 1994 and 2008, 56,010 people moved into Alytus county compared with 71,796 who migrated out of the region, resulting in a net loss of just under 16,000 people or 8% of the 1994 population.

As figure 9 indicates, out-migration has consistently exceeded in-migration over this period yet both have also fluctuated considerably. Both in-migration and out-migration peaked in 1997, with 5,306 new arrivals against 6,887 departures leading to the second highest yearly net migration loss over this period of 1,581 persons, with the highest loss the following year of 1,589. Both in- and out-migration declined for a period between 1998 and 2002, with out-migration reaching a low in 2001 of 2,408 leading to the smallest yearly net migration loss of just 64 persons.

1990	1991	1995	1999	2001	2003	2005	2007	2008
197400	198500	197200	190300	187769	186300	182800	178900	177000

Table 3: Population of Alytus county, 1990-2008.
Source: Statistics Lithuania

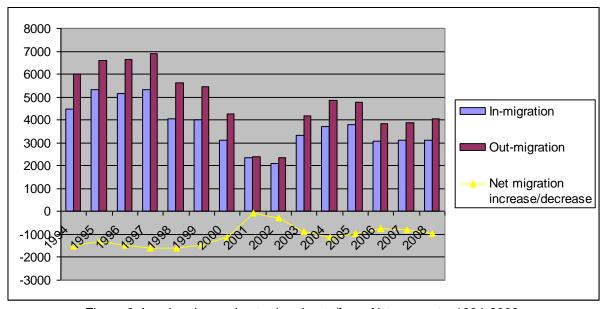


Figure 9: In-migration and out-migration to/from Alytus county, 1994-2008. Source: Statistics Lithuania

Whilst the majority of migration to Alytus county is from other parts of Lithuania, evidence suggests that international migration is making an increasing minority contribution in recent years following Lithuania's ascension to the EU. In 2001, there were 92 international migrants to Alytus county which accounted for just 3.9% of the total in-migration for that year; this figure increased to 426 international migrants by 2008, now accounting for a 13.7% share. At the same time, international out-migration from Alytus county to outside

Lithuania also increased, from 118 persons in 2001 to 718 in 2008, or from 4.9% to 17.7% of total out-migration. No regional level data is available for the country of origin of international in-migrants, however, at the national level the largest proportion in 2007 were from the UK (20.8%), followed by Belarus (12.0%) and then Russia (10.3% and Ireland (10.3%). While the most popular destinations for out-migrants leaving Lithuania in the same year were the UK (26.4%), Ireland (11.7%), USA (11.1%) and Germany (9.2%).³²

3.2 Demographic and Household Characteristics

The median age of residents of Alytus county is 32, which is below average when compared with the other DERREG case study regions. Just over 10% of the region's residents are aged over 70, while 20% are aged under 15 which is the third highest proportion of young people across the case study regions after the West Region of Ireland and the Westerkwartier in the Netherlands (figure 10). However, 10.6% of the population in 2001 were also aged between 60 and 69 which, combined with low birth rates, means that the county is experiencing significant growth in the age of its population. This is placing an increased economic burden on the working age population. At the same time, the proportion of residents aged between 20 and 29 is relatively low at 12.2%, indicating the out-migration of younger adults for further education and employment opportunities. Women have consistently made up a greater proportion of the region's population over the past decade and this is increasing, with a ratio of 1.08 women to every man in 2000 rising to 1.10 by 2008.

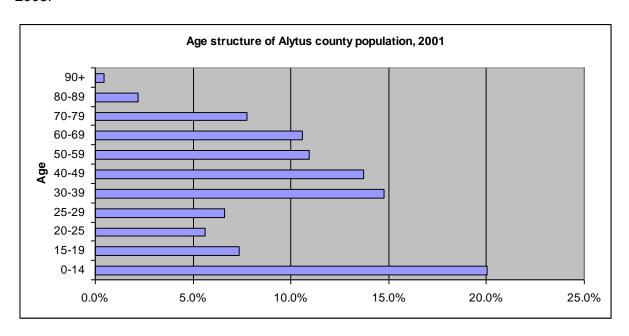


Figure 10: Age Structure of the population of Alytus county, 2001. Source: Eurostat

Household sizes in Alytus county are fairly evenly spread across 2 to 4 person households based on data for 2001, with between 20% and 30% of the population living in each. 10.0% of the population live in single person households and 18.4% in households of five people or more. This mix of household sizes may reflect the region's settlement pattern where just over 50% of residents live in the three largest cities/towns (Alytus, Druskininkai and Varena), while the remainder of the population live in a mix of smaller rural towns and villages.³³

