Forces affecting employment dynamics in Drenthe
Case study in a leading rural region in the Netherlands

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In this report the focus is on employment dynamics in Drenthe since the beginning of the 1980s. This study is part of an EU wide research project on employment development in leading and lagging rural regions of the EU. Total employment in Drenthe increased by 24,500 jobs or with over 20% in the period 1984-1996. Nearly 40% of employment growth occurred in the community, social and personal services sector, 25% in the trade, restaurant and hotel sector, 14% in the financial services sector, 13% in the construction sector and 12% in the manufacturing sector. A substantial part of employment growth consists of part time jobs. Employment in the agricultural sector declined by over 2,000 jobs in this period. Employment development is the result of many interacting factors. As strengths have been identified the beautiful landscape, which attracts tourists, labourers, entrepreneurs and retirees, the location of the region near the city of Groningen, the strategies of policymakers to create favourable preconditions for firm settlement, like zones of economic activities, low land prices and investment subsidies. Weak points in the employment situation are the peripheral location of Drenthe relatively to main economic centres, the cautious and risk averting attitude of many entrepreneurs and the relatively thinness of the economic structure. Opportunities for further employment growth are the congestion in the Randstad, improvements in infrastructure like the doubling of the N37 and the development of tourism. Threats are competitiveness with low wage countries and changes in EU agricultural and structural policies.

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Preface

This case study on employment dynamics in Drenthe has been carried out in the scope of the FAIR project 'Agriculture and employment in the rural regions of the EU (RUREMPLO; CT 96 1766)'. In that project Drenthe is considered as a leading rural region, with a rather favourable development of employment since the 1980s. In total 18 case studies have been carried in the project, of which 9 in leading rural regions and 9 in lagging rural regions. Except for the Netherlands, these case studies were carried out in the next 8 EU Member States: Belgium, Germany, Greece, Spain, France, Italy, Austria and Finland. Each of the case study reports can be seen as the 'story of employment dynamics' in a certain rural region. In the scope of the RUREMPLO project the case study reports have been used to identify forces behind employment dynamics in rural regions and to formulate lessons for employment creation in rural regions of the EU.

This case study has been carried out in 1997. For the purpose of this study we have made a number of interviews with key actors in Drenthe (see Annex 1 for an overview). We are grateful to all of the interviewed persons for the information they provided to us. This information forms an essential part of this case study.

We acknowledge the useful comments of Dirk Strijker (RUG), Diderik Koolman (Provincie Drenthe) and Jan Weener (Kamer van Koophandel Drenthe) on an earlier draft of this report.

LEI managing director

Prof. dr L.C. Zachariasse

The Hague, March 1999

Key issues

Local resources

1. *Do local resources matter in the creation of employment?*

   Yes, they contribute to employment growth, but actors are needed to exploit them.

2. *Identification of those local resources (including infrastructure) which are important for the creation of employment.*

2a. Beautiful landscape in Drenthe: forests, peats, moors, brooks, esdorp landscape and giant graves. These landscape amenities create an atmosphere of quietness and green space, which attracts tourists, labourers, entrepreneurs and retirees. The accommodations and services asked by these actors are a source of employment. Moreover, the new coming entrepreneurs also create employment opportunities in their own business.

2b. The well-developed highway A28 (north/south connection) and the relatively less-developed N37 (east/west connection). These allow for an efficient trade of goods and services, especially since many companies are located near to these roads.

Economic activities

3. *In which branches does employment increase? What are the properties of these branches?*

   Total employment in Drenthe increased by 24,500 jobs or with over 20% in the period 1984-1996. Nearly 40% of employment growth occurred in the community, social and personal services sector, 25% in the trade, restaurant and hotel sector, 14% in the financial services sector, 13% in the construction sector and 12% in the manufacturing sector. A substantial part of employment growth consists of part time jobs. Employment in the agricultural sector declined by over 2,000 jobs in this period.

   About three quarters of employment growth occurred in the community, social and personal services sector, the construction sector and the wholesale and retail trade, restaurants and hotels sector. These sectors are characterized by a limited exposure to global markets, relatively stable prices and a rather labour intensive production. The other two branches with an important contribution to employment growth are the financial services and the manufacturing sectors. These sectors are exposed to global markets and fluctuating prices. The production process of both sectors varies: the financial services sector is labour intensive and the manufacturing sector labour extensive. It goes without saying that the larger share of employment is created in sectors with a labour intensive way of production.

4. *Does the sectoral mix explain the dynamics in employment growth?*

No, since the sectoral mix in Drenthe shows a relative over representation of employment in the agricultural and industry sectors compared to the average in the Netherlands. Moreover, despite the fact that employment in Drenthe increases at a higher rate than the other intermediate regions in the Netherlands, the sectoral structure of employment in Drenthe does not differ from those regions.

5. *Is employment created in small or large enterprises?*

During the years 1984-1996 enterprises with 100 or more employed persons have the largest share (more than 50%) of total employment growth, from which the largest part (about 9000 jobs) was created in the community, social and personal services sector. Employment growth in SME (less than 100 employees) accounted for somewhat less than 50% in the years 1984-1996 and mainly occurred in the trade, restaurant and hotel sector (18% of total employment growth), the financial sector (13%) and the construction sector (6%). Part of the growth in SME can be attributed to the repulsion of activities by large enterprises, who tend to focus on their core business.

6. *Is employment created in new or existing enterprises?*

The total balance of jobs in new and closing companies during 1986-1996 was about 6800 jobs, which equals to about one third of total growth of jobs during these years. This balance is composed of jobs due to establishments (18,100 jobs) minus losses of jobs due to closings (11,300). In the period 1986-1996 in Drenthe an annual average of almost 1400 enterprises was established, from which two thirds were starting companies. During these years there was an annual average of about 700 closing enterprises. This resulted in an annual average net increase of 700 enterprises and over 600 jobs. The expansion of employment in existing companies amounted for about two thirds of the total increase in employment.

Actors: analysis of labour supply

7. *Does the education level of the labour force matter in the creation of employment?*

There is an over representation of low skilled labour in Drenthe, which was for many (mainly industrial) firms a reason to settle in Drenthe. On the other hand, the relative shortage of high skilled labourers is a reason for non-settlement in Drenthe for firms, which need this type of labour. However, large subsidiary business are hardly affected by the shortage of high skilled labourers in Drenthe, as they have a pool of high skilled labourers rotating in all settlements of the company.

Labour market

8. *Is employment hampered by the institutional structure of the labour market?*

Frictions in the institutional structure are of minor importance, so employment is hardly affected. There is one main exception on this rule: the minimum wage level. For some jobs this level is too high, which results in the disappearance of jobs or a shift of jobs to low wage countries.

Actors: analysis of strategies

9. *Does the capacity of actors matter in the creation of employment?*

Policy makers are able to implement policies according the needs and priorities of the region within a broader development perspective. Recently they have improved the co-operation with the neighbouring regions.
Entrepreneurs are often risk averting and cautious, which hampers employment creation, while the labourers generally have a good attitude towards work, which favours employment creation.
Due to the waiting attitude of Drenth people, their capacity to innovate is rather low. New coming people often act as innovators.

10. *Specify the role of internal and external networks in the creation of employment and give an analysis of which actors come to exercise power over others within and through networks*

Within the networks information, goods and services are exchanged and as such they contribute to the maintenance of creation of employment. The networks in Drenthe are characterized by a high degree of solidarity and easy communication. Although on the whole the functioning of the networks is assessed to be reasonable or good, also some critical remarks can be made. Due to the solidarity, actors have more or less a mutual dependency. Hence actors are not always very critical and sometimes no decisions are made. Besides, the density of actors is relatively low and contacts are not very frequent. As a result contacts between actors have the character of sociability instead of an incentive to innovate, which often occurs in 'more stressed' networks, i.e. networks in an environment with a high density of actors an a high frequency of contacts. With regard to this aspect the functioning of the network could be improved, and therefore entrepreneurs welcome a further clustering of economic activities as this may increase the local density of actors. From this observation, it can be suggested that although current networks contribute to the creation of employment, their contribution can be enlarged in a situation of a higher density of actors.
Within the networks some local leaders can be identified: actors who are able to push and to activate other actors to a large extent. It is striking that local leaders within the group of entrepreneurs often are of non-Drenth origin. They are in fact external actors,

who moved into the region and became internal actors. These new coming actors have the capability to mobilize other local actors, probably due to the fact that their attitude differs from the local actors in Drenthe, who can be characterized as cautious and risk averting. This means that the functioning of the networks could be improved by the attraction of external entrepreneurs.

The efforts of enterprises and municipalities towards the doubling of the N37 have created an attractive location zone for firms. So the joint effort for the improvement of the infrastructure stimulates employment.

External actors in the networks are mainly actors from the neighbouring provinces; with other external actors contacts are less frequent.

It appears that networks in the tourist sector suffer from a lack of cooperation, since most tourist firms strive after individual goals and have often no well-defined strategies. Hence it is difficult to join forces for an enhancement of the tourist structure in Drenthe, which has a negative impact on employment in the tourist sector.

11. *Give an identification of the most effective policies and strategies towards maintaining or augmenting policies and indicate their local implementation.*

-
- The clustering of economic activities in well-defined zones with a well-developed infrastructure and the allocation of activities in certain centres, like an industrial centre in Emmen, a services centre in Assen and a transport and distribution centre in Meppel/Hoogeveen can be considered as an effective policy. Advantages are a relatively high density of enterprises, which stimulates the interaction among enterprises and which attracts other enterprises. This leaves space for other functions (i.e. housing, recreation, agriculture, nature) in other parts of the province.
- The efforts towards the doubling of the N37 will improve the infrastructure in South-Drenthe and its opening up (a.o. connection to Germany) and will stimulate economic activities along the N37.
- The financial means of the EU Structural Funds are substantial compared to the national and regional means available for regional development, and form a major incentive for new economic activities, employment creation and training of labourers.
- Investment subsidies are also an effective instrument for the embedding of firms in the region.
- The cooperation in regional policy of the three northern provinces with the aim of creating a larger economic area with more critical mass is also a step forward.

12. *How do farm households adapt to the situation of decreasing employment in the agricultural sector? What are the perspectives for tourism on the farm, landscape conservation and pluriactivity for farm households?*

Sofar the most important strategy of farm households has been to adapt by farm enlargement, mainly by an increase in the agricultural area. This strategy is still dominant but other strategies are gaining in importance. In this respect a slight tendency towards diversification of farm activities and the introduction of on-farm activities like camp

sites and nature conservation can be mentioned. The participation of farm women in off-farm activities is limited and increasing.
Nevertheless, compared to other EU countries, in the Netherlands pluriactivity on and off farm is less important. Coherent with the competitiveness of land use, cultural values, conditions to get a loan for investments, agricultural policies and municipal and national policies, that support only to take over a *viable* farm which is able to provide a main source of income, there is more often a separation between agricultural activities and other activities.

1. Introduction

1.1 Objective, approach and plan of this case study

This case study is carried out in the scope of the FAIR project 'Agriculture and employment in the rural regions of the EU' (RUREMPLO; CT 96 1766). In this project an analysis is made of the development of employment in the rural regions of the EU against the background of a downward trend in the agricultural labour force. For this purpose a quantitative analysis of socio-economic characteristics in all EU regions and 18 case studies in leading and lagging rural regions in 9 EU Member States have been carried out in order to reveal forces behind employment dynamics. Based on the findings of the project a number of key messages emerge for policy consideration on employment opportunities in rural regions of the EU.

In RUREMPLO rural regions are viewed from the territorial approach, which means that rural regions are expressed as a territorial unit with one or more towns, with a local economy and a relatively low population density. Hence, a rural region is considered as an economic unit with an internal socio-economic structure and a system of local agents. The size of territorial units is for example that of départements in France, Regierungsbezirke in Germany, provincies in the Netherlands and counties in the UK. This territorial approach differs from other approaches from rural, for example those in which rural is more or less synonym to agriculture, to non-urban, to a specific set of social values etcetera.

During the last decade a number of rural regions in the EU showed a considerable employment growth in their non-agricultural sectors, while employment in other rural regions stagnated. In the RUREMPLO project we have labelled the first group as 'leading regions' and the second group as 'lagging regions'. In each of the participating countries in the project we have selected a leading and a lagging rural region for a case study analysis. In the Netherlands these regions are Drenthe and Groningen (Terluin et al., 1999a). The other regions in which case studies have been carried out are: Luxembourg (B), Niederbayern (GER), Lüneburg (GER), Korinthia (GR), Fthiotis (GR), Albacete (SP), Zamora (SP), Alpes de Haute Provence (FR), Ardennes (FR), Nièvre (FR), Pesaro (IT), Macerata (IT), Osttirol (AUS) Liezen (AUS) Keski- Suomen Lääni (FIN) and Mikkelin Lääni (FIN). The approach of RUREMPLO is comparing pairs of leading and lagging rural regions within EU Member States. Thus, the RUREMPLO project analyses rural employment conditions and trends within given national policy settings. Its focus is on rural/rural, rather than on rural/urban or rural to national comparisons.

The aim of this case study is to analyse the development of employment in Drenthe during the period 1980-1997. In order to visualize forces, which affect the employment development in rural regions, we have designed a field of force (figure 1). In this field the current global restructuring process, due to rapid technological changes in the communications and information sectors and due to political changes, is taken into account. This process results in an intensification of the external integration of rural regions. From the design of the field

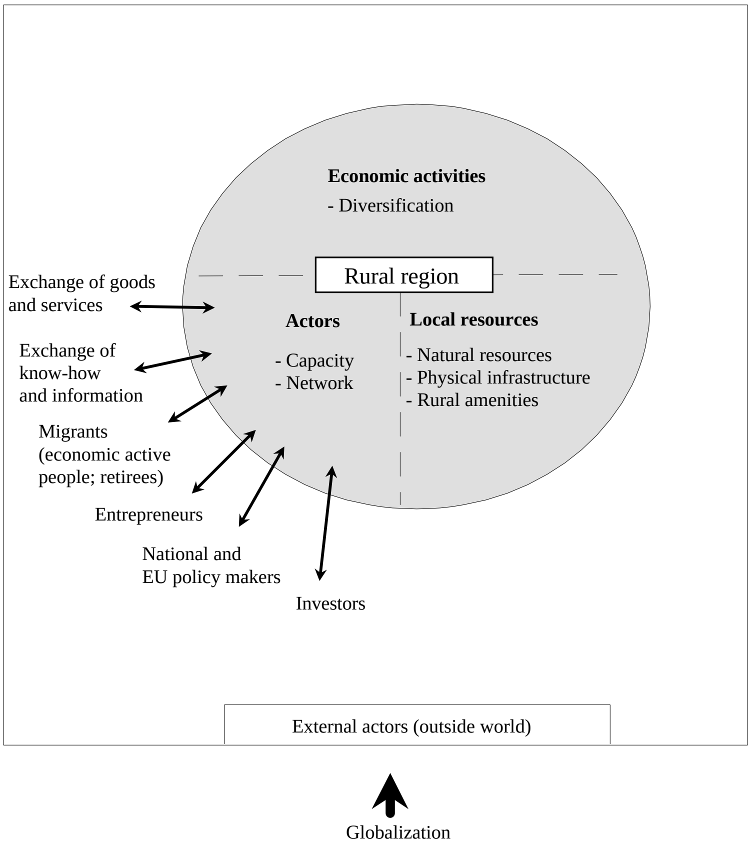


Figure 1 Field of force of a rural region

of force it is clear that we assume that both endogenous and exogenous forces are important for the development of employment in rural regions. In the case study we pay especially attention to the networks of internal and/or external actors, who affect the development of employment (see for more information on the field of force Terluin et al., 1999b). In order to asses the strengths of the various factors in the field of force, a further step in the case study was to make a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of these elements. We have carried out a SWOT analysis for 1980 (beginning of the period under study) and 1997 (ending year of the period under study). The case studies are based on statistical analysis, on literature study and on interviews with relevant actors in the region (see Annex 1 for an overview of interviewed persons for the purpose of this case study).

In order to guarantee the comparability of the 18 case studies in the project, we have made a detailed guideline with questions around the 3 main components of the field of force:

local resources, economic activities and actors (RUREMPLO team, 1997). In this guideline also the issues to be treated in the various chapters in each case study report are given.

The plan of this study is as follows. In this chapter introductionary remarks are made on the reasons behind the selection of Drenthe as a case study region, on the history of Drenthe, on the economic and geographical environment and on the institutional setting. In the second chapter local resources are discussed and in chapter 3 an analysis of economic activities is made. Labour supply is examined in chapter 4 and the functioning of the labour market is described in chapter 5. Strategies of the economic actors are elaborated in chapter 6 and in the last chapter a synthesis of the development of employment, including a SWOT analysis, is given.

1.2 Reasons behind selection of Drenthe in the case study

In RUREMPLO a leading region is defined as a region which manages to increase the non-agricultural employment and which simultaneously maintains or increases its population base. The condition on the maintenance or increase in population is a consequence of a rise of employment: once hidden unemployment has been disappeared and a stable participation rate has been established, employment growth will be accompanied by population growth. So in leading regions employment opportunities were created and the labour supply succeeded in responding to these changes. A general guideline for the selection of leading regions in the case study is that the annual growth rate of non-agricultural employment growth in these regions must exceed the national growth rate by 0.5 percent points during the last decade.

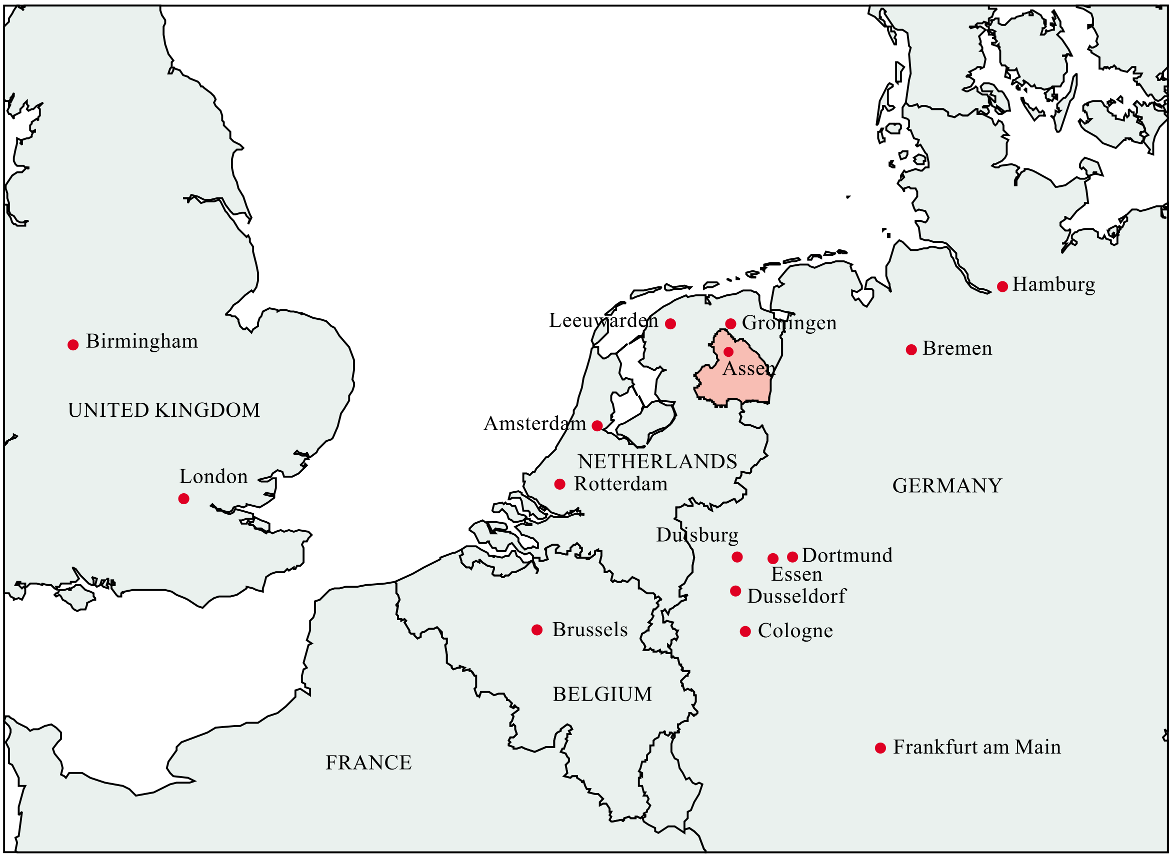
It is rather difficult to make an analysis of employment development in the provinces of the Netherlands since 1980 till now, due to lack of a consistent time series for this period and due to the creation of a new province (Flevoland) in 1986. Several data sources for employment data for short intervals since 1980 exist, but often these time series cannot be linked to each other and show sometimes even opposite trends. In this report we use several data sources for employment, and if appropriate we will indicate difficulties with the interpretation of the data.

Discussion reasons for selection of Drenthe

In the Netherlands a time series at provincial level on employment at the place of work for the 1980s and more recent years is only available for the period 1980-1991 (Eurostat). We used this time series for the selection of a leading and a lagging region. In the Netherlands there are 5 intermediate rural regions [1]: Groningen, Friesland, Drenthe, Flevoland and Zeeland. Flevoland is a newly established province in 1986, and consists of the so-called 'polders', area that has been reclaimed from the Zuider Zee during the course of this century. There is a high rate of commuting between Flevoland and the neighbouring Amsterdam. Although Flevoland ex-

[1]Based on the criterium of population density, Groningen,Friesland, Drenthe, Flevoland and Zeeland are classified as 'intermediate regions' and Overijssel, Gelderland, Utrecht, Noord-Holland, Zuid-Holland, Noord-Brabant and Limburg as 'most urban regions' (see OECD, 1994 and Terluin et al., 1999b).

perienced a rather high growth of employment during the last decade, due to these specific conditions it does not serve as a good example for other Dutch rural regions. There is one other rural region with a relatively high performance in employment: Drenthe. Its growth rate of non-agricultural employment (measured at the place of work) amounted to 4.2% per annum compared to a national average of 2.9% per annum during the years 1980-1991. Its population increased in this period. Since the other 3 intermediate rural regions experienced a more moderate employment growth, we selected Drenthe for the case study of a leading rural region. The region is situated in the northern part of the Netherlands (map 1.1).



Map 1.1 Drenthe in a broader EU context

In a more detailed look at the time series of the above used regional employment data from Eurostat for the years 1980-1991 we discovered that there was a break between 1985 and 1987, that the year 1986 for all provinces was missing, that there were no data for industrial employment for the year 1989 and that the years 1980-1985 were missing for Overijssel, Gelderland and Flevoland. So simply calculating an annual growth rate by using the beginning and end year of the series yields too high growth rates. Growth rates, calculated as the average of yearly growth rates for the period 1980-1985 and 1987-1991, resulted in moderate growth rates. By using these rates, non-agricultural employment growth in Drenthe amounted to 1.1%

per year and that for the Netherlands as a whole 0.7%. So by using these growth rates, we fit more or less within the criteria for selecting a leading region in our RUREMPLO project.

In order to examine the employment performance in Drenthe in the 1990s, we used a time series with data on employment at the place of residence in the Dutch provinces (CBS). Compared to the other intermediate rural provinces, Drenthe showed an above average growth during the years 1991-1996, except for 1994, in which employment decreased as a consequence of the recession. So we decided to use the period 1980-1997 for the case study.

1.3 Brief historical overview of the region

The countryside of Drenthe was formed in the Ice Age. The first people in Drenthe were hunters, fishermen and food collectors. About 4000 years before Christ the first farmers settled; these people were also the builders of the giant graves (hunebedden) (Heringa et al., 1985). These monuments are now one of Drenthes most important rural touristic sights. Drenthe has had a long history of poverty. The poor agricultural soil with low yields was often insufficient for a good living. The people often lived in turf huts and supplemented their incomes through peat-cutting (Eurostat, 1993). In 1815 Drenthe became officially a province, with a provincial government (provinciediskette Drenthe). After the Second World War Drenthe entered into a whole new phase. Drenthes most important employment source - agriculture - made great progress because of the introduction of the mechanization. But at the same moment this mechanization was responsible for the exodus of labour from agriculture. The percentage of people who worked in agriculture declined from 43% in 1947 to 27% in 1960 (Heringa et al., 1985). Since 1960 employment in agriculture declined to 8% in 1996 (table 1.1). There was also a large exodus of labour in the peat business. At the beginning of the 1950s, the authorities began to encourage industrial development through the granting of investment premiums, setting up industrial sites and adopting measures related to the construction of infrastructure (Eurostat, 1993). In Emmen and other main population centres, like Hoogeveen, Assen, Meppel and Coevorden, new enterprises were settled and the enterprises that already existed expanded substantially. The amount of industrial employment increased from 6,000 jobs in 1945 to 20,000 in 1960. After 1960 Drenthe stopped being a poor province that suffered from unemployment (Heringa et al., 1985). About in 1970 it can be said that the transformation process from an agrarian society to an industrial society was completed, and that a next phase started of a gradual decline of the shares of the agricultural and industrial sector in employment and an increase in the share of the services sector (table 1.1). At the beginning of the 1980s the recession in the world economy was a major set-back but Drenthe recovered relatively well. Over the period from 1960 to 1990, employment trends in Drenthe were positive, as the increase in employment was higher than the national average [1] (Eurostat, 1993).

[1]The employment growth in Drenthe was 3.0% in the period 1963-1991. In the same period in the Netherlands as a whole it was only 1.9% (Calculations of LEI-DLO, based on CBS, 1972 and 1993b).

Table 1.1 Sectoral distribution of employment in Drenthe (in %), 1960-1996

	1960	1970	1985	1990	1996
Agriculture	27	13	11	9	8
Industry	38	40	34	35	33
Service	35	47	54	56	59

Source: RuG, several years; adaptation LEI.

1.4 Geographical and economic environment

Drenthe can be described as peaceful, spacious and green. The varied landscape is suitable for leisure activities and makes for a good living environment. The main cities of Drenthe are Assen (the regional capital city), Emmen, Hoogeveen and Meppel. They play an important role in the economy, and have around half of the region's population and half of its enterprises (Eurostat, 1993). During the period 1984-1996 the municipalities of Emmen, Assen, Hoogeveen (and the municipalities of Roden and Meppel somewhat less) were the centres of employment growth in Drenthe. Most of the employment growth was in the community, social and personal services sector, the trade, restaurant and hotel sector, the financial services sector, the construction sector and the manufacturing sector.

