The strength of locality in the Achterhoek

A study on the relation between locality, demographic shrinkage, and the labour market.

Source image: (Trouw, 2020)

Master's Thesis

Student: Meyron Cauwels

Student number: s1024172

Internship: 8RHK ambassadeurs

Supervisor Internship: Caroline Termaat

Supervisor RU: prof. dr. Arnoud Lagendijk

Radboud University Nijmegen

July 2022

8RHK ambassadeurs

Radboud University

Preface

Dear reader,

In front of you is my Master's Thesis 'The strength of locality in the Achterhoek'. With this Master's Thesis, I will complete my master's degree in Human Geography with a specialization in Economic Geography at the Radboud University in Nijmegen. The study focuses on a subject I am interested in, namely the labour market and demographic situations of a region. This is because I come from such a region myself.

I want to thank some people who helped me during the process of writing my Master's Thesis. At first, my supervisor from the Radboud University, prof. dr. Arnoud Lagendijk, helped to shape my thesis in the beginning stages of the process and gave helpful feedback. I also want to thank my fellow students, who gave feedback on my thesis during the thesis labs. Furthermore, I would like to thank my supervisor from the internship, Caroline Termaat, for allowing me to work at their organization and for helping me to contact the respondents. And lastly, I would like to thank all the respondents that have participated in this research.

Enjoy the reading!

Meyron Cauwels

Doetinchem, July 2022

Summary

The Achterhoek is facing a shortage in the labour force in the coming years. There will be a shortage of 1,450 employees per year in the coming years. This is caused by a greying population in the region and the departure of youth. The Achterhoek is a region that is famous, among Dutch people, for its togetherness and community feeling. According to many people, the flag of the Achterhoek can be found everywhere in the region. On top of that, in the region, there is a lot of the so-called 'noaberschap'. This way of locality feeling can be a solution to tackle the problems in the labour market and the demographic situation.

This research aims to find out how a strong locality has an influence on the labour market and the demographic situation of the Achterhoek. The following main question has been formulated for this research: 'How can a strong locality in the Achterhoek develop the labour force and with that limit demographic shrinkage?'. Where locality is a combination of various aspects of a region, namely business- and management culture, the functioning of the housing- and labour market, and the interaction and cooperation between organizations in the Achterhoek.

To get an answer to this main question, representatives of municipalities and the province were interviewed. On top of that, is a policy analysis of these governmental layers. Furthermore, there is an analysis of the survey that is performed by Moventem and 8RHK ambassadors. At last, there has been a focus group with experts on this topic.

The results showed that there is indeed a strong locality in the Achterhoek, with a strong foundation of cooperation between companies and governmental layers. This strong foundation has a positive influence on the development of the labour force. However, there are still improvements possible in the cooperation between organizations. So, the locality has a positive influence on the labour market. However, the labour force has almost no influence on the demographic situation. It is the other way around; the demographic situation determines the developments in the labour market. When there is a strong locality in a region there is indeed a positive influence on the labour force, however, the labour force does not influence the demographic situation. The demographic situation influences the labour force and is supported by the strength of the locality in the region.

Based on these results, there are three recommendations made for the Achterhoek region. Firstly. there is currently a lack of HR management and -departments in the region. There are investments needed to stimulate companies in integrating such departments into their organization. Secondly, the Achterhoek is an innovative region with a lot of potential, however, it is barely known by people in- and outside the region. So, there is an investment needed where a general label is created which can be used by everyone in the Achterhoek. Lastly, the potential of the current population in the Achterhoek is not being used optimally. The study programs of schools do not fit properly with the job opportunities in the region. On top of that, there is a focus on attracting university and college students from outside the region. But when there will be more focus on the current youth and supporting them with retraining, there are opportunities to strengthen the labour force in that way.

Table of Contents

1. Introduction

1.1 Project Orientation

Over the last couple of decades, Europe has experienced a significant demographic transition. This demographic transition has affected the population of the continent. It is caused by a low birth rate, a stable death rate, and a rising life expectancy (van de Kaa, 1987). Eventually, this transition leads to a greying population. However, this greying of the population differs in Europe. Some regions are greying faster than other regions. The border regions of countries, mostly seen as the peripheral areas in a country, are greying faster than the centre and more prosperous areas in a country. (Sohn & Stambolic, 2015).

The Netherlands is one of the countries that is experiencing such a greying population. However, there are differences within the Netherlands itself. The rural areas and border regions are experiencing more demographic changes than the rest of the country, which eventually can lead to demographic shrinkage (de Groot, van Dam, & Daalhuizen, 2013). The Dutch government has named nine regions in the Netherlands as shrinkage regions. These are Noordoost-Friesland, Het Hogeland, Eemsdelta, Oost-Groningen, Achterhoek, Zeeuws-Vlaanderen, Westelijke Mijnstreek, Parkstad Limburg and Maastricht-Mergelland (see figure 1). On top of that, there are fourteen regions that are considered as regions that need anticipation to prevent further shrinkage (Government of the Netherlands, 2018).

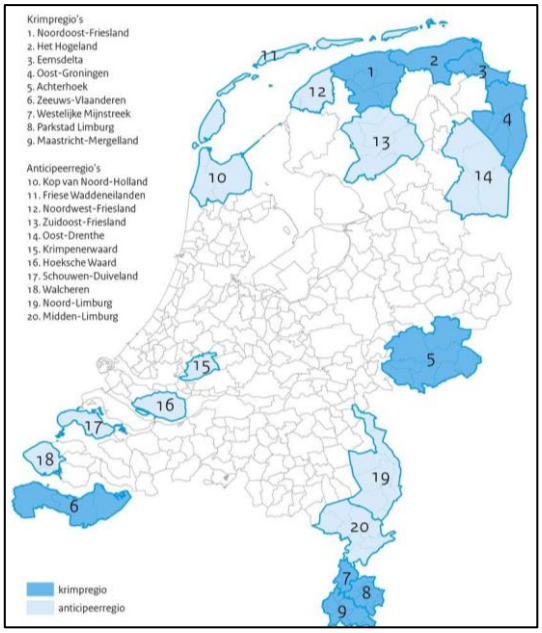

Figure 1: Shrinking- and anticipation regions in the Netherlands (Government of the Netherlands, 2018)

Most of the greying and shrinking of the population takes place in the so-called Randland (Meier, Reverda, & van der Wouw, 2015). This is not only a geographical demarcation, but it is a concept of thinking. This concept addresses the potential of (shrinking) regions located in the Randland. The issue of an aging population is not only located in the Randland of the Netherlands, but it will eventually occur in the Randstad as well. The experiences and practices that are used in the current shrinking regions, can be very useful in the future demographical problems of the Netherlands (Meier et al., 2015). A region that can be subdivided into the Randland is the Achterhoek, which will be the case in this research.

The Randland experiences issues that are already familiar with demographic problems in rural areas. These problems are the out-migration of young people to the cities; a loss of services; and problems in the labour market (Hospers, 2019). The out-migration of young people to urban areas, in among others the Randstad, causes an increasing percentage of elderly people in the region, and with that less labour force (Hospers, 2019).

The Achterhoek is one of the nine regions the Dutch Government sees as a shrinking region (Government of the Netherlands, 2018). The region is demographically shrinking, younger people move away, and the elderly stay in the region (de Groot et al., 2013). With that, the age of the population rises and the availability of the labour force shrinks. According to the UWV (Employee Insurance Agency), the shortage of employees in the region will increase more in the coming years. The potential labour force, which is the population between 15 and 75 years, will decrease by 5.9% in

the Achterhoek (de Gelderlander, 2021a). The cause of this decrease in the labour force is linkable to the aging population in the Achterhoek.

1.2 Problem description

The Achterhoek is a region that is famous, among Dutch people, for its togetherness and community feeling. According to many people, the flag of the Achterhoek can be found everywhere in the region. On top of that, in the region, there is a lot of the so-called 'noaberschap' (De Groene Amsterdammer, 2020). It means the connection between neighbors and people living in the region. Despite living further away from each other, because of farms and larger distances between villages, the people in the Achterhoek are visiting each other more than for example people in the Randstad (De Groene Amsterdammer, 2020). Because of this feeling of togetherness, the thought could be that the region does not have a lot of demographic issues. However, the region is struggling with a departing and greying population for the last few years.

According to research in 2019 by Achterhoek VO, an organization of schools in the region, the number of youths decreased the most in the Achterhoek compared to other regions in the Netherlands. To be more detailed, the number of youths decreased by 40.9%, which is at least 5% more than any other region in the Netherlands (Achterhoek VO, 2019). With that fact, the elderly ratio is increasing, which eventually will lead to a changing composition of the labour force and a shortage in the labour market (Derks, Hovens, & Klinkers, 2006).

The prognosis of the population in the Achterhoek is not promising any good either. In the coming 20 years, the population in the Achterhoek will decrease by 5.3%, from 263,000 inhabitants in 2021 to 248,000 inhabitants in 2040 (Koster, de Vor, & van de Wiel, 2021). While the Achterhoek will face a shrinking population size, the total population in the Netherlands will increase by 9% in the same period, as can be seen in figure 2 (Koster, de Vor, & van de Wiel, 2021).

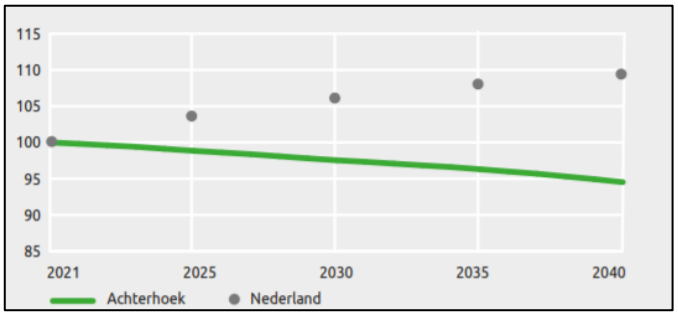

Figure 2: Prognosis of population development in the Achterhoek and the Netherlands 2021-2040 (Koster et al., 2021, p.81)

Another issue in the Achterhoek is the labour market. Nowhere else in the country the labour force drops as fast as in the Achterhoek, with -12% till 2030 (8RHK Ambassadeurs, 2019). A report in 2019 stated that in the coming years the region needs to attract 27,000 more workers, where 7,000 should have a university or college degree; 14,000 a secondary vocational degree; and 6,000 a preparatory secondary vocational degree (8RHK Ambassadeurs, 2019). However, this number has recently been adjusted to 14,000 workers (de Gelderlander, 2021b) The focus is mainly on the technic sector because the demand is the highest in that sector.

Since 2007 employment in the Achterhoek has slightly increased by 3.6%. However, compared with the total employment in the Netherlands, which has increased by 11.9%, the Achterhoek stays behind on a long-term basis (Koster, de Vor, & van de Wiel, 2021). This is visualized in figure 3. So, the employment in the Achterhoek is

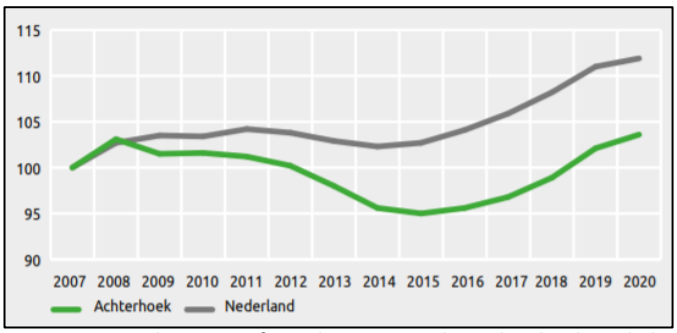

Figure 3: Development of employment in the Achterhoek and the Netherlands 2007-2020 (Koster et al., 2021, p.19)

slightly increasing, it is still far behind the total of the Netherlands, which will have effects on the region on a long-term basis.

As written before, the region will need around 7,000 workers with a college or university degree in the coming years (8RHK Ambassadeurs, 2019). In the region, there is a lack of colleges and universities. This means that high-educated youth will depart the region for education. It leaves a gap in the population that is aged between 20 and 40 years old (de Gelderlander, 2018). Eventually, it will affect the labour force in the region. For the development of the region, it could be crucial to attract these high educated (young) people to the region or keep them in the region. During the Covid-19 pandemic, there were projects between the organization 8RHK and municipalities to keep students in the Achterhoek (de Gelderlander, 2021c).

Continuing on the education level of the population in the Achterhoek, the 8RHK calls the region a '*MBO-economy'* (van de Wiel, Koster, & Hospers, 2021). With that, they mean that the biggest part of the population has a secondary vocational degree. Especially in comparison with the surrounding regions, the Achterhoek has a lower percentage of higher educated people. In the Achterhoek the percentage is 26.7%, while in the regions *Arnhem, Twente,* and *Stedendriehoek* are respectively 38.9%, 32.9%, and 32.8% (van de Wiel et al., 2021). So, a crucial factor in the development of the Achterhoek could be attracting students and interns to the region, but more importantly, keeping them in the region. A strong locality, in the way of cooperation between organizations, could be the solution.

1.3 Scientific relevance

In the scientific field, there is already a significant amount of demographic shrinkage and its effects on a region. Most of this literature is about the causes and the effects of demographic shrinkage. Several Dutch studies address the most prominent regions where shrinkage takes place and what the effects are on the population and the labour market (van Dam, de Groot, & Verwest, 2006; Meier et al., 2015; Bock et al., 2019; Hospers & Syssner, 2018). Despite all this literature, the effects of locality in a region on demographic shrinkage and the labour force are barely studied. This research will try to build on these existing theories and literature with the case of the Achterhoek.

The combination of research with locality, demographic shrinkage, and the labour market has rarely been done. There are studies where locality in a region is being studied and what locality contents. In the study from Meijer & van der Krabben (2018), the effects of local authorities and their participation in the development of the Achterhoek is described. The study concluded that outsourcing had positive effects and that local people in the Achterhoek had more influence in the region. Furthermore, Rutgers-Zoet & Hospers (2018) have written about the regional cooperation in the Achterhoek and evaluated the partnerships that have been created towards a collective agenda. The results and conclusion, from these studies, can be used in this research to expand further. A study in Spain by Sanchez, Molero, & Rama (2016) focused on how the cooperation of several multinationals could improve the demographic situation in the region. The results of the study were mixed because the cooperation had positive effects on the development of the labour force, however, the demographic situation did not improve that much (Sanchez et al., 2016).

There is also a study by Musikaphan, Sawangdee, Chamratrithirong, & Jampaklay (2009) that focuses on the relation between locality and out-migration. They concluded that existential locality, which is for example activities and facilities in a region, influences the out-migration of people. This study can be very interesting in researching the relationship between locality, demographic shrinkage, and the labour market.

1.4 Societal relevance

The latest numbers from a report indicate that the Achterhoek will face a lot of pressure on the labour market in the coming years (de Gelderlander, 2021b). It is caused by many people retiring in the area, especially in the healthcare, IT, and technic sectors. The region will have a shortage of 1,450 people per year (de Gelderlander, 2021b). This thesis can give insight to organizations and the governmental layers into the possibilities of a strong locality in the Achterhoek. These insights might help develop projects in tackling the out-migration of youth and with that will reduce the demographic shrinkage, with the hope of strengthening the labour market in the region. On top of that, companies can be supported by these organizations and governmental layers in keeping the youth in the region or even attracting departed youth.

Furthermore, the results from this study in the Achterhoek can be used by the Dutch Government in the future because the demographic shrinkage is now taking place in the Randland regions, but it will eventually spread throughout the entire country, even in the Randstad (Meier et al., 2015).

1.5 Research goal

The issue of demographic shrinkage and with that a decreasing labour market in the Achterhoek is challenging, but the sooner action is taken, the region will face fewer effects of it. The goal of this research can be formulated as the following: *get an insight into the possibilities of locality in tackling demographic shrinkage and a decreasing labour market in the Achterhoek*. This research attempts to form solutions and recommendations for local organizations, governmental layers, and companies regarding this issue.

With this research the following results will be produced:

- An insight into the current strength and effects of locality in the Achterhoek.
- An insight into the possibilities for local organizations, governmental layers, and companies to focus on locality in tackling demographic shrinkage in the Achterhoek. These results can help implementing strategies and projects on this issue.
- An insight into the possibilities for local organizations, governmental layers, and companies to focus on locality in strengthening the labour market in the Achterhoek. This can be used in making the region more attractive for (young) employees to stay or come to the region.

1.6 Research questions

In short, this research is mainly focused on getting an insight into several concepts in the Achterhoek region. These concepts are locality, labour force, and demographic shrinkage. With that the following main question is formulated:

- *How can a strong locality in the Achterhoek develop the labour force and with that limit demographic shrinkage?*

To answer this main question, and lay focus on the different concepts, it is further divided into four sub-questions. With these sub-questions, the research will try to study the relations between the given concepts, within the Achterhoek. The sub-questions are formulated as the following:

- *How strong is the locality and what are its effects in the Achterhoek?*
- *To what extent and how can a strong locality limit demographic shrinkage in the Achterhoek?*
- *How can locality strengthen the labour force in the Achterhoek?*
- *To what extent and how is there a relation between the labour force and the demographic situation in the Achterhoek?*

1.7 Reading Guide

The following chapter in this thesis will contain the theoretical frame, where existing literature on the concepts is being reviewed and presented in a conceptual model. Chapter 3 will contain the methodology of this research. Chapter 4 will describe the operationalization of the concepts. This eventually leads to chapter 5, where the findings and results of the research are presented. Chapter 6 will present the conclusion and recommendations of this thesis. This will be followed by a reflection in chapter 7. And finally, the used literature is presented in chapter 8, which is followed with the attachments of the thesis.