³² Source: Statistics Lithuania

³³ Source: Eurostat

The construction industry has been a major growth area within Alytus county in recent years, with employment in construction more than doubling between 2003 and 2007 from around 4,900 to 9,800 employees (see figure 5). In 2007, construction work carried out by construction enterprises in the county accounted for LTL 457.5 million (approx €130 million) which was 2.4 times more than in 2001. This includes a new trend towards building blocks of flats, as opposed to the 1 to 2 dwelling buildings which have previously dominated e.g. in 2007, permits were issued for the construction of residential buildings with 687 flats in Alytus county. Initially much of this new construction work (residential and non-residential buildings e.g. trade and catering premises, hotels and agricultural buildings) has been concentrated around Alytus town, but data for 2007 shows an increasingly numbers of new developments in Druskininkai and Lazdijai municipalities.³⁴

3.3 Non-national Residents

The whole of Alytus county lies within the historical and cultural region of Dzukija, one of five 'ethnographic' regions in Lithuania which is also comprised of some former Lithuanian areas of western Belarus and territories in Poland who share the Dzūkian dialect as well as many cultural traditions. The division of this cultural region by administrative boundaries means that the majority of inhabitants (over 95%) of Alytus county are ethnic Lithuanians, with Poles and Russians the largest groups of non-ethnic Lithuanians, constituting respectively 2.1% and 1.3% of the total population circa 2004.³⁵

Census data for 2001 records only 5,050 non-Lithuanian nationals living in Alytus county, which at 2.7% of the population was the smallest proportion across the DERREG case study regions. At this time, there were just 153 migrant workers from outside the European Union, plus a further 2 migrant workers from (pre-enlargement EU).³⁶ However, the more recent data above suggests this proportion may be increasing and this is in line with migration trends outlined in section 3.1 which showed an increasing amount of international migration into Alytus county following EU enlargement in 2004.

4. Environment and Sustainable Development

4.1 The Regional Environment

Large areas of Alytus county have infertile soils, unsuited for agriculture, and as a result have remained largely undeveloped. This has resulted in an environment characterised by dense pine forests and vast unspoilt areas low in population density and rich in biodiversity. Alytus county is the most forested area in Lithuania, with 247,200 hectares of forests and woodland covering 44% of the region's territory, with this figure rising to over 65% in both Varena and Druskininkai municipalities. Around 203,500 hectares (38%) of the land area is agricultural land which is the lowest proportion in Lithuania, although this rises to over 58% in Alytus district municipality where much of the region's agricultural production is concentrated. The region is therefore classified by the European Environment Agency as predominantly a mixture of rural mosaic and pasture landscapes, and forested landscape types.

Only around 2.1% of the regional territory, or 11,400 hectares, is covered built-up (artificial) land cover. The region's urban areas are highly concentrated, with more than one third of the region's population living in Alytus town. Only in the county's two more urbanised municipalities, Alytus town and Druskininkai, do more than half of the population live in urban areas, while the other three municipalities are predominantly rural and sparsely populated.

³⁶ Source: Eurostat

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³⁴ Source: DERREG Deliverable 1.1 Annex: *The DERREG Case Study Areas: Business Environment and Structure*

³⁵ Source: http://circa.europa.eu/irc/dsis/regportraits/info/data/en/lt001_geo.htm

Rivers and lakes cover 24,300 hectares (4.3%), with the Nemunas (the largest river in Lithuania) and Merkys rivers flowing through the county, while the largest of the numerous lakes include Dusia (2,334 ha), Metelys (1,290 ha), Žuvintas (992 ha) and Didžiulis (913ha). Many of these are concentrated in Lazdijai district municipality in the west of Alytus county, where 8.2% of the land area is covered by water bodies.³⁷



Figure 11: Aerial view of the landscape of Alytus county. Source: Google Earth

4.2 Protected Areas

Significant areas of the landscape of Alytus county have been afforded protection by national and international designations reflecting their environmental and cultural importance. The Dzukija National Park is one of five National Parks in Lithuania which were established in 1991 after the country declared independence from the Soviet Union. Located mainly in the Varena district municipality, the Dzukija National Park covers an area of approximately 58,520 hectares (one-third of the municipality) of predominantly pine forests, as well as traditional village landscapes, lakes and the Čepkeliai marsh nature reserve towards the border with Belarus (Figure 12). The Dzukija National Park is the largest protected area in Lithuania and encompasses a large part of the country's largest forest, The Dainava Forest, which is rich in edible mushrooms and berries important to the local economy, as well as being the habitat for endangered species including grey wolf, osprey and mountain hare (Figure 13). Many traditional crafts are preserved within the National Park including wild-hive beekeeping and wooden crosses, which, along with opportunities for outdoor recreation, contribute to making this one of the main tourist areas in Alytus county.