The most important highway in Drenthe, the A28, connects Zwolle (capital city of the province Overijssel) and Groningen (capital city of the province Groningen). From Zwolle it is easy to go to the rest of the Netherlands. The largest part of this highway lies in Drenthe and crosses the cities Meppel, Hoogeveen and Assen. On the traject Zwolle-Groningen there is also an important railway that connects Drenthe to the rest of the Netherlands. The N37, which connects Hoogeveen and Emmen, is currently under reconstruction. It is expected that this road becomes the A37, with an international connection to the Emslandline in Germany. Eelde, a regional airport in the north of Drenthe, increases in importance.

Geographical environment

Drenthe is one of the three northern provinces of the Netherlands. They are characterized by a relatively low density of population and economic activities and are located at the periphery of the Netherlands. This common starting point sometimes results in a natural cooperation to face problems in certain fields.

The city of Groningen, which is located only one kilometre from the northern border of Drenthe, is an important location outside Drenthe from the perspective of employment. Many people live in Drenthe and work in Groningen and commute daily (see section 5.4). There is a good connection by road between Drenthe and Groningen.

Table 1.2 Economic environment

	Drenthe	the Netherlands
Population in 1996 (million)	0.46	15.49
Size of the region (km²)	2,680	41,029
Population density (inhabitants/km²) (1996)	171	378
Population growth 1980-1996 (% per annum)	0.6	0.6
Employment growth 1980-1991(% in persons per annum)	0.6	0.7
Population 15-65 years (as % of total population):		
1980	64	66
1996	67	68
Income per capita in ecu:		
1980	8,200	8,800
1993	14,500	17,300
Sectoral employment as % of total employment, 1995		
Agriculture	7.3	3.7
Industries	26.5	22.6
Services	62.8	70.6
Unemployment rate (%):		
1987	9.2	9.9
1995	8.8	7.3
Population in main cities, 1995		
Assen	53,000	
Emmen	94,000	
Hoogeveen	47,000	

Sources: Eurostat Regio database; adaptation LEI.

The European integration emphasizes the significance of foreign markets. This is a positive development for Drenthe because it is located at the periphery of the domestic market. Due to the expansion of the EU with Scandinavian countries and the possible future expansion to the Central and Eastern European countries, Drenthe becomes a relatively more central location. Some municipalities in Drenthe have good contacts with foreign municipalities in Germany.

There are a number of important economic centres within a radius of 250 km: Hamburg, Hannover, the Ruhr, Antwerp and the Randstad Holland. The road links with these areas are generally good, with the exception of those with the Ruhr and Hannover (Eurostat, 1993). Groningen Airport Eelde (located in the north of Drenthe) has grown from a small local airport to the main regional airport of the north of the Netherlands.

1.5 Institutional setting

The Netherlands are divided into 12 provinces (map 1.2), each with an own administration. This administration makes decisions about developments at the provincial and local level.

Map 1.2 Provinces of the Netherlands

Drenthe is one of the provinces of the Netherlands. It has its own tasks but cooperates closely with other administrative institutions like the Dutch government, municipalities, the provinces of Friesland and Groningen and the Water Boards (waterschappen) and business, organizations and institutions. The province of Drenthe constitutes the administrative level between the

Dutch government and its 34 (from 1998: 12) municipalities. Compared to the Dutch government the province of Drenthe has mainly an executive task but it also makes some policy, for example in the field of infrastructure. The national government can decide that the province administration contributes to the execution of higher hierarchic regulations. So far as regulation and administration of its own housekeeping is concerned, the province administration is autonomous.

The mutual relation with other provinces is called IPO (interprovincial consultation). IPO is a cooperation of and for the provinces. It protects the interests of the provinces and serves as a coordinator and negotiator with the national government. The municipalities of Drenthe (together with the province of Drenthe and employers) care for a good settlement environment. Therefore they arrange sufficient and well-accessible industrial sites, and strive after a good skilled working population and a good connection between education and labour market. The municipalities of Drenthe also have a mutual organization, namely the society of the municipalities of Drenthe. This cooperation of all municipalities of Drenthe is aimed at the protection of interests and is a department of the Society of Dutch municipalities (Provincie Drenthe, 1997b).

Objective 2 and 5b areas

Since 1989 southeast Drenthe is eligible under objective 2 (map 1.3). Southeast Drenthe consists of the municipalities Hoogeveen, Zweelo, Oosterhesselen, Dalen, Coevorden, Odoorn, Sleen, Emmen and Schoonebeek. This area covers 32.4% of Drenthe. This area became an objective 2 status because its industry is in decline. This area has some weaknesses: it is highly dependent on small enterprises (99% of the enterprises have less than 100 employees), it has only a few research possibilities, it has a low export quote and a high unemployment rate compared to the national level. In 1994 south-east Drenthe remains still an objective 2 area but now the southwest of the province has been added as an objective 5b area (map 1.3). The southwest of Drenthe covers 33.9% of the area of the province and consists of the municipalities Zuidwolde, Westerbork, Beilen, Dwingelo, Diever, Vledder, Havelte, Nijeveen, Meppel, Ruinerwold, De Wijk and Ruinen. This area has been added as an objective 5b area because it has a very rural character and a relatively large share of employment in agriculture. The last five years the population has declined and aged considerably. The percentage of people working in agriculture is relatively high (12%) and the unemployment rate in this area is above the national level [1] (European Commission Agency in the Netherlands, 1995).

[1] The average unemployment rate during 1992-1994 in southwest Drenthe was 7%. The national level during this period was 6% (Provincie Drenthe, 1997a).

Map 1.3 Municipalties in Drenthe

2. Analysis of local resources

2.1 Introduction

The basic idea of our research project RUREMPLO is that economic development, and particularly one of its components that is employment growth can be understood only at a disaggregated territorial level. Economic fundamentals, agents' behaviour and strategies express themselves in a specific geographical context that usually takes the form of a *local economy*. In this idea of a local economy, territory is by definition a basic economic resource. In a more realistic and complex sense, we should say that territory could be at the same time a resource and a handicap, an obstacle to economic activities and a resource mobility.

The aim of this chapter is to represent the regional endowments of territorial resources and handicaps to support the explanation of activities and behaviour that will be described and analysed in the following chapters.

2.2 Physical variables

We consider four categories: land use, weather, mineral resources and water resources. All these aspects represent relevant variables for economic development affecting directly or indirectly economic activities and behaviour of actors.

2.2.1 Land use

The area of Drenthe covers about 2,700 km² (table 2.1), which is roughly 6-7% of the total Dutch area. Drenthe can approximately be divided into two areas: the Veenkoloniën (peat colonies) in the eastern part and the Drents Plateau in the central and western part. The Drents Plateau can be subdivided into the Hondsrug (at the east side), the Centraal Zandgebied (Central Sand Area) and the northern and southwestern meadows. Each area has its own characteristics. The Veenkoloniën is an open agricultural area with mainly arable production. The Drents Plateau has a more mixed land use (Ministerie van Landbouw, Natuur en Visserij, 1992). Over 60 % of the area in Drenthe is used for agriculture and 10% for forestry (table 2.2). Other user functions of the area are housing (4%), traffic (3%) and nature (4%) (CBS/LEI, 1996). In the period 1980-1994 the agricultural area decreased by 10% while the forest area increased by 8%. The sandy soils in Drenthe encourge forests. The share of forest in total area in Drenthe is above the average share in intermediate regions, but at a comparable level with the most urbanised regions in the Netherlands. This is due to the fact that the group of most urbanized regions includes two provinces with a share of forest in total area of about 15%. A relatively larger share of the area is used for agriculture in Drenthe than in the other intermediate regions and in the most urbanised regions. Somewhat less than 60% of the agricultural area in Drenthe is used as permanent meadows and over 40% for arable production.

Table 2.1 Some physical variables in Drenthe, 1980-1994

Variable	1980		1985	1990		1994
Total area (km²)	2681		2681	2681		2681
Forest area (1,000 ha)	26	a)	26	28	b)	
Agricultural area (1,000 ha)	169		169	166		160
of which:						
- area with permanent crops (1,000 ha)	0		0	0		0
- area with permanent meadows (1,000 ha)	79		77	69		62
- area with arable crops (1,000 ha)	90		92	97		98
% LFA in agricultural area				0	c)	

a) 1979; b) 1989; c) 1989/90.
Source: Eurostat Regio Database and EUROFARM/FSS; adaption LEI.

Table 2.2 Some physical variables in Drenthe and other regions, 1990 (as % of total area)

Variable	Drenthe	National		
		total	intermediate regions	most urban regions
Forest area (%) b)	10	7	4	10
Agricultural area (%)	62	49	48	49
of which (a)				
- area with permanent crops (%)	0	2	1	2
- area with permanent meadows (%)	42	53	43	59
- area with arable crops (%)	58	45	56	39
% LFA in agricultural area c)	0	0	0	0

a) Expressed as percentage of agricultural area; b) 1989; c) 1989/90.
Source: Eurostat Regio Database and EUROFARM/FSS; adaption LEI.

This picture does not deviate from the other intermediate regions in the Netherlands, but in the most urbanised regions more area is used for meadows and less for arable production. Drenthe - like the other parts of the Netherlands - is a flat region and has no area over 600 m of altitude. This is the main reason why the amount of LFA in the Dutch regions is negligible.

2.2.2 Weather

Drenthe has a moderate maritime climate with relatively warm winters and cool summers. The average temperature per year, the number of sunshine hours and the amount of precipitation is a little below the averages for the Netherlands, but differences are marginal (table A2.1).

2.2.3 Mineral resources

The municipality of Schoonebeek in southeast Drenthe produced 778,900 m^3 of mineral oil in 1980. This was 56% of the total Dutch oil production. In 1996 the production declined to 23,200 m^3, this was only 1% of the total oil production in the Netherlands (Ministry of Economic Affairs, 1997). That year it was decided to stop the oil exploitation in Schoonebeek. This closing had no serious consequences for employment because many people found work in the gas exploitation and the nature conservation branche (Agrarisch Dagblad, 1997).

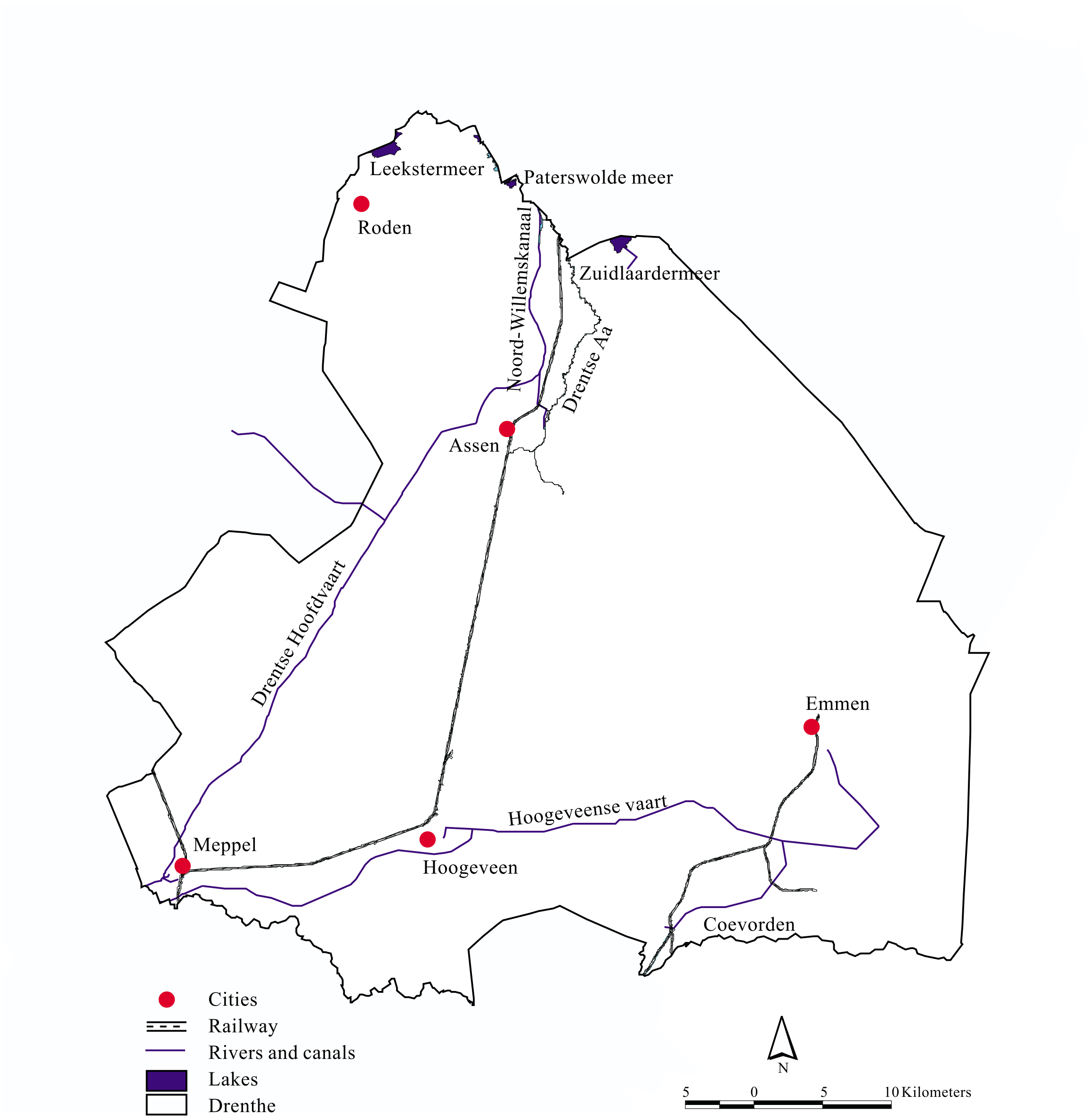
2.2.4 Water resources

Drenthe is not a province with many water resources (map 2.1). There are some small rivers but they are not important for freight traffic. The most well-known river in Drenthe is the Drentse Aa. This small river is of touristic importance because the beautiful landscape that surrounds this river attracts many cyclists. There are three important lakes in Drenthe in the field of tourism: Zuidlaardermeer, Paterswoldsemeer and Leekstermeer. All these lakes are located in North Drenthe, on or near the border between Groningen and Drenthe. As shown in table A2.2 only a small part of the Zuidlaardermeer and the Paterwoldsemeer is situated in Drenthe.

The length of the navigable canals in Drenthe is 161 km (CBS, 1996d). The largest canals in Drenthe are the Drentsche Hoofdvaart (44 km), the Noord-Willemskanaal (20 km), the Hoogeveensche Vaart (30 km) and the Verlengde Hoogeveensche Vaart (32 km) (Vaarwegenbeheer Provincie Drenthe, 1996). These canals are not very important for inland navigation because they are only navigable for vessels with a cargo capacity less than 1000 metric tons (CBS, 1996d). In former times they played a decisive role in the transport of peat and later of starch patatoes. Meppel has a wet container terminal that is the feed line to the Port of Rotterdam and is suitable for combined transportation, canal barges as well as lorries. The port of Meppel is situated at the Drentsche Hoofdvaart and is accessible to vessels of up to 2,000 tonnes.

2.3 Infrastructure resources

We define infrastructure resources as the set of services available on the territory that allows the connection between activities, agents and urban centres. This connection is fundamental to allow for efficient trade, mobility of resources and information exchange. Therefore, high infrastructure endowments and balanced distribution on the territory is a fundamental requisite for economic development and for the existence of efficient local and interregional markets. We consider only the stock of infrastructure (table 2.3 and A2.3), since the flow of services is considered in the chapter about economic activity; two relevant aspects are considered in this section: transportation and energy.



Map 2.1 Canals and lakes in Drenthe

Table 2.3 Infrastructure endowments in Drenthe and other regions, 1990

Variable	Drenthe	National		
		total	intermediate regions	most urban regions
Motorways, length (Km)	82	2,118	717	1,402
Motorways, density (M/Km² total area)	31	52	44	57
Other roads, length (Km)	6,001	102,711	37,788	64,933
Other roads, density (M/Km² total area)	2,239	2,503	2,325	2,621
Railways, length (Km) (a)	107	2,824	542	2,282
Railways, density (M/Km² total area) (a)	40	69	33	92
Navigable canals and rivers, length (Km)				
Navigable canals and rivers, density (Km/total area)				

a) 1985.
Source: Eurostat, Regio Database; adaption LEI.

2.3.1 Transportation

Roads

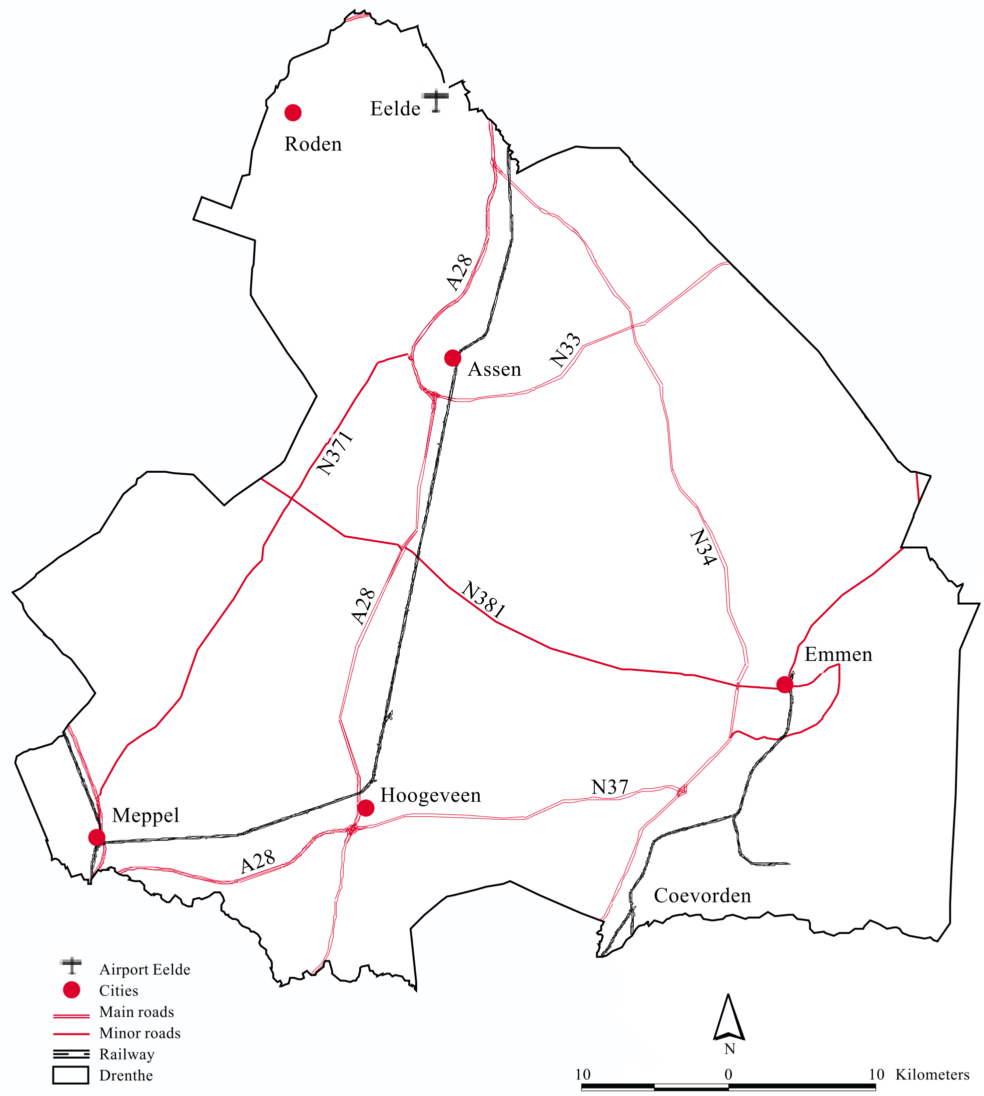
The important roads in the Netherlands can be divided as follows; E-roads, A-roads and N-roads. The N-roads are provincial roads and the A-roads are national four-lane roads that are connected to other national and international roads. A-roads and N-roads that cross the Dutch border are also called E-roads. Drenthe has several N-roads, 2 A-roads (A28 and A32) and 2 E-roads (E232 and E233) (map 2.2). Table A2.4 shows distances (respectively in kilometers and in minutes) between locations in Drenthe and to locations outside Drenthe. Distances between Emmen to some important locations in Germany are shown in table A2.5.

The most important motorway in Drenthe, the A28, connects Zwolle (capital city of the province Overijssel) and Groningen (capital city of the province Groningen). It is easy to go from Zwolle to the rest of the Netherlands. The largest part of this motorway lies in Drenthe and crosses the cities Meppel, Hoogeveen and Assen. The province of Drenthe starts soon to double the provincial road in southeast Drenthe (the N37/E233). This way connects the A28 with the Emslandline, which gives connection to the Ruhr.

Railways

There are 3 main railway lines passing the province of Drenthe:

- a railway from Zwolle to Groningen, which passes Hoogeveen, Beilen and Assen. The travel distance between Zwolle and Hoogeveen amounts to 30 minutes and between Zwolle and Assen to 45 minutes. This railway line directly connects Zwolle with other main destinations in the Netherlands. From Zwolle it takes about 1 hour and 10 minutes to reach Amsterdam and about 1 hour and 40 minutes to reach Rotterdam and The Hague by train;



Map 2.2 Main roads in Drenthe

- a railway from Zwolle to Leeuwarden, which passes Meppel, Steenwijk (Overijssel) and Heerenveen (Friesland). The travel distance between Zwolle and Meppel amounts to 15 minutes This railway line directly connects Zwolle with other main destinations in the Netherlands;

- a railway from Zwolle to Emmen. From Zwolle it takes about 1 hour to reach Emmen. There is no rail connection between Emmen and other important places in Drenthe (except Coevorden).

The international (indirect) rail connection to Germany is as follows:

- from Emmen to Hannover, crossing the border near Oldenzaal (Overijssel). It takes about 4 hours and 30 minutes to reach Hannover.
- from Emmen to Bremen, crossing the border near Nieuweschans (Groningen). This journey takes about 5 hours and 45 minutes.
- from Emmen to Dortmund, which passes Oberhausen and crosses the border near Zevenaar (Gelderland) The travel distance amounts to about 4 hours and 30 minutes.

Groningen Airport Eelde

Drenthe has one important regional airport. This airport is located in Eelde, close to the border with the province of Groningen. Because the province of Groningen also finances this airport, it is called 'Groningen Airport Eelde'. The airport exists for 65 years and has grown from a small local airport to the regional airport of the north of the Netherlands. Besides the several holiday destinations (like Kreta, Faro, Barcelona, Mallorca, Turkey and the Canary Islands) there are also scheduled flights between Groningen Airport Eelde and Amsterdam Airport Schiphol. On working days there are 7 flights and in the weekends 2 flights a day. The duration of the flight is about 30 minutes. Groningen Airport Eelde also offers business flights. The northern international enterprises use a large share of these flights. By now the airport has about 70,000 passengers a year and transports 3 million kilograms of air freight. In 1984 the airport had about 31,000 passengers (Groningen Airport Eelde, 1985 and 1996).

2.3.2 Telecommunications

The telecommunication facilities in the Netherlands (and so in Drenthe) are good. Everyone can be connected on the telephone net and on Internet.

2.4 Urban structure and geographical position

We can represent a regional territory as a *network of services* that flow between nodes that are represented by firms or other centres of economic activities. Therefore, urban centres represent naturally main nodes in this network. In this section we want to study how urban structure is distributed in the regional territory and how people and economic activities agglomerate and evolve through time. Furthermore, we must take into account that local economies and markets are usually open economies highly influenced by activities and performance of neighbourhood regions. This is the issue of the geographical location of the region under study.

Concentration of population

The first 4 cities of Drenthe are Emmen, Assen, Hoogeveen and Meppel. In 1990 approximately 48% of the population lived in these cities (table 2.4). During the period 1980-1996 this percentage did not change. In the other intermediate regions the percentage of people living in the first four cities is more or less the same, but in the most urbanized regions the concentration index is lower. This is due to the fact that there are a large number of urban centres in those regions.

Table 2.4 Concentration index in Drenthe and other regions, 1990

Variable	Drenthe	National		
		total	intermediate regions	most urban regions
Quota of population living in the first 4 towns (as % of total population)	48	37	47	35

Source: CBS, Bevolking der gemeenten van Nederland op 1 januari 1996; adaption LEI.

Geographical location

Drenthe is surrounded by three Dutch regions: Overijssel at the southern border, Friesland at the northwestern border and Groningen at the northeastern border. The German region Weser-Ems is located at the eastern border of Drenthe. Friesland, Groningen and Weser-Ems are classified - like Drenthe - as intermediate rural regions, and Overijssel as a most urbanized region.

In the early years of the 1980s GDP/inhabitant in Drenthe exceeded that in its neighbouring regions, except for Groningen (table 2.5). However, the comparison with Groningen is distorted by large revenues of gas in this province, which are included in its GDP. As a consequence of a relatively slow growth rate of GDP/inhabitant since the mid 1980s, per capita income in Drenthe was only slightly above that in Friesland and below that in Overijssel and Weser-Ems in 1995. Especially in this last region GDP/inhabitant increased at a rapid rate. The low participation rate and commuting of Drenthes labourers outside Drenthe can be remarked as factors behind the low growth of GDP/capita (Provincie Drenthe, 1995). In 1985 the unemployment rate in Drenthe was below the level in the neighbouring regions. Compared to the other regions, the unemployment rate in Drenthe fluctuated in a relatively small range in the period 1985-1995. As a result the unemployment rate in Drenthe was above the level in Friesland, Overijssel and Weser-Ems in 1995.

Table 2.5 Main characteristics of neighbouring regions of Drenthe, 1980-1995

		1980	1985 (a)	1990	1993 (b)
Drenthe	GDP/inhabitant (ecu)	8,245	11,656	13,308	14,539
	unemployment rate (%)		9.2	8.0	8.8
Groningen	GDP/inhabitant (ecu)	16,942	27,302	18,265	22,227
	unemployment rate (%)		14.0	12.3	9.7
Friesland	GDP/inhabitant (ecu)	7,068	8,824	12,614	14,371
	unemployment rate (%)		12.0	9.3	8.5
Overijssel	GDP/inhabitant (ecu)	-	10,358	13,159	15,358
	unemployment rate (%)	-	9,7	7,9	7,8
Weser-Ems	GDP/inhabitant (ecu)	7,848	10,553	15,277	18,478
	unemployment rate (%)		10.6	6.3	7.9

b) Unemployment rate: 1995.
Source: Eurostat, Regio Database; adaption LEI.