2. Theoretical frame

This chapter will discuss the literature on the concepts and variables that are used in this research, these are locality, demographic shrinkage, and the labour market. It will discuss the literature and will give definitions for the concepts. It will conclude with an expected answer and/or relation between the variables in this study, presented in a conceptual frame.

2.1 What is locality?

Locality is a term that many geographers have written about, which has led to many definitions and theories. The term locality has become complex and involves the analysis of a mixture of spatial and social processes (Urry, 1987). This coming section will try to give an overview of this literature about locality. Which eventually will lead to a specific definition of how locality will be used in this research.

According to Byrne (1998), the term locality is a replacement for community. This originated from community studies on local social systems in the 1960s, which pleaded for a different term, because of the astructural usage of the term community (Byrne, 1998). However, the term locality could only be used if there were "*communities with a distinctive and unique local culture"* (Urry, 1987, p. 443). So, the focus of these studies was the on community in a region, which separately on their behaviour.

There are, however, many geographers that disagree with this use of locality. For example, Bagguley et al. (1990) use locality as a way of describing the spatial processes in a region, and this method has arisen to attempt to make these complex intersections understandable. Doreen Massey (1993) explains these complex processes of locality. Locality is "*the functioning of local labour markets and housing markets, the dynamics of gender relations, the functioning of local households and their dominant structures"* (Massey, 1993, p. 147). Furthermore, she writes that all these aspects should be theorized on the specific local level because that is where the most crucial processes are operated (Massey, 1993).

More recent literature has studied locality in a globalizing world, and how this affects local processes. The actions of a country on the global market influence every specific region in a country. For example, local processes are being transformed or expanded to make them more global. However, much of the global interactions of institutions, businesses, and individuals in regions are characterized by their unique local value, this is called global locality (Alfasi & Fenster, 2009). Furthermore, Clarke (2013) addresses that despite the more global activity of countries that locality is from significant value, which is according to Clarke (2013) the political-administrative level and regional day-to-day activities and experiences below the national level. Overall, he addresses the importance of locality in regions for the development of countries.

According to Peth (2018), locality can be defined as the following: "(*trans)locality is a variety of enduring, open, and non-linear processes, which produce close interrelations between different places and people. These interrelations and various forms of exchange are created through migration flows and networks that are constantly questioned and reworked."*. This definition is more based on regional interactions between rural and urban areas, which are crucial for the development of the area.

The study of Musikaphan et al. (2009) takes a different view on locality. It describes the existential locality of a region. With that, they aim at the social activities and relations in a region, which are close distance to the location where people live. The existential locality influences on the out-migration of people, when people have enough activities and social relations within their living environment, they are less likely to migrate out of the region (Musikaphan et al., 2009).

In this research, locality will be used as a concept to describe the described literature. Where locality consists of the interactions between companies, local inhabitants, organizations, and the local government; the business culture in the region; the complex processes, as Massey (1993) describes them; the interaction between rural and urban areas; and the social activities and relations which impacts the out-migration of a region. In this way, the locality of the Achterhoek can be studied in detail and what effects it has on the demographics and labour force of the region.

When applying the concept of locality to the Achterhoek region, the studies from Meijer & van der Krabben (2018) and Rutgers-Zoet & Hospers (2018) can be useful. Both studies look at the collaboration of different actors in the Achterhoek. Within the region, there is a strong relationship between actors that are responsible for the economy and management in the region. Thanks to outsourcing, the inhabitants of the Achterhoek are involved in decisions on crucial projects in the region, this provides a stronger feeling of locality in the Achterhoek (Meijer & van der Krabben, 2018). With the establishment of 8RHK in the region, the cooperation between organizations, entrepreneurs, and governmental layers is increasing. In this way, decisions and projects are accepted and discussed by all actors in the Achterhoek, which strengthens the locality (Rutgers-Zoet & Hospers, 2018).

2.2 Demographic shrinkage

The public considers demographic shrinkage often as a decreasing total number of inhabitants in a region, however, this approach is too narrow for the phenomenon of demographic shrinkage (van Dam et al., 2006). Besides the total population in a region, demographic shrinkage also contains for example a decrease in households or a decrease in specific parts of the population, like ethnicity or age. On top of that, a decrease in households with a certain income can be seen as a form of demographic shrinkage. To get an overview, van Dam et al. (2006) have given three terms in which a region can experience demographic shrinkage:

- In terms of numbers, these are inhabitants and households;
- In terms of population composition by age and ethnicity; and
- In terms of household composition by size, income, education level, and stage of life.

An interplay of macro-processes on the local scale can cause any form of demographic shrinkage in a region. Such macro-processes relate to political, economic, demographic, and environmental issues (Rink, Haase, & Bernt, 2009). Demographic shrinkage takes place when one or more of these macro-processes lead to a population decline, which can be divided into natural decline or out-migration in the region (Rink et al, 2009). Building on this, are Bontje & Musterd (2012), who define demographic shrinkage as the decline of population and the local labour force. Furthermore, there is a relation between local planning factors and policies in a region and demographic shrinkage (Bontje & Musterd, 2012).

Demographic shrinkage is in most cases seen as a negative development for a region. "*What first comes to mind is a series of expected losses, including the loss of services, the loss of spending power, the loss of tax and other municipal sources of income, the loss of labour force, and the loss of investments.*" (Bontje & Musterd, 2012, p. 157). In a study, Hoekveld (2012) explains the loss of the labour force further. When a region must cope with an aging population, the labour force will drop, which eventually leads to problems for companies to find employees. This could lead to the departure of companies in a region (Hoekveld, 2012). Furthermore, when a region experiences demographic shrinkage, it ends up in a negative spiral, which is difficult to get out of. There could be more vacant houses and/or decay of the living environment, which could affect the presence of services in the region (van Dam et al., 2006).

One of the first theories about demographic shrinkage and differences between peripheral- and central areas of a country, was written by Myrdal (1957). He writes about the establishment of companies in a region, and how this improves job- and career opportunities in that region. Eventually, the region will develop into an attractive establishment climate. However, where one region will grow and develop, another region will decline and shrink in size. These are called the *backwash effects*: the price that shrinking regions must pay for the success of growing regions (Myrdal, 1957).

Regardless of the negative effects of demographic shrinkage, there are also possible positive effects. These are specifically direct effects for the affected region, but they can be used as a way for making other regions future-proof against demographic shrinkage (Bontje & Muster, 2012; Meier et al., 2015; van Dam et al., 2006). Another positive effect is described by Myrdal (1957), however, this is a process that happens after a longer period. The *backwash effects* will eventually lead to *spread effects*, which means that the growth in the central areas stagnates, because of higher prices or lack of space, and people and/or businesses move back to peripheral areas (Myrdal, 1957).

2.3 Labour force development

In regions where the population is shrinking or aging, the labour market is affected. The labour force in a region is influenced by the number of economically active people. "*It is the ratio of the number of persons that are not economically active (i.e., those that are not in the labour force) to those who are (i.e., those that are in the labour force) that is of crucial interest, since this provides an estimate of the economic burden on those that are economically active*." (Loichinger, 2015, p. 459). The Netherlands is in a phase where the population is aging, which means that the number of economically active people will decrease. Figure 4 visualizes the population development in the Netherlands (CBS, 2021a):

- with the orange line the total pressure (*the sum of the number of people aged between 0 and 20 and people aged 65 and over, in relation to people aged 20 to 65*) (CBS, 2021b);
- the yellow line visualizes the green pressure (t*he ratio between the number of people aged 0 to 20 and the number of people aged 20 to 65)* (CBS, 2021c);
- and finally, the purple line is for the grey pressure (*the ratio between the number of people aged 65 or over and the number of people aged 20 to 65)* (CBS, 2021d).

The graph in figure 4 shows that the 'grey' population in the Netherlands is increasing in the last couple of years, this is due to the baby-boom generation after the Second World War. This affects the labour force and -market, especially in the *Randland* regions (Cörvers, 2019). For that reason, the connection between the more urban areas in the *Randstad* and the more rural areas in the *Randland* should be improved, limit the impact on regional labour markets (Hospers, 2019).

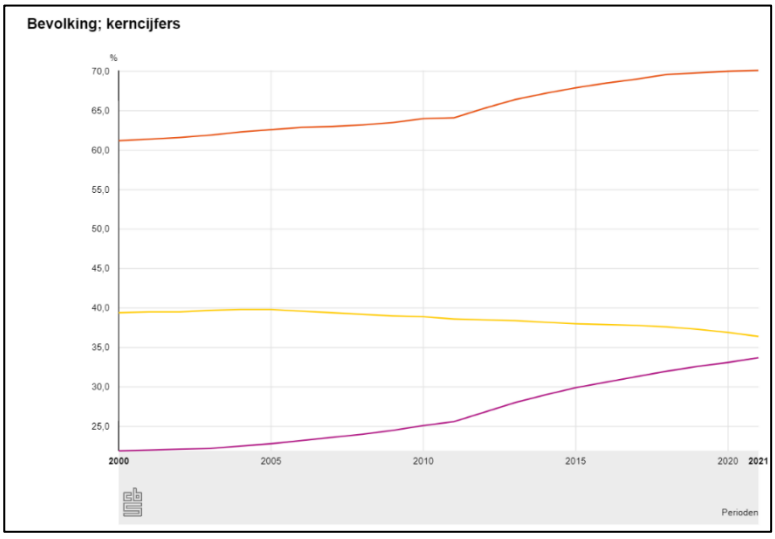

Figure 4: Population Development in the Netherlands (CBS, 2021a)

However, the composition of the labour market influences on the demographic situations in *Randland* regions. According to Cörvers (2019), "*It is a challenge to combine different economic activities in the Randland with each other with an eye for quality of life of the population*." (p. 108). In other words, a

region like the Achterhoek should specialize and profile certain sectors to create new business activities and with that job opportunities for employees (Córvers, 2019). These new business activities can attract people from the *Randstad* to move to the Achterhoek for job opportunities and the living environment. In this way, the local labour force and/or labour market will improve and the demographic shrinkage in the region will decrease.

Another factor that influences the labour force in a region, is the education level of the population (Loichinger, 2015). The labour market in Europe is currently based on tertiary work, which is mostly accessible to people with a high education level (Loichinger, 2015). However, the work that is needed in the other sectors, is still crucial in the economy of European countries. In the last couple of decades, it can be seen that there is a shortage in labour force in the secondary and primary sectors (Loichinger, 2015). This shortage mostly affects labour markets in the more rural areas of countries, and in the Netherlands, the *Randland* (Córvers, 2019; Hospers, 2019). On top of that, these regions often cope with a lack of colleges and/or universities, which causes an out-migration of high-educated youth. This is not ideal with a large number of elderly retiring, which causes a loss of strength in the labour force (Koster, de Vor, & van de Wiel, 2021).

2.4 Conceptual model

Based on this theoretical frame, an expected answer to this study can be formulated. At first, the different angles of locality that are discussed could conclude that there is a strong locality feeling present in the Achterhoek. Among the inhabitants is a lot of togetherness, where everyone helps each other. Besides that, the cooperation between the 'big' actors (organizations, entrepreneurs, and government) is actively present in the region (Rutgers-Zoet & Hospers, 2018). Especially with the meetings of these actors at thematic tables of the 8RHK. These meetings develop plans and programs where the labour market and the demographic situation could improve. So, according to the literature, the feeling of locality could indeed have positive effects on the development of the labour market and eventually the demographic situation in the Achterhoek.

The literature also confirms that there is a relation between the labour market and the demographic situation of a region. At first, when the population in a region is shrinking, which is in the Achterhoek caused by the departure of youth and a greying population, the labour market is affected. The number of economically active people will decrease and will cause a shortage of employees in the Achterhoek (Loichinger, 2015). With investments in the attraction of students, interns, and employees from outside of the region, the demographic situation would improve. This eventually will have a positive effect on the labour market. Secondly, with developing a favourable business climate, more entrepreneurs and businesses will move towards the Achterhoek. This will increase job opportunities in the region, which could cause a flow of people moving into the Achterhoek (Córvers, 2019). So, the labour market and the demographic situation are closely related to each other.

On the next page, in figure 5 is the conceptual model of this research visualized. It is based on the literature and theory described in the theoretical frame. In this section, the relations between the variables are described.

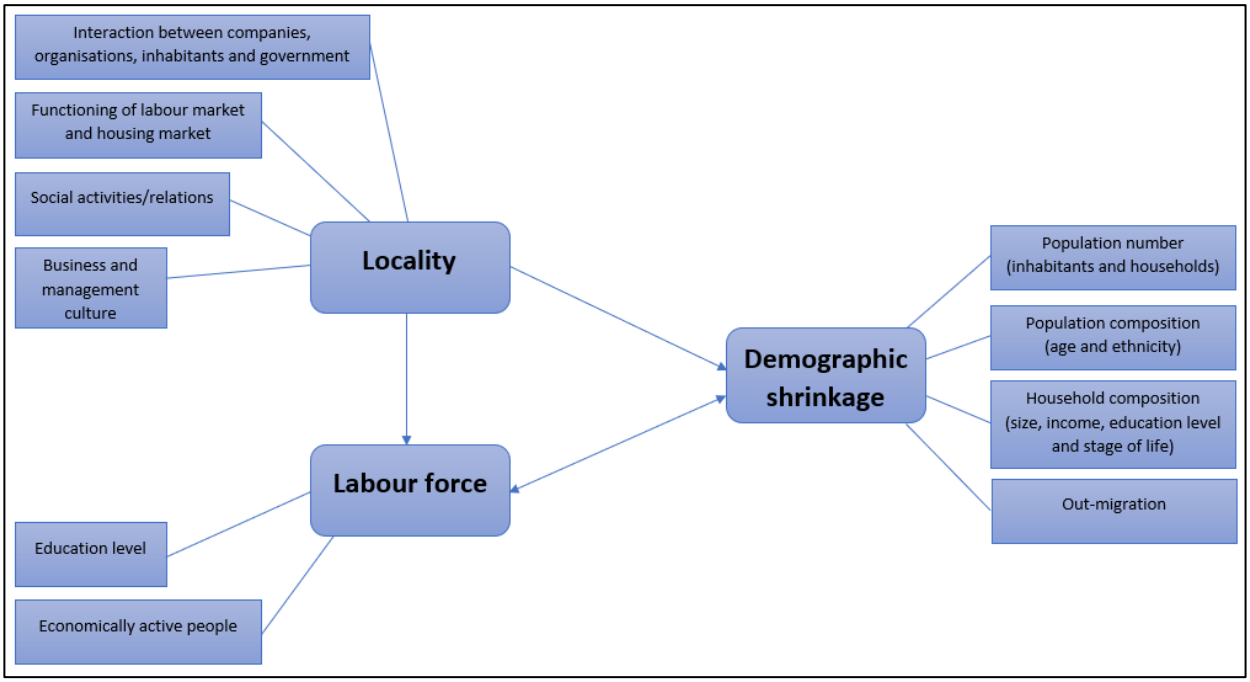

Figure 5: Conceptual model

At first, the relation between locality and demographic shrinkage. In this research, locality is divided into the following parts: interaction between local companies, organizations, inhabitants, and government; functioning of the labour- and housing market; social activities/relations; and business- and management culture. These all together and the relations make the locality of a region. This could have a positive effect on the demographic situation in a region, which in this case is a region with demographic shrinkage.

Secondly, this form of locality can help to improve the labour force in the Achterhoek. The attraction of employees will increase with an attractive working and establishing environment in the region, which can be created if there is a lot of interaction in the locality of a region. With that, there will arrive more employees and new companies in the Achterhoek. This has a positive effect on the labour force in the region.

Thirdly, there is a relation between labour force and demographic shrinkage, which is in both directions. This means that the labour force in a region influences the demographic shrinkage and the other way around. For example, the population composition can influence the number of economically active people in a region. This relation between the labour force and the demographics in the Achterhoek can be crucial in the development of the region. The labour force can be seen as the extra strength impulse in limiting demographic shrinkage. This relation will be studied in the fourth sub-question of this study.

With this conceptual model, the following hypothesis of this research is formed: *if the locality in a region is strong, it will have a positive influence on the labour force and eventually on the demographic situation.*

3. Methodology

This study tries to provide an answer to the problem of demographic shrinkage in the Achterhoek, with a focus on locality and the labour force. This chapter will explain the way of data collection and analysis in order to answer the main question. Paragraph 3.1 will focus on the used research design. Paragraph 3.2 will describe the methods of data collection. And finally, the third paragraph will focus on the reliability and validity of this research.

