



DERREG

Developing Europe's Rural
Regions in the Era of
Globalization



CASE STUDY CONTEXTUAL REPORT 3



Westerkwartier

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1. Introduction

1.1 Location and Geography

The 'Westerkwartier' is the western area of the province of Groningen, in the northern Netherlands, comprising the municipalities of Grootegast, Leek, Marum and Zuidhorn (Figure 1 and Figure 2). It is the smallest of the DERREG case study regions by area, covering a territory of 345 km², and is the only one of the case study regions not to correspond with a governance or administrative territory, or with an official statistical unit. Nonetheless, the 'Westerkwartier' has a strong and coherent cultural identity, reinforced and celebrated by the 'Mien Westerkwartier' initiative.¹ The district is located about 20 kilometres to the west of Groningen, the provincial capital with a population of 188,000, but is characterised by a distinctive rural patchwork landscape of small cultivated fields and pastures.



Figure 1: (Right) Groningen Province and the "Westerkwartier"

Figure 2: (Below) The modern provinces of The Netherlands, with Groningen in the north east.²



¹ www.mienwesterkwartier.nl

² Source: Wikipedia Commons, available at: http://en.wikipedia.org/wiki/File:Netherlands_map_large.png

Historically the Westerkwartier formed part of the neighbouring province of Friesland (Fryslân in Dutch) to the east, and the Frisian language is still spoken in villages such as Marum and De Wilp along the current provincial border between Friesland and Groningen. To the east, the Westerkwartier borders the province of Drenthe, while its northern border lies within Groningen province. This history has helped to make it culturally distinct from neighbouring districts.

In 2007, the population of the Westerkwartier stood at 59,869, which equalled 10.5% of the total population of Groningen province (573,614 persons). The municipality of Leek, in the eastern quarter of the districts has the largest population (19,289), followed by Zuidhorn in the north (18,374), Grootegast in the west (12,208), and Marum in the south (10,218). Each of the four municipalities comprise a main town and smaller villages and hamlets, generally with between 100 and 3000 residents. For example, in the municipality of Leek approximately 15,000 of its population of 19,000 live in the Leek-Tolbert urban settlement, while the remainder live in villages such as Zevenhuizen (~ 2,800 inhabitants), Oostwold (~680 inhabitants).³ Similarly, Marum town has a population of 5,500⁴, comprising over 50% of the population of Marum municipality, and Zuidhorn town has 6,559 residents⁵. Overall, the Westerkwartier has a population density of 173.4 persons per km², which whilst comparatively low by Dutch standards is the second highest population density of the ten DERREG case study regions. The region is classified as an 'intermediate rural' area by Eurostat.⁶

The Westerkwartier is peripherally located within the Netherlands but possesses a good public transport infrastructure, with train connections currently running twice an hour from Zuidhorn east to the provincial capital Groningen and west to Leeuwarden in Friesland (with plans to increase the frequency of services to four per hour). Additionally, the main A7 motorway runs on an east-west axis through the Westerkwartier (with exits to Marum and Leek) directly connecting it to the city of Groningen (20km from Leek) (Figure 3) and beyond to Germany to the east, and Utrecht and Amsterdam to the south-west (Figure 4). Within the wider Groningen province there is an airport, Groningen Airport Eelde, which is maintained in cooperation with the other provinces in the Northern Netherlands. It operates flights within the Netherlands as well as to the UK (Aberdeen), and a number of holiday destinations in Southern Europe such as Malaga, Tenerife and Crete.⁷ There are also two major seaports in Groningen province, Delfzijl and Eemshaven, both of which are located close to the delta of the Ems River in the north-east of Groningen province. This infrastructure combines to give Groningen a score of 50,500 on ESPON's potential accessibility index, which is relatively low in comparison to other European NUTS 2 regions, however, at the NUTS 3 level Overig Groningen scores 32,600 which is the second highest of the case study regions.

For administrative and statistical purposes, Westerkwartier lies within the COROP regional area of Overig Groningen, one of the 40 NUTS 3 regions in the Netherlands (Figure 5). The Overig Groningen region, which exists purely for statistical purposes and does not have any governmental function, comprises the four municipalities of Westerkwartier, the city of Groningen and the three other municipalities in the Centraal area of Groningen province, and five municipalities in the Noord area of Groningen province. The COROP/NUTS 3 regions of Overig Groningen, Oost-Groningen and Delfzijl en omgeving make up the province of Groningen, which ranks as a NUTS 2 region for statistical purposes (Table 1).

³ Source: <http://www.leek.nl/english/home/>

⁴ Source: <http://nl.wikipedia.org/wiki/Marum>

⁵ Source: <http://www.zuidhorn.nl/>

⁶ Source: EU Rural Development Report 2008

⁷ Source: <http://www.gae.nl/>

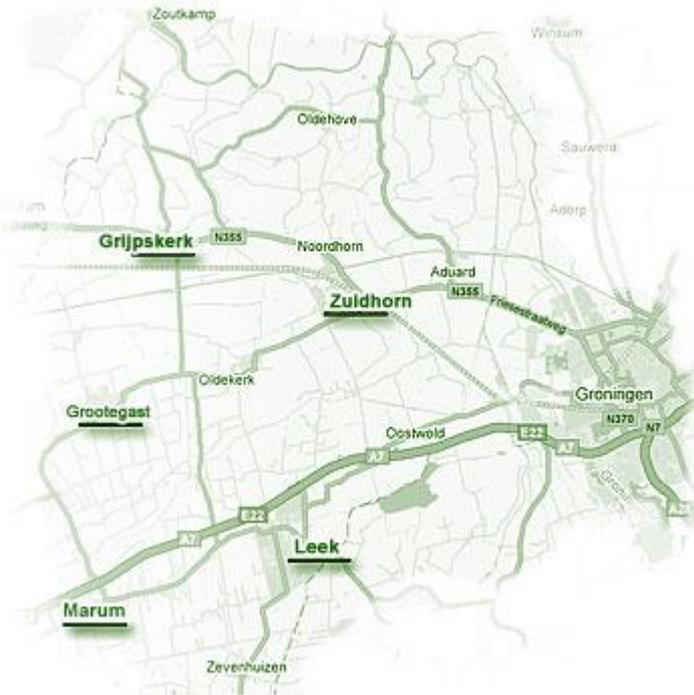


Figure 3: Main towns of the Westerkwartier with key roads and transport links.
 (Source: www.touristinformationwesterkwartier.nl)



Figure 4: Westerkwartier in regional context, showing major road links.
 Source: Google Earth

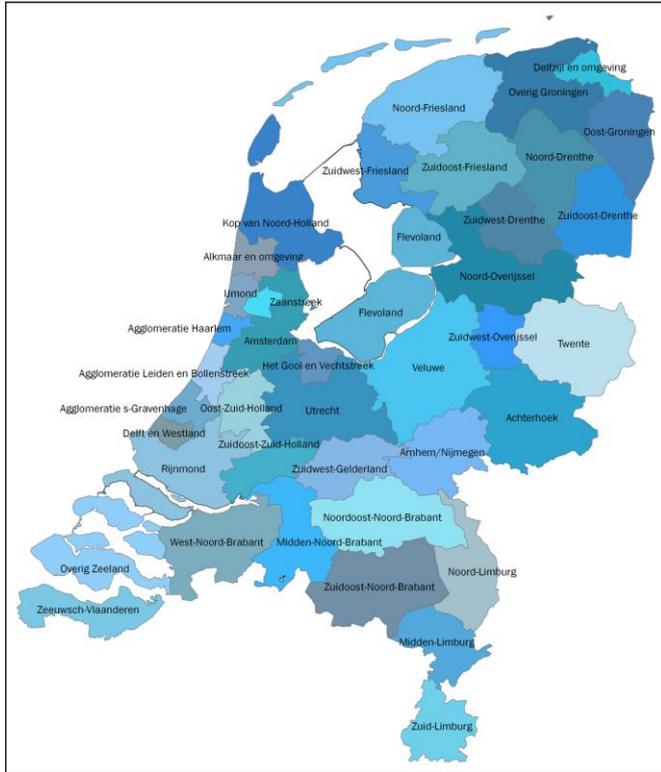


Figure 5: NUTS 3 / COROP statistical regions in the Netherlands

NUTS 1	NUTS 2	NUTS 3	LAU 1	LAU 2
Northern Netherlands	Groningen	Overig Groningen	(same as NUTS 3)	4 municipalities – Grootegast, Leek, Marum, Zuidhorn

Table 1: Hierarchy of administrative/statistical units for Westerkwartier

1.2 Government and Politics

Policy formulation and implementation in the Netherlands operates at three scales – the national government, with policies implemented through government ministries; provinces, implementing regional-scale policies; and municipalities, implementing local policies. The twelve provinces, including Groningen, have responsibility for regional strategic planning, regional transport infrastructure and public transport, economic development, environment and conservation, welfare, culture and recreation, water boards and local government finance. They are governed by a Queen’s Commissioner (*Commissaris van de Koningin*), appointed by the national government, and an executive cabinet, the *Gedeputeerde Staten*, which is accountable to the elected provincial parliament (*Provinciale Staten*), and have limited tax-raising powers. There has been some decentralisation of policy making from the national to the provincial level since 2007

The provinces are divided into municipalities (*gemeenten*), of which there are 431 in total across the Netherlands and 25 in Groningen province. Municipalities form the primary tier of local government in the Netherlands and are responsible for education, spatial planning and social security, within the bounds prescribed by the national and provincial government. They are governed by a college of the Mayor and the Aldermen. The Mayor is appointed by the national government, whilst the Aldermen are publicly elected and responsible to the

Municipal Council. Each of the four municipalities in the Westerkwartier is an autonomous authority, but they cooperate on a number of issues. The Westerkwartier is therefore not a statutory local government area, but is a cultural region in which there is partnership working between the four municipalities, two water boards and the provincial government, particularly through the Westerkwartier Regional Initiative Working Group (*Werkgroep Streekinitiatief Westerkwartier*). The Westerkwartier also has a territorial identity as a LEADER area.

Politically, the Netherlands has a multi-party system in which any one party has little chance of gaining power alone, requiring parties to work together to form coalition governments. Going into the general election in 2006, the key issues were the future of the Dutch economy, immigration and integration, and the environment. The election proved relatively successful for the governing Christian Democratic Appeal (CDA) which remained the largest party with 41 seats, a loss of only three seats in the Dutch House of Representatives. The largest increase in seats was for the Socialist Party (SP), which went from nine to 25 seats. However, the recent general election in June 2010 saw a large swing towards the free-market liberal People's Party for Freedom and Democracy (VVD) which gained 9 seats to become the largest party with 31 seats in total, narrowly beating the social-democratic Labour Party (PvdA) with 30, while support for the CDA fell dramatically with them losing 20 seats to become the fourth placed party.