Distance to big cities

Emmen is the biggest city in Drenthe (94,600 inhabitants). The nearest big cities with more than 500,000 inhabitants are Bremen (550,000 inhabitants), Dortmund (602,000 inhabitants), Hannover (526,000 inhabitants) and Amsterdam (718,000 inhabitants). The distance to these cities is about 200 kilometers and the travel time by car is about 2 and a half hours.

Qualitative description of connections

The supply of motorway connections in Drenthe is sufficient. In Drenthe every place can be reached by car within 45-60 minutes. There are also sufficient motorway connections from Drenthe to places outside the province. The south-north railroad connection in Drenthe (from Zwolle to Groningen) is very good (regular connection of two times per hour). But a west-east connection does not exist. There is only a railroad connection from Zwolle to Emmen, which passes Coevorden. In Emmen the railroad stops.

2.5 Touristic and cultural resources

Under this heading a qualitative description of natural and cultural inheritances of the region, the environmental quality of the region and the tourist attractiveness of the region is given. Besides it is indicated whether there are other rural amenities in the region. A region territory and a local economy identifies not only a complex set of physical resources, economic activities and relations between agents and nodes of the network, but even a set of historical, cultural and natural characteristics that represents by themselves an important source of economic opportunities. Besides, an attractive place to live for employees can play a role in the settlement decision of entrepreneurs.

2.5.1 Tourist structures and attractiveness

Amenities

Drenthe has some important rural amenities like the typical Drenthe landscape of moors (40,000 hectares), peatlands and brooks. These areas are being preserved by designating them as protected natural sites. The Dwingelose and Kraloose moors in the Dwingerveld National Park (in the south-west of Drenthe) are considered as one of the largest contiguous areas of wetland vegetation in Europe with a surface of around 3500 hectares (about 1.3% of total area in Drenthe).

A number of small river valley systems in Drenthe are also reasonably intact, and these form a major part of Drenthe's characteristic 'esdorp' (villages surrounded by open field) landscape. Some other important rural amenities in Drenthe are 'the giant graves' (hunebedden) constructed of enormous boulders in prehistoric times. These graves pull a lot of tourists every year.

Bicycle province

Drenthe is a real bicycle province: it is famous because of its attractive and varied landscape, its many woods and moors and the large number of cycle tracks which are of a very good quality. In 1992 the total length of the cycle tracks in Drenthe is 1,124 km; this means a density of 0.42 km cycle tracks per km^2. The surrounding provinces Groningen and Friesland have respectively densities of 0.23 km/km^2 and 0.22 km/km^2. The Netherlands as a whole has a rather high density of 0.40 km/km^2, because of the high densities in the urban provinces. Most cycle tracks in Drenthe are of a different kind than cycle tracks in the urban provinces. The cycle tracks in Drenthe have a more touristic character. This attracts a lot of people for a cycle tour. Each year there is also a famous bicycle event of four days (rijwielvierdaagse) with more than 25 thousand participants.

Museums

In 1990 there were 36 museums in Drenthe with a total amount of over 2 million visitors. The most well known museums are the 'Veenpark' (peatpark) and the 'Drents Museum'. The open air museum 'Veenpark' is an old village that forms a picture of the hard life of the peatworkers between 1850 and 1950. This history is shown by demonstrations of the old occupations and manual skills. The 'Veenpark' is settled near Emmen and has a surface of 160 hectares. The 'Drents Museum' is located in Assen and shows the history of Drenthe from prehistoric times up until now. Another important historical sight is the monumental village Orvelte. This is a characteristical, old Saxon village recovered in original condition with several manual firms and exhibitions.

Zoo

Another important touristic attractiveness is settled in Emmen: the 'Noorderdierenpark', a large zoo with several attractions. This trendsetting zoo is the second amusement activity in the Netherlands and has more than 1.7 million visitors a year. The interest in the zoo has a large and positive effect on Emmen and the surrounding area (European Commission Agency in the Netherlands, 1995). The positive effect is twofold: on the one hand the zoo generates many jobs; on the other hand visitors spend expenditure on consumption and shopping, since the zoo is located in the centre of the city.

Environmental quality

The environment of Drenthe is in relatively good condition. Drenthe is one of the cleanest provinces of the Netherlands. One of the reasons for this is the absence of large industrial complexes and of intensive livestock farming. In the northern provinces the air is purer than in the rest of the Netherlands (Eurostat, 1993). Both the air quality and the drinking water quality in Drenthe are good. Together with Rijkswaterstaat (a national authority in the field of water) and the water boards (local authorities in the field of water), the province takes care of the rivers, lakes and canals. Because of that the swimming and fish quality on most places are good (Provincie Drenthe, 1995).

Accommodation establishments and overnight stays

The number of accommodation establishments is rather moderate in Drenthe (table 2.6). These are scattered all over the region, with the exception of the area near the eastern border, the so-called Veenkoloniën. Within the group of intermediate regions in the Netherlands only Groningen has a smaller number of accommodation establishments. In the most urbanized regions the number of accommodation establishments usually amounted to 300 or more in 1995.

Table 2.6 Accommodation establishments and overnight stays in Drenthe and other regions, 1995

Variable	Drenthe	National		
		total	intermediate regions	most urban regions
Number of accommodation establishments	171	3,238	-	2,449
Number of overnight stays in accommodation establishments (in million)	4.6	61.9	16.4	45.4

Source: CBS, Tourisme in Nederland, 1995; adaption LEI.

The number of overnight stays in Drenthe amounted to 4.6 million in 1995, about 7% of total overnight stays in the Netherlands. There was a big increase in the number of overnight stays between 1989 and 1991 (from 3.6 million to 4.6 million) because of large international events, like the year of Van Gogh (1990), the year of Rembrandt (1992) and the Floriade (1992). These events led to more than one million overnight stays a year. After 1991 the number fluctuated around 4.5 million stays (table 2.7). Within the group of intermediate regions Drenthe is second in the ranking of overnight stays. Only Zeeland has a better score with 5.9 million overnight stays, which are connected for a large part with beach tourism.

Table 2.7 Accommodation establishments and overnight stays in Drenthe, 1989-1995

	1989	1991	1995
Number of accommodation establishments	-	-	171
Number of overnight stays in accomm. establishments	3.6	4.6	4.6

Source: CBS, Tourisme in Nederland, 1995; adaption LEI.

2.5.2 Education and research opportunities

Drenthe has a good supply of education opportunities. All types of education are present, except for a university. However, this is no problem since the University of Groningen is located nearby. Table A2.6 shows the numbers of different education types. The numbers of most education opportunities have decreased during the last decade. This is not so much due to closings but to the mergers of schools, an overall feature in the Netherlands.

There are 24 small research institutes in Drenthe. Drenthe has no university which functions as a research institute. Nevertheless, Drenthe profits of the results of the University of Groningen, which is located close to the northern border of Drenthe.

3. Analysis of economic activities

3.1 Introduction

In this chapter the pattern of employment growth is analysed in more detail by using a division in 9 main branches of employment. These branches also provide information on the kind of economic activities in Drenthe. In this chapter attention is also paid to questions like whether employment is created in small or large enterprises or in new or existing ones, and whether new created jobs are part time or full time jobs. Finally, some main characteristics of the agricultural sector are discussed.

3.2 General economic performance

GDP per capita in Drenthe amounted to about 13,300 ecu in 1990 (table 3.1), which was about 1,200 ecu below the average of the intermediate regions and about 1,700 ecu below that of the most urban regions in the Netherlands (table 3.2). GVA per worker in Drenthe also lagged a little behind the averages of the intermediate and most urban regions in the Netherlands. The share of agriculture in regional income in Drenthe fluctuated in a range from 5-7% in the period 1980-1994, which is more or less comparable with the other intermediate regions, but above the share in the urban regions. The share of industry in regional income in Drenthe has declined from 48% in the mid 1980s to 33% in 1994; whereas the share of services increased

Table 3.1 GDP per capita, GVA per worker and the shares of sectors in income and employment in Drenthe, 1980-1995

Variable	1980	1983	1985	1990	1994	
GDP per capita (ecu, current prices)	8,245		11,656	13,308	14,539	a)
GVA per worker (ecu, current prices)		31,382	33,866	31,901	35,326	
GVA per worker in agriculture (ecu, current prices)		21,953	26,043	27,888	26,393	
GVA per worker in industries (ecu, current prices)		43,649	48,517	40,147	40,968	
GVA per worker in services (ecu, current prices)		26,106	26,863	28,292	34,809	
Share agriculture in regional income (%)	6	7	7	6	5	
Share industries in regional income (%)	44	47	48	38	33	
Share services in regional income (%)	50	47	46	55	61	
Share agriculture in employment (%)		10	8	7	7	b)
Share industries in employment (%)		33	33	31	26	b)
Share services in employment (%)		56	58	62	63	b)
Unemployment rate (%)				8	9	b)

(a) 1993; (b) 1995.
Source: Eurostat, Regio Database; adaption LEI.

Table 3.2 GDP per capita, GVA per worker and unemployment rate in Drenthe and other regions, 1990

Variable	1990	Value in 1990		
		national	intermediate	most urban
GDP per capita (ecu, current prices)	13,308	14,936	14,567	14,998
GVA per worker (ecu, current prices)	31,901	33,523	34,963	32,808
GVA per worker in agriculture (ecu, current prices)	27,888	29,548	33,910	28,470
GVA per worker in industries (ecu, current prices)	40,147	37,800	49,721	34,201
GVA per worker in services (ecu, current prices)	28,292	32,242	28,824	32,642
Share agriculture in regional income (%)	6	4	7	4
Share industries in regional income (%)	38	30	39	27
Share services in regional income (%)	55	66	54	69
Share agriculture in employment (%)	7	5	7	4
Share industries in employment (%)	31	26	28	26
Share services in employment (%)	62	69	65	69
Unemployment rate (%)	8	7	9	7

Source: Eurostat, Regio Database; adaption LEI.

from 46% to 61% in these years. The share of industry and services in regional income in Drenthe are at the same level as those in the other intermediate regions. However, the share in industry in urban regions is below that in Drenthe and the share of services in urban regions is above that in Drenthe. These different shares reflect differences in the economic structure between intermediate and urban regions: in urban regions the share of agriculture and industries in total employment is below and that in services above those in the intermediate regions.

Total employment, measured at the place of work, increased with 0.6% per annum in the period 1980-1991, which was well above the growth in Groningen and Friesland, but about at the same level as the national growth (table 3.3). According to this data source employment in agriculture declined by over 4% p.a., which seems an overestimation. Industrial employment in Drenthe decreased somewhat less compared to Groningen, Friesland and the national average, whereas service employment showed a relatively higher growth.

Table 3.3 Development of employment (place of work) in Drenthe and some other regions, 1980-1991, % p.a.

	Drenthe	Groningen	Friesland	National
Total employment	0.6	0.0	0.2	0.7
Non-agricultural employment	1.1	0.0	0.2	0.7
Agricultural employment	-4.3 a)	0.3	-0.2	0.2
Industrial employment	-1.2	-1.9	-3.4 a)	-1.3
Service employment	1.5	1.4	0.7	1.2

a) These figures are unlikely low.
Source: Eurostat, Regio Database; adaptation LEI.

3.3 Demand of labour

Initial conditions and dynamics in the production structure define the regional path of labour demand. Within the production structure there are branches with job creation and branches with job destruction. Forces behind changes in labour demand may originate from a rise in GDP per capita, productivity growth, structural changes, wage structure and integration between sectors. A rising GDP per capita is basically the traditional idea behind an increase in employment. Productivity growth implies that the same production can be obtained by less workers. Productivity growth and its differential between sectors are critical points: if growth in demand lags behind growth in productivity, a clear contraction in labour demand occurs. A structural change between the sectors means a changing role and weight of different sectors. When for example the service sector has increasingly gained importance, being a sector with lower productivity and being based on human capital, this sector turns out to be a strategic one for employment growth. Within sectors, structural change means change in average size of firms and farms, which can result in changes in the ratio between capital and labour. Wage structure and wage dynamics can provide information about the incentive to substitute labour with capital. The integration between sectors, like firms networks, and specialization, can be relevant in producing positive externalities at a local level.

For the analysis of demand of labour at sector and at more detailed branch level we have used the so-called 'SBI 74', a Dutch classification of 9 main branches and 51 sub branches (table 3.4). The analysis covers the period 1984-1996 and is based on data on employment at the place of work from the Provincial Employment Register PWR.

Branches with job creation and branches with job destruction

Employment in Drenthe increased by 28,900 jobs in the period 1984-1996, but there was also a decrease of 4,400 jobs. So total employment in Drenthe increased by 24,500 jobs or with over 20%. Nearly 40% of employment growth occurred in the community, social and personal services sector, 25% in the trade, restaurant and hotel sector, 14% in the financial services sector, 13% in the construction sector and 12% in the manufacturing sector (table 3.4 and table A3.1). Employment in the agricultural sector declined by over 2,000 jobs in this period.

Table 3.4 Employment in the nine main branches, 1984 and 1996

		Employed people a)	Distribution of the employed people (%) over size classes (in employees) (in persons)				Absolute growth (in persons) 1984-1996	Growth (%) 1984-1996
			1-9	10-49	50-99	100>		
SBI 74	*1984*							
00	Agriculture, hunting, forestry and fishing	13,289	-	-	-	-		
10	Mining and quarrying	1,928	2.2	8.0	4.5	85.2		
20/30	Manufacturing	26,988	6.7	15.2	15.1	62.9		
40	Electricity, gas and water	749	6.8	34.3	45.4	13.5		
50	Construction	10,552	25.7	44.3	18.6	11.3		
60	Trade, restaurants and hotels	19,599	67.1	24.6	3.6	4.7		
70	Transport, storage and communication	4,033	27.2	45.5	18.8	8.5		
80	Finance, insurance, real estate and business service	7,776	29.3	38.1	14.1	18.5		
90	Community, social and personal services	31,474	20.1	26.2	15.4	38.3		
Total employment		116,388	27,465	27,041	13,903	34,690		
	1996							
00	Agriculture, hunting, forestry and fishing	11,103	-	-	-	-	-2,186	-8.9
10	Mining and quarrying	1,993	2.9	12.5	6.3	78.2	65	0.3
20/30	Manufacturing	29,849	7.3	16.3	12.7	63.6	2,861	11.7
40	Electricity, gas and water	852	4.8	10.8	32.4	52.0	103	0.4
50	Construction	13,707	20.2	42.9	17.3	19.6	3,155	12.9
60	Trade, restaurants and hotels	25,696	56.8	29.5	6.0	7.6	6,097	24.9
70	Transport, storage and communication	5,531	22.7	40.7	23.7	12.9	1,498	6.1
80	Finance, insurance, real estate and business service	11,197	39.1	34.5	14.6	11.8	3,421	14.0
90	Community, social and personal services	40,911	14.5	21.5	12.8	51.2	9,437	38.6
	Total employment	140,839	31.191	33.594	16.314	48.637	24,451	100.0

a) 1984: people who work more than 15 hours a week, 1996: people who work more than 12 hours a week.
Source: Provinciaal Werkgelegenheids Register, adaptation LEI.

In a more detailed look at the sub branches, it can be seen that almost all employment growth (97%) is created in 15 sub branches (table 3.5). The medical, dental, other health and veterinary services branch showed the largest increase: almost 4,500 jobs, over 18% of total increase. Other sub branches with a significant rise in employment are wholesale trade (12% of total), construction industry (9%), retail trade (8%) and public management, defence and social insurance (8%). Although tourism (hotels, restaurants and cafes) also belongs to the top 15, it is ranked at the 11th place with an employment growth of 4% of total growth. Nevertheless, employment in the tourism sector increased from about 3,200 jobs in 1984 to about 4,100 jobs in 1996, which equals to a growth of about 30%. No sub branches of the manufacturing sector appear in the top 15; the growth is mainly due to the sub branches of instruments and optical industry, means of transport industry, machinery industry and electronic industry. Except for agriculture, losses of employment occurred mainly in the food processing industries (about 1,300 jobs) and in the rubber and plastic industries (over 300 jobs) (table A3.1).

Table 3.5 Top 15 of branches with the highest employment growth, 1984-1996

		Employed people a)		Absolute growth	Growth as % of total
SBI 74		1984	1996		
93	Medical, dental, other health and veterinairy services	8,844	13,329	4,485	18.3
61	Wholesale trade	4,878	7,783	2,905	11.9
51	Construction industry	8,714	10,882	2,168	8.9
65	Retail trade	9,290	11,180	1,890	7.7
90	Public management, defense, social insurance	7,479	9,343	1,864	7.6
38	Instruments and optical industry	1,640	3,361	1,721	7.0
72	Road traffic	2,398	3,838	1,440	5.9
84	Business services	4,441	5,822	1,381	5.6
98	Other services	1,571	2,621	1,050	4.3
37	Construction installation industry	1,838	2,825	987	4.0
65	Hotels, restaurants, cafes	3,173	4,131	958	3.9
93	Social services	4,490	5,240	750	3.1
82	Insurance	678	1,386	708	2.9
39	Other manufacturing industry	4,521	5,207	686	2.8
37	Means of transport industry	1,276	1,960	684	2.8
	Total employment of theabove 15 branches	65,231	88,908	23,677	96.8
	Total employment	116,388	140,839	24,451	100.0

a) 1984: people who work more than 15 hours a week, 1996: people who work more than 12 hours a week.
Source: Provinciaal Werkgelegenheids Register, adaptiuon LEI.

80% of employment growth concentrated in 5 municipalities

Of all municipalities of Drenthe, Emmen had the largest share of total employment growth (26%) during the years 1984-1996, followed by Assen (21%), Hoogeveen (17%), Roden (9%)

and Meppel (9%) (RuG, 1984 and 1997). So these 5 municipalities (out of 34) have a share of over 80% of total employment growth in Drenthe. This reflects a concentration of employment growth in Drenthe. These 5 municipalities are located in the zone of Groningen/Assen (municipalities of Assen and Roden) and in the zone along the N37 (municipalities of Emmen, Hoogeveen and Meppel).

Properties of the branches in which employment increased

The different branches can be classified according to properties like exposure or less exposure to global markets, fluctuating or stable markets and labour intensive or labour saving. We have intuitively classified our list of branches as follows:

Classification of main branches

		Globality of markets	Volatility of markets	Nature of employment use
1.	Agriculture, hunting, forestry and fishing	GlobM	StabM	LabS
5.	Mining and quarrying	GlobM	FlucM	LabS
10.	Manufacturing	GlobM	FlucM	LabS
20.	Electricity, gas and water	LGlobM	StabM	LabS
23.	Construction	LGlobM	StabM	LabI
24.	Wholesale and retail trade, restaurants and hotels	LGlobM	StabM	LabI
29.	Transport, storage and communication	GlobM	StabM	LabI
32.	Finance, insurance, real estate and business services	GlobM	FlucM	LabI
38.	Community, social and personal services	LGlobM	StabM	LabI

GlobM: branch exposed to global markets;
LGlobM: branch less exposed to global markets;
FlucM: markets with fluctuating prices;
StabM: markets with stable prices;
LabI: branches with a relatively slow growth in labour productivity;
LabS: branches with a relatively rapid growth in labour productivity.

Within the years 1984-1996 about three quarters of employment growth occurred in the community, social and personal services sector, the construction sector and the wholesale and retail trade, restaurants and hotels sector. These sectors are characterized by a limited exposure to global markets, relatively stable prices and a rather labour intensive production. The other two branches with an important contribution to employment growth are the financial and the manufacturing sector (respectively 14% and 12% of total growth). These sectors are exposed to global markets and fluctuating prices. The production process of both sectors vary: the financial sector is labour intensive and the manufacturing sector labour extensive. It goes without saying that the larger share of employment is created in sectors with a labour intensive way of production, since capital intensive sectors tend to save labour input.

Relation employment growth and change in labour productivity

In a coordinate system with employment growth on the Y-axis and a rise in labour productivity (measured as GVA per worker) on the X-axis, it can be indicated whether an increase in jobs is accompanied by a rise in labour productivity or not. This depends on the appearance of structural changes. We examine in which quadrant the regions were located during the last decade in order to discuss which kind of employment can be created in rural regions: jobs with an average growth of labour productivity or jobs with an above average growth of labour productivity.

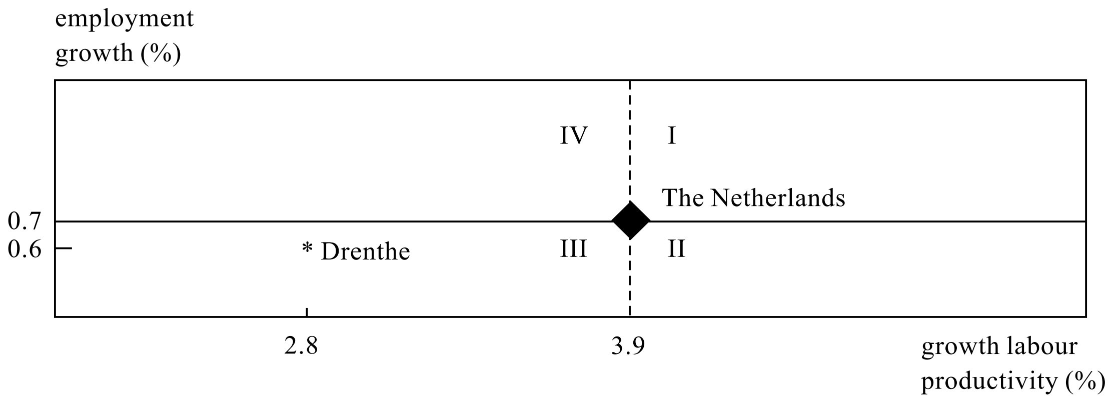


Figure 3.1 Relation of employment growth and increase in labour productivity, 1981-1991

In the 1980s employment in Drenthe increased at a slightly lower rate than the national average and labour productivity lagged also behind, so Drenthe is located in quadrant III (figure 3.1). The fact that the increase in labour productivity was below the national average can be explained by the creation of many new jobs in the services sector, which uses relatively few capital inputs.

Employment pattern in Drenthe versus national employment pattern

In the Netherlands, as in other EU countries, there are four structural changes concerning employment (De Koning et al., 1996):

- the number of low qualified jobs is diminishing and the number of high qualified jobs is increasing;

- lower educated employees are being replaced by higher educated employees;
- most new jobs created in the 1990s are part time;
- there is a general tendency of a decrease of employment in agriculture and industry and an increase in services.

For a comparison with the Dutch employment, the period 1987-1994 is used (table A3.4 and A3.5). The most striking differences among the sectoral development of employment in Drenthe and the Netherlands as a whole was at the one hand that employment in manufacturing in Drenthe increased in those years, whereas employment in manufacturing in the Netherlands showed a small decrease, and on the other hand the relative high increase in employment in the community, social and personal services sector in Drenthe compared to the national average.

Diversification of economic activities

Diversification or specialisation of the regional economy can be either interpreted as favourable or unfavourable to employment growth. The specialisation in a few sectors can create a critical mass of marketing infrastructure and services, know how, and other external economies in the region that can sustain the development and, hence employment in these specific sectors. In contrast, diversification in several sectors can minimize risk and facilitate the endogenous development of the region. Depending to what extent the region is able to take advantage of its orientation (specialisation versus diversification), specialisation as well as diversification can be viewed as a strength.

The sectoral structure of Drenthe in 1984 and 1996 of the nine main sectors is shown in the figures 3.2 and 3.3. During the period 1984-1996 the agricultural sector in Drenthe had an employment share of about twice the national employment share in the agricultural sector. The industry sector and the construction sector in Drenthe had an employment share that was a bit higher than the national employment share in these sectors. The remaining sectors are somewhat less represented in Drenthe relatively to the national level. The sectoral structure is roughly the same in the other intermediate rural provinces Groningen and Friesland, although Groningen has a higher share of employment in the service sector because of a sizeable employment of the University of Groningen and other important educational establishments.

The sectoral structure of Drenthe is not favourable because declining employment in the agricultural and industrial sector and increasing employment in the service sector is the trend. The sectoral structure of Drenthe does not differ enough from the national sector structure to speak about specialization. However, within municipalities in Drenthe there is some specialization: Emmen is mainly a site for industrial activities, Assen a centre for services and Meppel/Hoogeveen/Coevorden mainly rely on transport and distribution activities.

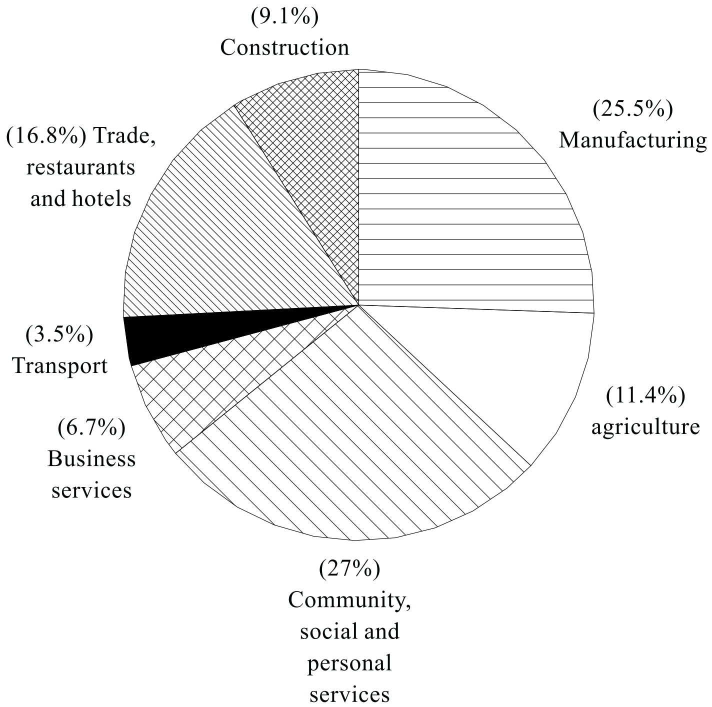


Figure 3.2 The sectoral structure of Drenthe in 1984

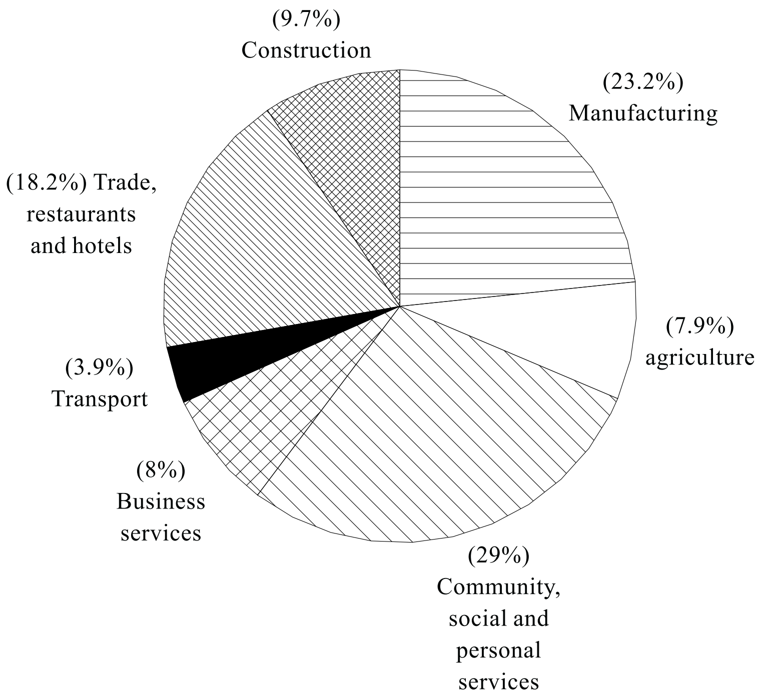


Figure 3.3 The sectoral structure of Drenthe in 1996

Largest part of employment is created in enterprises

In 1993 nearly 12% of the employed population was self-employed (CBS, Labour Force Statistics). This percentage varies among sectors. In agriculture about 75% of the employed population is self-employed, in the trade, restaurant and hotel sector about 17%, in the transport sector, the construction sector and the financial services sector about 10%, in the community, social and personal services sector 5% and in the manufacturing sector 3%. As shown in table A3.2 during 1987-1994 [1], over 90% of total employment growth in Drenthe was created in enterprises and about 10% was created by self-employers. In the Netherlands as a whole this distribution is about the same. In those years there was a decrease in the number of self-employed in the agricultural sector, which can be explained by business terminations in this sector, and an increase in the number of self-employed in the sector of trade, restaurants and hotels sector. Since SME are a big majority in Drenthe, this can be considered as a stimulating environment for the creating of self-employment.