3.1 Research Design

To study the relation between locality, the demographic situation in the Achterhoek, and the labour force, a combination of qualitative and quantitative research has been chosen as the most suitable. According to Bleijenbergh (2015), qualitative research is a way of research that tries to collect and interpret linguistic data to be able to make one or more statements about a phenomenon. Baarda & de Goede (2001) describe that qualitative research is about describing and understanding empirical reality. And thereby consider the context where the aspects and phenomena occur. The qualitative sources of this research will consist of internal documents, news articles, interviews, and literature. The collected data used in this research are coded with the program Atlas.ti, which makes coding systematic and structured. The qualitative data is coded and interpreted by the researcher, during this process there is a code or label connected (van Thiel, 2010). With quantitative research, a broad insight into the relation between locality, demographic shrinkage, and the labour market can be developed (Verschuren & Doorewaard, 2015). The quantitative source will consist of a survey. By conducting a survey, a good amount of data will be collected (Korzilius, 2008).

This study can be seen as a combination of descriptive and explorative research. It will try to answer the descriptive questions about the relation between the variables locality, labour force, and demographic shrinkage, which focuses on confirming and applying already existing theories in this area of expertise. However, there is also an explorative side in this study, which focuses on how the labour force could be the extra stimulus that a region like the Achterhoek needs to develop the demographic situation. Which makes this research a case study.

3.1.1 Case Study

A case study is a research where the researcher wants to gain insight into one or more objects or phenomena. Case studies are characterized by a small number of research units, more depth than breadth, a labour-intensive approach, and qualitative research methods (Vennix, 2019). Within the case study of the Achterhoek, the focus of respondents lay on the local actors in the region, like entrepreneurs, municipalities, or organizations within the Achterhoek. With that, the research will try to provide an image of the possibilities in the region, with a focus on all actors.

Within the method of case study, two different types can be applied. At first the single case study, and secondly the multiple case study. The difference between them lays in the fact that the single case study focuses on one individual case, whereas the multiple case study compares cases with each other (Verschuren & Doorewaard, 2015). In this research, there is a single case study applied, because of the focus on the Achterhoek. It is a specific region, which is because of its characteristics not like other regions in the Netherlands. On top of that, a single case study gives the possibility of focussing more on the variables of this research applied in the Achterhoek. This gives the advantage of providing an in-depth description of the phenomenon, instead of numbers and percentages where the phenomenon would get lost (Verschuren & Doorewaard, 2015). However, the single case study makes a generalization more difficult, because not every region is the same.

3.1.2 Demarcation of the Area

The COROP-region Achterhoek consists of eleven municipalities, see figure 6. However, in this research the studied number of municipalities will be seven, namely Aalten, Berkelland, Bronckhorst, Doetinchem, Oost Gelre, Oude IJsselstreek, and Winterswijk. It leaves out the municipalities Zutphen, Montferland, Brummen, and Lochem. The choice for this demarcation is made because the internship organization, 8RHK, has its focus on these seven municipalities. These municipalities have joined together in a board that focusses on the development of the region (van de Wiel et al., 2021). In this way, the existing data and policies correspond with this research.

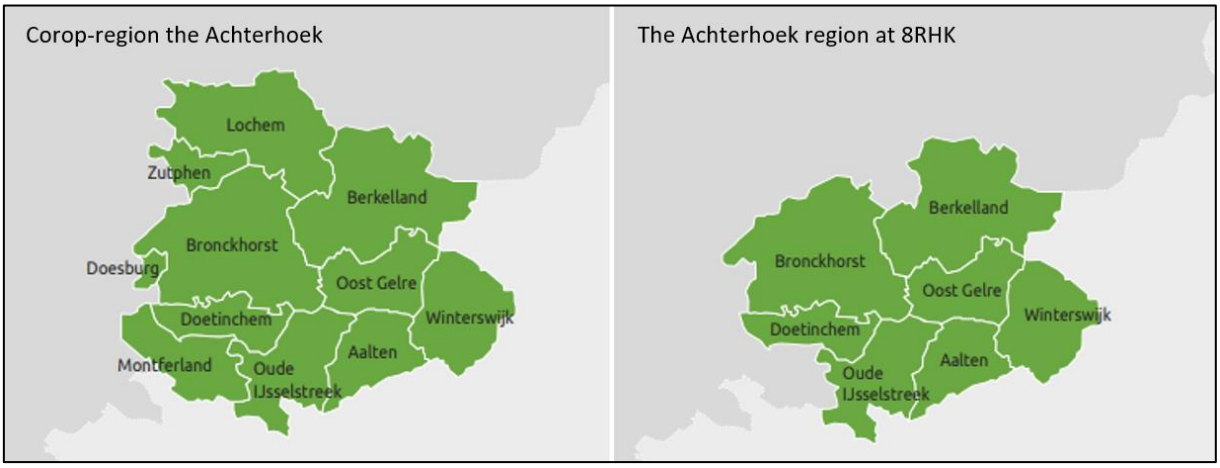

Figure 6: The Achterhoek region (van de Wiel et al., 2021, p. 6)

3.2 Data Collection

Within the qualitative research approach, there is more than one applicable method for data collection. In this research, there will be a combination of desk research, interviews, and a focus group to collect the data. With that, there will be triangulation in this research, which rules out every form of coincidence (Verschuren & Doorewaard, 2015). The research will be conducted by consulting qualitative sources such as internal documents, interviews, news articles, and literature. The desk research will answer the descriptive question(s). And the interviews and focus group will provide answers to the explorative questions.

3.2.1 Desk Research

The first way of data collection, the desk research, will mostly contain the analysis of existing policies in the region. With this, it can be studied what its strengths and weaknesses are, but also how the policies are applied in the Achterhoek. On top of that, it can be useful to study if every municipality in the Achterhoek has different kind of policies, or if the policies are comparable throughout the region. The findings of the desk research can be used in the interviews with respondents or are useful to mention in the results and/or answer the questions.

Furthermore, desk research is the analysis of the employers' survey that 8RHK and Moventem have performed, which focuses on the labour market and the attraction of employees and young talent towards the Achterhoek. The results from this survey can be used to give insight in the experiences and opinions of entrepreneurs and organizations in the region.

3.2.2 Interviews

Secondly, the interviews will be in the form of semi-structured interviews, which have closed- and open-ended questions. This kind of interview gives the possibility to the interviewer to adjust questions at the moment and/or make them more suitable for the respondent (Corbin & Morse, 2003). On top of that, it gives a structured interview and makes it possible to gather as much information as possible

(Robson, 2002). The questions in the interview will start easily to warm up the respondent, but eventually, it will go more in-depth with the application of theories and policies in the region. A crucial point when forming the interview guide and conducting the interview is that the respondent will not be asked the actual research questions. The interview guide can be found in Attachment 1: Interview Guide.

The interviews with the respondents will be conducted face-to-face or digitally. This depends on the preference of the respondent, because of the Covid-19 pandemic. On top of that, the interview will be held in Dutch, because this is the first language of the respondents, in that way the interview guide is also in Dutch. When conducting the interviews, it is useful to follow the structure of the interview guide, however, when a respondent gives an answer which is interesting to explore further, the interview guide will be neglected for those questions. To have a reliable analysis of the interviews, the respondents will be asked if there are problems with audio-recording the interview. In this way, the development of the transcript is easier and more reliable.

When analyzing the interviews, the program Atlas.ti is used. For optimization of the analysis, there is a code book created. These codes are based on the variables in the main- and sub-questions and the conceptual frame of this research. These codes will try to highlight the significant things that are mentioned in the interviews. During the process of analyzing, the code book will be expanded with new codes if these are relevant enough for the research. The code book is presented in Attachment 2: Code Book Interviews.

3.2.3 Focus Group

Besides the one-on-one interviews, it is useful to organize a focus group with experts on different themes and from different organizations and/or sectors within the Achterhoek. Focus groups are ideal to collect data from multiple respondents at once (Morgan, 1996). On top of that, the interaction between the respondents can lead to new insights and discussions that are not present in individual interviews. The focus group will be held in Dutch, just like the one-on-one interviews. The used format of the focus group is presented in Attachment 3: Format Focus Group.

In the focus group, the expertise of the participants is crucial to the process. When there are homogeneous participants, the opinions will be largely the same, without much discussion. However, when there are heterogeneous participants, opinions can differ and interesting discussions can occur, with useful outcomes as a result (Morgan, 1996).

3.2.4 Respondents

The search for respondents will be done in cooperation with the internship organization 8RHK. This organization has a good network and a lot of useful contacts. On top of that, within 8RHK, there are several experts in different sectors in the region the Achterhoek. The experts will be ideal for answering my questions, on the topics of Smart Work & Innovation, Education & Labour Market, Living & Real Estate, Circular Economy & Energy transition, Mobility & Accessibility, and Healthiest Region. These six points are the focus points of the organization 8RHK.

When conducting interviews, the respondents were asked if they have possible contacts that can help with the research. This is called the snowball method (Baarda & de Goede, 2001). With this method, it is hoped that already interviewed respondents are within a network that has contacts that are willing to get interviewed. On page 19 in table 1, the list of respondents for the interviews and focus group is presented. From two municipalities there was no response after multiple emails and calls, so the municipalities Berkelland and Winterswijk are not involved in this research. In the empirical chapter the quotes are based on the letter that the respondent has been given in table 1.

Respondent*	Organization	Function	Research Method
A	Province of Gelderland	File Education & Labour Market	Interview
B	Municipality Aalten	Alderman, Portfolio Work & Income Member theme table Education & Labour Market	Interview
C**	Municipality Berkelland	Alderman, Portfolio Economy, and Education Member theme table Education & Labour Market	Interview
D	Municipality Bronckhorst	Alderman, Portfolio Labour & Participation Member theme table Education & Labour Market	Interview
E	Municipality Doetinchem	Alderman, Portfolio Work & Income Member theme table Education & Labour Market	Interview
F	Municipality Oost Gelre	Alderman, Portfolio Finances and Education Member theme table Education & Labour Market	Interview
G	Municipality Oude IJsselstreek	Alderman, Portfolio Education and Public Health. Member theme table Education & Labour Market	Interview
H**	Municipality Winterswijk	Alderman, Portfolio Economy, and Work & Income	Interview
I	8RHK	Program director Education & Labour Market	Focus Group
J	8RHK / SmartHub	Program director SmartHub & Young Talent	Focus Group
K	8RHK / SmartHub	Program Employee SmartHub & Young Talent	Focus Group
L	Talentuin / Achterhoek werkt	Director	Focus Group
M	HENCON	HR-manager	Focus Group
N	De Steck	Owner / host	Focus Group
O	SmartHub incubator	Project Manager	Focus Group
P	Labour market region Achterhoek / Rode Loper	Project Manager	Focus Group
Q	Verbindeninbeeld	Innovation realtor	Focus Group
R	Van Raam	HR Manager Vice-President theme table Education & Labour Market	Focus Group

*Table 1: The list of respondents for interviews and focus group (*respondent will be held anonymous, **no response after several ways of trying to contact respondent)*

3.3 Quality Requirements

3.3.1 Reliability

The reliability of a research measures if there are coincidences or unsystematic errors. When the data collection is done reliably, it would mean that the outcomes would be the same, if the research is done the same. On top of that, reliable research should be independent of the time and moment of the study, the researcher that studied the case, and the instruments that are used (Korzilius, 2008).

In this research, the focus of paying attention to reliability is done in different ways. At first, by doing desk research, conducting interviews, and a focus group, different kinds of sources are used, which increases the reliability. On top of that, there is a way of triangulation that rules out coincidence and improves reliability (Verschuren & Doorewaard, 2015). Thirdly, by describing and explaining the methodological choices and approaches, the replicability of this research increases. Furthermore, by coding systematically, there is structured qualitative data.

3.3.2 Internal Validity

According to Vennix (2019), the reliability of research consists of the researcher measuring what he likes to measure. Research is internally valid if the chosen research methods draw the right conclusions. In other words, the quality of the research is measured by internal validity (Vennix, 2019). With the triangulation in this research, there is a lot of available data provided, which helps in increasing the internal validity. On top of that, because of a precise explanation of the methodological choices and the operationalization, this problem can be studied in the same way, if there was a repetitive study. This also improves the internal validity.

Because of the case study in this research, the internal validity could decrease, or it can be doubted. This is related to the problem of inferences in case studies (Yin, 2003). This means that every time a phenomenon cannot be observed, the case study involves an inference. When there is inference, this is based on previous thoughts or documents and interviews (Yin, 2003). To prevent this from happening in this research, there is a continued reflection of the findings, which improves the internal validity of this research.

3.3.3 External Validity

The external validity measures if the results of a study are generalizable to another situation or phenomenon than the originally studied case (Bleijenbergh, 2015). For this research, which is focused on the Achterhoek region, this could be difficult. The generalization of the results is not directly applicable in other regions, which makes the external validity low. However, the interest in this study started with the current occurring problems and issues of shrinking regions in the Netherlands. A result of this could be that the insights that are gained in this research can give insights into other regions. And on top of that, the results of this study can arise questions on a larger scale, where other regions have more comparisons. Furthermore, because of performing a focus group, the external validity will be lower. This is caused by the fact that focus groups are almost not generalizable for the entire population, because it is difficult to repeat the same focus group (Morgan, 1996).

4. Operationalization

In this part, the variables and concepts will be operationalized, so that it is clear how these variables and concepts are being studied. At first, the purpose and contents of the policy analysis will be described. This will be followed by the operationalization of the main concepts locality, demographic shrinkage, and labour force. The questions formulated in these concepts are mainly focused on gaining insights into the experiences of the respondents and the current situation in the Achterhoek. The results from these questions can be useful in formulating an answer to the main- and sub-question(s) of this research.

There are three main data sources in this study, namely a survey, interviews, and a focus group. All three sources will be analyzed on the basis of the related concepts of the conceptual frame. Not all questions of the survey will be used in this study, only the relevant questions will be described, and the responses on the statements will be presented in tables. To keep the respondents of the interviews anonymous, they will be named after the municipality they are part of. For the focus group, the plan was to have ten respondents present, but three of the respondents were eventually not able to come to the gathering. When describing findings and results of the interviews and the focus group, there will be quotes from the respondents that are literal translations from Dutch.

4.1 Policy Analysis

The first paragraph of the empirical data will be the policy analysis. This policy analysis will have as main purpose to describe and analyse the current developments and projects in the Achterhoek. It is subdivided into three parts where the vision of the Province Gelderland is described firstly. The paragraph will eventually change its scope more towards the Achterhoek region and eventually the representative municipalities.

With the policy analysis this study tries to research and test the concept of locality by analyzing implemented policies and cooperation between actors in the Achterhoek. For example, what kind of projects are implemented where several actors are participating with. On top of that, the policy analysis can help with sketching a picture of the business- and management culture in the region. To study the concept of demographic shrinkage, the policy analysis is the most significant method of data collection. These policies are based on statistics and facts and present the plans, projects, and/or solutions that the governmental bodies have implemented in the Achterhoek. These ideas are mostly based on keeping the demographics on the same level or even having a slight growth in population size, but also population composition. Furthermore, the policy analysis is significant in studying the labour force of the Achterhoek because it focuses on the projects and ideas from the governmental layers to improve the labour force, and with that can improve the entire region. By attracting more employees and/or students the Achterhoek could develop further.

The expected outcomes of the policy analysis are the points of improvement that are possible in the policies and management culture of the Achterhoek. In this way, it will be easier to develop recommendations that are suitable on the current policies.

4.2 Locality

Secondly, the concept of locality is very broad, as mentioned in the theoretical frame. It mainly focuses on the interaction between organizations in a region, but also the inhabitants of that region. On top of that, the business and management culture of organizations in a region can determine how strong the locality is. And of course, the interaction between urban and rural areas, and between the housing market and labour market. Finally, the involvement of organizations and inhabitants in social activities and relations. The empirical data from the interviews, survey and focus group are crucial in studying the strength of locality in the Achterhoek. The first step are the interviews, in table 2 there is the

operationalization of the concepts of locality and the related interview questions are presented. Not all questions are actually treated during the interviews, but the concepts have been discussed. The survey by Moventem contains questions and statements that study the business culture in the Achterhoek and how companies and/or entrepreneurs are willing to invest in the housing market and labour market, to make the region more attractive for employees. And finally, by hosting a focus group with relevant employers and managers from the Achterhoek the discussion on topics like cooperation, the business, and management culture can lead to new insights for the region.

In the second paragraph of the empirical findings and results, the concept of locality will be discussed and described. On the basis of the three data collection methods an answer on the first three sub-questions will formed. By combining these three datasets there will be triangulation of the data. The expected outcomes of these methods of data collection are that the locality feeling in the Achterhoek is strong, which means that companies, entrepreneurs, and organizations cooperate to improve the region. On top of that, it is expected that this level of strength has a positive influence on the labour force of the Achterhoek, by for example the attraction of employees and students to the region.

Concept	**Aspects**	**Interview questions**
Interactions and cooperation	The relationships and cooperation between companies, organizations, inhabitants, and the governmental layers in the region.	In what ways does your organization cooperate with other organizations? Following: - What topics are handled? - How does these collaboration work?
Functioning of the labour market	The functioning and the culture of the local labour market and the influence of organizations. So, not the actual labour market, but more the developments, activities, and cooperation of relevant actors within the labour market.	Is there a collaboration between organizations to attract students, high-educated people, and/or interns? Following: - And the further flow of these groups within the region?
Functioning of the housing market	The functioning of the housing market and available houses.	Is attention paid to attractive living in the region when recruiting highly educated students and employees? How are housing requirements taken into account when recruiting employees?
Social activities/ relations	The involvement of organizations and inhabitants in social activities and events in the region.	Are activities organised between organizations to strengthen the relationship and involvement? Following: - What kind of activities?
Business and management culture	The style and culture within businesses and management in the region. Focus on attracting employees and cooperation.	How is the phenomenon *naobershap* recognisable in the business and management culture? In what way is there attention to attracting and further flow of students in your business and/or management culture?