In the electoral geography of the Netherlands, the PvdA is strongest in the north of the country, and received the largest share of the vote in all four municipalities in Westerkwartier in the 2010 national election, compared to stronger support for the VVD in the central and western areas of the country (Figure 6). Historically, eastern Groningen was the scene of a particularly fierce class struggle in the 19th and 20th centuries and this socialist legacy remains influential in the region. However, the dominance of the PvdA is weakening, and whilst it emerged as the largest party from elections to the provincial parliament in 2007, it holds only 12 out of the 43 seats.

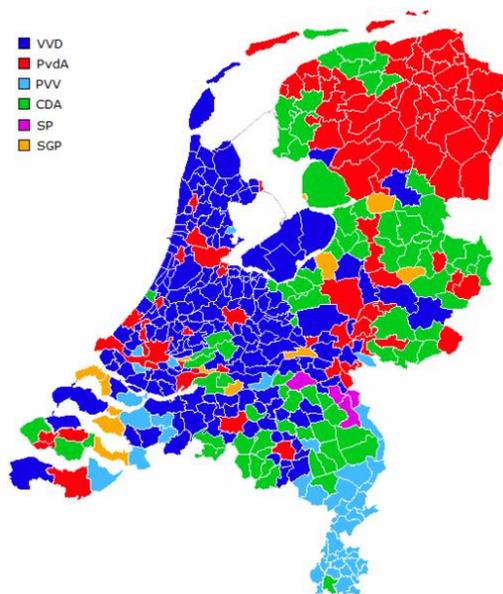


Figure 6: The largest political party per Dutch municipality based on 2010 general election results (Source: Wikipedia Commons)⁸

⁸ Source: http://en.wikipedia.org/wiki/File:Tweede_kamerverkiezingen_2010.png

In local government, the PvdA is the largest party on the Municipal Councils in Leek and Marum, but Grootegast and Zuidhorn both have centre-right majorities. Municipal elections in June 2010 showed the PvdA losing ground in all four municipalities to both the left (Greens and Socialists) and the right (VVD and Christian Union) (Table 2).

	PvdA	CDA	VVD	Christian Union	GreenLeft	Socialist Party	VZ 2000*
Leek	5 (-1)	3 (-1)	3 (0)	2 (0)	2 (0)	2 (+2)	
Marum	5 (-1)	4 (0)	4 (0)	2 (+1)			
Grootegast	2 (-1)	4 (-1)	2 (+1)	3 (0)	1 (+1)		3 (0)
Zuidhorn	3 (-1)	4 (0)	2 (0)	4 (0)	3 (0)	1 (+1)	

* Local political party in Grootegast

Table 2: Political composition of Municipal Councils in Westerkwartier after 2010 elections⁹

2. The Regional Economy

2.1 Economic History

The economy of the Westerkwartier has traditionally been based on agriculture (mainly dairy farming) and industry. In contrast to the peat moors of *De Veenkoloniën* to the east of Groningen, the Westerkwartier was not substantially cut for fuel and therefore was not transformed into a regimented agricultural landscape for potato and sugar beet cultivation, as *De Veenkoloniën* was between the 16th and 20th centuries. Rather, the patchwork landscape of Westerkwartier, with small fields and poor peat-clay soils was viewed as poor land for arable cultivation, and thus traditionally agriculture tended more towards livestock farming. The region has long been regarded as an area in need of modernisation, but residents successfully resisted land consolidation plans in the 1970s.

Efforts to promote and support diversification away from agriculture extend back over half-a-century, to the designation of Leek as an 'industrial centre' in 1959.¹⁰ Although industry is the largest single sector in Leek today, industrial development has primarily been through small-scale factories and units, often related to agricultural processing and light manufacturing, and there is no major industrial employer in the Westerkwartier district.

The economic development of Westerkwartier has instead become increasingly tied to the neighbouring city of Groningen in two ways. Firstly, a substantial number of Westerkwartier residents commute to work in Groningen, especially from towns and villages around Leek and Marum close to the motorway. Secondly, businesses in the district are increasingly focused on providing classic 'rural-fringe' functions and services for Groningen, including recreational and leisure opportunities, as well as transport and logistics. The economy of Groningen itself was historically based on food and drink processing, with two major sugar-refining plants, a brewery and a coffee and tobacco merchants as the leading employers. The city has also historically been an administrative and educational centre, and these sectors have grown rapidly such that the economy is now largely based on the service sector, as well as on life sciences, the ICT sector and renewable energy.

Across the Overig Groningen NUTS 3 region as a whole, industry has recovered from recession in the late 1990s to double its contribution to regional GVA between 1999 and 2005. The service sector has also demonstrated steady growth since the mid 1990s, and exceeded industry in its contribution to GVA through the late 1990s and early 2000s (Figure 7). However, the majority of employment in Groningen province is in the service sector, particularly in public services, which were the only sector to show significant growth in

⁹ Source: <http://nos.nl/dossier/133681-gemeenteraadsverkiezingen/tab/7/uitslagen/>

¹⁰ Source: www.leek.nl

employment during the first decade of the twenty-first century (Figure 8). The contribution of agriculture to both GVA and employment is very small, and agricultural GVA in Overig Groningen decreased by 9.1% between 1995 and 2005.¹¹

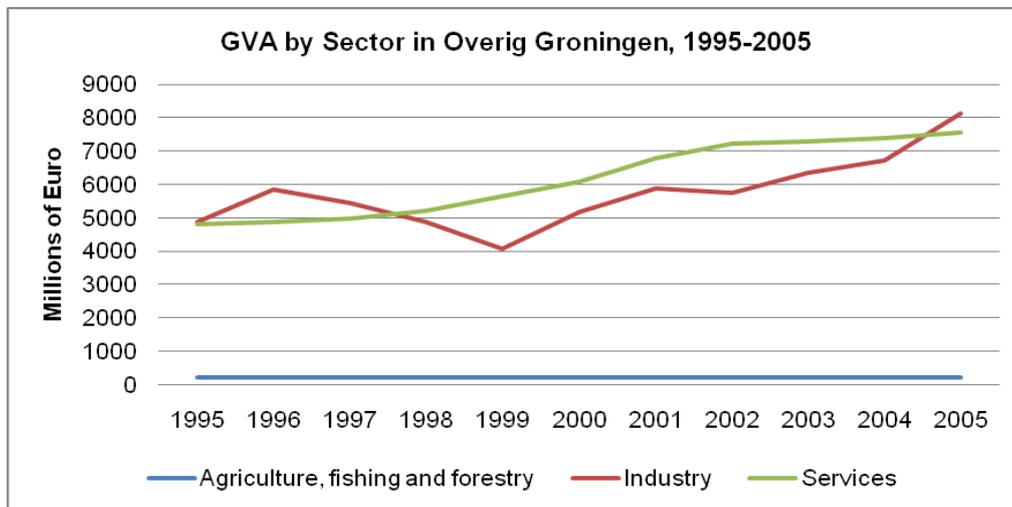


Figure 7: Gross Value Added (GVA) by economic sector in Overig Groningen, 1995-2005 (Source: Eurostat)

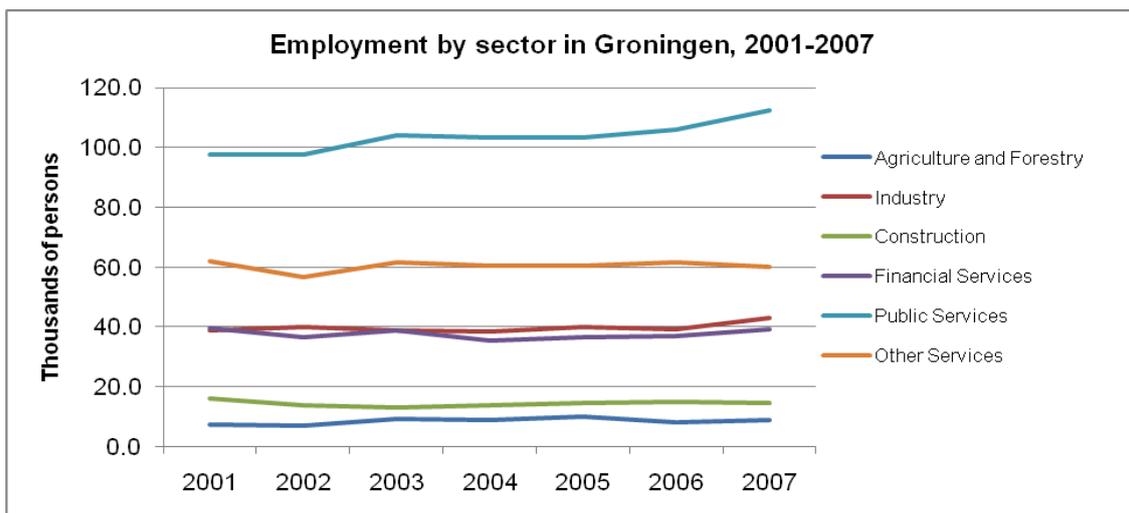


Figure 8: Employment by economic sector (in 1000's) in Groningen NUTS 2 region, 2001-2007 (Source: Eurostat)

2.2 Present Economic and Employment Structure

The employment structure of Westerkwartier broadly resembles that of the wider Groningen province, but with a lesser emphasis on services and slightly greater emphasis on industry and agriculture. The service sector provides 73% of employment in Groningen province as a whole, with 25% employed in industry and 3% in agriculture, forestry and fishing.¹² In the four municipalities of Westerkwartier, the service sector provides 63% of employment, with 26% employed in industry and construction and 11% in agriculture (Table 3).

¹¹ Source: Eurostat

¹² Source: Eurostat

Employment Sector	Number	%
Agriculture	2305	11.1
Industry	3514	16.9
Construction	1819	8.8
Total Industry	5333	25.7
Trade + repair	3807	18.3
Leisure	535	2.6
Logistics	1353	6.5
Services (including finances)	2435	11.7
Administration	582	2.8
Education	1061	5.1
Health	2597	12.5
Other services	743	3.6
Total Services	13113	63.2
Total employment	39197	

Table 3: Full-time employment in the Westerkwartier by sector, 2008
Source: Central Office for Statistics (CBS) Netherlands

In comparison to the province as a whole, for which public services are the largest single sector of employment, Westerkwartier has a relatively small level of public sector employment (around 20-25%), with a much greater emphasis on the private sector, especially trade, retail and repair businesses. Employment in industry and construction is more or less in line with the provincial norm, and reflects the growth in the industrial sector in the province since the mid 1990s that reflects a regional knowledge and innovation strategy with the development of the life sciences, ICT and renewable energy sectors. In Westerkwartier infrastructure for industrial development has been provided by small industrial parks in the municipalities, and industry is the largest single sector of employment in Leek municipality, at 27% of the workforce.¹³

One of the most notable features of the Westerkwartier labour force is the continuing significance of agriculture, with over 2,300 people employed in the sector, constituting over a tenth of employment. This is the highest level of agricultural employment in the ten DERREG case study regions, although it in large part reflects the small size of Westerkwartier and the exclusion of any sizeable towns. Equally notable, however, is that employment in agriculture in Westerkwartier has actually increased since the mid 1990s, against wider trends (Figure 9). In Marum municipality, in particular, the number of people employed in agriculture, forestry and fishing doubled between 1995 and 2007, although the actual numbers remain comparatively small. The reasons for this increase in agricultural employment are not clear from the statistics, but could reflect either the expansion of agribusiness, or alternatively job opportunities created by programmes supporting agri-environmental schemes implemented in the last decade.