Large enterprises account for more than 50% of employment growth

In 1984 the share of small enterprises (1-10 employees) in total employment amounted to 24%, that of medium sized enterprises (10-99 employees) to 36% and that of large enterprises (>100 employees) to 30% (table 3.4). Total employment increased by over 24,500 jobs in the period 1984-1996. Enterprises with 100 or more employed persons have the highest share (more than 50%) of total employment growth [2], from which the largest part (about 9,000 jobs) was created in the community, social and personal services sector (table A3.3). The share of the employment growth was the lowest (9%) in enterprises with 50 till 99 employed persons. The contribution to total growth in the size class 1-9 employees amounted to 14% and that in the size class 10-49 employees to about 25%.

In enterprises with 1 till 9 employed persons the finance, insurance, real estate and business service sector and the trade, restaurants and hotels sector have the highest employment growth. In enterprises with 10 till 49 employed persons the largest share of employment growth is in the trade, restaurants and hotels sector. The employment growth in enterprises with 50 till 99 employed persons is almost fairly divided over the nine sectors. On the other hand, in the size class with 100 or more employed persons employment growth is mainly due to the community, social and personal services, manufacturing, construction and trade, restaurants and hotels.

[1] Since 1994 another distribution of the branches has been used. When these data are used for the period 1994-1996 it appears that the share of employees in total employment growth in Drenthe is about 75% against over 90% in the period 1987-1994. For the Netherlands as a whole the share of employees and self-employers in total employment growth are about the same in both periods.

[2] Undoubtly part of this increase is due to a shift from enterprises in the class of 50-99 employees to the class of 100 employees and more. However,due to the construction of our data source PWR it is not possible to find such shifts.

The highest share of employment growth in the manufacturing sector is in the size class with 100 or more employees and in the construction sector the largest part of employment growth is in the size classes 10-49 employees and 100 or more employees. Employment in the trade, restaurants and hotel sector increases in all size classes although at the highest rate in the size class 10-49 employees. The largest growth in the finance, insurance, real estate and business service sector was in the size classes 1-9 employees and 10-49 employees. The employment in the community, social and personal services increases especially in the size class with 100 or more employed people. This pattern more or less reveals in which size class within each branch the larger part of employment is concentrated.

From these figures it can be concluded that some sectors have a higher increase in employment in companies with a relatively small number of employees while other sectors show a higher increase in employment in large companies. Employment growth in SME (less than 100 employees) accounted for somewhat less than 50% and mainly occurs in the trade, restaurant and hotel sector (18% of total employment growth), the financial sector (13%) and the construction sector (6%).

Most employment is created in existing enterprises

The total balance of jobs in new and closing companies during 1986-1996 was about 6,800 jobs, which equals to about one third of total growth of jobs during these years. This balance is composed of jobs due to establishments (18,100 jobs) minus loss of jobs due to closings (11,300). An annual average of 1,389 enterprises was established during the period 1986-1996 in Drenthe, from which two thirds were starting companies (Kamer van Koophandel, 1986-1996). During these years there was also an annual average of 688 closing enterprises. This resulted in an annual average net increase of 700 enterprises and 617 jobs. It has to be noted that this net increase includes companies which changed their juridical base or who merged with other companies.

In Drenthe there were relatively less establishments and closings than nationwide. Hence the growth of the total number of companies was relatively smaller in Drenthe than in the Netherlands as a whole. This moderate growth rate nevertheless resulted in a relatively stronger increase in employment than nationwide. Per 10,000 inhabitants the enterprise changes in the period 1986-1996 led to an average growth of 14 jobs per annum in Drenthe against 6 jobs nationwide (table 3.6) (Kamer van Koophandel, 1986-1996).

As shown in table 3.7 the municipality of Emmen had the largest number of companies of all municipalities in Drenthe during the period 1986-1996 (Kamer van Koophandel, 1986-1996).

Table 3.6 Annual average of mutations of enterprises in Drenthe and the Netherlands, 1986-1996

	Drenthe annual average	the Netherlands annual average
Starting enterprises	936	44,746
per 10,000 inhabitants	*21*	*30*
Jobs	928	44,260
per 10,000 inhabitants	*21*	*29*
Total establishments	1,389	71,705
per 10,000 inhabitants	*31*	*48*
Jobs	1,642	76,221
per 10,000 inhabitants	*37*	*51*
Closing enterprises	688	34,652
per 10,000 inhabitants	*15*	*23*
Jobs	1,025	67,712
per 10,000 inhabitants	*23*	*45*
Balance of establishments	700	37,054
per 10,000 inhabitants	*16*	*25*
Jobs	617	8,509
per 10,000 inhabitants	*14*	*6*

Source: Kamer van Koophandel, 1986-1996.

Table 3.7 Annual average of mutations of enterprises in the four main cities of Drenthe, 1986-1996

	Emmen	Assen	Hoogeveen	Meppel
Total establishments	298	174	145	94
Closing enterprises	151	89	72	51
Balance of establishments	147	84	73	44

Source: Kamer van Koophandel, 1986-1996.

Most enterprises in Drenthe are small or medium sized

In 1996 there were nearly 28,000 companies in Drenthe, from which only 126 enterprises with more than 100 employees. This implies that over 99% of all companies in Drenthe are small or medium sized enterprises (SME). This small share of large enterprises reflects a common pattern in the Netherlands: in all provinces it is less than 1% of all enterprises (cd rom KVK). Especially in the mining, manufacturing and community, social and personal services sector a high share of employment is found in large companies. The 126 large enterprises have a share of nearly 35% in total employment. This is an increase relatively to 1984: at that time the share of companies with over 100 employees in total employment was 30% [1]. The rising share shows that employment in large enterprises increased at a higher rate than employment in SME. Two thirds of the growth in large enterprises occurred in the community, social and personal services sector, in particular in medical and health services, in education services and in public management, defence and social insurance.

Subsidiary business

About 6% of all companies were registrated as subsidiary business in 1996 (cd rom KvK). This percentage varies between 5 and 7% in all Dutch provinces, so Drenthe is at an average level. Large multinational companies with over 500 employees belong to this group of subsidiaries, like Akzo Nobel Fibers (Emmen), Philips Personal Care (Hoogeveen), Fokker Special Products (Hoogeveen), Honeywell (Emmen), Scania (Meppel) and Cordis Europe (Roden). All these companies are active in the manufacturing sector, except for Cordis Europe, which is involved in wholesale trade. It is difficult to give a precise contribution of the subsidiary business to employment in Drenthe since no data are available. When we assume that all companies with over 100 employees in the manufacturing sector and in the trade, restaurants and hotel sector are subsidiary business, than the share of these companies in employment can be estimated as 15% [2], both in 1984 and 1996 (table A3.3). In absolute terms the increase in employment in those companies amounted to about 2,300 jobs in the period 1984-1996, which equals to just below 10% of employment growth in these years. When our assumption is right, subsidiary business had a positive, but limited contribution to employment growth in the past decade. Nevertheless, there is a general feeling in Drenthe that the subsidiary business structure is a weak point of the economic structure, since decisions on expansion, shrinking, reorganizing or closure of such companies are made in the parent company outside the region.

Increase in employment in the community, social and personal services sector

The share of the community, social and personal services sector (i.e. community, social and personal services) in total employment increased from 27% in 1984 to 29% in 1996 (table A3.1). So the increase in employment in the community, social and personal services sector was above the average growth of employment in Drenthe. In absolute terms the employment in the community, social and personal services sector covered about 31,500 jobs in 1984 and 41,000 jobs in 1996. In 1996 the largest number of jobs were in the medical and health services (13,300 jobs), community, social and personal services management, defence and social insurance (9,300 jobs) and educational services (7,100 jobs).

[1] However, this can be a statistical fallacy: when a firm with 99 employees (so counted in firm size 51-99 employees) hires 1 extra employee, it falls under a different (higher) firm size (100 or more employees). Then, all the 99 employees are counted for the growth in the size class 100 or more employees. In a number of cases this shift is induced by mergers of firms. However,due to the construction of our data source PWR it is not possible to find such shifts.

[2] This estimate is an overestimate since non-subsidiary business is also included.

Part-time and full-time jobs

As shown in table A3.4 during 1987-1994 [1], about 60% of total employment growth in Drenthe was created in part-time jobs and 40% in full-time jobs. About 80% of the increase in all part-time jobs was created in the community, social and personal services sector. Full-time jobs were mainly created in the manufacturing sector and the finance, insurance, real estate and business services sector. In the Netherlands as a whole (as shown in table A3.5) the part-time jobs were responsible for about 55% and the full-time jobs for about 45% of total employment growth. Part-time jobs in the Netherlands mainly increase in the community, social and personal services sector and in trade, restaurants and hotels sector, whereas fulltime jobs mainly increased in the finance, insurance, real estate and business service sector, followed by the trade, restaurants and hotels sector. So the conclusion can be made that total growth in the part-time and full-time jobs in Drenthe is about the same as in the Netherlands as a whole. However, the distribution over the different branches deviates to some extent.

Some general remarks on the reasons behind the creation of jobs

The unfavourable employment development in agriculture in Drenthe is a common feature in developed countries. The substantially employment growth in the hotel and catering industry can be explained by the tourist character of Drenthe (Stelder, 1992). The employment in the construction sector shows a relatively high performance, due to an increase in investments of enterprises and due to declining house building programs in the Randstad (urban zone in the west of the Netherlands). Further, some enterprises are pushed from the congested Randstad to Drenthe with abundant space.

Resources used in the branches with job creation

The beautiful varied landscape in Drenthe of forests, peats, moors, brooks, esdorp landscape, agricultural landscape and giant graves creates an atmosphere of quietness and green space, which attracts tourists, labourers, entrepreneurs and retirees. The accommodations and services asked by these actors are a source of employment. Moreover, the new coming entrepreneurs also create employment opportunities in their own business.

3.4 Agricultural sector and agribusiness

The emphasize in agricultural production in Drenthe is on animal production, although its share in total production has declined in the 1980s and amounts to about two thirds of total production in 1993 (table 3.8). The declining share of animal production is especially due to a decrease in milk production.

[1] After 1994 data used for this variable has changed. Another distribution of the branches has been used. But trends during 1987-1994 deviate not much from the period 1994-1996.

Table 3.8 Composition of agricultural production in % (1982-1993)

Variable	1982	1985	1990	1993
Total agricultural production				
- in mln ecu (current prices)	543	633	639	662
- in mln Dutch guilders (current prices)	1,420	1,589	1,478	1,439
- in mln Dutch guilders (prices of '1990')	1,396	1,525	1,507	1,626
Crop production (%)	27	32	38	35
of which:				
- cereals (%)	2	1	1	2
Animal production (%)	73	68	62	65
of which:				
- cattle (%)	14	11	11	12
- pigs (%)	9	8	8	7
- milk (%)	41	39	32	34

Source: Eurostat REGIO and Eurostat Agricultural Income; adaption LEI.

The percentage of part time farm holders (28%) and that of pluriactive farm holders (15%) is rather low in Drenthe, both compared to other EU countries, but also compared to the other Dutch regions (table A3.6). Nearly 30% of the farm holders is younger than 45 years; this percentage is comparable to the other Dutch regions. The economic size of farms is moderate relatively to other intermediate regions, except for Zeeland. Compared to the most urban regions in the Netherlands, farm size in Drenthe has an intermediate ranking.

3.5 Concluding remarks

The sectoral mix does not explain the above average employment growth in Drenthe. The share of agriculture and industries in employment in Drenthe is relatively larger than in the Netherlands, and these sectors generally show a decline in employment. However, employment in industry and services in Drenthe has increased in the last decade at a higher rate than in the other intermediate and in the urban regions of the Netherlands. A substantial part of employment growth consists of part time jobs.

Within the years 1984-1996 about three quarters of employment growth in Drenthe occurred in the community, social and personal services sector, the construction sector and the wholesale and retail trade, restaurants and hotels sector. These sectors are characterized by a limited exposure to global markets, relatively stable prices and a rather labour intensive production. The other two branches with an important contribution to employment growth are the financial and the manufacturing sector (respectively 14% and 12% of total growth). These sectors are exposed to global markets and fluctuating prices. The production process of both sectors varies: the financial sector is labour intensive and the manufacturing sector labour extensive. It goes without saying that the larger share of employment is created in sectors with a labour intensive way of production, since capital intensive sectors tend to save labour input.

Employment growth is almost evenly distributed over large enterprises and SME. Part of the growth of employment in SME can be explained by the repulsion of activities by large enterprises, which tend to focus on core business. New firms are responsible for a substantial part of employment growth. Employment growth is partly related to local resources in Drenthe: its attractive landscape. This especially applies for activities in the tourist sector and in the supply of facilities for retiree migrants.

4. Actors: analysis of labour supply

4.1 Introduction

In this chapter the characteristics of the population and the labour force in Groningen will be analysed. These include the skills formation, the age structure, the gender structure and work flexibility [1].

4.2 General population characteristics

In the period 1980-1996 the population increased from 419,000 to 457,000 persons, which implied a growth of 0.5% per annum in the 1980s and 0.6% per annum in the 1990s. Population growth is just below the national average growth rates of respective 0.6% and 0.7% in these periods (table 4.1). After the new residence region Flevoland near Amsterdam, Drenthe had the second population growth in the intermediate regions. If we consider also the urban regions, it is listed on the fifth place (out of twelve). In line with the population growth, the density of Drenthe increased from 152 (1981) to 171 (1996) persons per square kilometre, which is above the average population density of intermediate regions (140), but far below that of urban regions (534).

Table 4.1 Population in Drenthe and other Dutch regions, 1980-1996

	Drenthe	National	Intermediate	Most urban
Population size (x 1,000):				
1980	419	14,090	1,904	12,186
1990	441	14,891	2,162	12,729
1996	457	15,494	2,268	13,226
Annual growth rate (%)				
1980-1996	0.5	0.6	1.1	0.5
1980-1990	0.3	0.3	0.8	0.3
1990-1996	0.2	0.2	0.3	0.2

Source: Eurostat, Regio Database; adaption LEI.

[1] The used data are from Eurostat, Regio Database, excluding if there are other sources mentioned.

Trends in the age structure of the population in Drenthe between 1981 and 1995 are a decrease of people younger than 25 years (from 40% to 31%) and an increase in people older than 55 years (from 21% to 24%) (table A4.1). The trend of ageing occurs in all regions of The Netherlands, but not as strong as in Drenthe. The dependency index {[0-14]+[>=65]}/[15-64} in Drenthe was similar to the average of intermediate regions (45) and a bit higher than that of urban regions (41) in 1990. More significant were the differences in the vitality index [25-44]/[>=65], which was lower in Drenthe (244) and in the other intermediate regions (248) than in the urban regions (285) in 1990. Coherent with ageing, the vitality index decreased further in Drenthe and amounted to 228 in 1995.

While in the 1980s the population growth had been caused for two thirds by natural balance (births-deaths) and one third by migration balance (immigration - emigration), in the 1990s those relations have been reversed (table 4.2). Thus the positive migration balance has become the main factor that contributes to the growth of the population in Drenthe. In 1995 3.2% of population immigrated to Drenthe and 2.7% of the population emigrated to other regions. The immigrants were predominantly from other inland regions (2.8%), but also from abroad (0.1% were from EU countries and 0.3% from other countries). During 1985-1995 the number of immigrants increased, while the number of emigrants remained stable. Compared to national averages in 1995, Drenthe had more immigrants, particularly more from other inland regions (2.8% versus 1.6%), but less people from abroad (0.4% versus 0.6%). The lower number of immigrants from abroad might be attributed to the fact that both well educated and less educated foreigners live more often in the urban regions. The positive migration rate holds only for people older than 40 years, because younger people more often tend to leave the province. On average, only 4 out of ten migrants belong to the population of 15-64 years (Provincie Drenthe, 1997a). The main reason why Drenthe has more immigrants is caused by the high number of retired people, who mainly moves from the neighbouring province of Groningen to the northern part of Drenthe (CBS, 1996c). This has resulted in the nickname 'Drenthenieren' (retiring in Drenthe).

Table 4.2 Migration in Drenthe, 1980-1995

Years	Population change	Natural balance	Migration balance	Migration in % of population change
1980-1985	10,984	7,801	3,184	29
1985-1990	11,565	7,009	4,556	39
1990-1995	16,288	6,247	7,581	47

Source: RuG, Statistisch jaarboek voor het Noorden, several years; adaption LEI.

In Drenthe 187,000 households live with an average size of 2.4 persons per unit (1996). Although, there is a trend of individualisation with more single or two persons households, Drenthe is a bit behind the national average size of 2.3 persons per unit and it has fewer single households (respective to 25% and 30%). This might be attributed to the lack of main cities, where those persons more often live. The number of households with five or more persons in Drenthe is similar to the national average and amounts to 7% (CBS, 1996b).

4.3 Labour force characteristics

4.3.1 Employed and unemployed persons

In the period 1981 to 1995 the labour force (employed and unemployed people between 15-64 years who live in the region) in Drenthe increased from 157,000 till 206,000 persons (table 4.3). In line with the national (and urban) figures the number of unemployed in the labour force decreased from 15% to 8% between 1981 and 1995. The increase in employed in the labour force (from 85% to 92%) concerned predominantly men in the 1980s, and women in the 1990s. However, women are still more often unemployed than men (respective 9% and 7% in 1995).

Table 4.3 Labour force (a) in 1,000 persons in Drenthe and other Dutch regions, 1983-1995

	Drenthe			National	Intermediate	Most urban
	1983	1990	1995	1990	1990	1990
Labour force	157	187	206	6,801	931	5,870
Of which:						
- employed persons	133	172	191	6,275	841	5,434
- unemployed persons	24	15	16	526	91	436
In % of labour force:						
- employed persons	85	92	92	92	90	93
- unemployed persons	15	8	8	8	10	7

a) Labour force = employed and unemployed persons of 15-64 years.
Source: Eurostat, Regio Database; adaption LEI.

It might be stressed that in the 1990s the increase in employed who live in the region (1.6%) is higher than the increase in jobs in the region (1.1% in 1990-1996; RBA Drenthe, 1984-1996). This implies that the increase in employed in the 1990s is partly caused by the higher mobility of the labour force to find jobs outside the region (more outgoing commuters). This will be explained further in chapter 5 when the incoming and outgoing commuters will be discussed.

Compared to the national (and urban) figures, in Drenthe (and in other intermediate regions) less women are employed, while there are more men employed (than in urban and other intermediate regions) (table 4.4). The sectors of employment might disfavour the participation of women, because Drenthe has fewer employed in services and more employed in industries. Further, values about the combination of parental care and work, also expressed in the available social infrastructure, might restrict the propensity of women to participate. Since the increase in employed in the 1990s is mainly based on more outgoing commuters, it might be discussed whether the commuting patterns contribute to this, because more often men tend to commute (Van der Laan et al., 1994).

Table 4.4 Participation rate (a) by gender and age structure in Drenthe and other Dutch regions, 1983-1995

	Drenthe			National	Intermediate	Most urban
	1983	1990	1995	1990	1990	1990
Total	55	62	68	66	64	66
By gender:						
Male	75	77	80	80	78	80
Female	35	48	56	52	49	52
By age structure:						
- 15-24 years	44	52	62	56	53	57
- 25-34 years	70	78	82	80	79	80
- 35-44 years	67	78	82	78	76	78
- 45-54 years	59	64	71	68	67	68
- 55-64 years	29	28	28	31	30	31

a) Participation rate = employed plus unemployed persons as % of working age population (15-64 years).
Source: Eurostat, Regio Database; adaption LEI.

Besides the 206,000 persons belonging to the labour force (or the working population) between 15-64 years in 1995, Drenthe had 97,000 persons belonging to the non-working population between 15-64 years. Together they represent respective 46% and 22% of the total population, the other 32% are persons younger than 15 years or older than 65 years. Coherent with the increase in the working population during 1981-1995, the non-working population decreased (from 30% in 1981 to 22% in 1995). The share of non-working persons is similar to that in the other regions. Coherent with more males in the working population, Drenthe and other intermediate regions have more females in the non-working population than urban regions (and thus a lower participation of women).

The non-working population consists predominantly of retired people between 55-64 years and young people between 15-24 years (table A4.2). The other age groups between 25 and 55 years have a smaller share of people that belongs to the non-working population, and exactly those groups are responsible for the decrease in the non-working population. The decrease in the non-working population is mainly caused by the increase in the female employed and unemployed between 25 and 55 years. While in 1981 only 35% of the women between 15 and 64 years participated in the working population, in 1995 their participation has increased to 56%. In the same period the participation of men remained relatively stable (respective 78% and 80%).

4.3.2 Skills formation

In 1995 33% of the working population in Drenthe had at the most a lower secondary education, 48% an upper secondary education and 19% a tertiary education (table A4.3). Those data are nearly similar for employed (respective 32%, 48% and 20%) and thus also for unemployed. Compared to national data, the working population in Drenthe has less often a tertiary education and more often an upper secondary education. If we relate the education levelof the population between 15-64 years to the working population, in Drenthe (and at a national level) half of the persons with at the most lower secondary education belong to the working population. The education level is positively related to participation in the working population and amounts for persons with an upper secondary education 7 out of 10 and for persons with a tertiary education 8 out of 10 (CBS, 1995b).

In line with the general increase in education, the education level of the employed population in Drenthe increased strongly in the last 10 years. In 1985, 49% of the working population had at the most a lower secondary education, 37% an upper secondary education and only 14% a tertiary education.

The most recent education levels disaggregated by gender are available for male and female employed in 1993. At that time male employed had less often a tertiary education than female employed (respective 19% and 24%) and more often an upper secondary education (49% and 44%) (CBS, 1993a). This might be attributed to the fact that the propensity to participate for men is relatively independent on their education level, while for women the participation increases with their education level, especially for married women. There are hardly any reliable data for the education level of younger and older employed. However, given the rising education levels, the education of younger employed will be higher than that of older employed.

4.3.3 Flexibility labour supply

Flexibility of labour supply refers to the availability/opportunity of the labour force to be employed for a limited time during the week or during the year. The Netherlands is one of the EU countries with the highest share of part time workers (limited time during the week), while temporary or seasonal work (limited time during the year) is relatively unimportant.

In Drenthe the number of part time workers was 39% of the employed in 1995, which was twice as much compared with 1983 (table A4.4). Most of the part time workers are in services, predominantly in sectors of trade, hotels and restaurants and in community, social and personal services (46%) and in agriculture (35%), and not in industries (20%). While the number of part time workers in services showed a steady increase, in agriculture they increased only in the 1990s. The sectors of part time workers are explained by the fact that predominantly women work part time (71% compared to 18% of the male employed). Compared to other intermediate and urban regions, Drenthe has less part time workers, which might be attributed to a lower presence of employment in services. There are no data available about the age structure of part time workers. However, knowing that most of the part time workers are women, and that predominantly women younger than 45 years participate, it might be hypothesised that also part time workers will belong more often to those age group.

Compared to the number of part time workers, Drenthe has few temporary or seasonal workers (4% of total population in 1996). They are a bit overrepresented in the transport and communication (8%), petroleum and gas production (7%), education (6%) and hotels and restaurants (5%). Given those sectors, the influence of gender and age is difficult to prove, because those sectors are quite different in the gender and age structure of the employed. There are hardly similar data for other regions, but at the national level the number of temporary or seasonal workers is higher (8% of the employed in 1995) and is increasing (CBS, 1996c). Relatively to the labour supply, the increase in flexible workers might be more attributed to the labour demand, whose objective is to have an efficient use of employed and to react adequately to a flexibility in the demand for products and services. A sign of this development is the increase in temporary employment agencies.

4.3.4 Conclusions

The analysis of the population and labour supply in Drenthe shows the following trends: ageing of the population (lower vitality index), more immigrants older than 40 years and more outgoing commuters, more female part time workers and rising education levels of the employed. In the 1990s the increase in employed has been mainly caused by a higher outgoing mobility of the labour force. Compared to the national figures, Drenthe is gaining on, but the working population has still more males and less well educated. Further, there are still more residents belonging to the non-working population, predominantly women. Usually, they will try to find a job, if the employment opportunities increase.

If we consider the trends in the population and in the labour force and whether they induce opportunities to increase the employment in the region, the influence of more immigrants, ageing and more female workers might be further analysed. It might be discussed to what extent newcomers induce local employment or rely on larger regions for their demand of products and services. In chapter 3, it has been found that the sectors with the highest increase of jobs were medical, dental, other health and veterinary services. Besides more immigrants, also ageing of the own population is responsible for this.

The rising education of women will continue to increase their participation in the labour force and indirectly this might increase a labour demand for other women. Until now, most of the women have a part time job additional to their domestic work. If they increase their number of working hours, more externalisation of domestic work and care might be expected, and thus more (low-skilled) jobs. Since most of the domestic work and (health) care has been done by women, and the gender segregation on the labour market is relatively persistent, it might be expected that those trends will support a further increase of women in the labour force.