Table 2: Operationalization of Locality

4.3 Demographic shrinkage

Demographic shrinkage will be the main subject of the third paragraph in the chapter of empirical data. The term demographic shrinkage contains more than just the decrease of population, it also contains the composition of population and households (van Dam et al., 2006). To be precise, demographic shrinkage in this research involves the population number, the population composition, the household composition, and the out-migration. Table 3 presents the operationalization and the related interview questions on these concepts. The concept of demographic shrinkage is based on statistics and facts. That is why there are only a scarce number of questions about these concepts in the interview guide because the personal experience of respondents is less relevant to this concept.

The survey by Moventem can give insights into how the entrepreneurs and/or companies experience the current demographic situation, for example, the availability of employees in the region. However, there are fewer questions and statements included in the survey on improving the demographic situation. To compensate for this, the focus group is important, because the discussion held in the focus group can develop new insights and possibilities for improving the demographic situation of the Achterhoek. By dropping statements about the demographic situation in the Achterhoek, the participants will be able to discuss the current situation and the region its possibilities.

It is expected that the results will be that the total population in the Achterhoek is increasing and that the actors in the region rather not want to use the term shrinkage anymore. However, shrinkage contains more than the population size. That is another expected result from the interviews, survey, policy analysis, and focus group. On top of that, it is expected that new insights and solutions will be found when collecting the data.

Concept	Aspects	Interview questions
Population number	Number of inhabitants and households in the region.	If you reflect from your field of work, how do you notice that the Achterhoek is shrinking? How has the demographic situation developed over the last couple of years?
Population composition	By age and ethnicity in the region.	
Household composition	By size, income, education level and stage of life.	
Out-migration	The number of people departing from the region.	

Table 3: Operationalization of Demographic shrinkage

4.4 Labour force

The fourth and last paragraph of the empirical chapter is focused on the labour force of the Achterhoek. The concept of the labour force is measurable in several other variables. In this research, there is a subdivision of the labour market, education level, and economically active people in a region. The operationalization of these concepts is presented, with the related interview questions, in table 4.

Furthermore, the survey by Moventem will give insights into the actions that entrepreneurs and/or companies perform to improve the labour force in the region. The survey contains questions that are aimed at the attraction and education of (new) employees. Are entrepreneurs and companies willing to invest in their employees? And finally, with the focus group, the organizations that are responsible for managing the region towards positive developments in demographics and labour force will discuss these topics. Statements about the labour force and how the actors in the Achterhoek handle to improve are being discussed.

The expected insights and results, focused on the labour force, will mainly be related to the attraction of employees towards the region. However, besides that, also the education of current employees and how the actors in the Achterhoek will try to close the gap, that the wave of retirements will cause. Another outcome could be how much the actors are involved in improving the labour force in the Achterhoek, and what can be done to further develop this.

Concept	Aspects	Interview questions
Labour market	The composition of the labour market and the number of people working in a region.	What do you see as the biggest problem of the labour market in the Achterhoek? Is your organization involved in the strengthening of the labour market in the region? Following: - In what way? (Policies or measures?)
Education level	The level of education of the population in the region.	Is attention paid to attractive living in the region when recruiting highly educated students or employees?

(Table continues on next page)

		In what way is there attention to attracting and further flow of students in your business and/or management culture? Are there ongoing promotions about the Achterhoek on your behalf at universities or other educational institutions to attract students? Following: - In what way?
Economically active people	The number of people that are able to work or have a job in the region.	In what way is the labour market influenced by the demographic shrinkage? Does your organization experience struggle with a decreasing number of economically active people in the region? Following: - In what way and how? In what way is your organization searching employees or interns of different generations? In what way is your organization involved in the SmartHub principle of the Achterhoek?

Table 4: Operationalization of Labour force

4.5 Relation between variables

In the conceptual frame of this research, there are several relations and arrows presented. To study these relations between variables, there are questions formed in the interview guide that focus on multiple concepts and/or variables. With these questions, it will be possible to formulate a better answer to the sub- and main question(s) of this research, because the relations are central in these questions. However, the questions in the interview should not be the exact questions that are studied in this research. Table 5, on the next page, presents the operationalization of these relations, and the related interview questions.

First, to study the relation between the labour force and the demographic situation in the Achterhoek. To gain information on this relation between the variables a combination of desk research and interviews is needed. The desk research will give concrete insights into how governmental layers see these issues and the solutions. While the interviews will gain data that is based on the experiences and opinions of the experts in the region. By implanting questions about issues and opportunities between the labour market and the demographic situation in the focus group, several aspects of this relation will come up.

Secondly, are the relations between locality and the other two variables, namely locality and labour market, and locality and demographic shrinkage. To measure the influence and/or relation of locality with the other variables, it is significant to ask the respondents if there is a collaboration with other organizations based on the labour market, which includes the attraction of employees and young talent, and the development of the demographic situation. For example, what themes and topics are central in these collaborations, and are there results noticeable. However, besides the collaboration, the business culture, networks, and activities are significant to study.

With the use of these kinds of questions, the interviews try to research and test the relation between the variables that are formed in the conceptual framework. This is an explorative way to study these relations because it will be based on the experiences and examples of the respondents in the interview. On top of that, by asking further on some topics, the possible relations between variables and concepts can be studied, this will also be an explorative way of research method.

These relations are hard to study with the survey because that will lead to difficult questions for the respondents. That is why the focus of studying these relations is mainly on the interviews and the focus group. The respondents will be able to answer open questions and the interviewer can ask further on some topics that can eventually lead to answers that explain and/or describe the possible relation between variables.

The expected outcomes of studying these relations are comparable with the hypothesis that is formulated at the beginning of this research, namely: *if the locality in a region is strong, it will have a positive influence on the labour force and eventually on the demographic situation.* The combination of all data can eventually lead to an outcome like this.

Relation	**Aspects**	**Interview questions**
Labour force & Demographic shrinkage	The attraction of employees and young talent in the region to develop the demographic situation.	To what extent do you see opportunities for the labour market if the demographic situation stays at the same level? In what way is the labour market influenced by the demographic shrinkage?
Locality & Labour force	The way that business culture, collaborations, networks, and activities can improve the labour force.	Are activities organised between organizations to strengthen the relationship and involvement? - To what extent could these activities help in strengthening the labour market?
Locality & Demographic shrinkage	The way that business culture, collaborations, networks, and activities can improve the demographic situation.	Are activities, projects, or events organised between organizations to strengthen the relationship and involvement? - To what extent could these activities help in developing the demographic situation?

Table 5: Operationalization of the relations between Locality, Labour force, and Demographic shrinkage

5. Findings & Results

This chapter will describe the findings and the results of the collected data in this study. The chapter has been subdivided into four paragraphs. Firstly, the policy analysis is presented. After that, the concepts and variables of this study will be described. The paragraphs will present the findings of the collected data, and eventually, the actual results are described at the end of each paragraph.

5.1 Findings Policy Analysis

5.1.1 Vision of the Province Gelderland

The province of Gelderland, where the Achterhoek is located, has developed a vision, called *Gaaf Gelderland* (Great Gelderland), that applies to the entire province. It consists of plans and ambitions to have a green, durable, and economically powerful region. It focuses on topics like Energy Transition, Climate Change, Housing, Migration, etc. (Province of Gelderland, 2018). For this research, the focus of this vision is on the topics of Mobility, Business Climate, and Living Environment.

Mobility can play a significant factor in the demographic development of a region (Bock, 2019). That is why investments in mobility can be crucial in attracting and keeping students, interns, and employees in the Achterhoek (Bock, 2019). In the vision of the province, the mobility in the shrinking parts of the province is mentioned: "*In other parts of Gelderland we see a shrinking population. There, in particular, 'classic' public transport is under pressure*." (Province of Gelderland, 2018, p. 39). However, in the ambitions and approaches, there is no attention to developing a better mobility network in the shrinking regions of the province, it is mainly based on developing a durable mobility network. So, on this topic, there are possibilities for developing this network, especially in public transport.

The business climate topic is not only focused on the settlement of businesses but also on people and families. This is an interaction between businesses and people because wealthy and highly educated people attract bigger (multinational) organizations (van Dam et al., 2006). The other way around, the presence of big (multinational) organizations attracts people. In the province vision, there are ambitions to have a competitive position with Amsterdam, Brussels, and Cologne. They try to accomplish this with durable business centres, but also the connection between education and the labour market in the region. The development of these plans is crucial for a region like the Achterhoek because young talent needs to establish.

The relation between demographic shrinkage and the living environment is significant for the development of a region (van Dam et al., 2006). In the beginning stages of shrinkage, the living environment will be affected, and it will get in a downward spiral. However, with the right investments in housing, vacancy, and social cohesion, the living environment can improve, with eventually a positive effect on the demographic situation (van Dam et al., 2006). These are the exact points that are mentioned in the ambitions and approaches of the province. Gelderland aims at innovation to develop vacant buildings into living spaces for the population and on top of that, there are ongoing talks to improve the housing market in the region, especially in the border regions of the province, where the Achterhoek is located.

This vision of the province is a bit general, and not in detail. However, there is another document by the province where a more detailed plan for the Achterhoek is presented. The main points of this are Smart Work and Living in the region, which is crucial in the development of the demographic situation (Province of Gelderland, n.d.). There are plans and ambitions of developing education in the region, which close the gap between education and the labour market. An example of this is SmartHub Achterhoek, it is an organization that develops possibilities for students to come, and more importantly, stay in the region, by having a strong network with all kinds of organizations in the region.

Furthermore, there is a focus on the living environment of the region, with challenges such as social cohesion, durability, and vacancy. One of the programs is to move the elderly from family residences to elderly residences. In that way, there are more houses available for starters, which could attract wealthy and/or highly educated people to the region.

5.1.2 8RHK Vision

The 8RHK has developed several documents where the current situation and their visions for the region are presented. First, in this subparagraph, the current demographic- and labour market situation will be presented. This will be followed by the plans and visions the 8RHK wants to develop the region on these topics.

A crucial factor in analyzing the demographic situation of a region is how the population number and composition change. Shrinkage regions generally have a larger number of elderly people (Sohn & Stambolic, 2015). In the Achterhoek there are more deceases, than births, since 2011 there is a mortality surplus, which is one of the causes of the shrinking population. The actual growth in the Achterhoek is caused by the migration towards the region. There is a larger number of in-migration than out-migration, however, the biggest part of the out-migration is talented youth searching for universities or colleges (van de Wiel et al, 2021).

The composition of the youth and their education level is also significant factor in the demographic situation of the region. A first remark that can be made is the decreasing number of children in primary schools. In the last two years, the number is slightly increasing, but it is still lower than six years ago (van de Wiel et al., 2021). On top of that, the number of children attending secondary school has decreased by 5.0% in the last six years (van de Wiel et al., 2021). This is a significant problem for the region, at the end of secondary school, these children should choose what to do after and where to study further. When the actual number of secondary school pupils is lower, the actual number of youths staying in the region could also be lower. A positive fact is that the percentage of secondary vocational degree students is increasing in the last couple of years, with is in line with the 'MBO-economy' of the Achterhoek (van de Wiel et al., 2021).

Another point of view is the work and living places of people in the Achterhoek. This is a significant factor in the development and composition of the labour force in the region. The report by Van de Wiel et al. (2021) states two components that are related to the work destination of people in the Achterhoek. At first, the percentage of people that are living in the Achterhoek, that also work in the Achterhoek, is 73%. The percentages of the surrounding regions can be found in figure 7. Secondly, is the division of the age of employees in the Achterhoek. There is a relation between age and where people work. The older the employees, the more they work in the Achterhoek (van de Wiel et al., 2021). This is in line with the developments that can be seen in the demographics and labour force. This is where there is potential and the region should handle this situation. The attraction and flow of students and/or interns can be a crucial solution to this.

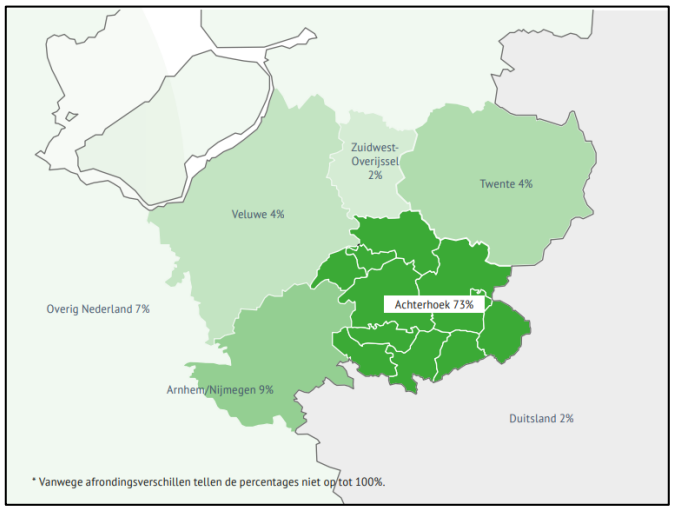

Figure 7: Work destination of people living in the Corop-region Achterhoek (van de Wiel et al., 2021, p. 27)

To tackle these problems and develop the region, 8RHK has made a vision with six targets. The Achterhoek should be Productive, Qualified, Reachable, Liveable, Clean, and Healthy (8RHK Ambassadeurs, 2019). The following section will discuss **the first four targets**, which are relevant for this research, and how 8RHK tries to achieve this in the region:

- Productive Region
  To flourish the greying and dejuvenating population in the Achterhoek region, innovative solutions and smart applications are needed that realize the economic, social, and environmental value (8RHK Ambassadeurs, 2019). The goal is to have a 3% growth in labour productivity in the manufacturing industry and agriculture. To accomplish this, there will be an investment in digitalizing these sectors and the development of 35 knowledge- and business clusters. On top of that, is the support for start-ups in the region, with the cooperation of already existing companies. Furthermore, is the development of SmartHub in the region, which is an organization that promotes the Achterhoek as the place internship- and graduation region (8RHK Ambassadeurs, 2019).
- Qualified Region
  The 8RHK sees the labour market as self-reliant and partly self-regulating, in other words, the companies and entrepreneurs have the initiative in attracting employees and young talent. Sometimes, however, there is an issue for which the labour market cannot come up with a solution itself. Job growth is substantial enough to bring unemployment down. At the same time, the growth is not strong enough to offer opportunities to everyone (8RHK Ambassadeurs, 2019). The goal of this target is to balance out the supply and demand in the labour market by 2030. To achieve this goal the focus is on the Technic and Care sector, but other sectors are also monitored. And there is the development of the Human Capital Agenda, which tries to achieve a lifelong development of the available working population, intake of young talent, and the use of cross-border opportunities for training (8RHK Ambassadeurs, 2019).
- Reachable Region
  Good accessibility is an essential condition for the Achterhoek to be able to grow economically, maintain the quality of life in the region, and its attractiveness to tourists (8RHK Ambassadeurs, 2019). The goal is to have an energy-neutral, affordable, and trustable transit for everyone that wants to travel to, within, and through the Achterhoek. At first, there is a focus on a reliable and robust network, with investments in public transport and the connection of highways. Secondly is durability, where the focus is on the development of bicycle networks in the region and chargers for electric bikes and cars. And thirdly, is smart, where the main focus is on affordable transit, by developing a service where inhabitants can choose, plan, and pay for their travels with an app on their smartphone (8RHK Ambassadeurs, 2019).
- Liveable Region
  The main thing is that the Achterhoek remains an attractive residential area. In the Achterhoek Housing Requirements and Liveability Survey of 2018, residents give their living environment a 7.8 out of 10. The small-scale, green landscape and the characteristic villages and towns make a major contribution to the enjoyment of living (8RHK Ambassadeurs, 2019). The goal is to keep the liveability in the Achterhoek at least 7.8. To accomplish this, the focus is on making existing houses more sustainable, the flow of residents to suitable houses, and the provision of 100,000 houses (8RHK Ambassadeurs, 2019).

To achieve these targets and their goals, there is cooperation between several actors within the 8RHK. It is a combination of entrepreneurs, education, and civil society organizations. This form of

governance is a way of innovation where knowledge and internal networks are shared, and the development of smart solutions for issues in the Achterhoek. The vision of 8RHK is being elaborated and performed in the thematic tables where all actors are involved in developing plans for the region.

5.1.3 Vision and Programme of the Municipalities

This sub-paragraph will discuss the visions and programs of the seven municipalities that are involved in the 8RHK region. These are significant in the development of projects in the municipality and will be more specific than the provincial and regional vision. These visions programs will contain a lot of themes and topics, but in this part, only the relevant ones will be discussed.