In addition, 30 regional parks were established in Lithuania in 1992 as natural and cultural reserves, including the Meteliai Regional Park in Lazdijai district of Alytus county. Covering an area of 17,700 hectares, the park encompasses some of the great lakes of southern Lithuania - Lake Metelys, Lake Dusia, and Lake Obelija – and their surrounding glacial landscape features, home to large numbers of bird species as well as a rich cultural heritage including traditional villages, battle sites, churches, cemeteries, and Stone Age settlements. Other protected areas include the Čepkeliai marsh mentioned above, which was designated as a State Nature Reserve in 1975 and subsequently as a Ramsar wetland site of international importance in 1993. The site is located in the watersheds of the Katra, Ula,

³⁷ Source: http://regionai.stat.gov.lt/en/alytaus_apskritis.html

Gruda, Musteika Rivers, and encompasses an area of 18,150 hectares of open raised bogs, fens, transition bogs, numerous small lakes, pools, forested islands and permanently flooded old forests with a high diversity of flora and fauna. Zuvintas in Alytus district municiplaity was the first Nature Reserve established in Lithuania in 1937 around the lake of the same name and was similarly designated as a Ramsar site in 1993. The Žuvintas Biosphere Reserve (5442 ha) was subsequently established in 2002 in line with the European conservation of natural habitats and of wild fauna and flora directive, and is a larger wetland complex extending from the west of Alytus town towards Marijampole town in neighbouring Marijampole county.



Figure 12: Area of the Dzukija National Park³⁸



Figure 13: View of the Dainava Forest within Dzukija National Park.
Source: Wikipedia Commons³⁹

39 Source: http://en.wikipedia.org/wiki/File:Ulos_akies_laukyme.jpg

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³⁸ Source: http://www.dzukijosparkas.lt/gamta-en.htm

In total there are 37 protected areas in Alytus county in the Natura 2000 network, ranging in size from under 20 hectares to over 55,000 hectares (the Dainaurus Giria birds directive site, which is largely coterminous with the Dzukija National Park). These include 30 sites listed under the Habitats Directive, and 7 listed under the Birds Protection Directive (Figure 14).

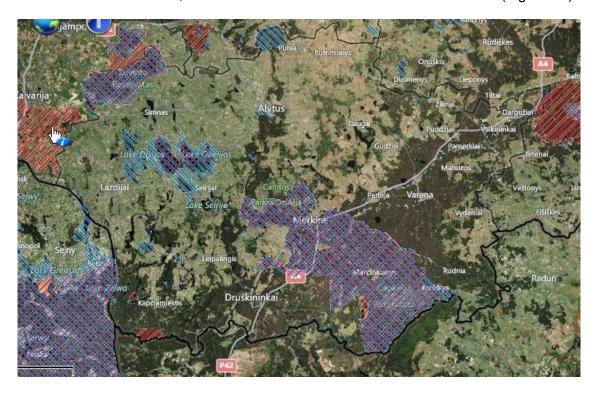


Figure 14: Map of Natura 2000 registered sites in Alytus county Source: http://natura2000.eea.europa.eu

4.3 Sustainable Development

The integration of sustainable development principles in Alytus county regional development programmes has so far been uneven; balanced against the foremost priority of improving the region's social and economic infrastructure in order to reduce rural/urban disparities. For example, the Alytus Regional Development Plan 2008-2010 recognises economic diversification in rural areas as a key tenet of this development and particularly rural tourism activities, in line with the stated objective of the "sustainable development of modern countryside". Eco- and agro-tourism are recognised as important growth areas in the region, building upon the already important tourist attraction of the Dzūkija National Park as well other protected natural and cultural landscape areas within Alytus county. The sustainable expansion of the region's forestry sector through the development of locally based enterprises and partnerships has also been encouraged through INTERREG funding.