5. Labour market

5.1 Introduction

In our analysis we assume the existence of a labour market and basic forces on the supply and demand side of this market have been analysed in the previous chapters. However, the labour market has two fundamental features that makes it peculiar and that must be taken into consideration:

1. the labour market is not a spot market, i.e. a market in which there is an auctioneer who matches demand and supply automatically and instantaneously. The labour market is in fact an institutional process, in which the final outcome - number of employed and wages - is always the final result of a bargaining process;
2. the labour market could be in disequilibrium: wages and unemployment rate are not necessarily the equilibrium ones and the traditional concept of equilibrium markets could be useless in this case. Sticky wages and frictions can produce temporarily or even structurally a disequilibrium on the labour market.

According to these aspects, in this chapter we study the functioning of the labour market by focusing on:

a. wages structure;
b. institutional functioning of labour market: transaction costs;
c. transportation costs.

In the last section we pay attention to frictions between the supply and demand of labour.

5.2 Wages structure

It is important to have a general impression of the wage level of the region: is it low or high compared to other regions. The wage level gives an impression of the labour productivity and of the competitiveness of the region. This general impression can contribute to the explanation why entrepreneurs settle or do not settle in a region.

Qualitative description of the regional wage level

In the Netherlands there are only minor regional differences in wage levels. This is the result of the Dutch system of collective labour agreements (CAOs). For each economic sector, a collective labour agreement is concluded at national level and all employers in the sector concerned are bound by it (Eurostat, 1993). Nevertheless regional differences in purchasing power exist. In 1995 Drenthe had almost the same percentage of people who earned less than the modal wage level (46%) as the Netherlands as a whole (45%). But the surrounding regions of Drenthe, the province of Groningen and the province of Friesland, had more people who made an income less than modal (respectively 52% and 50%). Drenthe had the smallest percentage (3%) of people who earned less than the minimum wage level of all provinces in the Netherlands (4%) (CBS, 1997), which is related to the relatively low share of services in total employment.

5.3 Institutional functioning of labour markets: transaction costs

We define institutions as the set of working rules operating in a given economic context, in this case a given local labour market. So the institutional functioning of a labour market is defined as the set of rules and conditions under which supply and demand can be matched and bargained. Transaction costs arise when there are frictions in the matching of supply and demand on the labour market. These costs are partly due to the existence of an imperfect market in which asymmetric information is present. Information costs are on the one hand due to difficulties by employers to get information about skills formation of the workers and on the other hand due to lack of information by workers about the opportunities on the labour market. Other sources of transaction costs are the costs of hiring and firing that firms and employers can face. We refer to these costs as turnover costs.

General overview of organisations and institutions affecting the labour market

Labour organisations

The best known labour market body is the Public Employment Service (PES), consisting of the Central Board for the Employment Service (Centraal Bestuur voor de Arbeidsvoorziening (CBA)) and the Regional Boards for the Employment Service (Regionale Besturen voor de Arbeidsvoorziening (RBA)). At national level CBA is a main semi-public institution. The CBA has a tri-partite structure consisting of the central government, employers' organisations and trade unions. Although the CBA formulates the main lines and the main scopes for policy, the decision making structure is strongly decentralised. There are also 18 tri-partite RBAs in the Netherlands. There is one RBA in Drenthe, located in Assen. The RBA has a high degree of autonomy as long as it stays within the guidelines of the CBA. In the RBAs employees are repesented by local union officials and employers by local employers, personnel managers of major employers and/or officials from employers' organisations. The local government is usually represented by an alderman (De Koning et al., 1996).

In Drenthe the RBA supervises eight local employment offices. The RBA mediates between persons looking for a job and employers. Therefore, the RBA has four main activities:

- to enhance the properties of employees;
- to place job seekers;
- to fulfill vacancies;
- to give information.

So the RBA has not only a matching function but also an advising function. It gives for example information about subsidies in the field of employment, education and legal information in the field of the labour market. The RBA also takes care of employment projects in Drenthe which are subsidized by the European Social Fund.

The RBA in Drenthe has close contacts with the Drenth business. Therefore she knows what matters at the moment, for example vacancies, education, etc. Due to the contacts with firms, the RBA can react quickly on new developments.

The Employment Service Act of 1991 authorises the establishment of private employment agencies offering a full range of services, acting as intermediaries between job-seekers and employers. Before starting operations agencies must obtain a licence. The Act has abolished the monopoly of the PES in the field of placement. The effect could be that an increase in the activities of other intermediaries would contribute to the objective of the Employment Service Act, namely to stimulate the efficiency of labour market processes and to increase labour market chances of disadvantaged groups. For Temporary Work Agencies (TWA's) a similar licence already existed (De Koning et al., 1996).

The market range (share of total vacancies in Drenthe) of the RBA is between 33% and 35%. They are fulfilling 70% of these vacancies. This gives a market share of about 25%. The RBA has the largest market share; Temporary Work Agencies have lower scores.

Chambers of commerce in Drenthe

Several chambers of commerce (Kamer van Koophandel) are located in the Netherlands. In Drenthe there are two chambers of commerce, the main office is located in Meppel. A chamber for Southeast Drenthe is located in Emmen. The chamber of commerce is an organisation that surveys the regional developments. The chamber keeps up the registration of firms in Drenthe and has an executive task concerning some shopkeeper's laws (for example laws about opening hours of shops). Further, it advises firms in the field of policy of spatial arrangements, urban developments, traffic, environment, education and labour market, tourism and recreation, economic and regional developments. The chamber has contacts with authorities and organizations at several levels: municipalities, regional cooperations, province and the national government and of course with enterprises. (Kamer van Koophandel, 1997).

Institute for SME

Instituut voor het MKB Voorlichting Noord (IMK) (The Institute for SME Information in the northern region) is an independent department of the national IMK Information. The IMK informs and advises entrepreneurs in SME about developments that are important for management. They organise meetings, give lectures, supervise entrepreneurs and mediate to others. Specific knowledge fields are: starting of enterprises, strategy, marketing, personnel and organisation, finance and firm take-overs.

Employers organisation

The VNO-NCW Noord is an employer's organisation for the northern provinces of the Netherlands. The VNO has no active role in the matching process of employers and employees. It works at a macro level; it tries to improve the entrepreneurial climate by stimulating employers to invest. These investments can create employment. The VNO has a good network; it is represented in many organisations and has good contacts with industrial societies. It also gives the possibility to network by organising meetings.

Trade unions

Districtkantoor Groningen FNV: FNV (a non-confessional trade union) has 46,700 members in Drenthe in 1997, that means 24.5% of the working population in Drenthe is member of FNV. In the Netherlands as a whole only 17.4% of the working population is member of FNV. In 1987 Drenthe had 32,600 FNV members (35% of the working population) and the Netherlands as a whole had 896,100 FNV members (29% of the working population).

Regiokantoor CNV: in 1997 the CNV (a confessional trade union) has 12,500 members in Drenthe, that means 6,6% of the working population. In the Netherlands as a whole the CNV has over 350,000 members. In 1981 Drenthe had 11,400 CNV members and the Netherlands as a whole had 297,300 CNV members.

Organisations of farmers

Noordelijke Land- en Tuinbouw Organisatie (NLTO) (Northern Agriculture and Horticulture Organisation): NLTO is a regional department of the LTO; the national organisation for agriculture and horticulture. The NLTO attends to the interests at regional level of more than 10,000 farmers in the provinces of Drenthe and Groningen (about 50% of agricultural labour force). These members exert also influence on the policy of their organisation via their sectoral department (farming, horticulture, dairy and intensive cattle farming). The members can make use of the protection of interests, information and services. The NLTO works together with the province of Drenthe, the municipalities and the nature conservation organizations.

Resources spend by employers to find workers

Employers spend different means to find workers, like advertisements, relations with other employers, employment agencies, employment exchanges, open applications, etc. Advertisements are the most used mean. When employers use 150 times resources to find workers, it results 100 times into the most appropriate candidate (Kamer van Koophandel et al., 1995).

Average duration of a vacancy job

The average duration of a vacancy job in Drenthe was 31 days in 1994. In the Netherlands as a whole this was 51 days. In 1995 the duration of vacancy jobs in Drenthe declined to 24 days, in the Netherlands to 28 days. The duration of vacancy jobs tells something about the quality and quantity of the labour supply. The relatively short duration of vacancy jobs in Drenthe means that there is sufficient labour supply of demanded quality (Kamer van Koophandel et al., 1994 and 1995).

Minimum wage constraints in hiring new workers

Since 1968 there are minimum wage constraints in hiring new workers at the age of 23 till 64 years. In the Netherlands all employers are bound to these constraints. The level of the minimum wage is adapted twice a year to the average increase in the CAO wages, unless this increase is so high that it is harmful for the employment situation. Since 1978 there are minimum wages for the youth at the age of 15 till 22 years. This wage is a certain percentage of the minimum wages of adults. The percentage varies from 30% to 85%, depending on the age of the worker (Bakels, 1996).

Public support for hiring new workers

In Drenthe, as in the Netherlands as a whole, there are job creation measures, like the Labour Pools (Banenpool (BP)), the Guaranteed-Jobs-for-the-Young Act (Jeugdwerkgarantiewet (JWG)) and the recently introduced Job Schemes (called 'Melkert jobs' after the present Dutch Minister of Social Affairs and Employment (SZW). These schemes create additional jobs for specific target groups, like women, young people, long term unemployed and ethnical minorities. Under the JWG the municipal organisation hires young people who are threatened with long-term unemployment and places them in temporary jobs. The purpose of the JWG is to place these young people in regular jobs when they have gained sufficient work experience. Labour pools are aimed at long-term unemployed who have no chance of a regular job. The idea is to let these unemployed do beneficial works for society. Placements from labour pools to regular jobs are not expected but not excluded either. The Job-schemes can be divided into three categories. The first category consists of the creation of jobs in the public sector for long-term unemployed. This reduces the long-term unemployment and simultaneously increases public safety, care and education. The second category is the creation of jobs with the use of social assistance benefits. Since 1996 it is possible to transfer social assistance benefits into a fixed amount of subsidies (Dfl. 18,000 per job). The third category consists of experiments with new ways of encouraging the participation of the long-term unemployed recipients of social assistance benefits. These are projects to activate social assistance recipients by letting them perform unpaid activities while retaining benefit. The local authorities decide upon the nature and the content of projects. The purpose of these projects is twofold: to enhance the labour market chances of long-term benefit recipients and to help them out of social isolation (De Koning et al., 1996). According to the representative of the RBA, measurements like

Melkert jobs, labour pools and JWG are not very effective measures. Employers are mainly interested in the qualities of employees and less in subsidies on employees.

The BP and the JWG are generally carried out by municipal organisations, which are related to the Municipal Social Welfare Office (Gemeentelijke Sociale Dienst (GSD)). Since 1995 the municipalities are also involved in the implementation of the new Job-Schemes (De Koning et al., 1996).

Conditions in hiring/firing labourers

Most of the times there are no costs in firing workers. In a contract of employment it can be described that when an employee is fired without his fault, he receives compensation.

Officially there are no different conditions in hiring young or elder people. Nevertheless, when employers can choose between a young and elder person, who both have the same qualities, they often prefer the younger person. This person is often cheaper and can stay longer with the firm. There are also no different conditions in firing young or elder people. When there have to be dismissals in a firm, the employees who came last in are the first to be fired. This is also the case when firms have to do with total reorganization. The second step in such reorganizations is that they fire the younger employees.

There are officially no different conditions in hiring women. However, the national government stimulates firms to hire more women, ethnic minorities and handicapped persons. Public firms are supposed to strive after a certain percentage of these employees. When employers can choose between a person belonging to this group or a person not belonging to this group, who both have the same qualities, they should choose the first person.

There are no different conditions in firing and hiring workers associated to Unions and workers not associated. There are also no costs in changing wages, although the people who did the administration concerning the bargaining have to be paid.

Table 5.1 Overview of relevance of information costs and turnover costs

Variable	Relevance	
	1980	1997
Resources spent by employers to find workers	5	4
Public support for hiring new workers	3	2
Conditions in hiring/firing labourers	5	5

In which: 1 = very high, 2 = high, 3 = medium, 4 = low, 5 = very low.

Costs for hiring/firing labourers are not relevant. In 1980 the labour market was relatively less narrow than in 1997. The public support for hiring new workers is intensified because of the job creation measures, like Labour Pools, JWG and Melkert jobs.

5.4 Transportation costs

Transportation costs as a result of the regional urban and geographical structure or infrastructure endowments can increase reservation wages of workers and hiring costs by firms. Basically transportation costs are of two different types:
- explicit costs = how much money a worker spends to reach the working place
- implicit costs = how much time a worker spends to reach the working place (this time could be alternatively spent in other gainful activities or leisure).

Commuting population

During 1990-1991 about 97,000 persons (84%) of the total employed persons in Drenthe (measured at place of residence) commuted inside the region and 17,000 persons (15%) commuted to other regions (CBS, 1993c). The amount of persons commuting from other regions into Drenthe was 10,000. In 1996 the amount of people commuting to other regions has increased to 30,000 people. The amount of persons commuting from other regions into Drenthe has increased to 20,000 persons. Most of the persons commuting to other regions work in the province of Groningen, in particular in and near the city of Groningen and live in the northern part of Drenthe. Drenthe obviously has a negative commuting balance (-7,000 in 1990 and -10,000 in 1996). The surrounding regions of Drenthe, the province of Groningen and the province of Friesland show a different commuting balance. The province of Friesland has, as Drenthe, a negative commuting balance (-2,000 in 1990 and -7,000 in 1996). But the working population in Friesland is about 50,000 persons larger than in Drenthe. The commuting balance of the province of Groningen has grown from 7,000 persons in 1990 to 14,000 persons in 1996 (Stelder and Van Dijk, 1997). The change and the level of the commuting balance shows that Drenthe is an attractive place to live and that it hence can be labeled as a 'living province' to some extent relatively to the neighbouring province of Groningen, which can be labeled as a 'working province'.

The average distance commuted

The average distance commuted in Drenthe per person per day in 1995 was 7.6 km. Most of this distance (6.4 km) has been commuted by car. Public transport had 0.5 commuted kilometres and 0.5 km was commuted by bike. The average distance commuted in Drenthe (7.6 km) differs not much from the national level (7.7 km). In the Netherlands as a whole the commuted distance by car is less (5.7 km) than in Drenthe and the distance commuted by public transport is higher (1.1 km), which has to do with the relatively low density of public transport in Drenthe. Commuted kilometres by bike (0.6 km) is almost the same (CBS, 1995a).

5.5 Friction between labour supply and labour demand

This section will give some information on the unemployment in Drenthe compared to the Netherlands and the differences in unemployment per municipality. It is not easy to give some information about unemployment because several definitions are used. Three of these definitions will be discussed: the not-working job seekers, the registered unemployment and the not-working or unemployed labour force. It goes without saying that these definitions result in different unemployment rates (table 5.2).

Table 5.2 Different concepts of unemployment in Drenthe, the other northern provinces and the Netherlands (in %), 1996

	Drenthe	Groningen	Friesland	the Netherlands
Registered unemployed	6.4	12.0	9.1	6.6
Not-working or unemployed labour force	8.2	11.9	9.2	7.4
Not-working job-seekers	13.3	20.4	17.4	12.9

Source: RuG, 1997.

Not-working job-seekers

Not-working job seekers are persons in the age of 15-64 years, registered at the PES and who are not working for 12 or more hours a week. This unemployment figure is used by the Public Employment Service. The main drawback of using the registrations of the PES as data source is the relative high degree of pollution of the PES-files. Often persons (still) registered as not-working are in fact having a job (and the other way around). Nevertheless, the development in the number of persons registered at the PES may be used as a (conjunctural) labour market indicator (Kamer van Koophandel et al., 1995; De Koning et al., 1996).

Registered unemployment

To correct for the pollution of the PES-files, the CBS uses another concept of employment, namely the registered unemployment. This figure contains all persons in the age of 15-64 years, registered at the PES and work not or less than 12 hours per week, willing to work at least 12 hours a week and who can start within two weeks. The CBS (Central Bureau of Statistics in the Netherlands) estimates this figure on the basis of a survey among the labour force. Since 1989 the registered unemployment is the official unemployment figure used by the Ministry of Social Affairs and Employment. (Kamer van Koophandel et al., 1995; De Koning et al., 1996).

Not-working or unemployed labour force

The not-working labour force are those people who are in the age of 15-64 years, who receive unemployment benefits and/or who are intensively searching via all kinds of possibilities a job for at least 12 hours a week, and who are available in the short run. Persons who found a job, but who did not started yet, are also counted in. This unemployment figure has a large similarity with the directives of the International Labour Organization (ILO) and EUROSTAT. For this definition the criterion 'intensively searching for a job' is important (Kamer van Koophandel et al., 1995; De Koning et al., 1996).

As from 1994 the definitions of the registered unemployment and the not-working or unemployed labour force have changed. This change concerns the labour force. Before 1994 people belonged to the labour force when they worked, or were willing to work, for at least 20 hours a week. Since 1994 this hour-limit has been reduced to 12 hours a week (Kamer van Koophandel et al., 1994).

Unemployment in Drenthe compared to the Netherlands

Table 5.3 shows registered unemployment figures since 1987 for Drenthe and the Netherlands as a whole. There are no large differences between the unemployment in Drenthe and the Netherlands as a whole. Till the beginning of the 1990s unemployment decreases, then there is an increase for a few years due to economic recession and a decrease since 1995. Of the three northern provinces, Drenthe has the lowest unemployment figures.

Unemployment at the municipality level is measured in not-working job-seekers figures. As shown in table A5.1 there are large differences in unemployment within Drenthe. Seven out of 34 municipalities have unemployment figures above the provincial average of 13.5%. These are mainly municipalities with larger cities. Most of these municipalities also have a high employment growth. In Assen and Emmen the unemployment is over 16%. Coevorden, Hoogeveen and Meppel have unemployment percentages between 14 and 15%. More than half of the unemployed population is living in these 5 municipalities. Eelde, Norg, Zuidlaren, Rolde, Nijeveen and Ruinerwold are the municipalities with the lowest unemployment (about 7-8%).

Table 5.3 Unemployment (Registered Unemployed) in Drenthe, other northern regions and the Netherlands (in %), 1987-1996

	Drenthe	Groningen	Friesland	the Netherlands
1987	7.8	12.0	9.4	7.9
1988	8.4	12.6	9.5	7.7
1989	6.8	12.5	8.8	6.9
1990	6.1	10.9	8.0	5.9
1991	5.4	8.9	7.4	5.4
1992	6.2	8.5	6.9	5.3
1993	6.9	10.3	9.5	6.5
1994	8.0	11.4	10.1	7.5
1995	7.2	11.8	9.2	7.0
1996	6.4	12.0	9.1	6.6

Source: RuG, 1997.

6. Actors: analysis of strategies

6.1 Introduction

The strategies of actors towards maintaining or increasing rural employment are the central part of this case study. A strategy can be defined as 'the art of employing all resources to achieve specific goals' or 'as a conscious pattern of actions to meet ends'. However, for some of these actors, employment is a side product, as their main objective is profit maximization. Moreover, we should take into account that there are actors who might have objectives but who not necessarily have strategies. The following groups of actors are distinguished: policy makers, entrepreneurs, farmers and labourers. In fact it can be argued that farmers belong to the group of entrepreneurs. They are treated here as a separate group since farmers are a relatively important group of actors in rural regions and they have a dominant claim on space. The strategies of these four groups of actors are discussed in section 6.2-6.5. The chapter is concluded by two sections on the interaction of internal actors and on the interaction of internal and external actors.

6.2 Strategies of policy makers

Within the group of policy makers four levels can be distinguished:
- EU level;
- national level;
- regional level (= provincial level in Drenthe);
- local level (= municipality level in Drenthe).

Often policy makers from two or more levels cooperate in launching their strategies and implementing policies. In this section firstly strategies of policy makers will be identified, and secondly attention will be paid to implemented policies, which can be seen as a result of these strategies. Finally, an assessment of strategies and policies is given.

6.2.1 Strategies

The following major strategies of regional and local policy makers towards maintaining or increasing employment can be identified:

a. strategy towards clustering of economic activities in well defined zones;
b. cooperation with the provinces of Groningen and Friesland in the field of regional development; this cooperation has been strengthened in recent years;
c. a strategy towards cooperation at the municipality level along the N37;

d. a strategy towards favourable settlement conditions for firms, in which the focus recently shifted from attracting new firms towards supporting existing firms.

The most important strategy of the national and EU policy makers towards maintaining and creating employment in Drenthe is to provide funds for stimulating regional economic development and improvement of the infrastructure. Below strategies (a)- (c) will be discussed; strategy (d) is directly related to policies, and hence this is dealt with in the next subsection.

Concentration of economic activities

The strategy towards a concentration of economic activities in well-defined zones is a new regional strategy of the Ministry of Economic Affairs (1995). In fact, Drenthe applied this strategy already in the 1980s and earlier. Economic activities were encouraged in the zones Meppel/Hoogeveen/Coevorden/Emmen and Assen/Groningen. Outside the zones economic activities were discouraged. The region outside the economic zones is intended for housing, recreation, agriculture and nature. However, this concentration strategy at provincial level was sometimes thwarted by policy makers at the municipality level, who were eager to attract some economic activities towards their municipality.

Strengthening cooperation policy makers northern provinces

Traditionally policy makers in the three northern provinces of Drenthe, Groningen and Friesland have a close cooperation, since these provinces have a peripheral location in the Netherlands and according to Dutch standards a relatively low population density. In recent years this cooperation has been strengthened and is now embodied in the SNN (Samenwerkingsverband Noord-Nederland), the cooperation of the northern provinces. The strengthening of the cooperation is the result of a growing awareness that each of the provinces is too small for an own regional development policy, and that the provinces should not compete with each other for attracting new enterprises. So the strategy is now to present the three northern provinces as one economic region, with a mix of economic activities concentrated in certain well-defined zones. The advantage of such a larger economic region is that it has more critical mass than each of the separate provinces. Targets for economic zones in Drenthe are a cluster of services and high tech activities in the zone Groningen/Assen, a cluster of transport and distribution activities in Meppel/Hoogeveen/Coevorden and a cluster of industrial activities in Emmen (SNN, 1998). This zoning reflects the already existing pattern in Drenthe.

Cooperation at the municipality level

Until now there were 34 municipalities in Drenthe. Sometimes they compete with each other for attracting new firms, but sometimes there is also a close cooperation. All 34 municipalities are united in the Society of Municipalities (VNG) of Drenthe (see section 1.5) At January 1, 1998 the number of the municipalities has been reduced to 12. This process of decreasing the number of municipalities ('gemeentelijke herindeling') occurs in most provinces in the Netherlands, although not at the same date. The purpose of this reduction is the improvement of the alertness of municipalities. Due to the smaller number of municipalities, it is expected that the quality of the local decision process and the rendering of public services will improve and that the competitiveness among municipalities will reduce.

The municipalities along the provincial highway N37, running from Meppel to Emmen, started in the mid 1980s a close cooperation in order to accelerate the transformation of the N37 into an international highway A37. Since part of this highway is located in Germany, German municipalities along this highway also joint the group. This cooperation of municipalities along the N37 is called the 'Stedenkring Zwolle-Emsland'. The enterprises in this region also supported the construction of the A37 and they formed the Industrial Society A37 (Bedrijvensociëteit A37). The completion of the A37 is expected at the beginning of the next century and establishes a connection with the Emslandline in Germany and hence a promising international opening. The cooperation of municipalities and enterprises along the N37 is considered as successful in Drenthe.

6.2.2 Policies

In this section we focus on four groups of policy measures:

a. passive/active labour market policies;
b. settlement policies directed at individual firms;
c. policies directed at the improvement of the regional economic infrastructure;
d. EU structural policies.

a. Labour market policies

Passive labour market measures refer to income support measures. They provide workers with work-related benefits, which replace wages in case of unemployment. Passive measures originate both from social security and from collective agreements in branches (such as early retirement arrangements). These measures are taken at the national level. The Netherlands has an extensive social security programme (De Koning et al., 1996). The gap between legal minimum wages and unemployment benefits is relatively small, especially in the short run.

Active policy consists of activities, which have the objective to place the unemployed in a regular or additionally created job. It is used as a steering device to promote an efficient matching of demand and supply on the labour market and to improve the qualifications of job seekers. Till 1991, the Public Employment Service (in Drenthe: RBA in Assen) was responsible for the major part of the active measures. Since that date the Employment Service Act authorises private employment agencies to act as intermediaries between job seekers and employers as well. Another recent development is the growing involvement of municipal organisations. The most important active measures are education and vocational training, placement subsidies, work experience and job schemes (De Koning et al., 1996).

Education is a very important subject nowadays, especially for technical and information sector occupations. It often occurs that labour demand of employers does not correspond to the education of employees. In order to harmonize supply and demand of employees, the RBA takes care of retraining courses. The RBA is constantly looking for ways to

give better/more flexible education. The RBA supports the way of thinking that schooling is not only important for job-seekers but also for working people. At present, the RBA has a training planning of 2,000 persons per annum in Drenthe.
The RBA works together with several educational institutions, like:

- regular educational institutions;
- Anke Weidema School (technical school for women);
- Centre for Vocational Training;
- Centre Occupation Orientation and Occupation Training.