Aalten

The municipality of Aalten has faced a demographic decrease during the last decade, however, in the last 5 years, the population is staying at the same level and is even slightly increasing again (Koster, de Vor, & van de Wiel, 2021). The changes in society mean that forms of employment disappear, and new ones arise in the municipality. In close collaboration with the business community, but also with social organizations and education, locally, regionally, and even across the border, the municipality wants to stimulate promising sectors (Municipality of Aalten, 2018). For the municipality of Aalten, these sectors are the 'smart' manufacturing industry and tourism. Good (public) transport options are of the utmost importance. The municipality is richly endowed with educational-, sports-, and social-cultural facilities, which contribute to the attractiveness of the living environment of Aalten. Together with all actors, the municipality will try to maintain these facilities, but without taking full responsibility (Municipality of Aalten, 2018).

To keep the municipality attractive, there will be investments in infrastructure, security, and greenery in the centres of Aalten and Dinxperlo. On top of that, the municipality is developing a regulation to decrease the vacancy within the region, which eventually will provide more available houses for starters. Furthermore, there are plans to upgrade mobility in the entire region, through investments in public transport. Another point in the vision is the development of the connection between education and the labour market, by investing in schools, societal internships, and studies (Municipality of Aalten, 2018).

Berkelland

Since 2005, the population number is decreasing in the municipality of Berkelland. On top of that, the composition is changing as well, 25% of the population is 65+ and keeps increasing (Municipality of Berkelland, 2021). The municipality tries to anticipate these demographic changes to keep the region attractive to live, work, and recreate in. With investments in housing in the right places for starters and elderly people, where everyone has a suitable place. Furthermore, the presence of associations and vibrant centres with good facilities are an investment point for the quality of life.

The municipality plans investments in housing and mobility to improve the living environment of the region. For example, by building houses in almost every core and renovating crucial road connections (Municipality of Berkelland, 2021). There are also ongoing investments in the business climate in Berkelland, which should lead to closing the gap between education and the labour market. With investments and support for entrepreneurs, the municipality will try to keep and develop job opportunities for people in and outside the region. This will be done by investments in the infrastructure in several business centres and villages. On top of that, is a project which helps jobseekers that are lagging behind in the labour market (Municipality of Berkelland, 2021).

Bronckhorst

Of all the municipalities in the Achterhoek region, Bronckhorst has experienced the biggest decrease in its total population, since 2007 the population has decreased by almost 4% (Koster, de Vor, & van

de Wiel, 2021). The municipality's ambition is aimed at maintaining and improving the quality of living, working, and recreation for the current and future residents of Bronckhorst. The municipality wants to strengthen the dynamics in society and give space to the actors that make Bronckhorst what it is and can become (Municipality of Bronckhorst, n.d.). An important attention point is education in the municipality and adapting to the current demographic situation. The municipality will invest in the clustering of schools and transport for pupils to keep the level of education high (Municipality of Bronckhorst, n.d.).

To increase the accessibility of the municipality for businesses and people from in and outside the Achterhoek, there will be investments in the quality of public transport and the road network. This policy is part of improving the business climate, aimed at preserving and reinforcing economic activity and employment (Municipality of Bronckhorst, n.d.). The role of the municipality mainly consists of facilitating, realizing, and reinforcing a good working environment, good accessibility (physical and digital), and facilitating companies in the development and connecting and connecting parties through which initiatives arise (Municipality of Bronckhorst, n.d.).

Doetinchem

Doetinchem is the core municipality of the Achterhoek, it has a strong society, in which people look out for each other and there is a flourishing association life. The fact that it is the core of the region can be seen in the demographic statistics, it is the only municipality where there has been strong growth in population (Koster, de Vor, & van de Wiel, 2021). Together with entrepreneurs, organizations, and residents, the municipality is working in the region and Doetinchem on the quality of its living and living environment, strengthening its regional economy and striving for optimal health for its residents (Municipality of Doetinchem, 2021). There should be more use of networks and connections with the surrounding regions of the municipality, such as Arnhem/Nijmegen and Food Valley, so that Doetinchem takes advantage of opportunities and generates more brand awareness (Municipality of Doetinchem, 2021).

For Doetinchem and the Achterhoek, attracting and retaining (new) employees is the biggest task for the coming period. In addition, the economy can gain strength by stimulating joint innovation in business parks and by identifying and shortening chains. So, the municipality lays the focus on the attracting and keeping the youth, talents, and students in the region. It has developed two programs where the youth is stimulated to work, study, or do an internship in the region (Municipality of Doetinchem, 2021). On top of that, the municipality is investing in simplifying the integration process to increase the total number of economically active people.

Oost Gelre

In Oost Gelre there has been a stable situation of the population since 2015, however, the years before that it had a decrease of 2% of the population (Koster, de Vor, & van de Wiel, 2021). And that is why municipal developments for the future are no longer aimed so much at the quantitative growth of the city and the centres but are mainly aimed at improving the quality of existing residential areas, the countryside, industrial estates, and the centres taking into account the consequences of the demographic developments (Municipality of Oost Gelre, n.d.). An important project is a further development of houses in all cores of the municipality, which will provide more available houses for people that want to move to the Achterhoek.

The municipality of Oost Gelre aims at a strong local education level, where the children are being prepared for their life in the Achterhoek later. To achieve this, it is important to invest in accessible schools, in every village and transport for pupils that must travel further (Municipality of Oost Gelre, n.d.). On top of that, with the clustering of some schools there will be preparation for a further

shrinking population in the municipality. Furthermore, the municipality strives for more jobs and diversity of jobs, good facilities, good accessibility and a pleasant environment for residents, and sufficient settlement options for companies. All this determines the business climate for entrepreneurs, which the municipality is committed to in collaboration with the business community (Municipality of Oost Gelre, n.d.). Good accessibility and sufficient free parking facilities in the cores are of significant importance for the economic vitality of municipal centres. Some projects provide housing opportunities by facilitating businesses in the Laarberg and Lindebrook business parks (Municipality of Oost Gelre, n.d.).

Oude IJsselstreek

The demographics of municipality Oude IJsselstreek have been a stable decrease over the last years, it is decreasing, but not as significant as other municipalities in the Achterhoek (Koster, de Vor, & van de Wiel, 2021). That is one of the reasons that the municipality wants to focus on good living, i.e., housing satisfaction, and maintain this in the future. It tries to keep the countryside, the small centres, and the centres vital (Municipality of Oude IJsselstreek, 2020). With an impulse program, the municipality stimulates economic innovation and sustainable development specifically in several sectors, and the business community is challenged to also shape the broad prosperity. With housing, the municipality not only generates economic activity and employment but also provides compact and liveable shopping centres with future-proof facilities that are easily accessible with the right homes (Municipality of Oude IJsselstreek, 2020).

For further development of the municipality and the Achterhoek region, there are projects with collaboration across the border, with German organizations, entrepreneurs, and governmental layers. In this way, the municipality tries to provide equal chances for its inhabitants (Municipality of Oude IJsselstreek, 2020). On top of that, there are investments in the approach of attraction and flow of students in the region, which is called the '*Red Carpet*'-approach. This means that organizations and entrepreneurs help students of settling in the Achterhoek by offering internships or jobs (Municipality of Oude IJsselstreek, 2020). This approach is innovated by 8RHK and is a guideline to create more possibilities for youth in the Achterhoek.

Winterswijk

And finally, the situation in Winterswijk has been stable over the last decade, the population has not increased or decreased significantly and it is ranked secondly in population growth among all municipalities in the Achterhoek (Koster, de Vor, & van de Wiel, 2021). The municipality of Winterswijk is committed to good education and the maintenance of sports and cultural facilities. In addition, full attention is paid to offering development opportunities for the economy, work, and tourism. The aim is to keep Winterswijk attractive through initiatives for the landscape and heritage (Municipality of Winterswijk, 2021). A crucial project is the development of an organization that helps unemployed people to jobs, but also the flow of students from schools to the labour market (Municipality of Winterswijk, 2021).

To improve the business climate of the municipality, there are projects for the construction of new business areas and the development of centres in the area (Municipality of Winterswijk, 2021). These projects should increase the attractiveness of the municipality and the Achterhoek. Another program focuses on building a network that connects the Achterhoek youth to the Achterhoek business community. Young people become part of the network during the final phase of their secondary education and secondary vocational education. Winterswijk is the initiator and functions as a pilot environment. The organization and implementation are in the hands of SmartHub Achterhoek (Municipality of Winterswijk, 2021).

5.1.4 Results Policy Analysis

To analyze this policy analysis, the relation and overlap over the different governmental layers will be discussed. On top of that, the possible shortcomings will be mentioned. At first, the vision on tackling the demographic shrinkage. The province has visions where there should be enough housing in the region, and this comes back in the municipality's visions. This should improve the living environment, and with that attract more people from outside the region. However, to make the region more attractive there should be an improvement in the mobility in the Achterhoek, which can be seen as the second focus point. At the municipality and regional levels are enough projects to improve the public transport and transit in the region, however, it lacks projects to improve the mobility networks to travel into or out of the Achterhoek. These developments can be crucial in the strengthening of the labour market. So, according to the policy analysis, there is a significant relation between the demographic situation and the labour market. To improve the situation in the labour market, the municipalities and region invest in the demographics by improving facilities and mobility, but also the living environment in the Achterhoek. Overall, there is a relation between the labour market and the demographic situation, however, the demographic situation has more influence on the labour market, than the other way around.

Thirdly, is the improvement of the business climate in the region. The vision of the province was very general at this point, however, the visions and plans per municipality are very clear at this point. This could be a significant factor in the attraction of businesses into the region and with that create more possibilities in the labour market. Fourthly, is the education and talent in the region. 8RHK has implied that organizations, entrepreneurs, and companies should be open to accepting students for internships or jobs. It can develop the demographic situation in a way of rejuvenation. This principle of the 'Red Carpet' comes back into the visions of the municipalities, where the actors are supported to achieve this. However, it can be questioned to what extent this principle is being performed. These visions and plans are mostly focused on changing the business culture in the Achterhoek. In this study, business culture is a concept of the variable locality. The implementation of the 'Red Carpet'-principle is a way of changing the business culture and with that attracting young talent to the region. This change of culture can have a positive influence on the labour market. So, according to these policies, there is a significant relation between the locality feeling and the labour market.

Overall, the policy analysis has given insight into the plans and visions of the different governmental layers in the Achterhoek. According to the policies, there should be investments in the living environment and facilities to increase the demographic situation, and with that the labour market. On top of that, a change in business culture and cooperation strengthens the locality feeling which has a positive effect on the labour market. This is however too little substantiated to answer the sub-questions, and to complete the triangulation the employers' survey, interviews, and focus group are of significant worth.

5.2 Findings Locality

This paragraph will describe the findings of the data sources that can be related to the concept of locality. Within the concept of locality are four aspects that have been discussed or treated in the survey, interviews, focus group. Namely interactions and cooperation, labour market, social activities and relations, and the business- and management culture. In the conceptual frame there is also the link with housing market, however in the data sources this aspect has not been mentioned enough to describe them.

5.2.1 Interactions and cooperation

The first aspect of locality is interactions and cooperation. Where the main focus are the relationships and cooperation between companies, organizations, inhabitants, and the governmental layers in the region. To study the strength of the locality in the Achterhoek cooperation between organizations in the region is a significant factor and part of the business- and management culture. In the survey of Moventem are several relevant questions on this topic, and these will be mentioned in this subparagraph. At first, two general statements on cooperation with other organizations are presented to the respondents, see table 6. Around 71% of the companies and/or entrepreneurs in the Achterhoek cooperate with organizations (van de Wiel, Koster, & Hospers, 2022). However, 35% of the respondents would like to improve this cooperation with other organizations. So, there is already a strong cooperation relation between organizations in the Achterhoek but is could be better.

A strong foundation of cooperation at the management level can be found back in the business culture of companies. This strong relation of working together is confirmed by representatives of municipalities: "*Yes, because you do see the structures. You are right, because there is a structure, a corporate structure where they need each other. Very often those small companies supply or vice versa to those large companies are parts or sometimes even originated*." (Municipality Doetinchem). This part of cooperation is part of the culture that is present in the region, and it can be linked to the noaberschap culture of the Achterhoek. There are strong networks, and the trust is high: "*Because there are also networks of companies and entrepreneurs here, in which the Achterhoek is very strong, those companies and entrepreneurs who know each other easily and trust each other easily*." (Municipality Bronckhorst).

Cooperation between organizations

	Totally disagree	Disagree	Neutral	Agree	Totally agree	Do not know / no opinion	**Total**
My organization cooperates with other organizations	3%	5%	16%	54%	17%	6%	**100%**
Within my organization there is a need to cooperate more with other organizations	3%	15%	39%	27%	8%	9%	**100%**

Table 6: Cooperation between organizations (van de Wiel, Koster, & Hospers, 2022)

In what ways the companies cooperate with other organizations or possible improvements in that, is also asked in the survey. The respondents had four options and could choose multiple answers, namely sharing knowledge, developing new products and/or services, retraining and further training, and personnel exchange. The findings are presented in tables 7 and 8. The companies in the Achterhoek

cooperate by sharing knowledge (84.5%) and developing new products and services (48.4%) (van de Wiel, Koster, & Hospers, 2022). With these findings, it can be said that 'noaberschap' is recognizable in the business culture in the region. A point that could improve the labour force and help companies with vacant vacancies is the exchange of personnel. Around 45.5% of the respondents want to cooperate more in that area.

Cooperation areas	**Number**	**Percentage**
Sharing knowledge	131	84.5%
Developing new products and services	75	48.4%
Retraining and further training	62	40.0%
Personnel exchange	32	20.6%
Other	9	5.8%
Total	**155**	**100%**

Table 7: In which area(s) do organisations cooperate with each other? (van de Wiel, Koster, & Hospers, 2022)

Cooperation areas that could improve	**Number**	**Percentage**
Sharing knowledge	52	67.5%
Developing new products and services	41	53.2%
Retraining and further training	24	31.2%
Personnel exchange	35	45.5%
Other	5	6.5%
Total	**77**	**100%**

Table 8: In which area(s) would organisations like to cooperate more with each other? (van de Wiel, Koster, Hospers, 2022)

A point improvement that is also confirmed by the representative of the Municipality Doetinchem that smaller companies should cooperate more with retraining of employees and the binding of people in the Achterhoek: "*They do know where to find each other, I know that, but I do not think around a focused agenda in which they support each other. In my opinion, it would also be useful for smaller companies if the Operations & Support department really work together, for example, so that you have a joint training program, joint supervision of those new starting employees, the binding and fascination of people who have been there for a longer period of time. and how are they going to retrain and such."*

Furthermore, the respondents were asked if they attach value to working together with other organizations from the Achterhoek. This is also a way of business- and management culture, which is partly influenced by the so-called 'noaberschap'. The findings on this question are presented in table 9. A big part of the companies in the Achterhoek, namely 52.3%, preferably cooperates with other companies and/or organizations in the Achterhoek (van de Wiel, Koster, & Hospers, 2022). However, there is also a big part of companies that do not have a preference for the location of the cooperation partner.

Do you value having a cooperation partner located in the Achterhoek?	**Number**	**Percentage**
It does not matter whether a partner is located in the Achterhoek	82	37.3%
Organizations we work with cannot be found in the Achterhoek	9	4.1%
We (preferably) work together with organizations from the Achterhoek or surrounding regions	115	52.3%
We only work with organizations from the Achterhoek	14	6.4%
Total	**220**	**100%**

Table 9: Value of cooperation partner in the Achterhoek (van de Wiel, Koster, & Hospers, 2022)

The Province of Gelderland is satisfied with the way that companies and other organizations work together. They even want to play a facilitating role to make this cooperation even smoother. In that way, the representative of the Province Gelderland aims for more job transitions to fill up current gaps in the suffering sectors of the labour market: "*How can we enable Lifelong Development? In the sense that people often want to move from one profession to another, in the context of development and labour mobility. The will is there, but the ability to do so is lacking. And that may have to do with salary,*

so that you end up with a different employer in a different scale and receive a different salary. This may also have to do with secondary employment conditions, or with contract types, that you will get a certain uncertainty again, instead of the security you now have with your current employer. We want to be there in the next two years, so we want to develop arrangements to make those kinds of steps easier." (Province Gelderland). The cooperation between the Province and 8RHK ambassadors has led to several projects to support companies with finding employees in sectors that need them the most: "*We have an education and labour market scheme, a subsidy scheme, which provides co-financing for influx and lateral influx projects. If a company, together with an educational institution, has an idea about bridging the gap or reducing the deficit, co-financing is available for that*." (Province Gelderland).

5.2.2 Functioning of the labour market

A second aspect of locality is the functioning of the labour. So, not the actual labour market, but more the developments, activities, and cooperation of relevant actors within the labour market. For example the possibilities of career paths at companies or the fact that it is possible for companies to educate their own staff. To be attractive for employees, it is valuable to give perspective for the long term: "*It also has to do with what perspective an entrepreneur offers to the graduate, can you stay or not? Only I think, SmartHub is a very nice initiative and I really think it is already well known, also among entrepreneurs and employers. And also, among students. I think you have to keep using it and developing it*." (Respondent R).

To fill the gap in the workplace, applicants that are not completely fitted for the job are employed. Table 10 presents how many of the employees at companies are trained and educated well enough for their job. What stands out is the fact that a large part of the employees, namely 77%, is educated and trained sufficiently enough (van de Wiel, Koster, & Hospers, 2022). A reason for these statistics is partly derivable from the business culture in the Achterhoek. A lot of the companies are strongly developed in educating their staff, which can be seen in the following table.