¹³ Source: www.leek.nl

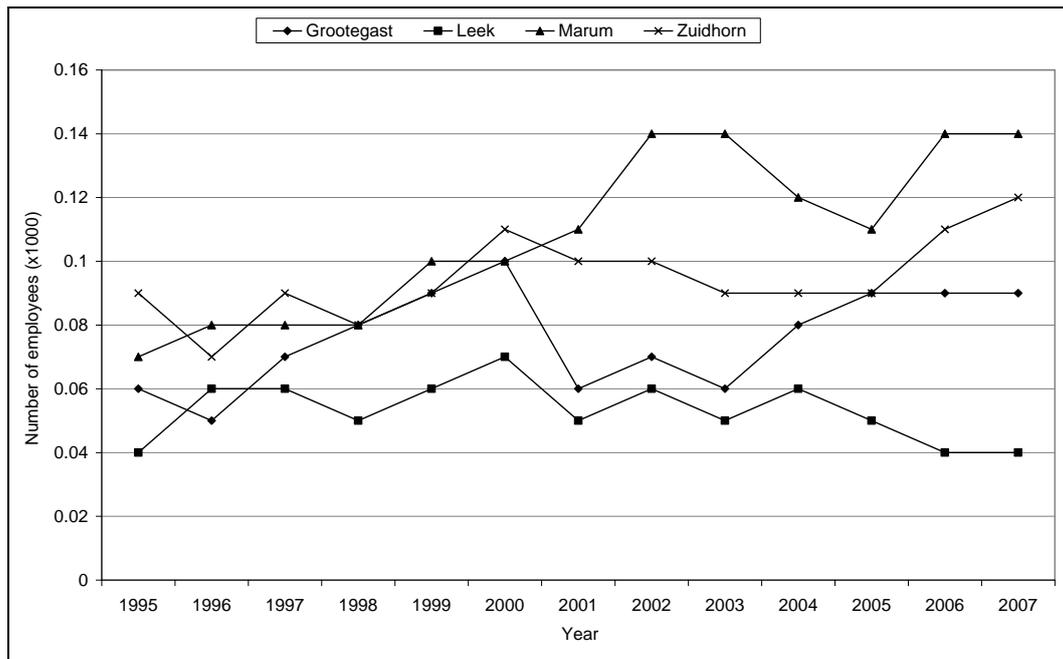


Figure 9: Number of people employed at municipality level (NUTS 5) in the primary sector of the Westerkwartier (Source: DERREG Deliverable 1.1; Original Data source: CBS, 2009)

At the same time, a significant proportion of Westerkwartier residents commute to work in Groningen and further afield – with good transport links a large number of cities in the Netherlands and north west Germany are within two hours travel times, including Amsterdam. Indeed, 11.8% of the economically active population in Groningen province commute outside the province to work, the highest figure across comparable NUTS 2 regions for the DERREG case studies.¹⁴ Those Westerkwartier residents commuting to work in Groningen city are likely to be disproportionately employed in the service sector, reflecting the evolving economy of the city. As the largest city in the northern Netherlands with a population of 188,000, Groningen serves as the administrative, educational and employment centre for the region. Major employers include the University of Groningen, with 5000 employees, and the University Medical Center Groningen (UMCG) with more than 10,000 employees,¹⁵ as well as regional government institutions and the Dutch Ministry of Agriculture, Nature and Food Quality. The processing of sugar from the region's large sugar beet crop had been a large regional employer, however, the recent closure of the *Suiker Unie* factory in January 2008 means that the only remaining sugar factory is *CSM Viervelaten*, 4km outside Groningen city in Hoogkerk, with 283 employees. Other well known companies from Groningen include *Hooghoudt* (a producer of alcoholic beverages), publishing house *Wolters-Noordhoff* and *Theodorus Niemeyer* (a coffee, tea and tobacco merchant).

The strength of the service sector is further reflected by the third of the working population of Overig Groningen who are employed in professional and managerial occupations, and the quarter employed in clerical and non-manual jobs. Around a sixth occupies technical occupations, just under an eighth are semi- and un-skilled manual workers and only one-tenth are employed in skilled manual or craft occupations (Table 4). Traditional sectors such as industry and construction are largely dominated by a male workforce, as are agriculture, business services and transport/communication to a lesser degree. Public sector

¹⁴ Source: Eurostat

¹⁵ <http://www.umcg.nl/English/umcg/Pages/umcg.aspx>

employment such as education is more closely balanced in terms of men and women employed, whereas female employment is dominant in the health and care sector.¹⁶

	Number	%
Senior officer and managers	16199	9.89%
Professionals	32032	19.57%
Professional and managerial occupations	48231	29.46%
Technical and associate professionals	27888	17.04%
Clerical and secretarial workers	20676	12.63%
Service and retail workers	16817	10.27%
Clerical and non-manual occupations	37493	22.90%
Skilled agriculture and fishery workers	1940	1.19%
Craft and related trade workers	14823	9.05%
Skilled manual and craft occupations	16763	10.24%
Plant and machine operators and assemblers	7980	4.87%
Elementary occupations	11784	7.20%
Semi- and un- skilled manual work	19764	12.07%
Not described (incl. Armed forces)	13571	8.29%
Total workforce	163710	

Table 4: Occupational Structure of the Overig Groningen (NUTS 3) labour market, 2001
(Source: Eurostat)

Overall, statistics point to a growing economy in both Westerkwartier and the wider Groningen province. The GDP per capita for Overig Groningen increased by 79% between 1995 and 2006, from €30,900 to €55,400 (Figure 10) – the highest GDP per capita of the ten DERREG case study regions, and almost three times the EU average.¹⁷ This figure includes the contribution of Groningen city, which is likely to be greater than that of surrounding rural districts such as Westerkwartier. Data on income levels suggest that the accessible income per person in 2006 was slightly below the Dutch national average (€13,300) in Westerkwartier, standing at €11,400 Grootegast, €12,200 in Marum, €12,400 in Leek and €12,500 in Zuidhorn.¹⁸

Conversely, unemployment in Westerkwartier is relatively low compared to regional and national averages. In 2009, the average unemployment rate in Westerkwartier was 5.4% (ranging from 3.9% in Grootegast to 6.9% in Leek), considerably lower than the rate of 8.5% for Groningen province, and the national rate of 5.9%.¹⁹ The unemployment rate for Overig Groningen fluctuated around 5-6% during the mid 2000s, and at 5.3% in 2007 was among the lowest of the DERREG case study regions. Similarly, the proportion of the active population in employment in Groningen province is the second highest of the DERREG case study regions, after Övre Norrland, at 70.8% according to 2006 figures.²⁰ Youth unemployment in Overig Groningen stood at 12.3% in 2007.

¹⁶ Source DERREG Deliverable 1.1; Original data source: Economie in het Noorden, 2009

¹⁷ Source: Eurostat

¹⁸ Source: Central Office for Statistics (CBS)

¹⁹ Source: Statistics Netherlands

²⁰ Source: Eurostat Rural Development Report (2008)

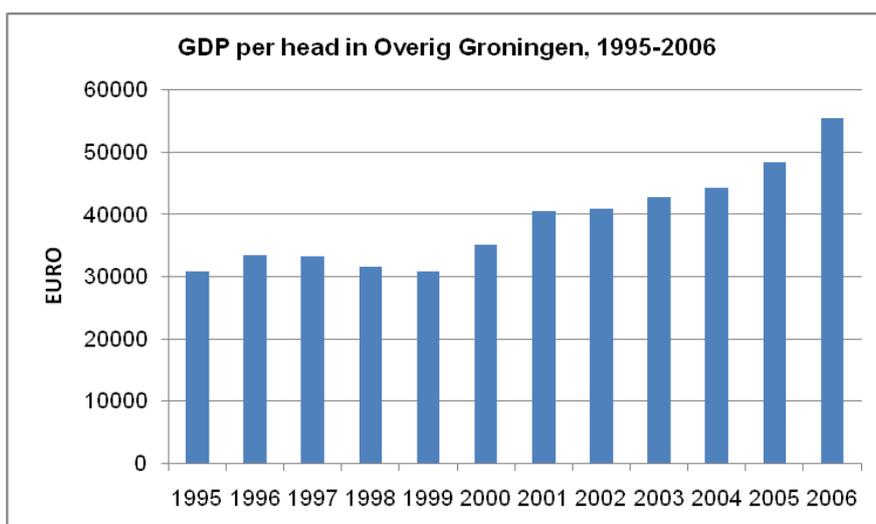


Figure 10: Gross Domestic Product (GDP) per head in Overig Groningen, 1995-2006.
(Source: Eurostat)

The Westerkwartier is dominated by micro-firms (0-9 employees), which accounted for 73% of private enterprises in 2008. This is partly the result of rural policies in the Netherlands which have sought to encourage the establishment of large firms in industrial concentrations close to cities in order to protect the environment of rural areas. Larger businesses are thus relatively sparse within the area, with only 5% of enterprises being of small to medium size (10-49 employees) and 2% large (50+ employees), although the size of the remaining 19% of private enterprises was unreported.²¹ The high number of micro-firms in the Westerkwartier corresponds with the development trend of the Overig Groningen NUTS 3 region, where since 2000 there has been a steady increase in the number of micro-firms. The number of small and medium sized businesses (10-49 employees) as well as the number of large firms (50 + employees) remained stable across the same period (Figure 11). Around 37% of businesses in the Westerkwartier are in the service sector, with a further 20% in the agricultural sector. Agricultural businesses are the largest single sector in Grootegast, but in Leek, Marum and Zuidhorn the service sector is most significant (Figure 12).