The above educational institutions intend to cooperate into the 'Vocational School Drenthe'. The advantage of such a cooperation is the organizational harmonization.
The General Employment Scheme Regular Jobs offers employers a one-time subsidy when they hire a long-term unemployed person. Under certain conditions the employer can be temporarily exempted from part of the social contributions (De Koning et al., 1996). The most important measures to obtain work experience are the JWG for young unemployed and the labour pools for long-term unemployed (see section 5.3). The job schemes create additional jobs for long-term unemployed, with use of financial means from social security.

b. *Settlement policies directed at individual firms*

- Especially for the Southeastern part of Drenthe, Hoogeveen and Eelde [1]: investment subsidies scheme (investeringspremieregeling IPR);
  This scheme is intended to stimulate economic activities. This part of the region is selected based on a relatively high unemployment rate and a low GDP per capita. In this part of the region entrepreneurs are eligible for an investment subsidy on the setting up of new enterprises or on the expansion of present enterprises. These subsidies are attractive for starting entrepreneurs, since during the enterprise starting phase they have many costs. Moreover, these region specific subsidies are used to encourage entrepreneurs to settle in certain zones, since during the enterprise starting phase they have many costs;
- national economic policies - applying for the whole country - are credit facilities for SME and credit facilities for technological development (there are no unambiguous criteria, these depend on the nature and size of firms);
- spatial planning policies: in the scope of spatial planning policies the province has a spatial planning plan (streekplan), which has an indicative function for the spatial planning plans (bestemmingsplan) of the municipalities. Within these plans, which are periodically revised, it is indicated which locations can be used for the settlement of enterprises. The spatial planning plans of the municipalities are binding upon citizens. As stated above, Drenthe has applied a concentration policy for locations of settlement. This has two advantages: within certain zones there is a clustering of economic activities and in other zones there is space for housing, recreation, agriculture and nature. Such a strict policy is necessary in a situation of

[1] This subsidy scheme also applies in certain other parts of the country.

many claims on the region by different functions and a guarantee for maintaining the assets of quietness and space in Drenthe.

c. *Policies directed at the improvement of the regional economic infrastructure*

- master plan for the northern part of the Netherlands ISP (Integraal Structuurplan Noorden des lands ISP);
  This is a programme implemented by the Ministry of Economic Affairs to stimulate economic development in the northern part of the Netherlands. The programme is used for investments in infrastructure and improvements in the entrepreneurial climate. The staff of this programme has very close contacts with enterprises. At the moment they are amongst others involved in a project to promote innovation in enterprises. Therefore they have selected about 350 entrepreneurs, who had a high rate of investment in recent years (forerunners). This selected group of entrepreneurs is asked to discuss the advantages of innovation with other entrepreneurs, who had an average rate of investment in recent years (followers) in order to stimulate innovation by this group too;
- national economic policies, applying for the whole country: ad hoc financing, from the national gas revenues, for infrastructure. For instance, this has been used for the construction of a ring road in Beilen.
- investment and development company NOM;
  The NOM, the investment and development company for the Northern Netherlands, aims at stimulating and reinforcing the economies of the three northern provinces in order to encourage employment opportunities. The NOM assists companies from inside and outside the region in investment matters, provides advice regarding subsidies and management, participates in financing and functions as an objective intermediary between government and enterprises. The NOM was established in 1974; also in other parts of the Netherlands companies like the NOM exist. The regional and national authorities finance the NOM, although entrepreneurs have to pay for the services of the NOM. In recent years the emphasize in the strategy of the NOM has shifted from attracting new firms into supporting existing firms and to promote the settlement of supplying and processing enterprises around some big industrial enterprises. By doing so, the NOM hopes to improve the entrepreneurial climate and the anchoring of big industrial enterprises, in order to prevent that these big enterprises leave the region.

d. *EU structural policies*

The south eastern part of Drenthe is since 1989 an objective 2 area. This area is bordering to the objective 2 area in Groningen, and hence one programme applies for both areas. The targets of the objective 2 policies are the enhancement of the regional gross product and employment. Priorities are the sectors industry, financial services and tourism along with the settlement environment: urban economy and tourist environment. The impact of these measures on employment is considerable, although it is very difficult to obtain information on this since EU support is given in combination with other sources of support. According to an estimate, in the period 1986 [1]-1996 about 8,600 permanent jobs and an amount of 13,000 man years of temporary labour in construction, services etc. were created in projects supported by the EU in the objective 2 areas in Drenthe and Groningen (Bureau Bartels, 1998). However, this is probably an overestimation, since all projects were included to which the EU contributed with financial support. Sometimes this support was very small, as the major part of financial support originated from other sources. Nevertheless, it has to be noted that investments in infrastructure can have a large spin off on future employment, which is not taken into account here.

Since 1994 the southwestern part of Drenthe is under objective 5b. Due to the short duration of the project, nothing can be said about the employment impact so far. The same area is also eligible for LEADER. It appears that many LEADER projects, which are small scale projects, are continued in larger projects in the scope of an objective 5b project. LEADER acts as a first engine to activate people and to create ideas for projects; so the small amount of money which is available under LEADER can be considered as seed money. Policy makers in Drenthe consider this as a very successful combination and indicated that this kind of combination of small scale and larger projects is a promising policy for the future.

The budget of the Ministry of Economic Affairs for regional development in the scope of ISP, IPR and NOM amounts to about 335 million ecu for the three northern provinces during the period 1994-1999. From the information available on expenditure in the scope of objective 2, objective 5b and Leader programmes, it can be seen that the contribution of the EU to regional development is substantial relatively to the national means (table 6.1). The EU contribution results in projects, which otherwise would be completed at a slower rate or not at all.

6.2.3 Assessment of strategies of policy makers and policies

Weaknesses and strengths

Weak points in the policies in the 1980s were the insufficient cooperation with the provinces of Groningen and Friesland in the field of regional development and the focus on attracting new firms. However, these weak points have been recognized in Drenthe in recent years. Now there is a close and increasing cooperation between Drenthe, Groningen and Friesland and the focus is more on existing firms in Drenthe. These shifts also offer promising perspectives for the near future. The clustering of economic activities along the A28 and N37 is considered to be effective in the creation of employment, since it is more or less a market conform policy. The investment subsidies are also effective, both for new firms and for firms who want to expand.

[1] In the period 1986-1988 there was an experimental programme towards structural improvement, co-financed by the EU.

Table 6.1 Financial overview structural policies EU in Drenthe a) (mio ecu)

	Total costs	Contribution		
		EU Structural Funds	public (national)	private
Objective 2				
1989-1993	318	82	174	62
1994-1996	253	76	133	44
1997-1999	296	100	155	51
Objective 5b				
1994-1999	158	35	81	41
Leader II				
1994-1999	2.75	1.04	0.9	0..8

a) Expenditure for objective 2 and 5b cover also expenditure for the province of Groningen; about 40% of the expenditure for objective 2 is spent in Drenthe and for objective 5b this percentage is 50.
Source: Various documents of the provinces of Drenthe and Groningen, and European Commission (1997), The impact of structural policies on economic and social cohesion in the Union 1989-99; Luxembourg.

So promising strategies and polices are identified as follows:

- the clustering of economic activities in well-defined zones with a well-developed infrastructure and the allocation of activities in certain centres, like an industrial centre in Emmen, a services centre in Assen and a transport and distribution centre in Meppel/Hoogeveen. Advantages are a relatively high density of enterprises, which stimulates the interaction among enterprises and which attracts other enterprises. This leaves space for other functions (i.e. housing, recreation, agriculture, nature) in other parts of the province;
- the cooperation in regional policy of the three northern provinces with the aim of creating a larger economic area with more critical mass (although it can be wondered what the size of an optimal area for regional development policy is);
- the shift in the focus on supporting existing companies instead of new companies. This seems also promising, since the bulk of employment is embodied in existing enterprises;
- the investment subsidies are effective, both for new firms and for firms who want to expand. Often these subsidies act as an additional incentive in favour of Drenthe in the decision process of settlement.

Integration of national and common policy measures at the regional level

Drenthe is a relatively wealthy region compared to other EU regions eligible for support in the scope of objective 2 and 5b. Nevertheless, the financial means of the Structural Funds are considered to be a welcome addition to the available national means for regional development. The integration of national and common policy, in the sense that expenditure for common policy measures in the scope of objective 2 and 5b have to be cofinanced by the national government, is sometimes hampered by the fact that the borders of the objective 2 and 5b region do not coincide with the borders delineated by the national authorities in their regional policies. In such cases national measures covering the whole region have to be divided in subregions, which complicates administrative control and monitoring to a high extent.

Motives of economic actors for using or not using EU policy instruments

Sometimes EU policies in objective 2 and 5b areas are not used since procedures are considered as to bureaucratic: a lot of time is needed to fill in all forms and for small projects this is too time consuming and expensive relatively to the revenues of the project. In Drenthe it was felt that there was a mismatch of the priorities of the region (infrastructure) and those of the Commission (SME), which resulted in a delay in the approval of the single program document. Moreover, the complicated and untransparant procedures prevent actors from participating in projects in the scope of objective 2 and 5b. On the other hand, actors use the EU policy instruments, as these result in a substantial financial flow to the region. The financial means are considered to be a welcome addition to the available funds in the region, and contribute to the realization of projects, which fit to the needs of the region.

Inadequacies

Sometimes there are inadequacies with regards to the formulation and implementation of policies. This especially occurs in the field between the different policies: economic policies, environmental policies and spatial planning policies, which have a multisectoral nature. The aims of these polices can be in conflict with each other, which results in frictions among policy makers and citizens. These frictions can be solved when there would be a better coordination of these different policies.

6.3 Strategies of entrepreneurs

In this section strategies are examined by analysing the motives of entrepreneurs for settlement or not-settlement in Groningen, cooperation in networks and future strategies.

Motives of firms for settlement in Drenthe

A mix of motives can be put forward why firms decide to settle in Drenthe:

a. internal factors (pull factors):
   - relatively low land prices;
   - subsidy measures like IPR;
   - space, quietness and good living circumstances;
   - good attitude of labourers;
   - relatively good infrastructure along the A28 (north/south connection) and along the A37 (east/west connection);
   - no congestion on the roads;

- suppliers or buyers of the company have been settled in Drenthe.

b. external factors (push factors):
   - congestion in the Randstad, the urban part in the West of the Netherlands. This results in a shift of companies to the middle parts of the Netherlands and also to the more northern parts like Drenthe;
   - European integration, in particular closer contacts with the Middle and Eastern European countries and the Scandinavian countries. This may result in a new economic corridor from west to north Europe. Drenthe has the advantage that it is located in this corridor and can hence profit from a higher density of economic activities [1].

It has to be stressed that the final decision on settlement depends often on a mix of the factors above, but non-rational factors, like the fact that the partner of the entrepreneur lives in Drenthe or likes Drenthe, also play an important role. New firms come from both inside and outside Drenthe. On the whole, firms from inside Drenthe can be characterized as risk averting towards investments, due to the cautious attitude of people in Drenthe. Firms from outside Drenthe come from other parts of the Netherlands (mainly Randstad and Groningen) and from abroad.

Motives of firms for leaving Drenthe

- globalization of production. This especially occurs in subsidiaries, when the production is shifted towards low wages countries;
- reorganization of multinational enterprises; this can result in closing of subsidiaries in Drenthe;
- moving to a more central part of the country with a higher density fo firms. This sometimes occurs with the parent company, although work holdings in which the larger part of employment is concentrated, may stay in Drenthe.

Motives of firms for not settling in Drenthe

- image: the distance between the centre of the Netherlands (Randstad in the western part of the country) and Drenthe is considered as too large, both in physical as in psychological terms. It has to be remarked that distance is a relative notion: the distance between the Randstad and Drenthe is about 200 kilometres or just over two hours travelling by car;
- thinness of the economic structure: some firms prefer the proximity of a large number of other firms, in order to have the opportunity of a tight network and to have supplying and processing firms in the neighbourhood and a sufficient variation in the supply of labour (which is available due to the presence of a large number of companies).

[1] Although this reason was often mentioned in the interviews, it can be doubted whether in this context the location of Drenthe matters, or that distances in an extended Europe are so large, that it makes no sense whether a firm is located in the western part of the Netherlands or in the northern part.

No redeployment policies

In the period 1980-1996 there were no closures of big firms in Drenthe, which induced to implement redeployment policies. The exodus of labourers from big enterprises is more a stepwise process, in which labourers are fired in groups. The fired workers can apply under the common measures of active and passive labour market policies.

Financial infrastructure

The financial infrastructure is well-developed in the Netherlands, and the availability of financial and credit services do not differ among the various provinces in the Netherlands. On the whole no problems arise in obtaining credits, when an entrepreneur can provide a promising business plan.

Networks

Entrepreneurs participate in networks. In each bigger town there are commercial clubs of entrepreneurs and along the A37 there is an Industrial Society A37. When a company is part of a multinational enterprise, this company participates in the network of subsidiaries of the parent company. Entrepreneurs have also contacts with other entrepreneurs in the same branch and with entrepreneurs in the region (employers organisationVNO/NCW, Chamber of Commerce). Besides, entrepreneurs participate in networks with policy makers. Commonly, networks are inward looking, since they mainly consist of local actors. However, actors from the neighbouring provinces of Friesland, Groningen and Emsland also participate in the networks in an increasing extent. External actors from other regions are less frequently included in the networks. Networks are used for the exchange of information, goods and services. Sometimes they are also used to mobilize joint forces and financial means for broader purposes, for instance the successful action on the doubling of the N37 and the construction of a theatre in Hoogeveen.

Opportunities and threats for entrepreneurs in the near future

Opportunities:
- doubling of the N37 improves the connection with other economic centres outside Drenthe;
- the density of firms is increased by the policies towards clustering of economic activities; hence there is more critical mass and the frequency of contacts between actors increases. This may enhance the general level of knowledge. Moreover, in an environment of many firms, a variety of different skilled employees is available, which facilitates the filling of vacant jobs.

Threats:
- a shortage of research institutes for applied knowledge in Drenthe;
- the thinness of the economic structure, which hampers a close interaction of actors.

6.4 Strategies of farmers

6.4.1 Introduction

The decrease in employment in agriculture in terms of the number of jobs of at least 15 hours a week was relatively small in the 1990s (on average 1.2% per annum). Knowing that the contribution of agriculture to the employment structure is already very small, the decrease of jobs has little impact. If we change from the labour demand to the labour supply, and thus whether farmers and farm women are able to adapt to this decline of employment, it might be emphasized that the farm workers who stop are often older than 60 years. It might be expected that farmer's children are prepared (educated) to deal with the changed labour demand, and thus that the vulnerable category of farm workers are those who will still belong to the working population for some years. Often they do not have relevant experience with other activities on farm (pluriactivity on farm) and with the labour market outside (pluriactivity off farm). Therefore both perspectives will be analysed.

6.4.2 Pluriactivity on farm

Present situation

Until now, in the Netherlands pluriactivity on farm concerns predominantly the home sale of farm products. Processing of farm products, tourism on farm and maintenance of the landscape occurs on few farms. In general, pluriactivity on farm is not an important source of income for farm families. Four out of five farm families belonging to the working population have their main source of income from agricultural production, while the others have it predominantly from pluriactivity *off* farm (Overbeek, 1996). Therefore, it might be asked why farm families do *not* start other activities on farm:

- firstly, the size and organisation of agricultural production might provide better income opportunities;
- secondly, the high land value might sooner stimulate farmers to sell their land;
- thirdly, the physical distance to find a job off farm is small, while the income perspectives are more secure.

However, farm families might prefer other activities on farm, if farmers (women) have problems to reach the primary segment [1] of the labour market off farm, which requires relevant professional and management experience. Further, women might prefer other activities on farm, because these are more easy to combine with care activities.

The attractive landscape provides opportunities for agrotourism. According to the representatives of the farmers union in Drenthe other activities on farm occur less often than it might be expected. Most of tourist activities on farm are small camps (2% of the farms). This

[1] The legal security of jobs is highest in the primary segment of the labour market. It decreases when going to the secundary segment and decreases further when going to the tertiary segment.

supply has often lower value based on less services and more quietness for a lower price than on other camps. Higher value tourism activities like lodging or dining on farm, are less available. Further, according to the representative of farm camps, there is little strategic cooperation to realise arrangements based on different local services or to create a network of providers with similar accommodations (like bed and breakfast circles). The number of camps on farm increased, due to the worse income perspectives in agriculture. However, the income of agri-tourism is too small to be a second main source of income. Farmers are more focused to restrict the number of providers of green tourism than on adding value. However, due to the rising incomes, predominantly the demand for higher value green tourism will increase (Luinstra, 1995). Although LEADER subsidies tend to support higher value green tourism, representatives of farmers camps *fear* them, because they might result in more overall supply. However, most farmers did too few investments to get an additional subsidy. To conclude, many farm(ers women) lack the ideas about the demand of tourists, and thus to reach segments of tourists who are willing to pay more for extra services on farm.

Besides the lack of a relevant strategy for farm tourism, also the budgets for the protection of the landscape and rural amenities have been underused. Further, farm families have used less subsidies for rural development (LEADER and national programmes) because they lack the requirement to cooperate with other stakeholders in rural areas. The result is that more subsidies are applied to support nature objectives, which representatives of the farmers union consider useless for agricultural objectives (like paddling pools).

Future situation

There is a trend to stimulate pluriactivity on farm, like the increase in retail sale of regional products and tourism (NLTO, 1997). However, the representatives of the farmers union are ambiguous about pluriactivity on farm, because they emphasize predominantly the opportunities to increase agricultural production and new agricultural activities like horticulture (like flowers, fruit and trees) and intensive chicken livestock as a second source of income. Therefore, they discuss the demand of land for housing, other enterprises and infrastructure which might restrict the employment in arable and dairy farming, while they hardly integrate the demand for regional products and tourism with agricultural objectives.

6.4.3 Pluriactivity off farm

Present situation

Compared to other EU countries, pluriactivity off farm is less important in the Netherlands. Coherent with the competitiveness of land use, cultural values, conditions to get a loan for investments, agricultural policies and municipal and national policies that support only to take over a *viable* farm which is able to provide a main source of income, there is more often a separation between agricultural and other activities. The result is that there is only a minority of the labour force working in agriculture at regional level, but that at farm level the remaining workers are predominantly employed in agricultural activities.

In Drenthe, one fifth of the oldest farm heads between 15-64 years have a job outside (CBS, Agricultural Census 1996). There is hardly information about the number of women with a job outside, because those women are often not registrated as a farm worker. Results from a representative survey among farm women in The Netherlands show that one fifth of the farmers and one fifth of the farm women have a job of at least 8 hours a week or 50 days a year (Overbeek, 1996). Therefore, if we include the pluriactivity of women and we take into consideration that in some families both men and women are pluriactive, it might be estimated that in Drenthe one third of the farm families are pluriactive off farm. Given the more flexibility of the labour market, representatives of the farmers union stress that in the last years it was not a problem to find a job outside.

Future situation

The number of farm families that tend to combine agricultural production with a job outside is expected to increase. The increase in pluriactivity will be not so much the male inheritors who consider farming as their main source of income, but women who will combine more often child care with paid work. They will continue their own labour perspective for which they have been qualified. The number of men that tend to combine a main job outside with farming is expected to increase to some extent, dependent on whether financial and policy measures support people to have a farm residence and to contribute to the maintenance of a rural landscape.

6.4.4 Conclusion

Representatives of farmers and agritourism concluded that 40% of the farm families earns a good income with agriculture, while 10% of the farm families will stop in the near future. Their concern is more the other 50% of the farm families, which should be prepared to make choices during their working life and to follow a strategy to realise this. Since the employment opportunities in agriculture are restricted, their choices will be more often related with pluriactivity. However, this is still less evident for farm families and reflected in the low investments in physical and human capital to get other activities on and off farm. Thus, although young people (sons) are well prepared to take over a farm, they are hardly prepared for a shift to other professions during their working life. The result is that they will rely predominantly on the employment opportunities in the secondary segment of the labour market. Women are better prepared for a profession in the primary segment, and they will continue this more often during their working life, if the labour organisation on farm and in the household allow them to do this.

6.5 Strategies of labourers, young people and women

In chapter 4, it has been explained that the migration rate is negative for people younger than 40 and positive for older people, while the education level of the labour force and the labour demand is lower than national/urban averages. Hence, young people who followed a tertiary education outside the region perceive fewer job opportunities to return. However, given the increase in physical mobility and the attraction of the landscape for a residence, it might be expected that the number of young qualified people in the region will increase. Although the activity of women in Drenthe is lower compared to women in urban regions, they tend to catch up with this.

Labour unions stress the importance of permanent training by including a number of days in the collective labour agreements to allow employed to follow courses. Although the attitude of labourers towards education and permanent training is improving, the opportunities for training in the region hold predominantly for people with an upper secondary or tertiary education. The representative of the labour union emphasized the lack of attention in the supply of courses for employed with only compulsory education. Further, Drenthe is dominated by small-scaled enterprises, which seems to create problems to develop courses relevant for employed in specific professions.

A discussion about a duality of the labour market makes sense, if both the demand of labour and the supply of labour will be analysed. The problem in Drenthe and in other areas is that the labour demand for jobs in the secondary segment of the labour market is lower compared to the supply of unemployed for this segment. Therefore, the objective of employment offices is to consider predominantly unemployed which have only qualifications relevant for the second segment of the labour market. If people become unemployed, their opportunities to enter the labour market will be analysed (Arbeidsvoorziening Drenthe, 1997). According to this analysis based on the *distance* to the labour market, a qualification strategy for each individual job-seeker is developed. A longer distance to the labour market implies more requirements to invest in training and social qualifications. Since, unemployed have problems to enter the labour market, labour unions give also emphasis to a better flow of low-skilled employed from secondary to primary segments of the labour market. Therefore, they promote more education facilities for low-skilled employed.

Most of the investments for training and social qualifications for unemployed will be related to the labour demand, because employment offices have to cofinance the facilities for training and education with a decrease of unemployment benefits. Therefore, although the share of women that is able to follow courses is similar with their share of registered unemployed (with an unemployment benefit) their share is lower if we take into account the higher share of women in the non working population, and thus the hidden unemployed.

6.6 Analysis of the interaction of internal actors

Interaction of internal actors

Various forms of cooperation exist: between entrepreneurs, between policy makers, between labourers, between farmers and between members from two or more of these groups. The cooperation can be formal, like the Chamber of Commerce, the Industrial Society A37, commercial clubs in the bigger towns, the 'Stedenkring Zwolle-Emsland', trade unions and producer unions (see section 5.3 and 6.3). Informal cooperation also exist, for instance cooperation between personnel managers of different companies, contacts of entrepreneurs and policy makers, contacts of entrepreneurs and members from the employment services, entrepreneurs and schools etc.. The area covered by these different forms of cooperation varies: some cooperations are local; other cooperations cover the whole province. Sometimes brokers are used to establish contacts between actors.

Assessment

Within the networks there is a high degree of solidarity and easy communication. Although on the whole the functioning of the networks is assessed to be reasonable or good, also some critical remarks can be made. Due to the solidarity, actors have more or less a mutual dependency. Hence actors are not always very critical and sometimes no decisions are made. Especially networks in the tourist sector suffer from a lack of decision making power. Besides, the density of actors is relatively low and contacts are not very frequent. As a result contacts between actors have the character of sociability instead of an incentive to innovate, which often occurs in 'more stressed' networks, i.e. networks in an environment with a high density of actors an a high frequency of contacts. With regard to this aspect the functioning of the network could be improved, and therefore some entrepreneurs welcome the further clustering of economic activities and the expansion of economic zones as this may increase the local density of actors.

Within the networks some local leaders can be identified: actors who are able to push and to activate other actors to a large extent. It is striking that local leaders within the group of entrepreneurs often are of non-Drenth origin. This can be explained by the cautious attitude of Drenth people, which originates from the long tradition of inferior peat labour in the region. This means that the functioning of the networks could be improved by the attraction of external entrepreneurs.

6.7 Analysis of the interaction of internal and external actors

Interaction of internal and external actors

External relationships exist in different forms. At the level of regional policy makers, there is a close cooperation with the provinces of Groningen and Friesland. The main reason for this cooperation is that all the northern provinces are located in the periphery of the Netherlands and that they are - right or not right - considered as lagging areas. Despite the cooperation, there was also some competitiveness among the three provinces in their strive to attract new firms. However, in recent years the provinces have more or less left this competitiveness, and now operate as policy makers of one economic area in the northern part of the Netherlands (see section 6.2.1). Due to this cooperation, the three provinces were able to give a joint answer to the Langman report (1997), in which the future national financial support for the economic development in the three provinces was outlined. Besides, contacts with Germany are embodied in the Ems-Dollard Region and the New Hanze Interregion. The emphasize in these contacts is mainly on getting acquainted with the neighbour. Contacts with external actors from other parts of the Netherlands or outside the Netherlands are less frequent. Local policy makers cooperate with other municipalities outside Drenthe, for example in the Stedenkring Zwolle-Emsland along the N37. They joint forces to accelerate the doubling of the N37. Employment services in the municipalities located at the Dutch-German border exchange each other's vacant jobs. Subsidiary businesses have external relationships with the parent company. Although subsidiaries are dependent on the parent company, a lot of knowledge is exchanged in these relationships. Firms have also external relationships with firms outside Drenthe, in order to exchange information, goods and services.

Exogenous/endogenous development model

The dynamics of the region comes both from local actors and external actors. An endogenous force for development is the strategy of policy makers to create zones, in which economic activities are clustered. Another endogenous force is the cooperation of municipalities and firms in the field of the doubling of the N37. The abundant space and the attractive living circumstances can also be referred to as an endogenous force for development. External forces are the congestion in the Randstad. As a consequence firms are pushed to other regions of the Netherlands.

It is striking that local leaders among entrepreneurs in Drenthe have often migrated to Drenthe in the past. They are in fact external actors, who moved into the region and became internal actors. These newcoming actors have the capability to mobilize other local actors, probably due to the fact that their attitude differs from the local actors in Drenthe, who can be characterized as more cautious and risk averting.

The relationship between internal and external actors consists both of cooperation and competitiveness. Cooperation occurs in the field of exchange of information and knowledge and in joint strategies/action groups towards regional development. Competition also exist in the relationship of internal and external actors, since a large part of the regional product in Drenthe is sold at markets outside Drenthe, both in other parts of the Netherlands and abroad.