	What percentage of your staff do you think is currently sufficiently trained to perform their duties well?								
	<5%	5-10%	10-15%	15-25%	25-50%	50-75%	>75%	Do not know / no opinion	**Total**
Number	1	0	2	3	8	33	164	2	**213**
Percentage	0.5%	0%	0.9%	1.4%	3.8%	15.5%	77.0%	0.9%	**100%**

Table 10: Employees sufficiently trained? (van de Wiel, Koster, & Hospers, 2022)

The companies answered that they are capable of educating and training their employees to the desired level, as can be seen in table 11. This question is also interesting to compare with the company size. Around 75% of the companies indicate that they have the option to educate their staff at their organization (van de Wiel, Koster, & Hospers, 2022). This is a crucial factor in strengthening the labour

Education possible at own organization.	**Number of employees**			**Total**
	1-10	11-100	More than 100	%
Totally disagree	6%	1%	0%	3%
Disagree	11%	3%	5%	7%
Neutral	9%	12%	13%	11%
Agree	45%	51%	47%	48%
Totally disagree	14%	33%	32%	25%
Do not know/no opinion	15%	0%	3%	6%
Total	**100%**	**100%**	**100%**	**100%**

Table 11: Education possible at own organization (van de Wiel, Koster, & Hospers, 2022)

force in the Achterhoek. There is a difference between the company size and the possibility to educate staff, smaller companies (1-10 employees) often have fewer options to educate their employees.

Furthermore, it is important to promote what is available in the Achterhoek, and that is why an organization like SmartHub should keep investing in the branding of the potential of organizations that are present in the Achterhoek because currently a lot of those companies are unknown under employees from in- and outside the region. "*I think the point is that they should show that there are job opportunities. I mean, take Kramp again, there is just an IT company in a company. Nobody knows that. If you do not know Kramp and you drive past it, you think it is a warehouse with boxes, but there are also more than 160 IT people there. And they make really cool stuff. So it is also about profiling, and I think companies could use a little help with that. Because they do try that themselves, but I think if you were to expand that at Unexpected Hoek, in other words expand it further, you would show: 'even though you went to study in Rotterdam and you stayed there and you now have a child and you want to live in a quiet area again, then we just have the cool opportunities for you in the Achterhoek*'." (Respondent I). However, I stated that for bigger companies it is wat easier to promote their company. They are most of the time already known in the region and attract a lot of employees. Especially the smaller companies, which are a lot in the Achterhoek, struggle with their brand awareness. "*That is also the picture that you (Meyron) sketch, there are small businesses that are very successful and cannot find employees, and then I think of {NAME} of this world, I do not think it has such a problem attracting people. So, should not we link there? But then you have the question of how willing everyone is to think further with each other*." (Respondent I).

5.2.3 Social activities/ relations

The third aspect of locality in this study are social activities and relations. Where it means the involvement of organizations and inhabitants in social activities and events in the region. With these events and projects to organizations could have a significant role in making the Achterhoek a more attractive region to work and live in.

A first step in attracting new employees in the region is focusing on the current youth that is already there. Instead of investing lots in attracting youth from outside the region, it is important to develop projects and activities to stimulate youth for certain sectors in the region: *"And yes, of course, there are numerous events from the region, the SmartHub and then the internship market that we also do here with Germany. So, say, from education and the business community and the theme table, activities are organized to at least interest young people in technology and care*." (Municipality Aalten). At this point is a lot of cooperation between organizations, which was also the aim of the founding of 8RHK ambassadors. It intends to create projects to help the youth in the region with entering the labour market, and a lot of actors are involved: *"Well, we have more such goals in the near future to fill in concrete projects. I think what we just do for those young people with 'Red Carpet' and (...) with the Achterhoek youth action plan, I think is also to make connections between the parties that are also part of the regional mobility team. So those are the entrepreneurs, those are the trade unions, (...). But there is also education at the table, and UWV, and the municipalities. So yes, I think the structure is in place, we will find each other*." (Municipality Doetinchem).

So, municipalities are very active in searching for cooperation with different organizations and developing the labour force in the Achterhoek, however, sometimes all these intentions are a bit too much for municipalities to take into their account: *"Yes, as a municipality we also participate a lot in, for example, the technology week. We want technology training to receive more attention here, because of all those companies here too. So as a municipality we are also very much looking for cooperation with companies and between companies, (...) that must be formalized a bit, that is not something that you as a municipality or as a civil servant can just do on the side."* (Municipality Oude

IJsselstreek). The founding of 8RHK ambassadors is a great step in the right direction. This is also confirmed by the Municipality Oost Gelre: "*That is more from the companies themselves and supported by the 8RHK ambassadors. They are very into that.*"

To make the Achterhoek more known as an innovative region, the Province Gelderland has played an active facilitating role for developing companies. "*We also have a social innovation scheme, in which we also enable companies to innovate their business processes. So, with either impression workers or additional training of workers, to get started and thus also remain competitive*." (Province Gelderland). In this way, the Province hopes to keep up and compete with the regions in the west of the Netherlands. There is however a hick-up in the culture of the Achterhoek. People are way too modest and shy about the quality and possibilities in the region. Because there are a lot of innovative companies that are on the top level, however, they are barely noticed, because they do not speak out: "*Because those industrial areas are all those impossible boxes, from the outside it often also looks shabby, nowadays a few more industrial halls have been refurbished and renewed. (…) But such an outdated hall and you walk in and there is the latest equipment. But you cannot see that from the outside. And they do not show it, so the modesty of those Achterhoekers is so big, that they are also so professional that they do not feel the need to tell you how good they are. There are a lot of those hidden gems, so it is a bit unknown.*" (Municipality Bronckhorst). This opinion is shared with the representative of the Province of Gelderland. He pleats for promoting the qualities and possibilities more because that could be a point that employees find attractive: "*But the east of the country, so Gelderland and Overijssel in general, and in the Achterhoek in particular, always adopts a very modest attitude. Characteristic of the Achterhoek, and that is then generalising, is more 'show, don't tell'. Show what you do and how good you are, but I think the need for 'tell' is very great. So that it can help if the region, supported by the province, shouts from the rooftops more often what good things are happening*." (Province Gelderland).

A point where all the respondents agreed with each other, is the fact that there is more awareness needed of the potential of living in the Achterhoek and with that making it more attractive for people to move to, but more important that people stay in the region. There are already projects running in creating more awareness for the Achterhoek and its possibilities: "There is *customized training; service point technology; digital Achterhoek, (...); lifelong development; tool box. Well, there are actually quite a lot of projects. So, there are projects in which we participate as a theme table just to continuously promote, say that this is an attractive region to live, work and recreate*." (Municipality Oude IJsselstreek). The combination of innovative companies and organizations, with the living environment, could be the most important point of interest that should be spread throughout the region and the rest of the country. Or as the Municipality Aalten put it: "*And then you have to say well the attractiveness of the Achterhoek is the peace, the space, and the green surroundings. Well, try to communicate that along with innovative ideas about new ways of building and farming, circularity, recycling and all that sort of things*."

Inside the cooperation of the 8RHK ambassadors, there are a lot of ongoing projects to stimulate and support retraining in the Achterhoek, with as goal to improve the labour force of the region: "*Well, this education & labour market, I am in on behalf of education from our municipality. And we have formed a club again, and I am in that again, Speerpunt Group. One is lifelong development, and the other is regular training so that you constantly ensure a constant supply of training to people, for example those in their thirties*." (Municipality Oude IJsselstreek). The focus is especially on the yuppies (Young Urban Professionals) that could move to the region for another job or are already in the region and want to switch jobs.

The problem of brand exposure of smaller companies and helping each other out with personnel, can be solved by putting a label on the Achterhoek, that the Achterhoek is from all Achterhoekers: "*How can we reload the Achterhoek label in such a way that it is not necessarily about the 8RHK ambassadors sitting on the lobby side, but that it starts to concern the Achterhoek that is ours? (...) So that it also creates a common property and a common value. And that it will come to life*." (Respondent O). This opinion was shared with all the respondents, and everyone agreed that the organizations are present, but that the next step needs to be taken: "*We have a very nice organization, but we have to think about the branding and planning. Do we want to bring a lot of young people here, talent*." (Respondent N).

5.2.4 Business- and management culture

Fourth and lastly, business- and management culture is a significant aspect of locality in this study. It includes the style and culture within businesses and management in the region, and in this study it focusses on attracting employees and cooperation.

As described before from the literature, the Achterhoek is known as an 'MBO-economy' which is caused by the business culture in the region. A lot of businesses are focused on the technic sector: *"Many of those business leaders, whether they are the son of, or if it is a family business, or who started their own business, are technical enthusiasts trained in vocational education."* (Municipality Bronckhorst). Furthermore, the Municipality Doetinchem thinks that the management culture in the Achterhoek has focused too little on this group of people in the region. Management organizations mainly focused on attracting students from universities and colleges but forgot their strengths: "*But my focus is somewhat more on what I just said, more about the vocational training, more about that basis that I indeed see at the Graafschap College, at the practical schools, I think we have recognized them too little as extremely important.*" (Municipality Doetinchem).

When focussing on the management culture in the Achterhoek, it can be said that there are similarities and differences between the involved actors. For example, the ambitions that municipalities have: "*You could say, but yes, we do see a huge migration to a town like this (Doetinchem). We think that the level of facilities, but also for employment, is important to give that growth further scope. So that is really part of our ambition, and in that sense, it differs greatly from Aalten, for example, that region has also achieved a good ambition, they will go more for the qualitative development of the municipality than extra growth*." (Municipality Doetinchem). Despite the different ambitions per municipality, there is a general regional ambition, where the cooperation is on a top-level: "*We are good at that mutual cooperation here, we have anchored that well in the new regional structure, triple O. We can say that very well to ourselves, it has a good vibe and things are going very well*." (Municipality Bronckhorst). The triple O which this respondent refers to, stands for Education, Government and Entrepreneurs. This cooperation is strong and is a good foundation for the future, this is also noticed by the representative of the Province Gelderland: "*Especially in the way in which there is cooperation and how companies view personnel and recruiting personnel. Then I think it is true, that the Achterhoek has an advantage in this. So, I am also optimistic. Look, that staff shortage in 2030 I question whether we can solve that. But I do think that the experiences of recent years help to get close to that*."

A characteristic of the Achterhoek culture is noaberschap, in the interviews it is asked if the representatives recognize noaberschap in the business- and management culture of the Achterhoek. There were different ways of how noaberschap is intertwined. At first, the strong bond of working together: "*Of course, you have all kinds of industrial circles here, for the larger companies, you have them in every municipality. But you also have that between the municipalities, so that is one network, they meet each other a lot on all kinds of occasions and always know where to find each other*." (Municipality Oost Gelre). There is a foundation of strong networks that makes cooperation easier and

more efficient. This might give the Achterhoek a small advantage compared to the rest of the country. Besides working together, another characteristic is the family businesses in the Achterhoek, which are often a bit less formal than in other parts of the country. "*And I also think that you have the family culture here, it is often family businesses, but also that small-scale culture. Or yes, not everything has to be recorded in protocols, but you just do it. Sometimes, you know, that is what noaberschap actually is*." (Municipality Oude IJsselstreek).

During the Covid-19 pandemic, the noaberschap, and so locality, in the business culture got stronger than ever. The companies in the Achterhoek were dependent on products from China and Italy but needed to find new producers when the global exchange came to a halt. "*Parts could not come from China, or from Italy, we started bringing people together very quickly, we did that quickly from the Achterhoek Board. This has helped to bring people into contact, sometimes literally with the neighbour to the right or a company a block away in the industrial estate, which turned out to be already making or could do that (…). And that has led to a structural working relationship, so in fact, reshoring, bringing production back here again, because it is simply easier, and it is above all more flexible.*" (Municipality Bronckhorst). So, thanks to the current close relations and cooperation between companies and other organizations, every actor experiences positive effects of the so-called noaberschap in the business- and management culture. "*Noaberschap is more about really looking out for each other in one's own neighbourhood or village, if you would translate that to the region, you could put that on it*." (Province Gelderland).

There are a lot of SMEs in the Achterhoek. This is part of the business culture in the region, caused by the number of family businesses. However, these SMEs most of the time do not have an HR department in their organization. "*The scale of the companies here does not always justify having their own HR department. So, in general, strategic personnel policy is still little applied and you could say this, we have had some projects about this. Of course, you could do one HR person per 5 companies. So, something that you also increase the knowledge of those responsible within such a company*." (Municipality Aalten). The problem of ignorance of HR management can be solved by hiring an independent organization. This is also supported by Municipality Bronckhorst: "*But few in the small organizations have someone with HR expertise. You cannot, because you cannot say one person like that you have to hire, you cannot. But we do have a lot of service providers, and companies or that area. Big and small, but also a lot of pitters. And how nice would it be if companies would get used to hiring such a pitter or such a company, for a few hours a month*." By introducing such a system of more HR departments in the business culture, the representatives of the municipalities hope that companies are more reachable for applicants and that the experience of staff in the workplace will improve: "*I have the feeling that it helps if a bit of a relationship of trust develops there, and someone only spends a few hours a month doing something in such a company. Just structuring: what is your building function? Think about what practical support you can provide with such an intern. Think about what conditions there should be. But also, for permanent employees, a little more insight into what the current generation of graduates or educated pupils and students expect."* (Municipality Bronckhorst). This could be a crucial step in filling the gap in the labour force in some sectors.

According to Respondent O, there is a transition needed in the business- and management culture where the organizations realize that it is important to do extra work when it comes to landing applicants, and that should also be the general Red Carpet approach: "*But I think that is part of the realisation, which is very low-level among people that interns, graduates come in, could land. That it indeed does not cost a lot of energy, do not have very high expectations, except for the thought of: 'oh you are now entering Kramp, but there is no room, maybe you should talk to Van Raam, because I know she is looking for such people'. It is that simple. That is my Red-Carpet perception*." (Respondent O).

To make a policy like the Red-Carpet approach integrate into companies' policies, it is needed that an organization, like for example 8RHK, is involved in processes or controlling some cases. "*And that is what I think here too, if you really want to make an impact, then it could well be, as an 8RHK organization, we are not just going to tell someone to an intern: 'you should go there?', but you have to go there. be there when they say yes or no. And if you say no, you say: 'okay, then you should go and have a look there, because we also have an opportunity there'. Sure, that costs money, I know that, maybe it is not feasible at all from an organizational point of view to do that, but maybe that is the only way to really let people notice by showing example behaviour 'on the spot*'." (Respondent O). It costs a lot of time and money of course, but it is a way of making sure that cases like this are treated in the correct and desired way.

The representatives of SmartHub indicated that they as an organization often check the company they contacted has been handled correctly: "*We notice it very much, people who are affiliated with SmartHub have that regional feeling. But we also give it a lot of credit, because I often ask that question: 'Do you ever find that you cannot place people and what happens then?'. There are of course different answers, but I certainly hear that those contacts are there to another company. Or they give it back to us*." (Respondent K). So, according to them, there is already a culture existing that companies send applicants through to other companies or organizations. However, Respondent R, who is closely involved with companies and their management, pointed out that the exchange of personnel and the forwarding of applicants is a very sensitive subject. "*But in Varsseveld, where all those companies are located, when we had that discussion, the first thing people said was: 'we are going to take people away from each other, then it has to become more transparent'. It was very sensitive. In the end we did. (…). But there is so limiting thinking sometimes. And I think that is also a bit of a culture that you have to change*." (Respondent R). In that way, the trust in each other should improve to make a project like this work. This behaviour is a bit contradictory to the noaberschap culture in the Achterhoek, so it can be concluded that noaberschap is present at the production and trade level, but not on personnel. However, the Red Carpet approach is not intended to give companies a lot of extra work, a small effort can be enough to strengthen the relation and trust with other companies: "*It does not always have to be very large, of course, if I have good applicants at Van Raam, I call two people I know from my network and ask if it's something for them. Then you are already doing something."* (Respondent R).

A significant factor in attracting young talent and/or employees is the willingness of companies to educate their (future) employees. In the Achterhoek this is quite strong, which is part of the business culture and with that the locality variable in this study. Table 12 (next page) presents the findings on three relevant statements on this topic. Around 90% of the companies value the further development of their employees, and another 66% offer career opportunities for their staff. Furthermore, to help the staff with development, around 84% of the companies offer training. Other findings also showed that especially bigger companies have more options in offering education and training for employees, namely 95%. Where smaller companies struggle more to have these options, namely 67% of the companies (van de Wiel, Koster, & Hospers, 2022).

The willingness of companies to educate their staff							
	Totally disagree	Disagree	Neutral	Agree	Totally agree	Do not know / no opinion	**Total**
My organization finds it important that employees continue to develop	0%	1%	4%	42%	50%	3%	**100%**
My organization offers career opportunities to employees (career path)	1%	6%	22%	39%	27%	5%	**100%**
My organization offers new employees opportunities to develop or train	1%	2%	9%	44%	40%	4%	**100%**

Table 12: The willingness of companies to educate their staff (van de Wiel, Koster, & Hospers, 2022)

An important factor in brand awareness and handling in the correct manner with employees is the role of HR management at organizations. It is interesting to study the company size and the presence of HR management, because this gives an insight into the business culture of companies in the Achterhoek. This business culture is a significant variable in the concept of locality. In tables 13 and 14 these statistics are presented separately. A remarkable finding is the number of SMEs in the Achterhoek region, a whopping 92.7% of the asked companies is an SME. This is a significant factor in the business culture of the Achterhoek because most of these SMEs are family businesses. Another factor in the business culture and the availability of companies for job seekers and/or graduates is the presence of HR management because these are the first contact points for applicants. However, as can be seen in table 8, around 60% of the companies in the Achterhoek do not have an HR management in service.