Annual business start-ups in Overig Groningen have been steadily increasing since 2003 up to 2007, following a period of decline 2000-2003 when business closures had exceeded start-ups. Alongside this growth of starter businesses, the number of new franchises in the region also began to increase again from 2003 whilst the number of closures remained relatively stable over time, resulting in a net gain in the total number of businesses (Figure 13). Focusing on the Westerkwartier, the total number of businesses started in Leek and Zuidhorn was greater than in Marum and Grootegast over the whole of the period 2000-2007, with the difference most pronounced in 2007 where the former 2 municipalities each had over 80 business start-ups compared to less than 60 each in the latter. At the same time, however, the number of business closures was greater in Leek and Zuidhorn in 2007 than in Marum and Grootegast by a similar proportion, resulting in comparable net rates of economic expansion.²²

²¹ Source: DERREG Deliverable 1.1 (Original data source: Economie in het Noorden, 2009)

²² Source: Economie in het Noorden, 2009

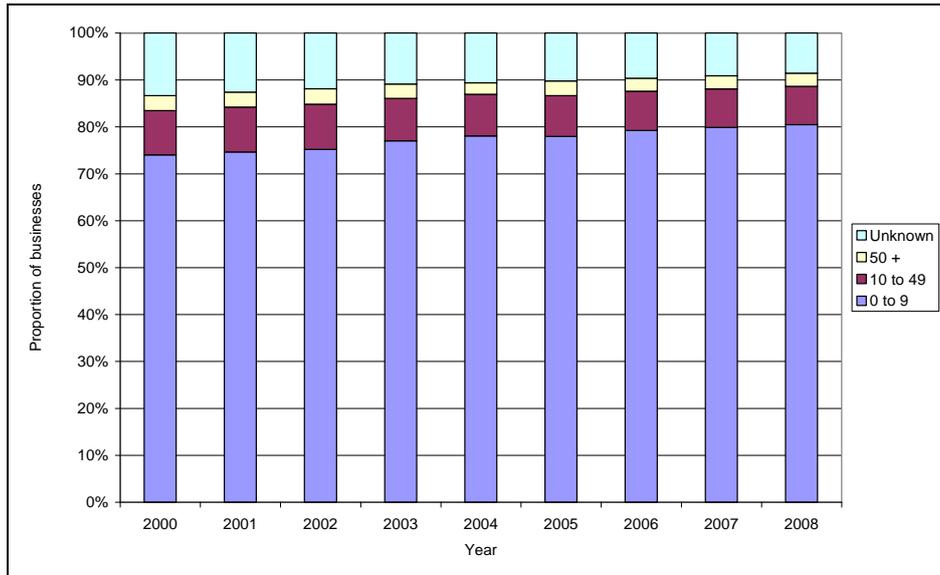


Figure 11: Changes in the relative proportion of firm sizes in Overig Groningen, from 2000 to 2008. (Source: DERREG Deliverable 1.1; Original data source: Economie in het Noorden, 2009)

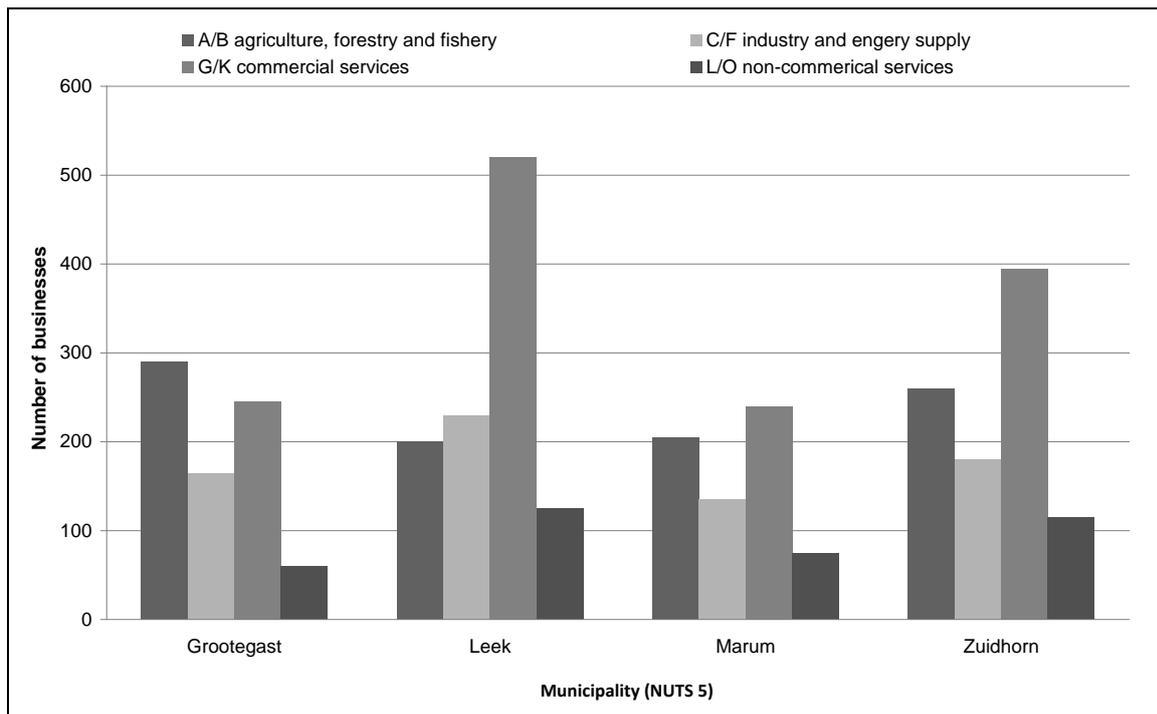


Figure 12: Number of businesses per economic sector in Westerkwartier, 2008. (Source: DERREG Deliverable 1.1; Original data source: Economie in het Noorden, 2009)

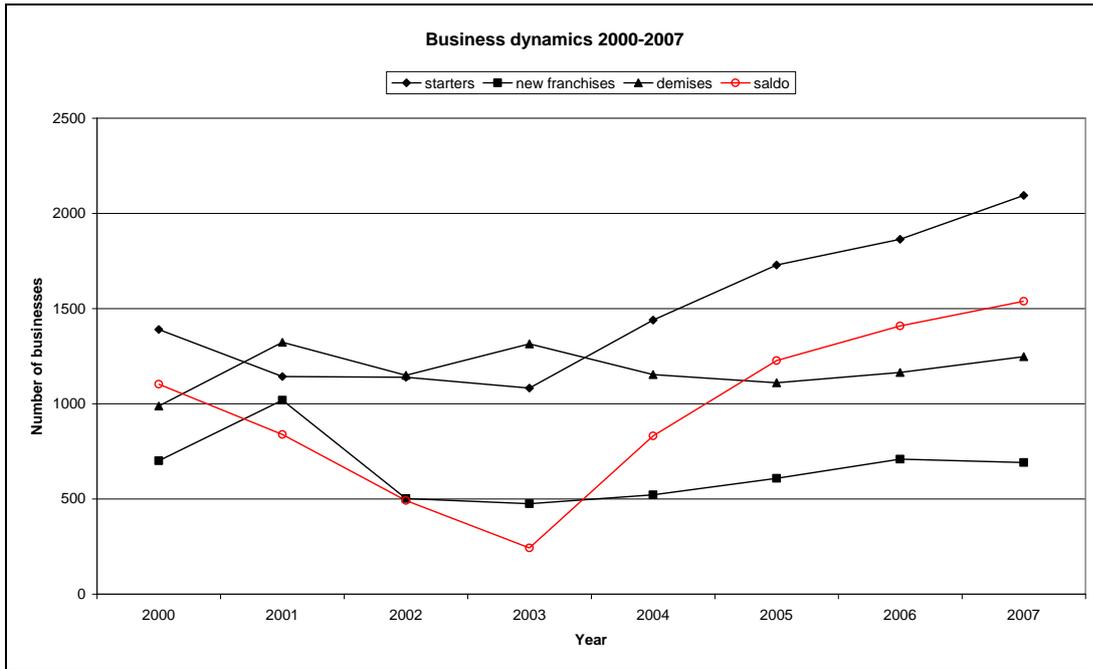


Figure 13: Business start-ups and closures in Overig Groningen, from 2000 to 2007
 (Source: DERREG Deliverable 1.1; Original data source: Economie in het Noorden, 2009)

Across Groningen province more broadly the greatest business growth has been in the retail, consultancy, construction, facilities and personal sectors between the years 2000 and 2007, whilst the greatest number of closures was also witnessed in the retail sector by a considerable degree. As Figure 13 shows, the number of closures in the retail sector ranged between 300 and 500 compared to between 50 and 250 in other sectors, with the lowest actually in the agricultural and fishery sector with an average of below 50 business closures per year.

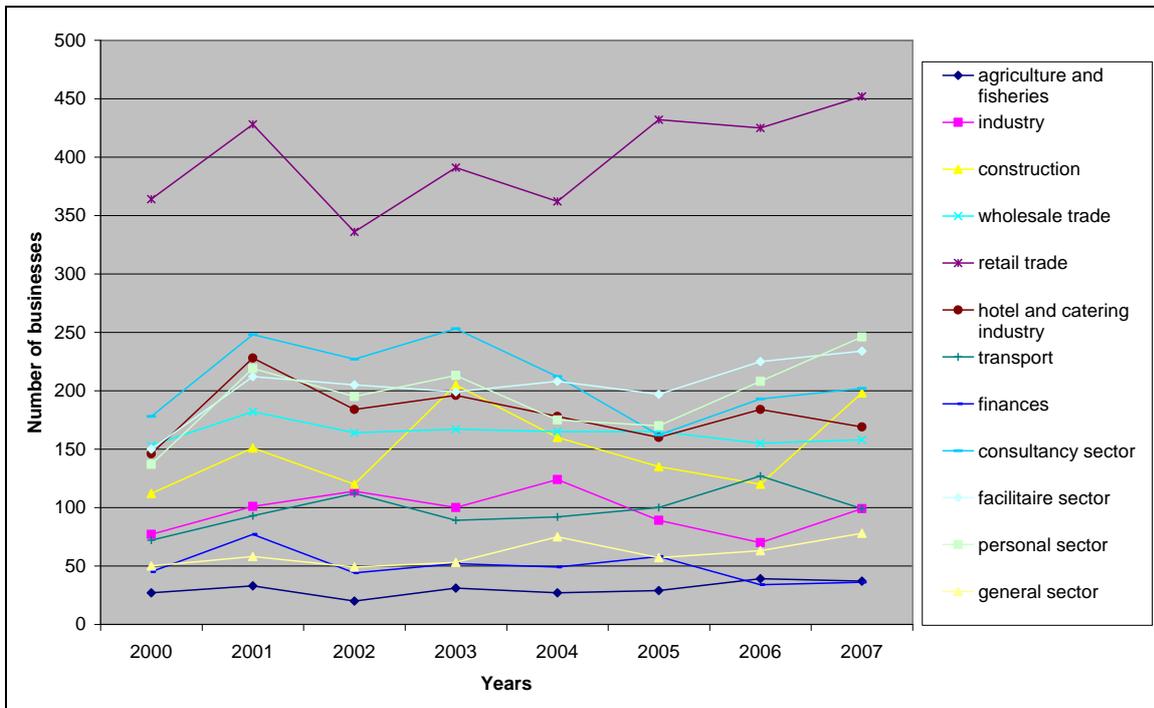


Figure 14: Business closures in Groningen province (NUTS 2) by sector, 2000-2007.
 (Source: DERREG Deliverable 1.1; Original data source: Economie in het Noorden, 2009)

2.3 Rural Primary Industries

As noted above, agriculture and food processing were historically the foundation of the regional economy in Groningen province, but the economic significance of agriculture in the region declined sharply in the late twentieth century and into the twenty-first century. Agricultural GVA in Overig Groningen fell from €222 million in 1995 to €202 in 2005, with its share of regional GVA falling from 2.3% to 1.3% over the same period. However, there are some signs of a small recovery in the agricultural sector, with agricultural employment in Groningen province increasing from around 7,400 to around 9,000 between 2001 and 2007, raising the share of regional employment in agriculture from 2.8% to 3.2%.²³ This trend is reflected in the increase in agricultural employment in Westerkwartier, as again discussed earlier, with agriculture now employing just over one in ten of the workforce.