7. Development of employment: a synthesis

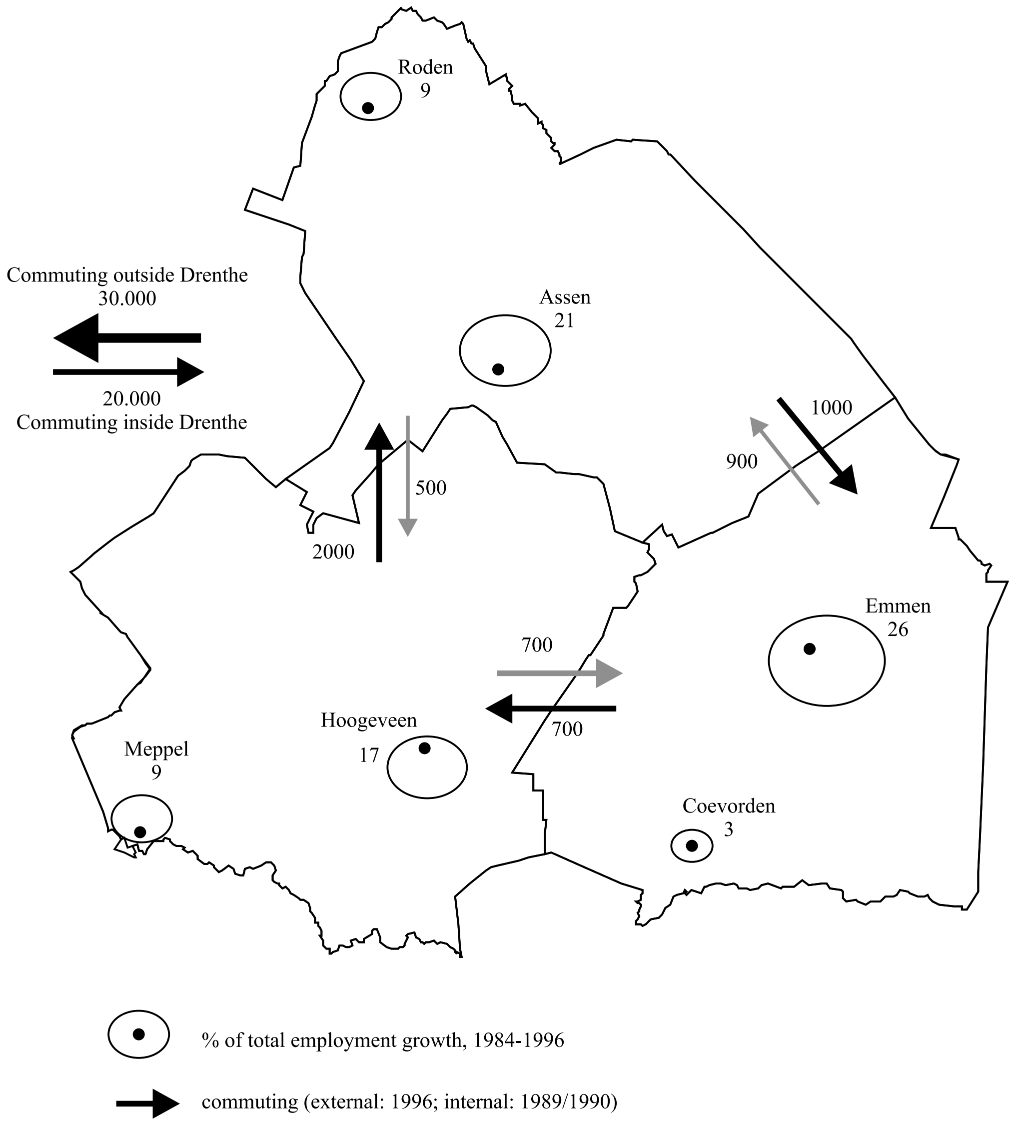
7.1 Introduction

In this chapter first an indication is given of the centres of employment in Drenthe. As a next step a SWOT analysis is made of forces affecting employment creation in 1980 and 1997. In section 7.4 the key factors behind the success of employment growth in Drenthe are identified. In the two last sections an assessment of the policies and strategies towards employment creation and of the interaction process of actors is given.

7.2 Map of the region

During 1984-1996 Emmen had the largest share of total employment growth (26%) followed by Assen (21%), Hoogeveen (17%), Roden (9%) and Meppel (9%) (map 7.1).These 5 municipalities (of the 34 municipalities) have a share of almost 80% of total employment growth in Drenthe. This means that there is concentration of employment growth in Drenthe.

During 1990-1991 about 97,000 persons (84%) of total employed persons in Drenthe (measured at place of residence) commuted inside the region and 17,000 persons (15%) commuted to other regions (CBS, 1993c). The amount of persons commuting from other regions into Drenthe was 10,000, which resulted in a negative commuting balance (-7,000) in 1990-1991. In 1996 the amount of people commuting to other regions has increased to about 30,000 people. The amount of persons commuting from other regions into Drenthe was about 20,000 persons. Drenthe obviously has a negative commuting balance (-10,000). There is only data for internal commuting in Drenthe for the period 1989/1990. The amount of people in North Drenthe commuting to Southwest Drenthe and Southeast Drenthe is respectively 900 and 500 commuters in this period. The amount of commuting people to North Drenthe is larger; 1,000 people from Southeast Drenthe and 2,000 people from Southwest Drenthe. The commuting balance between Southeast Drenthe and Southwest Drenthe is in balance with 700 commuters (Kamer van Koophandel et al., 1994). Compared to commuting inside and outside Drenthe, commuting between the three different parts of Drenthe is relatively small.



Map 7.1 Commuting in Drenthe

7.3 SWOT analysis for 1980 and 1997

The SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is just a convenient and systematic way to analyse the different aspects reported in the previous chapters to identify the key factors of rural employment development. The 1980 SWOT analysis focuses on explaining what was going on in the region in terms of employment while the 1997 SWOT analysis focuses more on the future development of the region in terms of employment.

Strengths and weaknesses are the key factors *within* the region that explain employment development in the region. Elements in the previous chapters forming the local resources, labour demand, labour supply and labour market actors' strategies are systematically reexamined to isolate dominant strengths and weaknesses for employment development. So strengths and weaknesses are characteristics of the region.

Opportunities and threats are the key factors *within* or *outside* the region that may affect the development of rural employment. They may also be identified through a careful re-examination of elements forming the local resources, labour demand, labour supply and labour market actors' strategies. Since opportunities and threats may include elements external to the region, such as market development or national/European regulations, an effort has been made here to broaden the analysis to external factors that may be identified as opportunities and threats for the region. So opportunities and threats are the possibilities to use the strengths of the region. The items of the SWOT are considered from the employment perspective and are based on the assessment of the authors.

SWOT analysis

Strengths and weaknesses

Location of the region (proximity to a large economic centre) in the regional context	1980	1997
Drenthe is located close to the city of Groningen, which is the economic centre of the northern part of the Netherlands. Especially the northern part of Drenthe profits from this location, both in the sense that firms look for a location in the neighbourhood of Groningen and in the sense that employees work in Groningen and live in Drenthe.	+	++

Location of the region (proximity to a large economic centre) in a global context	1980	1997
Drenthe has a peripheral location relatively to the economic centre of the Netherlands (the Randstad in the western part of the country) and to other large economic centres in Europe.	-	-

Local resources which favour employment	1980	1997
Drenthe has an attractive landscape. In the course of time the subjective appraisal for landscape amenities has increased. In combination with a rise in leisure time and hence a larger demand for recreation activities on the one hand and a larger emphasize on the environment of housing on the other hand, the double plus arises in 1997.	+	++

Education level of the labour force	1980	1997
The education level of the labour force lags relatively behind the general level in the Netherlands. The limited supply of highly educated labourers may discourage the settlement of high tech firms in Drenthe.	-	-

Low cost labour	1980	1997
Due to the collective labour agreements (CAO's) the same wages apply in all parts of the Netherlands. So labour costs in Drenthe do not deviate from the other provinces in the Netherlands.	0	0

Well-developed physical infrastructure	1980	1997
The quality of the existing roads is good and there is few congestion. Although the north-south connection (A28) is well-developed, the east-west connection (N37) and in particular the opening up of Emmen, is insufficient.	0	0

Favourable industry structures	1980	1997
The south-eastern part in Drenthe was both in 1989 and in 1994 selected as objective 2 area, which reflects a situation of a traditional industry undergoing restructuring.	-	-

Favourable climate	1980	1997
Although the climate offers favourable working conditions for labourers (not too hot, not too cold), the climate is less favourable for tourists. The season with reasonable weather for cycling and walking is only attractive in summer time. During winter time the climate is unsuitable to provide any open air tourist attractions.	0	0

Favourable amenities	1980	1997
Amenities have been upgraded by policies, amongst other by the reconstruction of the original flows of brooks like the Aa, nature conservation and national parks.	+	++

Capacity (knowledge, skills and attitude) of local actors: *policy makers*	1980	1997
The clustering of economic activities, low land prices and investment subsidies can be assessed to be positive. The insufficient cooperation with the provinces of Groningen and Friesland, and the thwarting of the concentration strategy by policy makers at the municipality level can be indicated as weak points. However, in recent years the cooperation between policy makers of the three northern provinces has been improved.	0	+

Capacity (knowledge, skills and attitude) of local actors: *entrepreneurs*	1980	1997
Entrepreneurs in Drenthe are cautious and risk averting.	-	-

Capacity (knowledge, skills and attitude) of local actors: *labourers*	1980	1997
The attitude of labourers to work is general referred to as good, but the education level of the labour force is relatively low.	0	0

Presence of universities and other major research centres	1980	1997
There are no universities or other large research institutes in Drenthe, although the northern part of Drenthe profits from the neighbourhood from the University of Groningen. There is a lack of smaller research institutes, which are able to transfer knowledge to SME. The general assessment we tend to make here is mix of - and +.	0	0

Capacity of local actors to innovate	1980	1997
Due to the waiting attitude of Drenth people, their capacity to innovate is rather low. New coming people in Drenthe often act as innovators and as a next step, they are followed by Drenth people.	-	-

Entrepreneurial climate: *concentration of firms*	1980	1997
The relatively thinness of the economic structure hampers the creation of networks in which information, products and services can be exchanged.	-	-

Entrepreneurial climate: *favourable policies*	1980	1997
Several factors play a role, like low land prices, investment subsidies, sufficient space and favourable fiscal treatments.	+	+

Specialization of the regional economy *diversification of the regional economy*	1980	1997
Diversification and specialization are more or less two sides of the same coin. The extent of diversification can be measured by looking whether the regional distribution of the different branches in total employment converges towards the national distribution. When regional employment is concentrated in a few branches, the regional economy is specialized. There is no specialisation of production in Drenthe, so no extraordinary sensibility for market fluctuations exists. Specialization in a few sectors can create a critical mass of marketing infrastructure and services, know how, and other external economies in the region that can sustain development and, hence, employment in these specific sectors In 1980 the share of employment in agriculture and industries in Drenthe exceeded the average share of the Netherlands. In the course of the period 1980-1997 the economic structure in Drenthe converged towards the structure of the whole Dutch economy. Diversification in several sectors can minimize risk and facilitate the endogenous development of the region.	0 0	0 +

Vertical coordination within sectors	1980	1997
The situation in Drenthe does not deviate from the average situation in the Netherlands.	0	0

Horizontal coordination across sectors	1980	1997
Due to lack of a sufficient number of enterprises in the neighbourhood, the horizontal coordination is weak. In recent years it has been tried to stimulate horizontal coordination by anchoring of new enterprises close to existing enterprises.	-	-

Internal networks	1980	1997
Within the networks there is a high degree of solidarity and easy communication. Although on the whole the functioning of the networks is assessed to be reasonable or good, actors are not always very critical and sometimes no decisions are made. In the tourist sectornetworks are rather weak. The close cooperation of entrepreneurs (Bedrijvensociëteit A37) and of municipalities (Stedenkring Zwolle-Emsland) in the successful strive for the doubling of the N37, can be seen as a step forward in the functioning of the internal networks.	0	+

External networks	1980	1997
On the whole networks are too much inward looking and insufficient directed towards actors outside Drenthe. In recent years the cooperation with policy makers in the neighbouring provinces Groningen and Friesland has been strengthened.	-	0

Market 'niches'	1980	1997
The situation does not differ from that in the rest of the Netherlands.	0	0

Tourism	1980	1997
As a consequence of an increase in leisure time, the demand for tourist and recreation facilities has been increased. However, the relatively low quality of tourism accommodations can be considered as a negative point.	+	+

Culture of subsidiary business	1980	1997
Decisions on expansion, shrinking, reorganizing or closure of subsidiary business are made in the parent company outside the region. At the beginning of the 1980s changes in the size of the subsidiary business had sometimes large impacts on the employment of blue collar workers. Nowadays, reorganizing of subsidiaries involves all kind of workers, but the situation in Drenthe does hardly differ from other regions in the Netherlands.	-	+

Opportunities and threats

Development of tourism	1980	1997
People have more leisure and higher incomes, which results in a rising demand for recreation and tourism accommodations. In order to use this opportunity, the quality of accommodations has to be improved. A disadvantage in this field is the fact that many people prefer to spend their holidays far away from the place where they live.	+	+

Drenthenieren	1980	1997
Due to the current ageing of population in the Netherlands, there are relatively large numbers of wealthy retirees, who can afford to live in luxury houses and spend a lot of money on leisure activities. Rather large groups of these wealthy retirees migrate from both intermediate and urban regions into Drenthe. These people induce a demand for houses, retail trade services, health services and leisure activities.	0	+

European integration and extension	1980	1997
European integration, in particular closer contacts with the Middle and Eastern European countries and the Scandinavian countries, may result in a new economic corridor from west to north Europe. Drenthe has the advantage that it is located in this corridor and hence can profit from a higher density of economic activities.	0	+

Congestion in the Randstad	1980	1997
Due to congestion in the Randstad, the urban part in the West of the Netherlands, companies shift to the middle parts of the Netherlands and also to the more northern parts like Drenthe.	+	++

Improvements in infrastructure	1980	1997
The doubling of the N37, which will be completed in the early years of the next millennium, implies a promising international connection with the Emslandline for the southern part of Drenthe. Locations along the N37 become attractive for settlement, and a higher density of enterprises may positively affect the overall quality of the entrepreneurial climate and the labour force.	0	+

Reconsideration distribution means EU Structural Funds in 2000	1980	1997
The current measures of the objective 2 and 5b programmes are relatively successful in creating employment. When Drenthe should not be eligible for support from the Structural Funds after 1999, a further improvement of the employment situation in certain less favoured parts of the province might be hampered.	0	-

Further reform of the CAP	1980	1997
Agriculture in the eastern part of Drenthe relies to a large extent on the production of starch potatoes, which are processed near the border in Groningen. When in a further CAP reform the support for starch potatoes should be decreased or abolished, a part of the starch production will probably disappear from the region, which has relatively large consequences for employment in this part of Drenthe.	0	-

Competitiveness with low wage countries	1980	1997
Labour costs in Drenthe are high relatively to low wage countries. Hence there is a danger that companies move from Drenthe to these countries.	-	--

The items above can be summarized in a figure as follows:

SWOT 1980

Strengths		*Weaknesses*	
- location of the region (proximity to a large economic centre) in the regional context	+	- location of the region (proximity to a large economic centre) in a global context	-
- local resources which favour employment	+	- education level of the labour force	-
- favourable amenities	+	- favourable industry structures	-
- entrepreneurial climate: favourable policies	+	- capacity (knowledge, skills and attitude) of local actors: entrepreneurs	-
- tourism	+	- capacity of local actors to innovate	-
		- entrepreneurial climate: concentration	
		- of firms	-
		- horizontal coordination across sectors	-
		- external networks	-
		- culture of subsidiary business	-
Opportunities		*Threats*	
- development of tourism	+	- competitiveness with low wage countries	-
- congestion in de Randstad	+		

Indifferent items are:

Strengths and weaknesses

- *low cost labour*
- *well-developed physical infrastructure*
- *favourable climate*
- *capacity (knowledge, skills and attitude) of local actors: policy makers*
- *capacity (knowledge, skills and attitude) of local actors: labourers*
- *presence of universities and other major research centres*
- *specialization of the regional economy*
- *diversification of the regional economy*
- *vertical coordination within sectors*
- *internal networks*
- *market 'niches'*

Opportunities and threats

- *Drenthenieren*
- *European integration and extension*
- *congestion in the Randstad*
- *improvements in infrastructure*
- *reconsideration distribution means EU Structural Funds in 2000*
- *further reform of the CAP*

The items of the SWOT for 1997 are summarized below:

SWOT 1997

Strengths		*Weaknesses*	
- location of the region (proximity to a large economic centre) in the regional context	++	- location of the region (proximity to a large economic centre) in a global context	-
- local resources which favour employment	++	- education level of the labour force	-
- favourable amenities	++	- favourable industry structures	-
- capacity (knowledge, skills and attitude) of local actors: policy makers	+	capacity (knowledge, skills and attitude) of local actors: entrepreneurs	-
- entrepreneurial climate:		- capacity of local actors to innovate	-
favourable policies	+	- entrepreneurial climate: concentration of firms	-
diversification of the regional economy	+		
- internal networks	+	- horizontal coordination across sectors	-
- tourism	+		
Opportunities		*Threats*	
- development of tourism Drenthenieren	+	- reconsideration distribution means EU Structural Funds in 2000	-
- European integration and extension	+	- further reform of the CAP	-
- congestion in de Randstad	++	- competitiveness with low wage countries	--
- improvements in infrastructure	+		

Indifferent items are:
Strengths and weaknesses
- *low cost labour*
- *well-developed physical infrastructure*
- *favourable climate*
- *capacity (knowledge, skills and attitude) of local actors: labourers*
- *presence of universities and other major research centres*
- *specialization of the regional economy*
- *vertical coordination within sectors*
- *external networks*
- *market 'niches'*
- *culture of subsidiary business*

7.4 Identification of key factors of success

Taking into account the findings in the previous chapters on the local resources, the economic activities (demand of labour), the supply of labour and the strategies of the actors in the region, the results of the SWOT analyses in the previous section, and the field of force of a rural region, we indicate in this section the key factors behind the success of employment growth. A key factor can be seen as the interplay of a specific group of actors who managed to use specific local resources, who are organized in a certain network and who were successful in creating/maintaining employment (in other words, it is more or less a success story of a specific group of actors).

Attractive landscape

The beautiful varied landscape in Drenthe of forests, peats, moors, brooks, esdorp landscape, agricultural landscape and giant graves creates an atmosphere of quietness and green space, which attracts tourists, labourers, entrepreneurs and retirees. The accommodations and services asked by these actors are a source of employment. Moreover, the new coming entrepreneurs also create employment opportunities in their own business.

The neighbourhood of the city of Groningen

Groningen is a main economic centre in the north of the Netherlands, which is located only at a few kilometres distance of the Drenth border. Many companies look for settlement opportunities in the neighbourhood of this city, and often settle in the north of Drenthe. This is a main factor in the creation of employment in Drenthe. Due to the attractive housing circumstances in the northern part of Drenthe, many labourers, who work in the city of Groningen, prefer to live in the northern part of Drenthe.

Favourable business site conditions

Land prices for new establishments in Drenthe are relatively low compared to the more congested western part of the Netherlands (Randstad). Moreover, facilities like investment subsidies and favourable fiscal treatments and the relatively low prices of real estate as well enhance the attractiveness of Drenthe for entrepreneurs looking for a location to settle. Drenthe has applied a concentration policy for locations of settlement. This has two advantages: within certain zones there is a clustering of economic activities, which enhances the density of entrepreneurs and the opportunities for networking, and it contributes to the safeguarding of the attractiveness of other zones for other functions.

7.5 Assessment of policies and strategies towards maintaining and augmenting employment

In this section it is assessed to what extent policies and strategies of policy makers, entrepreneurs, farmers and labourers targeted at maintaining and augmenting employment were effective. Of course, the degree of contribution will be difficult to specify as it is difficult to disentangle factor effects, but it is done tentatively.

Description and assessment of policies and strategies of policy makers towards maintaining and augmenting employment

Regional policy makers do not have one or two focal points in their strategies and policies towards maintaining and augmenting employment, but try to achieve employment growth by various ways. As main strategies of policy makers have been identified:

a. a strategy towards clustering of economic activities in well defined zones;

b. cooperation with the provinces of Groningen and Friesland in the field of regional development; this cooperation has been strengthened in recent years;
c. a strategy towards cooperation at the municipality level along the N37;
d. a strategy towards favourable settlement conditions for firms, in which the focus recently shifted from attracting new firms towards supporting existing firms.

Description and assessment of the policies and strategies of entrepreneurs towards maintaining and augmenting employment

Although companies are a direct source of employment, usually the purpose of a firm is not to create employment but to make profits. In order to achieve this goal a firm needs labour and a location of settlement. In the past decade main incentives for firms for settlement in Drenthe were low land prices, a large supply of unskilled labour, investment subsidies and a favourable fiscal treatment. These incentives are external factors for entrepreneurs. However, firms like to be in a neighbourhood, where other firms have been settled as well. So the settlement of one firm acts as attractive force for other firms.

An important strategy of entrepreneurs was their cooperation towards the doubling of the N37. The new A37 will attract many new firms and hence boost employment. The cooperation resulted in the creation of the Industrial Society A37, which still acts as an important incentive for interaction among firms.

Description and assessment of the policies and strategies of farmers towards maintaining and augmenting employment

So far the most important strategy of farm households has been to adapt by farm enlargement, mainly by an increase in the agricultural area. This strategy is still dominant but other strategies are gaining in importance. In this respect a slight tendency towards diversification of farm activities and the introduction of on-farm activities like camp sites and nature conservation can be mentioned. The participation of farm women in off-farm activities is limited, but increasing.

Description and assessment of the policies and strategies of labourers towards maintaining and augmenting employment

The trade unions stress the importance of training: they take care that this strategy is covered in collective labour agreements and strive to increase the opportunities for training for employees, especially for employees with only compulsory training. Just in this group there are many unemployed. Employment offices have developed a qualification strategy for each individual job seeker with respect to social qualifications. This last point is very relevant as there are many persons, which are already for a long time unemployed. Due to the financing system and the fact that the share of women in hidden unemployment is relatively high, there are less opportunities for training for women.

Many young people leave the region to study elsewhere and do not return after completing their study.

Successful policies and strategies of actors towards maintaining and augmenting employment

The two most successful strategies towards augmenting employment were:
- the creation of favourable settlement conditions for firms by providing investment subsidies, low land prices and a spatial planning policy in which the focus was on a clustering of economic activities in well-defined areas along the A28 and the N37;
- the cooperation of policy makers and entrepreneurs towards the doubling of the N37.

7.6 Assessment of the interaction process of actors

Within the networks there is a high degree of solidarity and easy communication. Although on the whole the functioning of the networks is assessed to be reasonable or good, also some critical remarks can be made. Due to the solidarity, actors have more or less a mutual dependency. Hence actors are not always very critical and sometimes no decisions are made. Especially networks in the tourist sector suffer from a lack of decision making power. Besides, the density of actors is relatively low and contacts are not very frequent. As a result contacts between actors have the character of sociability instead of an incentive to innovate, which often occurs in 'more stressed' networks, i.e. networks in an environment with a high density of actors an a high frequency of contacts. With regard to this aspect the functioning of the network could be improved, and therefore some entrepreneurs welcome the further clustering of economic activities and the expansion of economic zones as this may increase the local density of actors.

Within the networks some local leaders can be identified: actors who are able to push and to activate other actors to a large extent. It is striking that local leaders within the group of entrepreneurs often are of non-Drenth origin. This can be explained by the cautious attitude of Drenth people. This means that the functioning of the networks could be improved by the attraction of external entrepreneurs.

Contacts with external actors from other parts of the Netherlands or outside the Netherlands are less frequent, which are for a part due to distance. However, with the neighbouring provinces a rather long tradition of cooperation exists, which has increased in recent years. There is also cooperation with the German region Emsland and with non-Drenth municipalities of the Stedenkring Zwolle-Emsland.

The most obvious result of the interaction process is the doubling of the N37.

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Annex 1 List of interviewed persons

Mr. E.J.J. Akkerman	Afdeling Noord VNO-NCW (Employers organisation for the northern provinces)	Haren
Mr. E. Bolhuis	NLTO (Northern Agriculture and Horticulture Organisation)	Assen
Mr. T. Breimer	Ministerie EZ, Regio Noord (Ministry of Economic Affairs, Department North)	Groningen
Mrs. A. Brusse	Provincie Drenthe (Province of Drenthe)	Assen
Mr. S. Faber	Burgemeester Hoogeveen (Mayor of Hoogeveen)	Hoogeveen
Mr. B.G.H. Jacobse	ISP/NOM (Investment and development company for the Northern Netherlands, department of masterplan for the northern part of the Netherlands ISP)	Groningen
Mrs. F. Kamps	VEKABO (Society for camping at farmers)	Zweelo
Mr. J.W. de Klein	Gemeente Hoogeveen (Municipality of Hoogeveen)	Hoogeveen
Mr. D. Koolman	Provincie Drenthe (Province of Drenthe)	Assen
Mr. A. Lanting	NLTO (Northern Agriculture and Horticulture Organisation)	Assen
Mr. A. Peterson	NOM (Investment and development company for the Northern Netherlands)	Groningen
Mr. G. Piek	Provincie Drenthe (Province of Drenthe)	Assen

Mrs. C. Postumus	Provincie Drenthe (Province of Drenthe)	Assen
Mr. P.B.M. Raumann	Arbeidsvoorziening Drenthe (Regional Board for the Employment Service in Drenthe)	Assen
Mrs. A. Rensen	Noorderdierenpark (oud-directeur) (Former manager of the zoo in Emmen)	Emmen
Mr. R.J.B. Sjouke	AKZO-Nobel (Chemical industry firm)	Emmen
Mr. J. Strijker	TVM (Transport Insurance Company)	Hoogeveen
Mr. K.T. Uitham	FNV (Non-confessional trade union)	Groningen
Mr. J. Weener	Kamer van Koophandel Meppel (Chamber of Commerce in Meppel)	Meppel

Annex 2 Overview of publications of the RUREMPLO project

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Annex 3 Tables

Table A2.1 Temperature, sunshine and precipitation in Drenthe a) and the Netherlands b) (averages for the period 1961-1990)

	J	F	M	A	M	J	J	A	S	O	N	D	Year
Temperature (daily averages in degrees Celsius)													
Drenthe	1.3	1.6	4.1	7.2	11.6	14.6	15.9	16.0	13.4	9.8	5.4	2.5	8.6
Netherlands	2.2	2.5	5.0	8.0	12.3	15.2	16.8	16.7	14.0	10.5	5.9	3.2	9.4
Sunshine (hours per month)													
Drenthe	39	68	103	151	195	192	180	182	129	94	53	33	1,417
Netherlands	47	77	107	153	197	192	187	185	134	103	55	43	1,480
Precipation (mm per month)													
Drenthe	67	44	58	48	56	69	80	70	69	71	80	76	787
Netherlands	73	52	67	55	63	74	77	72	68	70	80	86	835

a) Measured in Eelde; b) Measured in De Bilt (in the center of the Netherlands).
Source: Koninklijk Nederlands Meteorologisch Instituut (KNMI).

Table A2.2 Surface of lakes in Drenthe

	Total surface (hectares)	Surface in Drenthe (hectares)	% Surface in Drenthe
Zuidlaardermeer	650	150	23.1
Paterswoldsemeer	300	5	1.7
Leekstermeer	170	170	100.0

Source: Zuiveringsschap Drenthe, 1997.