Number of employees	**Number**	**Percentage**
1-10	88	40.0%
11-50	71	32.3%
51-100	23	10.5%
101-250	22	10.0%
More than 250	16	7.3%
Total	**220**	**100%**

Table 13: Number of employees at companies in the Achterhoek (van de Wiel, Koster, & Hospers, 2022)

HR management present?	**Number**	**Percentage**
Yes	87	39.5%
No	133	60.5%
Total	**220**	**100%**

Table 14: HR management presence at companies in the Achterhoek (van de Wiel, Koster, & Hospers, 2022)

When combining these results, table 15 is formed. In this table, the relation between these two significant factors of the business culture is presented. What stands out is the fact that especially smaller companies do not have HR management in their organization, which makes it for applicants more difficult to contact these companies.

HR management present?	**Number of employees**			**Total**
	1-10	11-100	More than 100	
Yes	10%	45%	95%	39.5%
No	90%	55%	5%	60.5%
Total	**100%**	**100%**	**100%**	**100%**

Table *15: The relation between company size and HR-management (van de Wiel, Koster, & Hospers, 2022)*

The bigger companies most of the time have an HR department, but in those companies, the regional thought is not present in their vision and policy, as Respondent R experienced: "*No one really cares about that anymore. I said, someone must take over, I even said on the theme table that there was a place available for Kramp. But it was just said it was not a priority. They did not have time for that, so how important is it."* (Respondent R). And according to Respondent R, it is, especially for bigger companies, crucial to play an active role on a regional level, to make sure that the labour force in the region develops: "*Especially if you are such a large employer in the region. I actually think that is an obligation to be active, and I think you just need that. To gain support and to get that realization. Because I think that also, if I look at the region, it does a lot to increase awareness outside the region, but how big is it in the region?"* (Respondent R). So, also in this aspect, there is a change in business- and management culture needed.

Another advantage of having more HR management in the business culture is the possibility of exchanging personnel more or helping with the flow of employees. Two respondents mentioned an initiative where companies help their employees with finding a job for their partner, so moving to the region would go easier: "*That when a partner gets a good job, that the other partner is also helped to get a job somewhere nearby*." (Municipality Aalten). Currently, this is done individually by the companies, but having an HR department will be a burden that falls off the shoulder of companies. "*I think that happens per company. Often the company knows broadly, the partner who works in a hospital, for example, (...). And then they will actively look here themselves to see if there is some work to get there*." (Municipality Oude IJsselstreek). Furthermore, the companies in the Achterhoek often lack a long-term vision of their personnel and what is needed in the coming years. Having an HR manager within the organization can help with developing such a vision, in cooperation with VNONCW: "*Because when I speak with VNONCW in particular, (…), they actually represent the entrepreneurial part of the Achterhoek, and I sometimes doubt to what extent all companies in the Achterhoek are involved. Of course not, I think even some of them are there. And sometimes just in a passive role (...). To what extent are they aware of the development of personnel and the future of the labour market? I do not really know; I am a little worried about it too.*" (Municipality Doetinchem). This point of long-term vision could be significant in attracting and keeping employees in the region and with that have a positive influence on the labour market in the Achterhoek: "*You would also like those companies to have a somewhat longer vision about personnel policy and the labour market*." (Municipality Aalten).

Furthermore, the current culture within HR management is mainly focused on their own company, and not thinking about networks within the region. "*But I think anyway, if you are talking about, we have a lot of innovative companies, but if you look at HR, we are very traditional, a lot of companies. The innovation in the nature of the work that the entrepreneur does, it does not always correspond to how the staff is treated*." (Respondent R). It is a shame that the innovative companies that are present in the company are not known by the potential employees within the Achterhoek, because the HR departments are not working together. Furthermore, HR departments are also not active in taking time for brand awareness, as can be stated by this example from the SmartHub representatives: "W*e mainly deal with HR and then we also ask whether we can let an ambassador or young talent within their company speak to the outside world. We will show it to students in the Netherlands, and we will throw that into our marketing. We have asked all members to do this, and in the end, you do not get that input. But that it will be more that they see nothing of it, without having any influence on it*." (Respondent J). So, there is a structural change needed in the mindset of companies and their HR-department to be more attractive for employees and make the recruiting, binding, and captivating more successful: "*No idea where it ends up. You simply notice in the issues of the day often does not even arrive at the organizations. And also, the municipality as employer, (...) the council members sitting at my theme table have never had discussions with the HR department about the initiatives we*

have. (...). There are very nice projects with executive project leaders, and with that you hope that they will take the step, but you would actually like HR to look at what exactly is happening from the front. They look at how the project works, what the risks are and whether the subsidies are going in the right direction. They just do not have that conversation with HR where it just as well concerns their own organization where it is deployed. We have to make that mindset at the table." (Respondent I). It is needed to control if projects that are initiated at the theme tables are coming through all layers within the companies of the Achterhoek.

All in all, there is a transition needed in the HR departments of all companies. For big companies, there should be someone that has a regional vision, and for smaller companies there should be someone, to make sure that the work is done properly. "*I think you should also look for people, not necessarily the board or the management of a company, but people who are involved in the region and who get around it internally. They are not necessarily at work 40 hours a week, but simply want to do it extra. (...) But you just have people in the organization who also have that involvement, who can also propagate it and make links. If only it happens…*" (Respondent O). In this way, the companies in the Achterhoek are better reachable for employees, and it helps with the brand exposure of companies and the region self. Although the point is with the hiring of HR-organization by companies, there is still the fear that personnel is being stolen by others, as Respondent R mentions: "*If you are talking about this, we do indeed have HR circles and several. It is very often about attracting talent and retaining it, so it is very often the topic. But I think a general HR department, if I look at Varsseveld and the industry circles there, for example, would be super sensitive. That is actually a bit of a no-go. If I would like to call a colleague's company to ask if they still have a good buyer, then that is all very sensitive, for some people not for everyone*." (Respondent R). It could work, but some companies fear that their personnel will be transferred to other companies. Ideas like this should be based on giving and taking, but trust is needed, to make it work.

5.2.5 Results

At first, the business- and management culture in the Achterhoek is focused on working together where possible. The policy analysis showed that there is strong cooperation between governmental organizations in the region, and now with the findings of the survey, it turns out that the cooperation between the companies in the Achterhoek is strong. This culture of cooperation influences the strength of the locality in the region. It can be said that the common interest in developing the Achterhoek is the red thread of cooperation and interaction between several organizations. With that, it can be concluded that the locality is strong in the Achterhoek.

Within the business culture of companies in the Achterhoek, it is ordinary to invest in retraining your staff and developing them further. This part of culture plays a significant role in the relation between locality and the labour force because companies themselves are investing in their personnel to fill up gaps in the labour market. If companies can keep doing this, then the demand for college and university students/graduates will decrease over time. Of course, is it not possible to fill up the entire gap, but this form of business culture is a step in the right direction.

However, there is a transition needed in the mindset of companies and organizations on the recruiting, binding, and captivating of new and existing employees. Currently, the companies are mainly focused on their success and do not want to invest time in exchanging or forwarding personnel to other companies in the Achterhoek. Especially big companies that have enough employees should take the initiative in cooperating more at this level. Most of the time it is a matter of trust, which the companies struggle with. However, this is a process of giving and taking, and once it is integrated the entire region can profit. From the survey and interviews, it became clear that noaberschap is recognizable in the

business culture of the Achterhoek, mostly on product and knowledge exchange, but there is improvement possible on the personnel level

Secondly, is the awareness of the potential in the Achterhoek. There are a lot of innovative companies in the Achterhoek that are not known by people from in and outside the region. The larger companies are overflowed with applicants, while the smaller companies have difficulties with finding personnel. This was also a finding of the survey, but after the interviews and the focus group, this is even confirmed more. So, there is an initiative needed with a general brand exposure of the Achterhoek region to make it more attractive for employees to come and stay in the region, but also to support smaller companies with their brand awareness and their potential.

A third important finding is the fact that the role of HR management should be bigger and improve more in organizations in the Achterhoek. A lot of companies do not even have an HR department, and companies that do have an HR department do not see an interest in cooperating to improve the region. The current HR departments are traditional and focused on their success, and the regional networks are being neglected. However, when there would be a stronger network throughout the HR departments of companies in the Achterhoek, there is a lot of potential in recruiting, binding, and captivating new and existing employees.

Despite the positive effects of the business culture in the Achterhoek, there is a point of improvement possible. Namely the presence of HR management at companies, only 39.5% of the asked companies have an HR department in their organization. This makes the connection between staff and the labour market in the Achterhoek not fitting. Companies are less reachable for applicants or the management of staff within an organization is not good enough. The presence of an HR department can improve the relationship between companies and employees, and with that, the labour force and market could develop further.

Overall, the locality is, no doubt, strong in the Achterhoek. Although, there are transitions needed within aspects of that locality to have a more positive influence on the labour market and the demographic situation. There is a lot of potential in the aspects of improving the business- and management culture and the functioning of the labour market. So, currently, the locality is strengthening the labour force in the Achterhoek, however, it could be more. Companies and organizations, on business- and management levels, intensively cooperate. Especially, the characteristic noaberschap is recognizable in the business- and management culture when it comes to cooperation for different projects and initiatives. These forms of cooperation are firstly focused on making the region attractive for new people, but also for people that already live in the Achterhoek. Examples of that are investing in mobility, housing, infrastructure, and education in the region. So, it can be said that there is a strong locality in the Achterhoek, and it leads to initiatives that have positive effects on the demographic situation and the labour market.

5.3 Findings Demographic shrinkage

The following paragraph will focus on the concept of demographic shrinkage/situation in the Achterhoek. In the conceptual frame are four related aspects for this concept however, this paragraph has merged the first three aspects, namely population number, population composition, and household composition, because of the overlap of the aspects. Eventually, there is a sub-paragraph about the out-migration in the Achterhoek.

5.3.1 Population number, Population composition, & Household composition

When focussing on the demographic situation in the Achterhoek, the municipalities are united on the fact that the Achterhoek is not shrinking as much as in the last decade. "*I think demographics here are pretty stable now. In total it is. As a municipality, we have been above 30,000 for years. And we have been just under it for several years now. It is about hundreds*." (Municipality Oost Gelre). This is further explained by the Municipality Bronckhorst: "*Although the growth figures often lagged the national average, there was growth, at the moment we are doing better on some indicators, but 10-20 years ago (…) was the image that each time just a few percentage points less on national growth. So, it does grow, but if it continues for years, the difference will become bigger and bigger*." So, the total population number is not decreasing that much anymore, however, there is another development in the demographic situation that is causing problems for the region and will cause more problems in the future, namely dejuvenation and greying.

This has effects on the composition of the population, which could eventually affect the labour market when the total number of economically active people is decreasing. "*Roughly speaking, in the Achterhoek, the number of young people is still stagnating somewhat, the number of elderly people is increasing everywhere, and roughly speaking, the shrinkage in the Achterhoek is currently decreasing somewhat*." (Municipality Oude IJsselstreek). This quote can be supplemented with the following: "*The working population is shrinking, the population of students is shrinking, the number of elderly people is growing, so it is a growth region, which is often a problem*." (Municipality Bronckhorst). In the Achterhoek that are three waves of greying present, as the Municipality Oude IJsselstreek says: "*What you have been seeing for a long time throughout the Netherlands, but even more so in the Achterhoek, is what I call triple greying. You are currently dealing with the baby boomers after the Second World War (...). That is one wave of aging, the other wave of aging is that people are getting older. (…) Well of course that means more elderly people. And the third is that people have to live independently at home for longer, so that they are less likely to go to a care home or nursing home*." The combination of these three waves is the main reason that the number of elderly in the region is increasing. More people are going into retirement, which affects the labour market. Furthermore, because people are getting older in general, there are more elderly people in the region. And lastly, because elderly people stay longer at their houses, there is a shortage in the housing market. On top of that, there are also retired people moving towards the Achterhoek: "*The arrival of older people or pensioners, without children, which is what you see in the Achterhoek right now. Who buy the houses, that you then automatically contribute to the greying of your entire population, of course, and the demand for care will increase*." (Municipality Aalten). These retirees move towards the Achterhoek for quietness and the living environment, which also affects the housing market because these retirees are more likely to have a bigger budget than the starters that want to buy a house.

In the search for employees, the applicants must have enough knowledge and experience in their discipline. However, a large part of the applicants in the Achterhoek is not on this level. This causes extra work for companies to (re)train them, or they are more likely not even to employ the candidates. Table 16 presents the findings on this question. Around 52% of the companies answer that the applicants are not compatible enough to start right away at their business (van de Wiel, Koster, &

Hospers, 2022). The given reasons by the companies, which are relevant for this study, are presented in table 17. The results show that most of the time the applicants are not educated enough or do not have enough skills to work at the company. However, most of the time companies do not have a choice and employ these applicants and retrain and educated them themselves.

Are applicants compatible?	**Number**	**Percentage**
Yes	106	48.2%
No	114	51.8%
Total	**220**	**100%**

Table 16: Are applicants compatible? (van de Wiel, Koster, & Hospers, 2022)

Reason	**Number**	**Percentage**
Applicants are not educated enough	18	15.8%
Applicants are too educated	6	5.3%
Insufficient relevant education of applicants	56	49.1%
Too little work experience applicants	54	47.4%
Applicants mismatched skills	55	48.2%
Other options	(…)	(…)
Total	**114**	**100%**

Table 17: Reasons that applicants are not compatible (multiple choice) (van de Wiel, Koster, & Hospers, 2022)

The region should not completely focus on attracting people in an unending flow. "*So, we are not going to think like Achterhoek, let us have a lot of people come here to work, because then we will also get more residents. It is not that kind of policy*." (Municipality Oost Gelre). And this opinion is shared by the other interviewed representatives. It is more important to improve in quality and not in quantity: "*But that is also our vision. Our vision is not we want to grow, we want to grow in quality, you want to grow by at least not scaring people away*." (Municipality Bronckhorst). To reach that, there are investments needed in facilities, infrastructure, mobility, and housing. In that way, the region should be more attractive to live for new people, but also people already living in the Achterhoek. "*And that is also to keep people here and to encourage them in their own environment to do all kinds of fun things. Get involved in community life. I think it is a beautiful region and a flourishing club life, yes and that sense of community. Well, keep things like that…*" (Municipality Oude IJsselstreek). And with involving people more in society, the region will be more attractive, and the quality of life will improve. A significant factor of not expanding the gap in the labour market is to keep the population level stable as it is and invest in the quality of life and living environment, which is a characteristic of the Achterhoek.

Although, Respondent I thinks that there is already an organization with these ambitions of promoting the region, namely the Unexpected Corner (in Dutch: Onverwachte Hoek): "*That is also the case, but I notice that that is not the case with the Unexpected Corner. There is simply a lot of effort on the fact that it is beautiful to work, live and live here."* (Respondent I). It was also added that the region now has a surplus in MBO students but needs to be aware of not neglecting to give this group of the population attention because they are needed in society. *We do know that MBO students do not often go very far from home to their education. And they often continue to live in the region where they grew up. (…) But that also applies to MBO students in Arnhem and Nijmegen, so the moment we have a shortage in that MBO spectrum, we also have a lot of trouble getting that group in this direction. So, we still have to profile ourselves at all levels, because we may eventually have a shortage of MBO students*." (Respondent I).

5.3.2 Out-migration

Furthermore, this demographic transition is caused by the departure of youth out of the region because of their study, or simply because there are no available houses: "*There are groups of friends, groups of football friends, groups of friends at school, three or four of those cohorts had to leave because they could not get anything here. They are now in Zutphen, or Doetinchem, Westervoort, or something like that. That is very tragic for those small villages*." (Municipality Bronckhorst). And not only does the Municipality Bronckhorst experience that the youth wants to live in the region where they are born and have lived their childhood, but other villages also plead for more houses: "*All the cores in Oost Gelre are on the sidewalk of the town hall every day to argue for more houses to be built. Young people really want to live in their own village*" (Municipality Oost Gelre). The connection of the youth with their village can be related to the theory of place attachment by Edward Relph (1976). People are in some way connected to a place they live, which makes the decision to leave more difficult (Relph, 1976).