Organic farming methods are becoming increasingly popular in the region, with 205 certified organic farms in Alytus county in 2007 covering a land area of 7,935 hectares and more farmers across the region applying for organic status. This accounts for 7.2% of all certified organic farms in Lithuania and 6.6% of the land area, despite the comparably small size of Alytus's agricultural sector.⁴¹

⁴⁰ Source: DERREG Deliverable 4.1: Overview of learning and innovation support strategies

⁴¹ Source: Source: DERREG Deliverable 1.1 Annex: The DERREG Case Study Areas: Business Environment and Structure

However, despite the region's natural resources (rivers, lakes) engagement with sustainable energy production has been slow to develop both in Alytus county and within Lithunia nationally, with currently no carbon-based or renewable power stations located in Alytus county. Proposals for a large-scale hydro-power plant on the Neman River in Alytus county met with local opposition based on the potential damaging impact on the river's ecosystem. 42 In 1993, 88% of Lithuania's energy came from nuclear power stations. This figure fell dramatically to 26% in 2007, with the country's entry into the EU reliant on the decommissioning of its powerful Soviet-era Ignalina nuclear power station due to safety concerns. With few fossil fuel reserves this has led to an increased reliance on oil and gas imports from Russia, however, issues of energy security and climate change have highlighted the unsustainability of this situation. Renewable energy production (biomass, wind and hydro-electric) is being developed in Lithuania yet based on current levels (approx 8.5%) the country is unlikely to meet the EU target of 20% renewable energy by 2020, leading to calls for renewed investment in nuclear. In February 2007, the three Baltic states (Lithuania, Latvia and Estonia) and Poland agreed to build a new nuclear plant at Ignalina, although this will not be operational until around 2018.⁴³

4.4 Environmental Issues

Significant environmental concerns in Alytus county centre around issues of development, waste and pollution. In particular, addressing the impacts of domestic, municipal and industrial waste water discharge into surface waters and improving the water quality of the Nemunas River. Although waste water discharge in Alytus county is not considerable, the amount of waste water treated in the county in 2007 was 27 % larger than the national average. The largest share (85 %) of waste water requiring treatment was generated in Alytus town and Druskininkai. Waste management is another environmental priority in Alytus county, including the further development of the region's waste collection infrastructure with levels of municipal waste increasing since 2004 in all parts of Alytus county except for Lazdijai district municipality due to economic development and increasing consumption.⁴⁴

5. Regional Development and Innovation

5.1 Regional Development Programmes

The formation and implementation regional economic and social development policy is a shared responsibility between national, regional and local governments. At the national level, policy documents including the Regional Development Programme of the Republic of Lithuania (2006), Programme for Reduction of Regional Social and Economic Differences (2007-2010) and Rural Development Programme for Lithuania (2007-2013) set out overarching policy agendas and objectives, guided by the National Regional Development Council. These objectives are interpreted within a county level Regional Development framework by the Alytus Regional Development Council, which consists of representatives from the Governor administration of Alytus county and the five municipalities as well as social and economic partners. Each municipality also prepares a Strategic Development Plan and Strategic Action Plan, with specific programmes for implementation within the municipality territory.

Since the accession of Lithuania to the European Union in 2004, Alytus county along with the rest of the country has been in receipt of support from the European Regional Development (ERDF), with Lithuania regarded as a single NUTS2 region from the EU policy perspective. The whole territory of Lithuania was eligible for support under the Convergence

⁴² Source: http://www.ccb.se/newsletters/2004/03/0403a.htm

⁴³ Source: http://ec.europa.eu/energy/energy_policy/doc/factsheets/renewables/renewables_lt_en.pdf

Objective (NUTS2 regions whose GDP per inhabitant is less than 75% of the Community average) for the 2007-13 EU Structural Fund programme, with funds administered through two main national operational programmes. The first operational programme, 'Economic Growth', received €3.09 billion from the EU (45 % of total EU Cohesion policy 2007-2013 funding in Lithuania) with a further €448 million from national match-funding, with the aim of speeding up economic growth through five main priority areas:

- Research and development (R&D) for competitiveness and growth of the economy
- Increasing business productivity and improving environment for business
- Information society for all
- Basic economic infrastructure
- Development of trans-European transport networks

The second main operational programme, 'Promotion of Cohesion', was supported by a further € 2.64 billion of ERDF and Cohesion Funding and € 397 million from Lithuanian authorities, with aim of improving standards of living throughout the country as a basis for stable sustainable economic development in the long term. Again, funding for this programme was channelled through several key priority areas: local and urban development, conservation of cultural heritage and nature, and adaptation for tourism development; quality and accessibility of public services (health, education and social infrastructure); and environment and sustainable development. Alytus county is also a participant in three European Territorial Cooperation Objective programmes, with the operational programme 'Lithuania-Poland' (€71.7 million from the ERDF) specifically focused on generating sustainable economic and business development in the two country's shared border region without harming the environment (figure 13). Investments will therefore target tourism development, such as rivers and lakes for water activities, and forests and farmsteads for eco and agro-tourism, alongside developing the border infrastructure such as local roads, border crossing points, communication and ICT networks, and public transport.