Agriculture also continues to be significant in terms of land use and the appearance of the landscape in the Westerkwartier, with 90% of land being used for farming. Across Overig Groningen as a whole, there were 2,160 farms in 2005, down 16% on the figure for 2000. Larger farms dominate with 50% having land-holdings of over 30 hectares and only 15% with less than 5 hectares. This gives a mean farm size of 40.0 hectares which is smaller than in the two other NUTS 3 areas which constitute Groningen province - Delfzijl en omgeving and Oost-Groningen – but still amongst the largest mean farm sizes in the Netherlands and the fourth highest out of the DERREG case study regions after Jihomoravský kraj and Saarland and Dresden in Germany.²⁴

In the late twentieth century, farmland in the Netherlands was subjected to a spatial modernisation project that rationalised the distribution of agricultural types and led to the creation of large uniform fields in regions such as Groningen province, aided by the region's flat rolling terrain, for the purpose of maximizing agricultural yields. However, the Westerkwartier escaped this process in the 1970s due to collective opposition from local farmers and, as a result, the traditional landscape structure of smaller fields divided by hedgerows was preserved and remains a strong symbol of local identity. This landscape reflects the underlying soil structure with sandy ridges in north-west direction where many villages are located and in between lower peat moors and peat-clay soils. This means a poor soil for farming and historically made living conditions in the Westerkwartier more difficult, requiring residents to seek diverse ways of sustaining their livelihoods as well as creating a greater emphasis on livestock farming.²⁵ In spite of these challenges, none of the Westerkwartier is classified as a 'less favoured area' for farming.

Across Overig Groningen, arable and livestock farming are closely balanced, with 51% of farmland in arable production and 49% maintained as permanent grassland for livestock grazing. This contrasts with the eastern part of Groningen province where arable farming is predominant.²⁶ Many individual farms combine arable and pastoral farming, with 78% of farms in Overig Groningen keeping livestock (including cattle, sheep and pigs), and 51% involving some form of arable production.²⁷

Although there are continuing initiatives to diversify the economy of the Westerkwartier, the relatively strong position of agriculture is reflected in the comparatively limited degree of diversification at the individual farm level. Only 18.3% of the 2,160 farms in Overig Groningen have a complementary non-agricultural income, for example from landscape management, home-selling, agro-tourism or working for a third party. This is the second lowest level of farm diversification across the DERREG case study regions after Galicia.²⁸

²³ Source: Eurostat

²⁴ EU Rural Development Report 2008

²⁵ Source: <http://ruralsociologywageningen.wordpress.com/2009/03/17/places-to-care-for-2/>

²⁶ EU Rural Development Report 2008

²⁷ Source: Eurostat

²⁸ Source: Eurostat

The age profile of farmers in Overig Groningen is also more evenly spread than in many regions, with 48% aged between 35 and 54, and 47% aged 55 plus (with 19% aged over 65). The overwhelming majority (93.5%) are men.

2.4 Tourism

Tourism and recreation have been identified as key areas for development in the economy of the Westerkwartier, emphasising the region's natural landscape and agricultural way of life. Figures for the whole of Groningen province (NUTS 2) show that tourist numbers increased by around a third between 2000 and 2007, from 411,000 to 549,700. The majority of visitors to Groningen are domestic tourists, with only 19.3% coming from outside the Netherlands in 2007. Indeed, whilst overall tourists numbers have increased this has largely been due to increased domestic tourism, with international visitors to Groningen declining slightly since 2000 (Figure 15). Around four in ten international visitors to Groningen province in 2009 were from Germany (around 23,200 in total), with a further 13% from the UK (7,200), and 10% from Belgium (5,700). Only 7% of international visitors came from outside Europe, equating to about 1% of all visitors to the province.²⁹

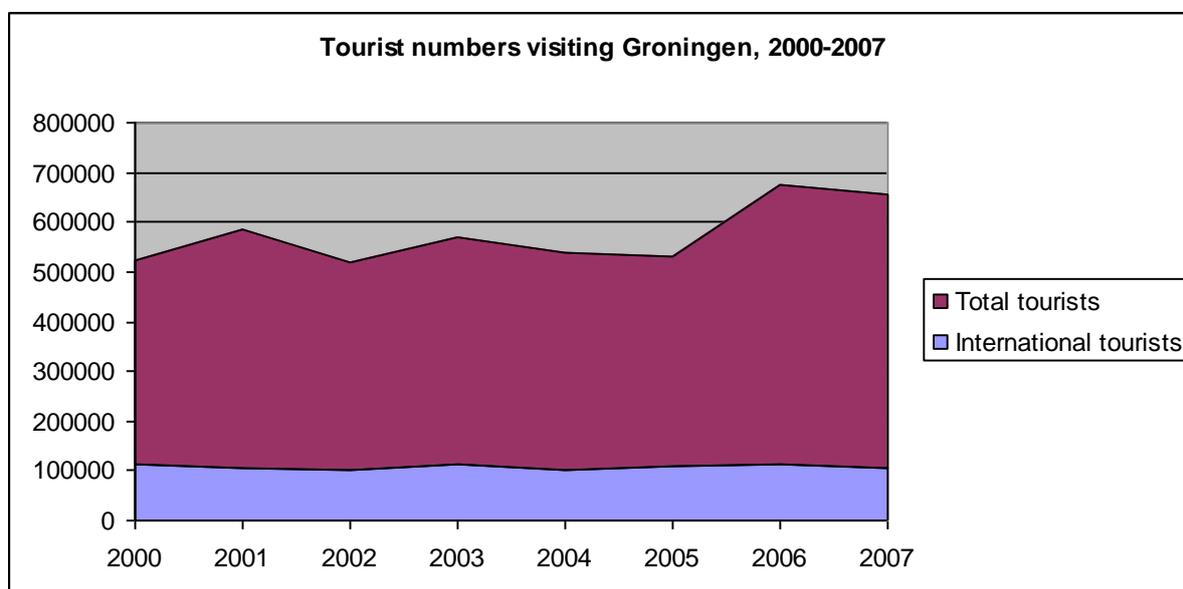


Figure 15: Tourist numbers visiting Groningen Nuts 2 region, 2000-2007.
(Source: Eurostat)

Tourism infrastructure in Overig Groningen has at the same time been expanding to cope with increased visitor numbers. According to Eurostat, the number of hotels increased by 25.0% between 2000 and 2007 whilst the number of other tourist establishments increased by 12.5%, leading to a 10.3% increase in available bed places in tourist establishments over this same period from 14,595 to 16,095 beds.

Tourism and recreational activities in the Westerkwartier itself are arguably more oriented towards catering for leisure trips by visitors from Groningen city and other neighbouring areas, with an emphasis on activities such as walking, cycling and horse-riding. The main visitor attractions in the four municipalities are the Nienoord country estate near Leek, which houses the National Carriage Museum, and the birthplace of Abel Tasman in Grootegast municipality, whilst the Westerkwartier tourism website lists 16 campsites and 12 hotels, as well as a number of hostels, apartments and bed and breakfast accommodation.³⁰ The

²⁹ Source: CBS

³⁰ www.touristinformationwesterkwartier.nl

promotion of tourism is a key element of regional development in the Westerkwartier, with marketing again largely focused on the Dutch market. The four municipalities have grant-funded a website for Westerkwartier linked to the Dutch cycling club, VVV, whilst the Westerkwartier tourism information website (www.touristinformationwesterkwartier.nl) is notably only available in Dutch.

2.5 International Integration

As a maritime nation with a small land area, the Netherlands have a long tradition in international trade which continues to the present day. Stimulating international trade is a key objective of national and regional economic policies, and several initiatives operate for entrepreneurs in Groningen province. For instance, the Kamer van Koophandel (chamber of commerce) in Groningen provides information on international trade initiations and conditions (KvK, 2009). Furthermore, the Kamer van Koophandel organises international trade fairs, seminars and lectures at which regional entrepreneurs are able to network and receive information on international business relations (KvK, 2009). Also the municipality of Groningen offers several programmes to engage local businesses in international trade. For example, the project *Noordelijke Ontwikkelings* As promotes the collaboration of businesses in the North of the Netherlands with businesses in the North of Germany, the Baltic states and Scandinavia (Gemeente Groningen, 2009). A further project encourages business cooperations with China and other North-European states (Nordconnect) (Gemeente Groningen, 2009). Statistics suggest that these initiatives have had some success, with the number of businesses engaged in exporting products in Groningen increasing since 2000, and an accelerating number recording increasing exports.³¹

At the same time, the Netherlands are also regarded as a highly attractive destination for direct foreign investment, owing to their location, logistics, education system and tax incentives (NFIA, 2009). In 2008, more than 50% of all new projects and jobs created in the Netherlands were estimated to have resulted from foreign investments (NFIA, 2009).

No detailed statistics are available for the international engagement of businesses at a local scale, but it might be speculated that businesses in the Westerkwartier are not as heavily integrated in international networks as businesses in Groningen city, the port cities of Delfzijl and Eemshaven, or districts on the German border. The preponderance of small businesses in the Westerkwartier, and the significance of the trade and repair and agricultural sectors, indicates that businesses are more likely to be focused on local, regional and national markets and not likely to have significant international links, but this needs to be confirmed through empirical research.