Table A2.3 Infrastructure endowments in Drenthe, 1980-1995

Variable	1980	1985	1990	1994
Motorways, length (Km)	75	76	82	84
Motorways, density (M/Km² total area)	28	28	31	31
Other roads, length (Km)	5,265	5,644	6,001	6,215
Other roads, density (M/Km² total area)	1,964	2,106	2,239	2,319
Railways, length (Km)	122	107		
Railways, density (M/Km² total area)	46	40		
Navigable canals and rivers, length (Km)	161	161	161	161
Navigable canals and rivers, density (Km/total area)	0.06	0.06	0.06	0.06

Source: Eurostat, Regio Database; adaption LEI.

Table A2.4 Distances between locations in Drenthe and to locations outside Drenthe (in km and minutes)

	Assen	Emmen	Hoogeveen	Meppel	Groningen	Zwolle	Utrecht	Amsterdam
Km:								
Assen	x	42	36	55	27	76	166	182
Emmen	42	x	35	54	56	72	162	189
Hoogeveen	36	35	x	19	62	43	130	152
Meppel	55	54	19	x	81	27	114	136
Groningen	27	56	62	81	x	105	195	203
Zwolle	76	72	43	27	105	x	91	108
Utrecht	166	162	130	114	195	91	x	37
Amsterdam	182	189	152	136	203	108	37	x
Minutes:								
Assen	x	45	25	40	25	55	105	125
Emmen	45	x	35	50	60	65	120	135
Hoogeveen	25	35	x	15	40	30	140	160
Meppel	40	50	15	x	55	20	75	90
Groningen	25	60	40	55	x	70	120	120
Zwolle	55	65	30	20	70	x	60	80
Utrecht	105	120	140	75	120	60	x	40
Amsterdam	125	135	160	90	120	80	40	x

Source: CD-ROM Auto Lease Holland, 1993.

Table A2.5 Distances between Emmen and some important locations in Germany (in km)

Emmen	-	Oldenburg	169
Emmen	-	Bremen	208
Emmen	-	Hamburg	300
Emmen	-	Osnabruck	124
Emmen	-	Hannover	255

Source: CD-ROM Auto Lease Holland, 1993.

Tabel A2.6 Numbers of different types of schools in Drenthe

	1985/'86	1990/'91	1995/'96
Primary schools (basisschool)	349	354	315
Special (secundary) schools	29	31	30
Secundary schools (MAVO, HAVO, VWO)	44	38	13
Lower vocational secundary schools (VBO)	38	28	11
Higher secundary vocational training (MBO)	14	10	5
Higher vocational schools (HBO)	11	1	1
Universities	0	0	0

Source: CBS, Onderwijsstatistieken, several years.

Table A3.1 Employment growth in the different branches, 1984-1996

SBI 74		Employed people a) 1984	1996	Absolute growth	Growth as % of total	Distribution of employed people (%) over size classes, 1996 (in employees) 1-9	10-49	50-99	100>
	Agriculture, hunting, forestry and fishing	*13,289*	*11,103*	*-2,186*	*-8.9*	.	.	.	.
01	Agriculture	13,088	10,916	-2,172	-8.9	.	.	.	.
02	Forestry	201	187	-14	-0.1	.	.	.	.
	Mining and quarrying	*1,928*	*1,993*	*65*	*0.2*	*2.9*	*12.5*	*6.3*	*78.2*
19	Other mining	1,928	1,993	65	0.3	2.9	12.5	6.3	78.2
	Manufacturing	*26,988*	*29,849*	*2,861*	*11.7*	*7.3*	*16.3*	*12.7*	*63.6*
20	Food and stimulants	3,815	2,486	-1,329	-5.4	15.7	27.3	14.3	42.6
22	Textile industries	612	490	-122	-0.5	9.6	11.2	25.3	53.9
23	Wearing apparel industries	256	147	-109	-0.4	34.0	11.6	54.4	0.0
24	Leather industries	50	101	51	0.2	8.9	21.8	69.3	0.0
25	Wood, and wood products, including furniture	557	690	133	0.5	38.1	33.0	9.3	19.6
26	Paper and paper products	380	344	-36	-0.1	2.0	0.0	20.6	77.3
27	Printing and publishing	1,383	1,653	270	1.1	17.2	20.0	36.3	26.6
28	Petroleum industries	11	14	3	0.0	100.0	0.0	0.0	0.0
29	Chemical industries	668	551	-117	-0.5	2.0	9.1	0.0	88.9
31	Rubber and plastic industries	3,981	3,634	-347	-1.4	1.0	8.0	5.6	85.4
32	Building, earthenware, and glass industries	564	700	136	0.6	13.4	32.0	21.3	33.3
33	Basic metal industries	35	89	54	0.2	3.4	96.6	0.0	0.0
34	Fabricated metal product industries	3,574	3,883	309	1.3	12.8	31.5	15.9	39.7
35	Machinery industry	1,416	1,893	477	2.0	7.9	38.5	26.1	27.5
36	Electronic industry	2,249	2,646	397	1.6	3.3	7.1	16.8	72.8
37	Means of transport industry	1,276	1,960	684	2.8	4.8	14.8	7.8	72.6
38	Instruments, and optical industry	1,640	3,361	1,721	7.0	2.4	8.2	4.3	85.2
39	Other manufacturing industry	4,521	5,207	686	2.8	1.2	3.6	4.2	91.0
	Electricity, gas and water	*749*	*852*	*103*	*0.2*	*4.8*	*10.8*	*32.4*	*52*
40	Electricity, gas and water	749	852	103	0.4	4.8	10.8	32.4	52.0
	Construction	*10,552*	*13,707*	*3,155*	*12.9*	*20.2*	*42.9*	*17.3*	*19.6*
51	Construction industry	8,714	10,882	2,168	8.9	20.6	44.2	17.4	17.8
52	Construction installation industry	1,838	2,825	987	4.0	18.5	37.9	17.0	26.6
	Trade, restaurants an,d hotels	*19,599*	*25,696*	*6,097*	*24.9*	*56.8*	*29.5*	*6.0*	*7.6*

Table A3.1 (continued)

SBI 74		Employed people a) 1984	1996	Absolute growth	Growth as % of total	Distribution of employed people (%) over size classes, 1996 (in employees) 1-9	10-49	50-99	100>
61	Wholesale	4,878	7,783	2,905	11.9	33.7	37.3	10.8	18.2
65	Retail	9,290	11,180	1,890	7.7	68.3	25.7	5.1	0.9
67	Hotels, restaurants, cafes	3,173	4,131	958	3.9	71.2	21.2	1.9	5.7
68.	Repair industries for durable goods	2,258	2,602	344	1.4	53.9	36.2	2.2	7.6
	Transport, storage and communication	*4,033*	*5,531*	*1,498*	*6.1*	*22.7*	*40.7*	*23.7*	*12.9*
71	Rail roads	174	176	2	0.0	3.4	54.0	42.6	0.0
72	Road traffic	2,398	3,838	1,440	5.9	21.4	44.8	21.7	12.2
73	Maritime shipping	44	1	-43	-0.2	100.0	0.0	0.0	0.0
74	Inland navigation	81	103	22	0.1	100	0.0	0.0	0.0
75	Aviation	58	61	3	0.0	44.3	55.7	0.0	0.0
76	Transport services	147	344	197	0.8	51.7	27.9	20.3	0.0
77	Communication	1,131	1,008	-123	-0.5	11.8	30.4	33.3	24.5
	Finance, insurance, real estate and business service	*7,776*	*11,197*	*3,421*	*14.0*	*39.1*	*34.5*	*14.6*	*11.8*
81	Financial institutions	1,719	2,050	331	1.4	26.4	56.5	17.1	0.0
82	Insurance	678	1,386	708	2.9	28.3	10.5	5.4	55.8
83	Real estate	795	1,236	441	1.8	45.0	32.9	9.4	12.7
84	Business services	4,441	5,822	1,381	5.6	46.2	34.1	17.5	2.2
85	Machine letting	143	316	173	0.7	58.2	19.9	21.8	0.0
86	Holder companies	0	387	387	1.6	3.4	27.1	0.0	69.5
	Community, social and personal services	*31,474*	*40,911*	*9,437*	*38.6*	*14.5*	*21.5*	*12.8*	*51.2*
90	Public management, defense, social insurance	7,479	9,343	1,864	7.6	1.2	21.9	17.9	59.1
91	Religious organizations	185	186	1	0.0	84.9	15.1	0.0	0.0
92	Educational services	6,707	7,112	405	1.7	21.3	38.6	15.3	24.8
93	Medical, dental, other health and veterinary services	8,844	13,329	4,485	18.3	9.0	3.4	2.3	85.2
94	Social services	4,490	5,240	750	3.1	3.9	39.3	28.0	28.8
95	Social and cultural institutes	1,243	1,780	537	2.2	35.4	35.2	11.4	18.0
96	Sports and recreational services	625	917	292	1.2	63.5	19.6	16.9	0.0
97	Business, and employer organizations	330	348	18	0.1	10.1	62.6	27.3	0.0
98	Other services	1,571	2,621	1,050	4.3	56.3	15.3	10.1	18.3

Table A3.1 (continued)

SBI 74		Employed people a) 1984	1996	Absolute growth	Growth as % of total	Distribution of employed people (%) over size classes, 1996 (in employees) 1-9	10-49	50-99	100>
99	Houses with people in the pay	0	35	35	0.1	5.7	94.3	0.0	0.0
	Total employment	*116,388*	*140,839*	*24,451*	*100.0*	*22.1*	*23.9*	*11.6*	*34.5*

a) 1984: people who work more than 15 hours a week, 1996: people who work more than 12 hours a week.
Source: Provinciaal Werkgelegenheids Register, adaption LEI.

Table A3.2 The amount of employees and self-employers in Drenthe, 1987-1994

x 1,000		Total labour force		Abs. growth
		1987	1994	
0	Agriculture, hunting, forestry and fishing	14	11	-3
1	Mining and quarring	.	.	.
2/3	Manufacturing	29	33	4
4	Electricity, gas and water	.	.	.
5	Construction	13	12	-1
6	Trade, restaurants and hotels	22	25	3
7	Transport, storage and communication	6	7	1
8	Finance, insurance, real estate and business services	9	12	3
9.	Community, social and personal services	46	57	11
Unknown		.	.	.
Total		145	163	18

		Employees		Abs. growth	% growth	% of total growth in employees	% of total growth
		1987	1994				
0	Agriculture, hunting, forestry and fishing	.	.	.	.	.	.
1	Mining and quarring	.	.		.	.	.
2/3	Manufacturing	29	32	3	10	18	16
4	Electricity, gas and water	.	.	.	.	.	.
5	Construction	12	11	-1	-8	-6	-5
6	Trade, restaurants and hotels	18	19	1	6	6	5
7	Transport, storage and communication	6	7	1	17	6	5
8	Finance, insurance, real estate and business services	8	10	2	25	12	11
9	Community, social and personal services	44	54	10	23	59	55
Unknown		.	.	.	.	.	.
Total		125	142	17	14	100	93

Table A3.2 (continued)

	Selfemployers 1987	Selfemployers 1994	Abs. growth	% growth	% of total growth in employees	% of total growth
0 Agriculture, hunting, forestry and fishing	10	8	-2	-16	-89	-9
1 Mining and quarring	.	.	.	.	.	.
2/3 Manufacturing	.	.	.	.	.	.
4 Electricity, gas and water	.	.	.	.	.	.
5 Construction	.	.	.	.	.	.
6 Trade, restaurants and hotels	5	6	1	29	77	7
7 Transport, storage and communication	.	.	.	.	.	.
8 Finance, insurance, real estate and business services	.	.	.	.	.	.
9 Community, social and personal services	.	.	.	.	.	.
Unknown	.	.	.	.	.	.
Total	19	21	2	9	100	10

Source: CBS, Labour Force Survey; adaption LEI.

Table A3.3 Employment in the nine main size classes, 1984-1996 (absolute numbers and in % of total increase, exclusive agriculture)

	Size classes (in employees)									
	1-9		10-49		50-99		100>		total	
	absolute growth	as % of total increase	absolute growth	as %of total increase	absolute growth	as % of total increase	absolute growth	as %of total increase	absolute growth	as % of total increase
Mining and quarrying	15	0.1	95	0.4	39	0.1	-84	-0.3	65	0.2
Manufacturing	363	1.4	774	2.9	-291	-1.1	2,015	7.6	2,861	10.7
Electricity, gas and water	-10	-0.0	-165	-0.6	-64	-0.2	342	1.3	103	0.4
Construction	50	0.2	1,203	4.5	409	1.5	1,493	5.6	3,155	11.8
Trade, restaurants and hotels	1,455	5.5	2,775	10.4	837	3.1	1,030	3.9	6,097	22.9
Transport, storage and communication	158	0.6	415	1.6	552	2.1	373	1.4	1,498	5.6
Finance, insurance, real estate and business services	2,097	7.9	906	3.4	532	2.0	-114	-0.4	3,421	12.8
Community, social and personal services	-402	-1.5	550	2.1	397	1.5	8,892	33.4	9,437	35.4
Total employment	3,726	14.0	6,553	24.6	2,411	9.1	13,947	52.4	26,637	100.0

Source: Provinciaal Werkgelegenheids Register, adaption LEI.

Table A3.4 The ratio of part-time and full-time employees in Drenthe, 1987-1994 (x 1,000)

	Total labour force		Abs. growth			
	1987	1994				
0 Agriculture, hunting, forestry and fishing	14	11	-3			
1 Mining and quarring	.	.	.			
2/3 Manufacturing	29	33	4			
4 Electricity, gas and water	.	.	0			
5 Construction	13	12	-1			
6 Trade, restaurants and hotels	22	25	3			
7 Transport, storage and communication	6	7	1			
8 Finance, insurance, real estate and business services	9	12	3			
9. Community, social and personal services	46	57	11			
Unknown	.	.	.			
Total	145	163	18			
	Part-time		**Abs. growth**	**% growth**	**% of total growth in part-timers**	**% of total growth**
	1987	**1994**				
0 Agriculture, hunting, forestry and fishing	3	2	-1	-33	-9	-6
1 Mining and quarring	.	.	.	.	.	.
2/3 Manufacturing	3	4	1	33	9	6
4 Electricity, gas and water	.	.	.	.	.	.
5 Construction	1	1	0	0	0	0
6 Trade, restaurants and hotels	6	7	1	17	9	6
7 Transport, storage and communication	1	1	0	0	0	0
8 Finance, insurance, real estate and business services	2	2	0	0	0	0
9 Community, social and personal services	16	25	9	56	82	50
Unknown	.	.	.	.	.	.
Total	33	44	11	33	100	61

Table A3.4 (continued)

		Full-time		Abs. growth	% growth	% of total growth in full-timers	% of total growth
		1987	1994				
0	Agriculture, hunting, forestry and fishing	11	9	-2	-18	-29	-11
1	Mining and quarring	.	.	.	.	.	.
2/3	Manufacturing	26	29	3	12	43	17
4	Electricity, gas and water	.	.	.	.	.	.
5	Construction	12	11	-1	-8	-14	-6
6	Trade, restaurants and hotels	16	18	2	13	29	11
7	Transport, storage and communication	5	6	1	20	14	6
8	Finance, insurance, real estate and business services	7	10	3	43	43	17
9	Community, social and personal services	30	32	2	7	29	11
Unknown		.	.	.	.	.	.
Total		112	119	7	6	100	39

Source: CBS, Labour Force Survey; adaption LEI.

Table A3.5 The ratio of part-time and full-time employees in the Netherlands in the different branches, 1987-1994 (x 1,000)

		Total labour force		Abs. growth
		1987	1994	
0	Agriculture, hunting, forestry and fishing	249	236	-13
1	Mining and quarring	13	10	-3
2/3	Manufacturing	1,036	1,021	-15
4	Electricity, gas and water	50	47	-3
5	Construction	365	387	22
6	Trade, restaurants and hotels	908	1,096	188
7	Transport, storage and communication	324	383	59
8	Finance, insurance, real estate and business services	506	672	166
9.	Community, social and personal services	1,744	2,012	268
Unknown		63	55	-8
Total		5,257	5,920	663

		Part-time		Abs. growth	% growth	% of total growth in part-timers	% of total growth
		1987	1994				
0	Agriculture, hunting, forestry and fishin	46	47	1	2	0	0
1	Mining and quarring	1	1	0	0	0	0
2/3	Manufacturing	131	141	10	8	3	2
4	Electricity, gas and water	3	5	2	67	1	0
5	Construction	36	30	-6	-17	-2	-1
6	Trade, restaurants and hotels	219	312	93	42	25	14
7	Transport, storage and communication	47	67	20	43	5	3
8	Finance, insurance, real estate and business services	81	130	49	60	13	7
9	Community, social and personal services	619	818	199	32	54	30
Unknown		16	17	1	6	0	0
Total		1,198	1,569	371	31	100	56

Table A3.5 (continued)

		Full-time 1987	1994	Abs. growth	% growth	% of total growth in full-timers	% of total growth
0	Agriculture, hunting, forestry and fishing	203	189	-14	0	0	0
1	Mining and quarring	12	9	-3	-25	-1	-0
2/3	Manufacturing	905	880	-25	-3	-9	-4
4	Electricity, gas and water	47	42	-5	-11	-2	-1
5	Construction	329	357	28	9	10	4
6	Trade, restaurants and hotels	689	784	95	14	33	14
7	Transport, storage and communication	277	316	39	14	13	6
8	Finance, insurance, real estate and business services	425	542	117	28	40	18
9	Community, social and personal services	1,125	1,194	69	6	24	10
Unknown		47	38	-9	-19	-3	-1
Total		4,059	4,351	292	7	100	44

Source: CBS, Labour Force Survey; adaption LEI.

Table A3.6 Some other agricultural variables in Drenthe and other Dutch regions (1989/90)

Variable	Drenthe	National	Intermediate regions				Most urban regions						
			Gronin-gen	Fries-land	Flevo-land	Zee-land	Over-ijssel	Gelder-land	Utrecht	Noord-Holland	Zuid-Holland	Noord-Brabant	Limburg
Part time farmers (%)	28	32	33	31	13	37	32	40	29	26	21	35	37
Rate of pluriactivity in agriculture (%)	15	23	18	17	18	26	24	33	24	17	16	28	21
Age structure of the agricultural labour force farm holders who are also manager; based on number of persons)													
< 35 year (%)	8	9	7	8	13	6	6	10	9	8	11	12	10
35-44 year (%)	20	21	21	23	36	17	18	19	24	21	22	21	20
45-54 year (%)	27	28	30	28	27	27	26	25	28	31	29	27	31
55-64 year (%)	31	28	28	28	17	32	29	28	25	28	26	29	27
>= 65 year (%)	14	14	13	13	7	18	21	18	15	12	12	11	12
Number of farms (x 1,000)	6.5	124.8	5.2	8.7	2.6	5.1	14.3	22.5	4.8	9.1	15.0	21.9	9.2
(Economic) size of farms (SGM/holding in esu)	47	52	53	52	86	47	38	38	43	63	79	51	52
Composition of agricultural production in 1990													
total agricultural production (mln ecu)	639	15,748	535	945	501	382	1,305	2,404	490	1,133	2,961	3,113	1,340
crop production (%)	38	43	48	16	83	82	6	18	22	77	87	23	41
cereals (%)	1	1	9	1	6	12	0	0	0	1	1	1	1
animal production (%)	62	57	52	84	17	18	94	82	78	23	13	77	59
cattle (%)	11	10	9	15	3	3	15	21	13	4	2	10	5
pigs (%)	8	17	5	3	1	4	28	25	20	1	2	37	27
milk (%)	32	22	30	59	10	6	42	24	39	16	8	18	10
Composition of farming types													
cereal farms (%)	0	0	2	0	0	3	0	0	0	0	0	0	0
general cropping farms (%)	28	15	38	7	68	63	5	5	2	14	10	12	19
horticultural holdings (%)	3	14	3	2	7	4	1	7	7	39	49	10	20
vineyards (%)	0	0	0	0	0	0	0	0	0	0	0	0	0
permanent crop holdings (%)	1	5	1	1	7	10	1	6	7	3	8	5	7
dairy farms (%)	34	29	29	59	11	4	48	30	46	22	18	23	12
drystock farms (%)	21	18	18	27	3	6	22	24	23	18	10	16	11
granivore farms (%)	5	9	3	3	1	1	10	13	7	1	1	21	16
mixed farms (%)	9	10	6	2	4	9	13	15	8	2	3	13	15

Source: Eurostat REGIO and EUROFARM/FSS; adaption LEI-DLO.

Table A4.1 Age structure of population in Drenthe and other Dutch regions (in % of total population), 1981-1995

	Drenthe			National	Intermediate	Most urban
	1981	1990	1995	1990	1990	1990
0-14 years	21	18	19	17	18	17
15-24 years	19	16	12	17	17	17
25-34 years	15	15	15	17	16	17
35-44 years	13	16	16	16	16	16
45-54 years	12	12	14	12	11	12
55-64 years	10	10	10	9	9	10
>= 65 years	11	13	14	12	13	12

Source: Eurostat, Regio Database; adaption LEI.

Table A4.2 Not-working population by gender and age structure in Drenthe and other Dutch regions, 1983-1995

	Drenthe			National	Intermediate	Most urban
	1983	1990	1995	1990	1990	1990
Not-working population (% of working age population, 15-64 years)	45	38	32	34	36	34
By age structure a):						
15-24 years	56	48	38	44	47	43
25-34 years	30	22	18	20	21	20
35-44 years	33	22	18	22	24	22
45-54 years	41	36	29	32	33	32
55-64 years	71	72	72	69	70	69
By gender b):						
Male	25	23	20	20	22	20
Female	65	52	44	48	51	48

a) As % of total persons in the age group in the working age population (15-64 years); b) As % of male and female persons in the working age population (15-64 years).
Source: Eurostat, Regio Database; adaption LEI.

Table A4.3 Education level of the employed population in Drenthe and other Dutch regions, 1985-1995 (in %)

	Drenthe		National	Intermediate	Most urban
	1985	1995	1995	1995	1995
Working age population					
Lower secundary education	48	33	31	33	31
Upper secundary education	37	48	44	47	43
Tertiary education	13	19	25	21	25
Employed persons					
Total					
Lower secundary education	49	32	30	31	30
Upper secundary education	37	48	45	47	44
Tertiary education	14	20	25	21	26
Male a)					
Lower secundary education	49	32	33	36	33
Upper secundary education	37	49	43	45	43
Tertiary education	14	19	24	19	24
Female a)					
Lower secundary education	49	32	31	30	31
Upper secundary education	37	44	43	46	42
Tertiary education	14	24	26	24	27

a) Figures for male and female are for 1993 instead of 1995.
Source: CBS, Enquête Beroepsbevolking, 1985 and 1995 and CBS, Regionale gegevens over arbeid, 1993; adaption LEI.

Table A4.4 Part time workers in Drenthe and other Dutch regions, 1983-1995 a)

	Drenthe			National	Intermediate	Most urban
	1983	1990	1995	1990	1990	1990
In 1,000 persons						
Part time workers	25.8	48.4	74.3	1989.3	263.5	1,725.8
By sector:						
Agriculture	2.2	2.1	4.8	83.8	14	69.8
Industries	3.2	6.7	10.0	234.3	30.2	204.1
Services	20.3	39.2	54.5	1,658.7	217.8	1,440.9
By gender:						
Male	5.4	13.6	20.7	584.2	73.6	510.7
Female	20.4	34.8	53.6	1,405.1	189.9	1,215.1
In % of total workers						
Part time workers	19	28	39	32	31	32
By sector:						
Agriculture	17	17	35	28	24	29
Industries	7	13	20	14	13	14
Services	27	37	46	39	40	38
By gender:						
Male	6	12	18	15	14	15
Female	50	58	71	59	62	59

a) Due to differences in definitions about part timers this table does not correspond with table A3.4.
Source: Eurostat, Regio Database; adaption LEI.

Table A5.1 Employment growth and unemployment in the municipalities and COROP areas of Drenthe, 1984-1996

	1984	1996	abs. growth	growth yearly	% of total growth	Unemployment (1996) (Not-working job-seekers)
North Drenthe	*39,786*	*49,225*	*9,439*	*2.0*	*38.2*	*10.6*
Anloo	962	1,000	38	0.4	0.2	9.5
Assen	18,801	24,065	5,264	2.3	21.3	16.1
Borger	2,867	2,937	70	0.2	0.3	13.3
Eelde	1,609	1,835	226	1.2	0.9	7.5
Gasselte	681	857	176	2.1	0.7	13.0
Gieten	1,669	1,278	-391	-2.4	-1.6	12.3
Norg	1,666	1,773	107	0.6	0.4	8.2
Peize	713	708	-5	-0.1	-0.0	9.3
Roden	3,774	6,098	2,324	4.5	9.4	11.4
Rolde	1,467	1,806	339	1.9	1.4	8.3
Smilde	1,458	1,592	134	0.8	0.5	11.3
Vries	1,962	2,504	542	2.2	2.2	9.6
Zuidlaren	2,157	2,772	615	2.3	2.5	7.8
Southeast Drenthe	*39,231*	*47,103*	*7,872*	*1.7*	*31.9*	*13.1*
Coevorden	5,151	5,759	608	1.0	2.5	14.3
Dalen	1,011	1,133	122	1.0	0.5	9.7
Emmen	26,244	32,691	6,447	2.0	26.1	17.6
Odoorn	1,772	1,789	17	0.1	0.1	12.1
Oosterhesselen	861	886	25	0.3	0.1	13.2
Schoonebeek	2,290	2,399	109	0.4	0.4	13.7
Sleen	1,361	1,900	539	3.1	2.2	13.6
Zweeloo	541	546	5	0.1	0.0	10.3
Southwest Drenthe	*37,120*	*44,509*	*7,389*	*1.7*	*29.9*	*10.5*
Beilen	4,318	4,787	469	0.9	1.9	9.6
Diever	733	760	27	0.3	0.1	11.1
Dwingelo	744	918	174	1.9	0.7	10.5
Havelte	877	1,248	371	3.3	1.5	11.4
Hoogeveen	13,399	17,591	4,192	2.5	17.0	15.0
Meppel	9,379	11,482	2,103	1.9	8.5	14.2
Nijeveen	448	409	-39	-0.8	-0.2	7.2
Ruinen	1,973	1,596	-377	-1.9	-1.5	9.1
Ruinerwold	719	651	-68	-0.9	-0.3	8.1
Vledder	644	821	177	2.2	0.7	11.5
Westerbork	1,344	1,427	83	0.5	0.3	10.0
De Wijk	802	921	119	1.3	0.5	9.8
Zuidwolde	1,740	1,898	158	0.8	0.6	9.5
Province	*116,137*	*140,837*	*24,700*	*1.8*	*100.0*	*13.5*

Source: RuG, 1985 and 1997; adaption LEI and Stelder and Van Dijk, 1997.