Figure 13: Regions targeted for support through the Operational Programme 'Lithuania - Poland'. Source: European Commission

The EU's LEADER+ initiative was also introduced in Lithuania following the country's accession in 2004 and coincided with a more widespread resurgence in civil society following decades of centralized Soviet-era governance.⁴⁵ Within Alytus, the Dzūkija Local

⁴⁵ See Juska et al (2005) and Juska et al (2008)

Action Group (LAG) was established to cover the county's rural areas (Alytus district, Lazdijai district, Druskininkai and Varėna district municipalities, excluding Druskininkai and Varėna towns) and implement stategies related to the theme of 'Improvement of Quality of Life in Rural Areas'. Under the 2007-2013 funding period, there is now an LAG established in each of the 4 rural municipalities of Alytus county who prepare and implement a rural development strategy for the municipality.⁴⁶

5.2 Regional Skills-base and Infrastructure

Alytus county has no university level educational institutions, with many young people from the area moving to study at one of the educational institutes in Vilnius or Kaunas. Higher education and professional schools play an important role in rural regional learning process through participation in regional councils, development projects, vocational training, orientation to labour market and life-long learning/training opportunities. In 2000, Alytus Higher Technical School was reorganized as Alytus College, an accredited higher education institute offering students courses in management and business administration, ICT's, and transport and civil engineering. The College promotes connections with the regional business sector and research development, and is a co-partner along with Alytus city municipality in The Business Incubator which provides students with opportunities to develop practical business skills. Another co-partner is the public institution Alytus Business Innovation Center, which was established in 1998 to promote science and business innovations and support their implementation. The educational level in Lithuania is generally very high, with just over 88% of adults (25-64) having a medium or high level of educational attainment in 2006.47 In Alvtus county, census data for 2001 recorded 32.6% of residents as having a tertiary qualification, which was slightly below the Lithuanian national average of 34.8% but still above average across the DERREG case study regions.⁴⁸

As noted, regional development strategies concerned with increasing employment opportunities in Alytus county are seeking to stimulate economic diversification and business sector growth (SMEs) through improvements to the region's communications infrastructure and learning support services. A state initiative for encouraging the distribution foreign investment in less-developed regions of Lithuania is the on-going the building of nine public industrial parks, including Alytus Industrial Park, and three private industrial parks across the country. Alytus Industrial Park is due to be open by 2013 and is targeted at attracting firms in the manufacturing and logistics sectors, with the county's young population is promoted in terms of providing a skilled workforce in to the future, alongside the pre-existing industrial skills base amongst older (and unemployed) residents. However, the majority of these regional learning and business support structures are concentrated in the regional centre of Alytus city, as well as some in the smaller towns of Druskininkai, Lazdijai and Varėna, with opportunities in rural areas currently limited.

Lithuania has a highly developed ICT sector and is among countries having the fastest Internet connection speeds in the world, yet Internet access in many rural areas is still undeveloped. At the national scale, 51% of households had Internet access in 2008. However, this figures drops to around 23% of households in rural areas of the country.

⁴⁶ Source: DERREG Deliverable 4.1: *Overview of learning and innovation support strategies*

⁴⁷ Source: Eurostat Rural Development Report 2008

⁴⁸ Source: Eurostat

⁴⁹ Source: http://www.lda.lt/en/Industrial_Parks.html

6. Summative Analysis

The contemporary economic, social and environmental situation of Alytus county is characterised by:

- A border location, on the edge of both Lithuania and the European Union, with historic cultural ties to districts in neighbouring countries.
- A landscape dominated by forest and woodland, reflecting poor quality soils for agriculture in much of the region, with farming concentrated in the Nemunas river valley.
- Population concentration, with over half the population living in the three main towns, and the remainder spread among more than a thousand small towns and villages.
- A strong cultural identity and heritage, with notable vernacular folk traditions.
- An emerging governance system and political culture than has developed since democratisation and independence in 1990, with primary responsibility for local government held at the municipal level, with regional government focused on coordination and some aspects of economic development.
- Considerable economic restructuring over the last two decades following economic liberalisation, with a sharp fall in agricultural employment, continuing significant industrial employment, and increases in employment in construction and the service sector.
- A three-fold increase in GDP per head between the mid 1990s and mid 2000s, but a
 ongoing position of economic deprivation, with GDP per head at less than a quarter of the
 EU average and falling further behind the Lithuanian average.
- A relatively buoyant construction sector reflecting investment in property.
- Small-scale mixed farming, with little evidence of the impact of socialist collectivised farming practices, but with low levels of productivity and two-thirds of farmland classified as a less favourable area for agriculture.
- A notable forest economy sector including timber production, wood products and the gathering of wild resources such as mushrooms and berries.
- An established tourism industry concentrated on the spa town of Druskininkai and the Dzukija National Park, catering primarily for domestic tourists.
- Significant and sharp fluctuations in unemployment rates, possibly reflecting waves of out-migration and return migration.
- A trend of steady population decline over the last two decades, driven by significant net out-migration, including both to other parts of Lithuania and internationally.
- A relatively small non-national population, but with some signs of a small increase in foreign residents since EU accession.

- A rich natural environment, with a number of sites of ecological importance subject to regional, national and international protected areas designations.
- Investment in regional development from the EU Structural Funds as a Convergence Region, following accession to the European Union in 2004.

With the significance of the post-socialist transition in shaping the social and economic trajectory of Alytus county over the last two decades, it can be categorised as a 'liberalising post-socialist rural area', characterised by substantial economic restructuring, net population out-migration, and an improving but still disadvantaged economic and employment situation, as well as by the legacy of centrally-planned economic policies. In this, Alytus county has similarities with South Moravia among the other DERREG case study regions, as well as with other rural regions in Poland, Slovakia, Hungary and the Baltic States.

The impact of globalisation in Alytus county has been significant but concentrated, and has arguably been largely negative to date. Notable expressions of globalisation evident in Alytus county from our initial analysis include:

- Access to wider employment opportunities following accession to the European Union resulting in significant international out-migration both permanently and for temporary work.
- The opening up of markets with economic liberalisation and EU accession both providing new export opportunities for local producers, but also bringing competition in the domestic market.
- A degree of foreign direct investment, including the opening of branch plants by corporations including Coca Cola, Litalka Elektronik and Sofa Brands, but heavily concentrated in Alytus city, and overall notably below levels of FDI in many other regions of Lithuania.
- The designation of significant areas of land as protected landscapes adhering to international models and structures, including Natura 2000.
- Significant investment of international capital in regional development in the county through the European Structural Funds since 2004.

The nature of these global or transnational relations, together with the distinctive socioeconomic character of the region, creates both opportunities and vulnerabilities for future regional development. The opportunities are presented by:

- A skilled and education workforce and a potential capacity to draw on the expertise and experience of return migrants from western Europe, to support economic development.
- Locational benefits, including cross-border access to Poland and Belarus, relative accessibility to Vilnius, free trade access to the EU market, but also low production costs, which could attract further foreign direct investment.
- The potential to develop international tourism, especially from neighbouring countries and from western and northern Europe, building on established domestic tourism and capitalising on the region's natural and cultural heritage.

- Opportunities to develop niche products for international export markets, especially with respect to forest products, including wood crafts and wild resources such as berries and mushrooms.
- The capacity to capitalise on the region's natural resources in providing ecosystem services, including habitat protection, carbon reservoirs and sequestration and renewable biomass energy, to address international environmental concerns.

At the same time, however, our initial analysis suggests that regional development in Alytus county is vulnerable to both global and endogenous pressures and challenges in a number of ways. These include:

- Continuing significant out-migration that is not matched by sustained return migration producing a brain drain that weakens the skills base and capacity to act of the region.
- The susceptibility of branch plants to distant corporate decision-making and economic events.
- Risks that limited capacity to respond to economic opportunities will weaken the ability of the county to compete with other regions in a global economy, further consolidating the relative disadvantage of the region.

7. Bibliography

The list below includes academic papers reporting on research relevant to Alytus county published since 2005, as well as other reports and articles containing information about the region. Not all items listed in the bibliography have been cited in the text of this paper.

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