3. Population and Migration

3.1 Population Development

The population of the Westerkwartier has expanded substantially over the last forty years, increasing by 85.7% between 1970 and 2008, from 32,000 to 60,000 (Table 5). This rate of increase is significantly higher than the growth rate of 11.2% for Groningen province as a whole over the same period, and might be attributed to the trend of counterurbanisation and the in-migration of ex-urbanites, including commuters to Groningen. A small natural population increase has also contributed to the trend (Table 6).

1970	1975	1980	1985	1990	1995	2000	2003	2006	2008
32,322	38,259	41,191	42,674	54,667	56,543	58,353	60,015	59,578	60,089

Table 5: Population of the Westerkwartier, 1970-2008.
Source: CBS

³¹ Source: DERREG Deliverable 1.1 Annex.

Regions	1960	1970	1980	1990	2000	2008
Grootegast	126	95	53	54	83	60
Leek	109	211	148	80	90	94
Marum	97	120	27	63	46	34
Zuidhorn	44	35	24	80	111	90
Westerkwartier	376	461	252	277	330	278

Table 6: Annual natural population increase in the Westerkwartier, 1960-2008.
Source: CBS

The growth in population has tailed off, however, since 1990, reflecting fluctuations in the migration trend (Figure 16). Periods of net in-migration in the mid 1990s and between 1999 and 2001 have been balanced by periods of net out-migration in the late 1990s and between 2002 and 2005. Over the period from 1990 to 2007, a total of 51,199 people migrated into the Westerkwartier, and 50,694 moved out of the region – producing a net population gain of just 0.9%.

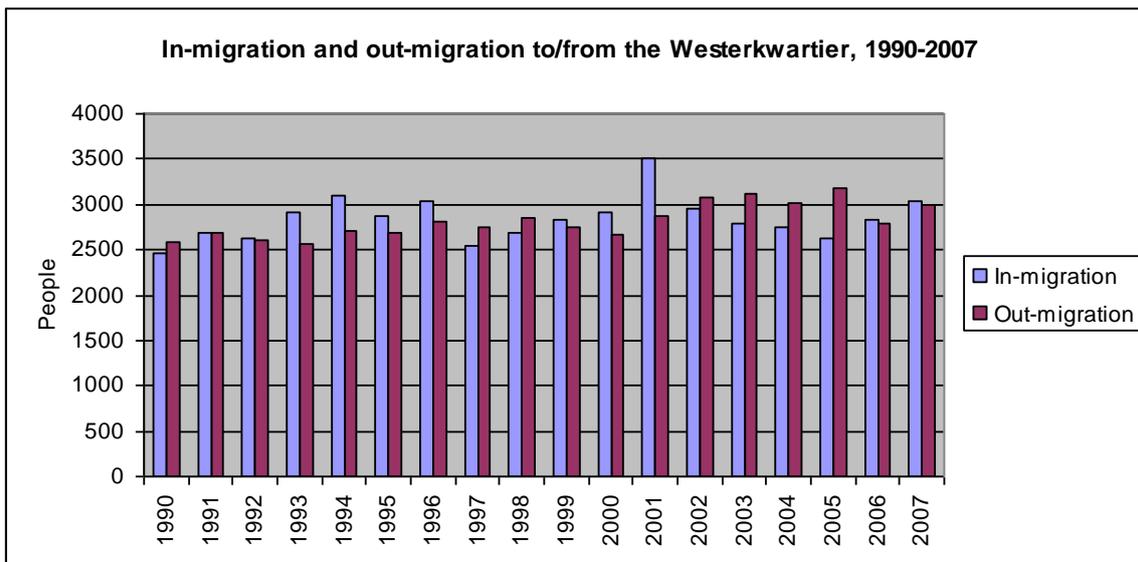


Figure 16: In-migration and out-migration to/from the Westerkwartier, 1990-2007.
Source: CBS

3.2 Demographic and Household Characteristics

Like most western European countries, the Netherlands is experiencing an ageing population due to increasing life expectancy and decreasing birth rate. However, the median age of residents in Overig Groningen is 31, which is the second lowest amongst the DERREG case study regions following the West of Ireland and suggests the attractiveness of the region for younger families. This is reflected in the age structure of residents in the Westerkwartier with 20.5% aged less than 15 years and which is again, following Ireland, the second largest proportion in this age category across cases study regions (Figure 17). In contrast, the proportion of 20-29 year olds in the Westerkwartier is comparatively low at only 9% of the population. However, within the larger region of Overig Groningen this figure almost doubles to 17.9% and can be explained by the presence of The University of Groningen, lying only 20km outside of the Westerkwartier in Groningen city and home to

approximately 18,000 students, including potentially many of those born in the Westerkwartier. The gender balance of the population of the Westerkwartier has remained constant since 2000, with 1.01 men to every woman each year up to 2008.

Based on 2001 census data, the greatest proportion of the population in Overig Groningen lived in 2-person households (30.1%) followed by one-person households (21.7%), giving a smaller typical household size than for most other DERREG cases study regions. Only 12.5% of people lived in a household of more than 5 persons.

Following a period of steady economic growth since 2000, property prices in the Netherlands have been decreasing in recent years following the economic recession of late 2007. In Groningen province, the property price index for all types of private dwelling in 2008 stood at 111.5 based on the price in 2005 equalling 100 and therefore showing a 11.5% increase over 3 years. In 2009 this had fallen to 107.2, representing a 3.9% decrease in house prices on the previous year.³²

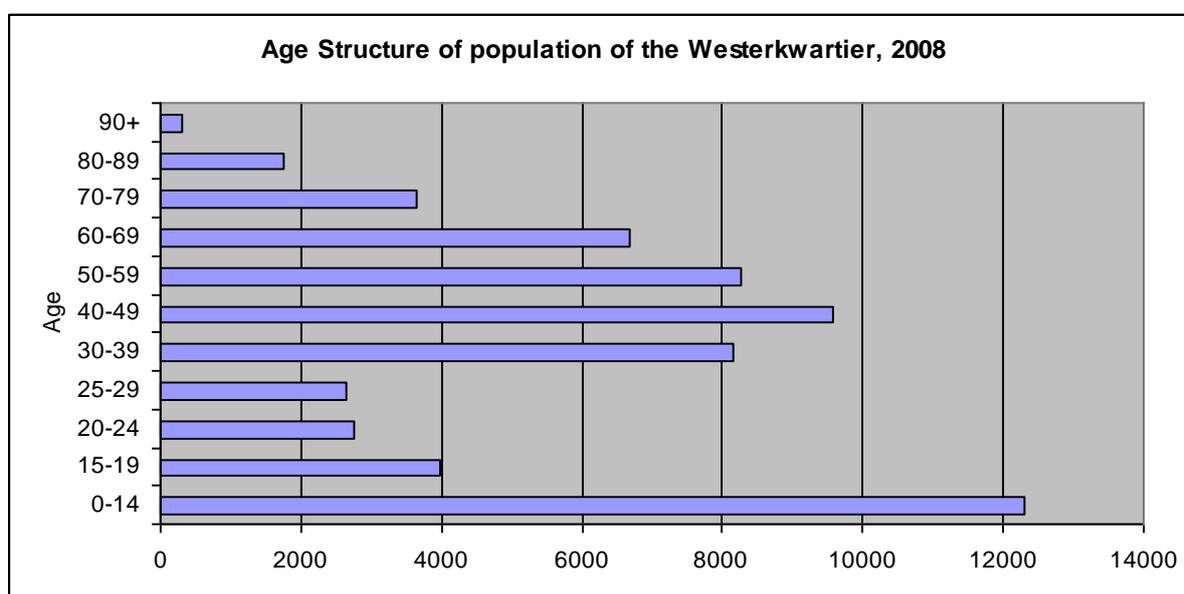


Figure 17: Age structure of the population of the Westerkwartier, 2008
Source: CBS

3.3 Non-national Residents

In 2001, there were 25,772 non-Dutch nationals recorded as living in Overig Groningen amounting to 7.2% of the population. Many of these will have been concentrated in the city of Groningen, including international students, and the figure also includes just over 1,000 migrant workers from outside the European Union and a further 1,200 from within the EU. Of these, over 80% of both EU- and non-EU migrant workers are employed in the service sector, whilst 18.5% of the former are employed in industry and 16% of the latter. The number of migrant workers from within the EU is likely to have increased following enlargement in 2004, however, Statistics Netherlands suggests the majority of new migrant workers either settled in one of the four major Dutch cities (Amsterdam, Rotterdam, The Hague and Utrecht), or sought employment in glasshouse horticulture in the Westland region or the bulb-growing regions of the southern Netherlands.³³

³² Source: Statistics Netherlands (CBS)

³³ Source: <http://www.cbs.nl/en-GB/menu/themas/bevolking/publicaties/artikelen/archief/2007/2007-2334-wm.htm?Languageswitch=on>

In 2001, which was a peak year for in-migration to the Westerkwartier, a quarter of in-migrants to the four municipalities had been living outside the Netherlands a year earlier (889 individuals in total). The proportion of international migrants among in-migrants to the Westerkwartier dropped sharply in subsequent years, and constituted just 6% of in-migrants (189 individuals). A significant element of the spike in in-migration to the Westerkwartier in 2001 can therefore be explained by the high number of international migrants in that year. This in turn is explained by the arrival of refugees fleeing inter-communal conflict between Islamic and Christian populations in the Maluku Islands of Indonesia between 1999 and 2003. Westerkwartier has had a small but notable Moluccan community since 1951, when the first refugees from the former Dutch colony arrived escaping conflict over the incorporation of the region into Indonesia and were housed in a former military camp near Marum.³⁴ In 1969 the community was moved from the camp and settled in Marum in an area that has become known as the Moluccan district. At the height of the 1999-2003 inter-communal conflict, the number of international migrants arriving in Marum municipality increased from 7 in 1998 and 12 in 1999 to 139 in 2000 and 128 in 2001.³⁵ Others came to the neighbouring municipalities of Grootegast and Leek, contributing to a 490% increase in the number of international migrants to the Westerkwartier between 1999 and 2001 (Figure 18). There are currently some 400 of Moluccan origin living in Marum, represented by the Tatitha Kumi Foundation that works to promote Moluccan culture.³⁶

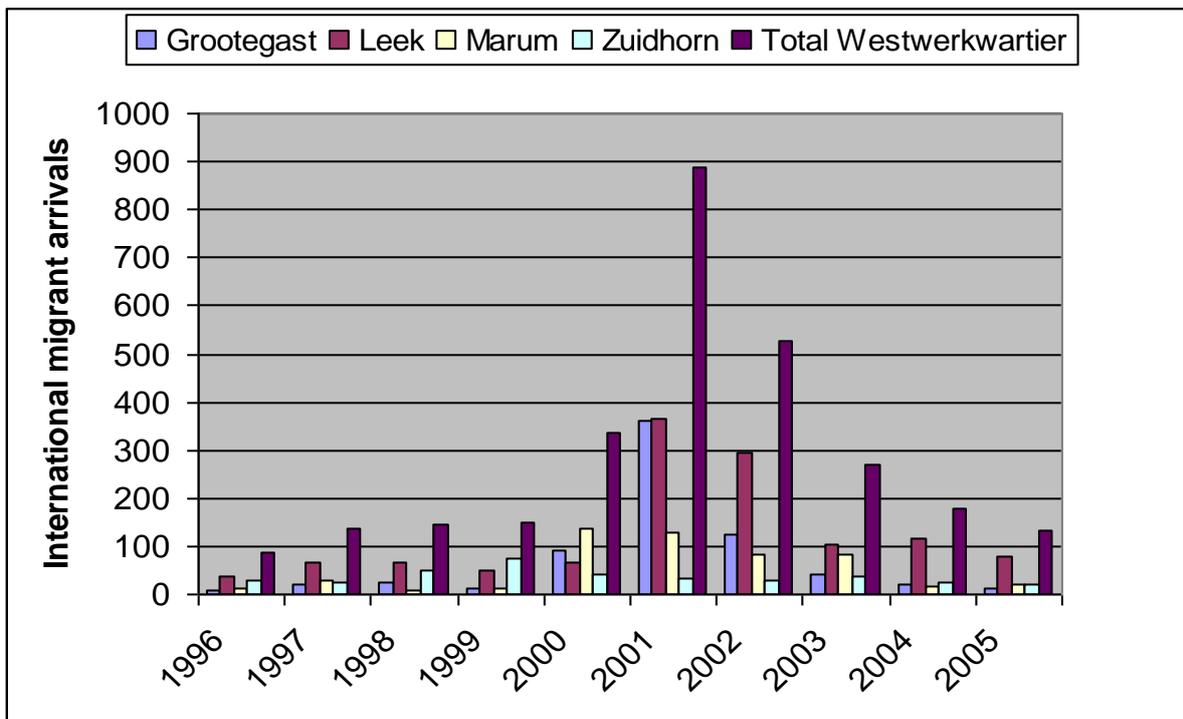


Figure 18: Migrants to the Westerkwartier arriving from outside the Netherlands, 1996-2005
Source: CBS

³⁴ Source: LEADER Westerkwartier newsletter, www.leaderwesterkwartier.nl

³⁵ Source: CBS

³⁶ Source: LEADER Westerkwartier newsletter, www.leaderwesterkwartier.nl

4. Environment and Sustainable Development

4.1 The Regional Environment

The landscape of the Westerkwartier can be divided into two parts. The north (particularly Zuidhorn municipality) is characterised by an old salt marsh landscape with villages (e.g. Ezinge, Oldehove and Niehove) built on artificially raised hills or 'terp' which are a feature of Groningen's northern coastal plane along the Wadden Sea. The south of Westerkwartier is distinctive for its patchwork landscape of small cultivated fields divided by hedgerows and belts of natural land cover which have encouraged greater biodiversity in the area (Figure 19). Canals were built to extract peat from low-lying bogs, whilst ribbon settlements such as Marum and Grootegast developed along the more stable sand ridges.



Figure 19: Aerial view of the Westerkwartier landscape
(Source: Google Earth)

Land use in the Westerkwartier is dominated by agriculture, with 90.4% of its 33,676 hectares given over to agricultural land in 2003. This represents a very small decrease of 327 hectares or 1% of total land area since 1996, which is compensated for by minor increases in both developed land and woods and open natural land. The area of Overig Groningen is classified by the European Environment Agency as being mostly a rural mosaic and pasture landscape, with some secondary landscape type provided by broad pattern intensive agriculture. Water bodies occupy 1.5% of the land area of the Westerkwartier which is bisected by large canals and drainage channels.

Throughout the twentieth century Groningen province had severe problems with industrial water pollution from peat extraction and agricultural waste water. This was eventually tackled in the 1980s with high levies on brought against companies dumping unpurified water.³⁷ Levels of atmospheric pollutants associated with industry or intensive agriculture are relatively low in the Northern Netherlands, with levels of nitrogen oxides recorded just across

³⁷ Source: <http://www.eh-resources.org/groningen.html>

the border of Groningen in Friesland the third lowest across DERREG case study regions after Ovre Norrland and Galicia, whilst levels of sulphur dioxide are the lowest recorded.

4.2 Protected Areas

The northern edge of the Westerkwartier forms part of the Middag-Humsterland National Landscape, designated in 2007, which includes the village of Zuidhorn and extends north across the northern half of Zuidhorn municipality into the neighbouring municipality of Winsum (the precise boundaries have yet to be defined) (Figure 20). The landscape of the Middag-Humsterland was formed as salt marshes on the edge of the Wadden Sea. As the sea retreated raised hillocks emerged amidst the marsh, which was subsequently drained for cultivation, producing an open landscape characterised by mounds, ridges and marsh dykes, red brick farms and churches, and an irregular pattern of square fields. The pattern of roads and settlements still largely follows the topography of the Fifth century, making the Middag-Humsterland one of the oldest cultural landscapes in Europe.³⁸ The area was nominated for UNESCO World Heritage status in 2005.

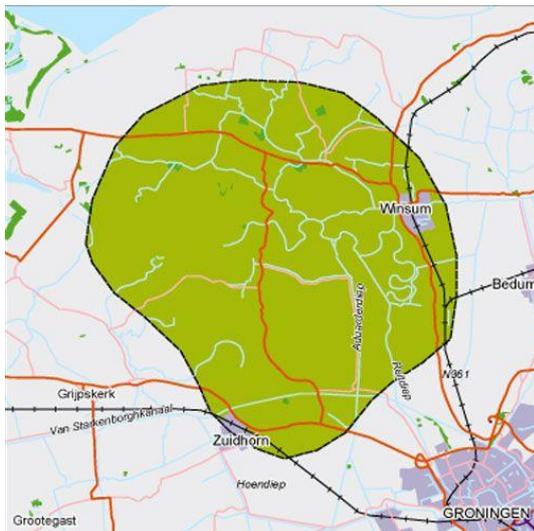


Figure 20: The approximate area of the newly-designated Middag-Humsterland National Landscape (Source: www.nationalelandschappen.nl)

On its western side, the Westerkwartier abuts a second National Landscape, the Noardlike Fryske Wâlden. A landscape of long narrow plots, pingo dykes and ruins, formed by peat extraction, the eastern limit of the Noardlike Fryske Wâlden is formed by the western boundary of Grootegast municipality.³⁹ On the eastern edge of Westerkwartier, the Leekstermeer forms part of the boundary of Leek municipality. A freshwater lake covering 1,450 hectares, Leekstermeer was designated as a Ramsar wetland of international importance in 2000.

The far northern tip of Westerkwartier also touches a corner of the Lauwersmeer National Park, designated in 1969. The Lauwersmeer is an artificial lake created when a dyke was constructed across the mouth of the old Reitdiep estuary with the Wadden Sea. The area around the Lauwersmeer was designated as a national park for both conservation and recreational purposes. On the one hand, the National Park is an example of large-scale land reclamation, with over 6000 hectares of protected land surrounding the lake now home to a wide diversity of flora and fauna. On the other hand, the Lauwersmeer National Park is a popular tourist destination in the Netherlands, with extensive walking and cycling routes as well as sailing and kayaking on the lake and surrounding waterways, and opportunities for mud-flat walking at the renowned village of Pieterburen (Figure 21).⁴⁰

³⁸ Source: <http://www.nationalelandschappen.nl/landschap.php?id=10>

³⁹ Source: <http://www.nationalelandschappen.nl/landschap.php?id=12>

⁴⁰ Source: <http://www.lauwersmeer.org>



Figure 19: Tourist map of Lauwersmeer National Park

(Source: www.lauwersmeer.org)

4.3 Sustainable Development

The province of Groningen along with Drenthe and Friesland is home to Energy Valley; a central tenet in the Netherlands national energy transition policy towards the development of a sustainable energy economy. The region is home to approximately 400 companies, more than 25,000 jobs and 350 projects under development concerned with the development of sustainable mobility/transport, energy conservation, clean fossil fuel energy and new energy technologies.⁴¹ In 2007, the Energy Valley provinces signed a joint agreement with the Dutch government committing to specific goals for renewable energy production and reductions in CO₂ emissions. Within Groningen, there are around 15-20 operational bio-energy sites and further in development, as well as both biomass and sustainable gas sites including Green Gas Westerkwartier.

The development of sustainable agriculture has been increasing slowly over the past decade in Groningen, alongside the overall contraction of the agricultural sector. Of the 4325 agricultural and horticultural businesses in Groningen province (NUTS 2) in 1999, just 38 or 0.9% were fully organic with a further 8 in transition. By 2004, the number of businesses had decreased to 3729 but the number of those that are organic had grown to 73; a 2.0% share of the total.⁴² However, land under organic cultivation only amounted to 0.019% of utilised agricultural land in the province in 2005.⁴³ Locally produced food is also being emphasised, with a labelling association established in Groningen province – *Streek Producten Groningen* - which labels food products taking into account their local area of origin within Groningen. A 'farmers market' selling local produce is held regularly in Leek on Fridays.

More emphasis has been placed on encouraging environmental stewardship by farmers. Collaborations between farmers in agri-environmental trusts (*Agrarische Natuur Verenigingen*) and the Forestry Commission (*Staatsbosbeheer*) have explored ways of combining sustainable farming practice with the preservation of landscape and biodiversity, in order to utilise the landscape both as an asset for cultural, tourism and educational purposes at the same time as diversifying the local economy.⁴⁴ However, uptake of agro-

⁴¹ Source: <http://www.energyvalley.nl/>

⁴² Source: Statistics Netherlands

⁴³ Source: EU Rural Development Report 2008

⁴⁴ Source: <http://ruralsociologywageningen.wordpress.com/2009/03/17/places-to-care-for-2/>

tourism opportunities has thus far been limited, with only 60 out of 3460 agricultural and horticultural businesses in Groningen province involved in agro-tourism in 2008, down from 79 in 2005.⁴⁵

4.4 Environmental Issues

The environmental agenda in Westerkwartier is largely focused on the protection of the area's distinctive landscape. Initiatives for nature conservation and land stewardship, discussed above, have widespread participation. More controversial has been the rate of new development in the region, and the loss of greenfield sites - a concern shared with many peri-urban districts. The formulation of a development plan for Leek between 2006 and 2009 provide a focus for debate, with a local campaign group *Ons Groen* ('Our Green') formed to lobby for more infill of developed land within the towns and villages and the protection of undeveloped fields, and to oppose a proposed bypass for Leek.

Another controversial issue is plans to expand and implement the *Ecologische Hoofdstructuur* (EHS) (Ecological Framework) in the Westerkwartier, as part of a national policy to create a network of existing and planned nature conservation areas connected by ecological linkage zones with the objective of preserving biodiversity. However, the plan would involve farmers operating in conservation areas either selling their land or taking up forms of non-agricultural activity with less environmental impact; both of which options have met with local opposition.

5. Regional Development and Innovation

5.1 Regional Development Programmes

Regional social and economic development in the Westerkwartier involves actors and policies across multiple governmental levels, including the European Union, national government, the region (Northern Netherlands), the province (Groningen) and, lastly, the four municipalities and water boards.

The Northern Netherlands region was identified as eligible for EU Structural Funds assistance due to its limited economic structure, and received €341.9 million for the 2000-2006 period in order to co-finance the regional Objective 2 development programme. This operational programme for the Northern Netherlands was continued in the 2007-13 round of Structural Funds under the Regional Competitiveness and Employment objective, with the region receiving €169 million from the European Regional Development Fund (ERDF) and €203.3 million in national match-funding.⁴⁶ The core objective of the programme is to transition the North-Netherlands to a 'knowledge economy' through technological development, knowledge transfer into business life and the development of new foreign markets (table 7). This will focus on stimulating knowledge in key economic areas; namely energy, water technology, multisensory systems, agribusiness, chemistry, commercial care, life science, ICT sector, shipbuilding and tourism. At the same time, emphasis will be placed on stimulating opportunities for SMEs in key economic areas, as well as connecting the economy of the Northern Netherlands with those of Germany and Scandinavia in a 'northern development axis'. In addition, Groningen province will benefit from Structural Funds delivered through Cross-Border operational programmes with Germany, France and the United Kingdom, amongst others.

⁴⁵ Source: Statistics Netherlands

⁴⁶ Source:

http://ec.europa.eu/regional_policy/country/prordn/details_new.cfm?gv_PAY=NL&gv_reg=615&gv_PGM=1184&LAN=7&gv_PER=2&gv_defL=7

Priority Area	Key Strands	% of total programme funding	EU Contribution for 2007-2013, Euro
Knowledge economy, entrepreneurship, innovation	1) Strengthen the region's innovative capacity 2) Enhancing the knowledge in small and medium-sized enterprises (SME) 3) Stimulate entrepreneurship 4) Reinforce the labour market structure	49%	94,864,000
Attractive regions	1) Maintenance and the further improvement of an attractive countryside 2) Enhancing accessibility and mobility 3) The enhancement of business locations	23.5%	33,880,000
The urban dimension	1) Addressing urban issues in 4 cities (Groningen, Leeuwarden, Assen, Emmen) 2) Qualitative upgrading of facilities and services in cities and locations for knowledge-oriented business	23.5%	33,880,000
Technical assistance		3.8%	6,776,000
Total			169,400,000

Table 7: 'North Netherlands' operational programme priorities and Structural funds allocation, 2007-13
(Source: The European Commission)

At the same time, rural development policy in the Netherlands is currently formulated through the 'Vital countryside' agenda which includes objectives of the re-phrased European Common Agricultural Policy (including the LEADER approach) together with national rural development objectives. These rural and regional development agendas are integrated and operationalised at the local level in the Westerkwartier by the *Steering Group West*, with the Westerkwartier acknowledged by the province of Groningen as a LEADER region; that is, as a distinct rural area (e.g. national landscapes or reconstruction areas) that does not coincide with a single public administration unit. Through the LEADER scheme, a Local Action Group (LAG) was established in the Westerkwartier. Prior to the recognition of the Westerkwartier as a LEADER area, various citizen stakeholders had come together to form the Westerkwartier Initiative Group (*Werkgroep Streek Initiatief*), with one of their purposes being to support other citizens access sources of funding for development projects and innovations. Additionally, three public knowledge institutes have been involved with development initiatives in the Westerkwartier, namely Wageningen University, Van Hall-Larenstein University of Applied Sciences (an educational institute associated with Wageningen University) and Stenden University of Applied Sciences.

LEADER Westerkwartier has a budget of €7.8 million for the period 2007-13, and is engaged in implementing an action plan developed by the *Werkgroep Streek Initiatief* and orientated around four key themes: (i) agriculture and landscape (including the development of agro-tourism and biomass); (ii) viability of the rural economy; (iii) identity, culture and tourism; and (iv) collaboration and networking, with an emphasis on regional networking as opposed to international links. Among the activities organised by LEADER Westerkwartier is a regular series of 'Countryside Cafés' aimed at disseminating ideas and examples for rural development.⁴⁷

⁴⁷ Source: www.leaderwesterkwartier.nl

5.2 Regional skills-base and Infrastructure

Although not a comparatively large city, Groningen city has long been established as the main educational, cultural and knowledge centre in the Northern Netherlands region being home to several universities with a total population of approximately 50,000 students in addition to lecturers, researchers and technical staff. Institutes include the University of Groningen (*Rijkuniversiteit Groningen*) which was founded in 1614 and is amongst the oldest educational centres in the Netherlands, offering courses across the sciences, humanities, law and business with particular specialities in Ecology, Material Sciences, Chemistry and Astronomy. There is also the Hanze University of Applied Sciences and one of the campuses for the Stenden University of Applied Sciences, as well as other educational institutes including University Medical Center Groningen (UMCG), which is main hospital of Groningen and affiliated with the Rijksuniversiteit Groningen, and AOC Terra, an Agricultural Education Centre (AOC) offering land based (agricultural/ green) educational courses at 16+ and 18+ levels.

Groningen University has 27 associated research centres, including specialisms in the life sciences and science and technology. However, these skills do not appear to have diffused throughout the traditionally agricultural region, with 4.22% of the workforce of Groningen province (NUTS 2) employed in hi-tech industries in 2007 which is lower than the average across DERREG case study regions.⁴⁸ Similarly, investment in research and development activities in Groningen was €309.7 million in 2005 which was again below average amongst the NUTS 2 areas containing the DERREG case study regions, and the same with employment from that sector which contributed 1.55% of the total.⁴⁹ However, the current emphasis on developing the province as a knowledge economy through regional development initiatives may encourage greater collaboration between public and private sector interest groups in ventures such as Energy Valley.

With the long established presence of several universities in the region educational attainment in Overig Groningen is fairly high, with 2001 census data recording 18.8% of the population of Overig Groningen as having a tertiary qualification compared to the Dutch national average of 14.8%. Additionally, Overig Groningen has the second highest proportion of adults aged 25 to 64 participating in education and/or training out of the DERREG case study regions at 16.2%. Figures for the larger region of Groningen from 2006 give the proportion of adults (25-64) with medium to high educational attainment is 75.3% which is above average across Dutch NUTS 2 regions.⁵⁰

The technological infrastructure across the wider area of Groningen province is extremely well developed, with 89% of households having Internet access in 2008 and 72% having broadband; the highest figures across comparative DERREG NUTS 2 case study regions according to Eurostat.

⁴⁸ Source: Eurostat

⁴⁹ Source: EU Rural Development Report

⁵⁰ Source: EU Rural Development Report 2008

6. Summative Analysis

The contemporary economic, social and environmental situation of the Westerkwartier is characterised by:

- A distinctive, historic landscape of small-scale agricultural production that has avoided land consolidation and agricultural modernisation, but which is of environmental and cultural value.
- Proximity to a medium-sized city and regional centre, stimulating population growth through counterurbanisation and demands for leisure and recreational use of the Westerkwartier landscape, but also providing employment for a large number of residents through commuting.
- A local economy characterised by a preponderance of small businesses and one-person enterprises, mainly in the service sector but including some small-scale industry.
- An agricultural sector that has declined in economic importance from a once dominant position, but which is still significant in employing over one in ten of the region's workforce.
- A strong cultural identity that compensates for the absence of a single local government body for the district, but which is reflected through partnership working between local institutions and the creation of a LEADER local action group focused on the area.
- An accessible location with a motorway running through the region and several large cities in the Netherlands and north-western Germany within two hours travel time.

The dynamics of social and economic development in the Westerkwartier are therefore in many ways typical of peri-urban districts. The distinctive landscape and the strong cultural heritage and identity marks the Westerkwartier out from more homogenised peri-urban zones, but is not unique. Examples of comparable areas include the Pennine moorland communities on the peri-urban fringe of Manchester and the Albufera district on the fringe of Valencia.

Given the strong influence of Groningen on the Westerkwartier, the major forces impacting on the district may be argued to have come from regional and national factors, rather than from globalisation processes. The most apparent direct engagement with globalization was the arrival of several hundred asylum seekers and migrants from the South Maluku Islands around the turn of the century, joining a Moluccan community that has been established in Marum since the 1950s. However, the economy and society of the Westerkwartier has also been exposed to less direct consequences of globalisation processes. These may well include:

- The globalisation of food commodity chains and agricultural markets, and the accompanying deregulation of national and European agricultural regimes, with indirect consequences for the financial position and practices of individual farms.
- The global restructuring of the sugar industry with trade liberalisation, which may have contributed to the contraction of sugar-processing in Groningen and the closure of one of the city's sugar-processing plants – a major local employer (although the closure was primarily in response to a local campaign against its noxious presence in the urban environment).

- The development of international agreements and programmes for environmental conservation and protection, such as Natura 2000, which have cascaded down into national and regional schemes and designations, including Ramsar sites and the *Ecologische Hoofdstructuur*.

Equally, opportunities and challenges for the future development of Westerkwartier are also likely to be largely determined by regional and national factors, in particular the district's relations with Groningen. Yet, these will also be informed and framed, at least indirectly, by the wider context of globalisation. Potential globalisation-linked opportunities include:

- The valorisation of the distinctive natural landscape and heritage of the Westerkwartier and of its environmental resources for tourism and leisure, including for international visitors.
- The development of renewable energy resources, including biomass production on Westerkwartier farms, as part of the broader Energy Valley initiative.
- Employment opportunities in the science- and technology- sectors in Groningen, with potential engagement with global markets.

At the same time, globalisation processes can also indirectly present potential challenges and threats for Westerkwartier, which might include:

- The impact of agricultural policy reform, as part of the global liberalisation of agricultural markets, on subsidies and funding available to Westerkwartier farmers for production and agri-environmental schemes.
- Potential international competition to small-scale industrial companies operating in the Westerkwartier, especially from south and east Asia.

7. Bibliography

The list below includes academic papers reporting on relevant research in the Westerkwartier region published since 2000, 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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