Lastly, the infrastructure and mobility are an important part of the Achterhoek and make the region more attractive. Especially, to reduce the out-migration of students. When the reachability of the Achterhoek is better, the students are not dependable of living in the city where they go to school. The municipalities have focus on these topics, but also a lot of concerns for them. For example, the N18 road across the region. "*The municipality of Oost Gelre is the main driver for an upgrade of the N18. At the moment just, we always call it a cart track, with all those traffic lights and intersections. It is a disaster to get to the north from Doetinchem. We want to try to improve that*." (Municipality Oost Gelre). The improvement of this road can improve the reachability of the entire region, and with that make it a more attractive business climate and living environment. On top of that, public transport should improve. This can be done by investing in a new train from Arnhem to Doetinchem and Winterswijk, the so-called Regio Express. "*The Regio Express is an express train from Arnhem to Doetinchem and vice versa. (...) But I think that such an express train also makes it possible that if you can get to Arnhem 20 minutes faster, I think that makes a difference of about 13 to 20 minutes, but that is quite a lot of course if you have to cover that distance twice a day*." (Municipality Doetinchem). In this way, the region could be more attractive for people to move to because the rest of the country has better reachability, which improves the situation for commuters. And to improve this, even more, the Municipality Doetinchem is making land available close to the station where companies and entrepreneurs can settle in combination with houses for students and/or starters: "*For example, we are now busy in the station area (...). That is quite a bare environment, (...), because there are quite a lot of lots in the station area where something is still possible. We have also taken that as one of the areas that we say we are going to now and within a year, where all plans are already in development for the station. And there we want to make a combination of, well, sort of a real student campus, preferably, where you can live, work, study, a bit of catering and stuff like that.*"

5.3.3 Results

What can be concluded is the fact that the demographic situation has more influence on the labour force, than the other way around. In the Achterhoek there is no equal division of education levels, and on top of that because of the greying and dejuvenation, the number of economically active people is decreasing more. So, it can be said that the current demographic situation negatively influences the labour force. Because of this fact, the strength of locality is more and more significant in the Achterhoek, because this has a positive influence on the development of the labour force. So, the current cooperation between organizations and the business culture is important in the development of the Achterhoek.

Another point that became clear and was confirmed by the respondents is the fact that the Achterhoek region has made a transition from investing in attracting a lot of young talent, towards supporting and preserving talented people in the region. This form of management culture influences the demographic situation. These investments should eventually have positive effects on the labour market. Because the cooperation between all relevant actors is strong, the Achterhoek has an advantageous position compared to the rest of the country. It strengthens the effects of locality even more.

At last, the findings gave an insight into the relation between the demographic situation and the labour force. It became clear that especially the developments of the demography, as the education level and age of the population, influence the labour force. The fourth sub-question suggested that there is a relation between these two variables, but in fact, the findings of the data show that the labour force barely influences the demographic situation. So, to conclude the developments in the labour market will not have an influence on limiting the demographic shrinkage of the Achterhoek.

5.4 Findings Labour force

The third and last concept in this study is the labour force. It is divided into three aspects, namely the labour market, education level, and economically active people. During the data collection, this topic is treated broadly however, not everything that is collected, was relevant for this study. So, that has been left out of this study.

5.4.1 Labour market

Overall, a significant factor in attracting employees is being reachable and known by people that might be interested in living and working in the region: "*So in short, an important part of solving that problem for people, is partly in being easy to find for the people you are looking for. And also to show how nice it is to live and work here."* (Municipality Bronckhorst). To make that possible, there are meetings needed where plans of making a common interest in the region clear and spreadable throughout the region and the country. "*So, we still have to talk carefully about what is our common interest in the Achterhoek and our message to the west as well. Or to the other, yes just any way, to the public*." (Municipality Aalten). In this way, the attraction of employees and the preservation of the current population in the Achterhoek will develop. And with that, the labour force will eventually increase over time.

On top of that, is the aim of reintroducing dropouts of the labour market, who can still be very useful and productive in some professions: "*I think that we are not yet sufficiently involving a group in our labour market, we have had to continue to involve them in a different way. That is sometimes also at a later age, people who are now on social assistance, for example, end up at the UWV or think: 'I am 50 and I am actually not that suitable for this labour market anymore'. I think we have to remain very active, especially the people who drop out or partially drop out of our labour market, in order to involve them again, because they are often people who can of course do this type of work fantastic. As long as you train them properly."* (Municipality Doetinchem). This reintroducing could cause a new impulse in the development of the labour force.

To fill the upcoming gap in the labour force, companies should attract new employees. In the survey were questions about the labour market in the Achterhoek and the attraction of new employees for companies. Table 18 presents a statement that studies the labour shortage in the Achterhoek. Around 48% of the companies have difficulties with filling up their vacancies. This is a sign that there is a form of labour shortage in the Achterhoek region. Especially the bigger companies struggle with this problem, which is derivable from the fact that these companies most likely have more vacancies than the smaller companies (van de Wiel, Koster, & Hospers, 2022).

My organization manages to fill vacant vacancies on time

	Totally disagree	Disagree	Neutral	Agree	Totally agree	Do not know / no opinion	**Total**
Number	26	80	39	50	12	13	**220**
Percentage	11.8%	36.7%	17.8%	22.7%	5.5%	5.9%	**100%**

Table 18: Filling up vacancies (van de Wiel, Koster, & Hospers, 2022)

Following this statement, there is a more direct statement that describes the shortage of available employees for companies. It asks the respondents if their company is affected by the fact that there is not enough labour force present in the Achterhoek. Table 19 (next page) presents the results of this statement. Around 42% of the companies in the Achterhoek experience the labour shortage as an obstacle to expanding their business (van de Wiel, Koster, & Hospers, 2022). This is an indirect effect of the current demographic situation on the labour market in the Achterhoek. However, the reliability of this statement can be questioned, because 10% of the respondents answered 'do not know/no

opinion', this could be caused by the fact that there are two statements merged into one statement, which makes it more difficult for respondents to give a clear answer on this statement.

My organization succeeds in attracting new employees so that my organization can expand

	Totally disagree	Disagree	Neutral	Agree	Totally agree	Do not know / no opinion	**Total**
Number	21	72	51	49	5	22	**220**
Percentage	9.5%	32.7%	23.2%	22.3%	2.3%	10.0%	**100%**

Table 19: Difficulties in attracting employees limits companies' expansion (van de Wiel, Koster, & Hospers, 2022)

Besides investing in its regional youth, it is still important to attract people from outside of the region. Although, the focus should lay on already working people, that are around 30 years old because that will eventually help with population growth: "*I think we should focus more on getting the people in their thirties back, who then have children and go back to school."* (Municipality Oude IJsselstreek). There is an initiative that is specifically focused on that group of people. They promote the Achterhoek in parts of the country to attract employees to the region: *"That is the campaign of the Unexpected Corner of the Netherlands. It is very much aimed at people we think we know have an interest in living and working in this part of the country, or in this type of environment."* (Municipality Bronckhorst). The respondent from the Municipality Doetinchem goes even further than that, he believes that the attraction of university and college should not be the focus. The region should invest in attracting employees that can directly start with their job: "*We often talked about this a few years ago, how do we get more university students and college students to our region. I have less of that concern. I think if we have interesting vacancies with a good salary and our attractive environment there, (...), then it will be nice to live there again. So, I am not so negative about attracting higher educated staff again, I think that will be fine. I am more concerned about the basics of what the Achterhoek once was, rolling up sleeves, handy people, who just do the basic work.*" (Municipality Doetinchem).

The concept of Red Carpet has already been shortly described (see 5.2.4 Business- and management culture) and this can be interpreted in different ways, and it is also crucial to know how this lands within the organizations of the Achterhoek. The discussion begins with Respondent P, founder of the Red-Carpet project, explaining what their interpretation was: "*But we notice that we currently support a lot of young people who want to take the step back to training. Who have dropped out of the education system somewhere, or who have fallen, and who then make a detour via a low-paid job. (…). So that is a bit of career support. We currently mainly support young people who are slightly more distanced from the labour market and who cannot get a job tomorrow, and who often still follow the education route*." (Respondent P). So, in short, the Red-Carpet project is initiated to help youth that has issues or distance with the labour market.

However, this is not the interpretation by the 8RHK ambassadors, as explained by Respondent I: "*That is actually the perspective that I see, that we as a region have 1500 to 1900 shortages, then we have a Red Carpet here to explain to everyone who wants to come this way, until they also have that job, have a house, have education, my god what has. But that is my interpretation of what we should do if you have a Red-Carpet policy. Apart from the Red-Carpet project. Call it the Green Carpet, maybe that is easier, we have a green Achterhoek flag. (…). How does that actually end up in those organizations? Who understands which links you have to make when we say that we are the graduation and internship region?*" (Respondent I). It becomes clear that the same term is being used for different ideas, the Red-Carpet project is to support struggling youth in the labour market, and the Red-Carpet Policy is intended to do everything as organizations to land an applicant in the region. This confusion makes it more difficult for important actors to understand what is meant by the Red-Carpet approach.

So, you could say that there are projects needed to support the SMEs in the Achterhoek with their brand exposure. According to 8RHK ambassadors, there are already projects running, but there is improvement needed: "*Because we are investing significant resources in this together and they are really cool projects, they are also doing very well, but how are we going to make sure that it lands even better if you look at the big perspective within recruiting, binding, captivating future employees and current employees?*" (Respondent I). The idea of a new project to recruit, bind, and captivate employees is, according to SmartHub, not an option, because there are already a lot of initiatives in the region: "*I also think it is a pitfall that there are so many initiatives. Sometimes I come across an initiative, so many people are interested in young talent, but then I sometimes think that is double work. I can imagine that as an outsider, that you do not know where to report*." (Respondent J). In this way, there is not a clear path for applicants to take when they are searching for help in the Achterhoek.

5.4.2 Education level

In the literature about the Achterhoek and the vision of 8RHK, the term 'MBO-economy' is being used to describe the education level in the region. This term also came back in the interviews with the representatives of the governmental layers in the Achterhoek: "*Well and from that research, it became painfully clear that we have surpluses in MBO 2 and 3, I think also MBO 4. And again, a shortage in master's and bachelor's in Scientific Education."* (Municipality Aalten). It is the question if companies are limited by the fact that there is an 'MBO-economy', so the respondents are asked if the available schools in the region are fitting to their requirements. The results in table 20 show that the companies are satisfied with the educational offer in the (wide) region. It says wide region because there is no university located in the Achterhoek region. So, the wide region is only applicable for the statement about the university. However, these results are a bit of a distorted picture, because the percentage of companies that have answered 'do not know/no opinion' is quite high.

The educational offer in the (wide) region fits the needs of my organization	**MBO**	**HBO**	**University**
Totally disagree	3%	5%	8%
Disagree	15%	15%	13%
Neutral	21%	28%	24%
Agree	39%	29%	20%
Totally agree	7%	3%	3%
Do not know/no opinion	15%	20%	32%
Total	**100%**	**100%**	**100%**

Table 20: Educational offer in the (wide) region (van de Wiel, Koster, & Hospers, 2022)

Another aspect that the representatives pointed out was the potential of the college that is just across the border in Germany: "*So there you really have an HBO education, which you have less here.*" (Municipality Oost Gelre). An education centre like that can help with keeping students in the region or attract some students to the region. But on top of that, MBO students could develop themselves further while staying in the region. On top of that, from that school there are possibilities for students that can do internships in the Achterhoek: "*I have always said you will go to the technical college from Bocholt, there are 1200 people who are trained to be engineers. You could also bring them here to do internships.*" (Municipality Aalten). However, the cross-border relations with Germany are less studied in this research, so further research on this topic is needed to come to conclusions.

Furthermore, to fill up the gap of higher educated employees, the management organizations try to stimulate youth and employees that have a degree on MBO level, to study further. "*To train those MBO students to that level is of course also a good idea*." (Municipality Aalten). With that, the

municipalities hope that the lack of higher educated employees can be partly solved in a short term. Of course, is this only a slight part of the gap in the labour market that can be filled up.

Since the ambition of becoming the innovative region in the Netherlands, companies in the Achterhoek are investing a lot in innovating their production process and equipment. For this case, their staff needs to get educated more or need to get retrained to be able to work efficiently: "*But it is, of course, worth it, you have to guide people in that. People have to learn to work with new equipment in that respect, not everyone can do that. A lot of people can do it too. (...) So you have to do that well on both sides, so our innovation projects are fortunately in line with our ambition in that labour market."* (Municipality Bronckhorst). The municipality is willing to support companies in becoming more innovative and retraining their staff because it develops the economy and labour market of the region.

Another issue on this topic is the presence of fitting studies on the MBO level. In the Achterhoek there is a large demand for employees in the technic and healthcare sectors, however, there are a lot of studies that are not fitting for the region: "*I think we really need to focus on those MBO students here. The ROC de Graafschap is good of course, only they might have to get a little better in terms of study choices or possibilities*." (Municipality Aalten). To continue on this, the schools should adapt their supply more which would be more beneficial for the region: "*But it is strange that such an MBO has to look at what exactly we are training for. I do not believe that everyone who is now in the sports and exercise program can become a sports instructor, we do not need that many. You should perhaps turn that more towards care."* (Municipality Aalten).

The respondents experienced another problem at the labour market and education level in the Achterhoek. There is an upcoming shortage of people that are uneducated or do jobs where no education is needed: "*What accidentally surprised me is that we have 1500 shortages a year, but most of it unskilled.*" (Municipality Aalten). Many of these jobs are in craftmanship and are family businesses. Those professions are crucial to have in the economy, however, the Municipality Doetinchem is afraid that in the future these jobs are almost nowhere to be found: "*That baker and the butcher, and so on. I think that a number of professions can simply become very difficult to perform when we have too few people. And I do not see that so much in the professions that you and I will perform, because we have enough people who can do that, also in our region. But I think that especially to make the products, well in the catering industry, I mean all professions where people just have to be handy, the painters, the butchers, indeed the catering employees*." Furthermore, according to Municipality Doetinchem, also on this point, the management culture should change, and this problem should not be neglected. Uneducated people can do professions well enough to fit in the labour market, however currently the focus is on other groups in society: "*I thought that also means something in our vision of, well, that we are always busy training, training, training. I think this is yes, I think that remains important, because I think people who do unskilled work can also have an education*." (Municipality Doetinchem).

To fill the gaps that are caused by the education level in the Achterhoek, companies are benevolent to retrain and/or their staff, which was already described in sub-paragraph 5.2.2 Functioning of the labour market. This is an initiative by the companies themselves, but the municipalities are willing to support them in a facilitating way: "*What you do see is that we have quite a lot of company courses, private courses, or such a CIVON, which also includes the technology and care academy. Somehow, I think they are little known in the Achterhoek. Maybe if they were more famous*." (Municipality Oude IJsselstreek). An example of funding by municipalities, in cooperation with the 8RHK ambassadors, is given by the representative of the Municipality Doetinchem: "*Because as a municipality, it is also becoming increasingly important that we also deal with, well, OpIJver for example, the training fund. And well, further retraining, the development of all residents of our municipality."*

5.4.3 Economically active people

The Achterhoek is facing a lot of greying in the population the coming years (Koster, de Vor, & van de Wiel, 2021). This results in a bigger group of retirees in the labour market. The survey asked the companies how many of their employees are expected to retire in the next five years, see table 21. Around 70% of companies expect that a maximum of 10% of their employees will retire in the next five years. However, there is a difference in the sector where the retirements will take place, the tertiary sector will face the biggest problems with finding a replacement for the retirees (van de Wiel, Koster, & Hospers, 2022).

	What percentage of your total workforce do you expect to retire within the next five years?								
	<5%	5-10%	10-15%	15-25%	25-50%	50-75%	>75%	Do not know / no opinion	**Total**
Number	91	41	26	16	8	3	3	8	**196**
Percentage	46.4%	20.9%	13.3%	8.2%	4.1%	1.5%	1.5%	4.1%	**100%**

Table 21: Expected retirement of employees (van de Wiel, Koster, & Hospers, 2022)

5.4.4 Results

It was already mentioned that the strong locality feeling in the Achterhoek has a positive influence on the labour force of the region. A crucial factor in this relation is the business culture in the Achterhoek. It is common for companies to educate and retrain their staff or applicants, to make them more suitable and efficient at their job. In this way, the education level of the population improves, and certain vacancies can be filled with their own retrained staff. This opportunity for a career path is significant in improving the labour force of the Achterhoek. On top of that, the cooperation of companies in the Achterhoek is for a part focused on the exchange of personnel with each other to fill gaps in the labour market. However, according to the asked employers, this form of cooperation could still improve.

The main problem in the Achterhoek is the availability of employees. There are however multiple ways to tackle this problem. According to the finding, it is important to invest in the already present youth and their development of career path. After that comes the attraction of youth and employees from outside of the region. In order to keep the already present youth interested in the Achterhoek region, it is significant to cooperate with each other and start initiatives to support (struggling) youth and employees with finding a job.

Furthermore, the Achterhoek has a one-sided education supply, with only MBO schools. This ties into the fact that the region has a so-called 'MBO-economy'. However, there are a lot of studies at these schools that do not fit well with the demand of the labour market. That is why the representatives that are interviewed pleaded for investments and transitions in the education system of the region. There should be more supply in studies for the technic and healthcare sectors. In this way, the education level of the population fits more into the current labour market. So, it can be concluded that a combination of locality (namely policies and management culture) and the demographic situation (namely education level) have a significant influence on the development of the labour force in the Achterhoek.

6. Conclusion & Recommendations

6.1 Conclusion

This research was focused on answering the main question: '*How can a strong locality in the Achterhoek develop the labour force and with that limit demographic shrinkage?*'. In this research, there has been qualitative and quantitative data used from municipalities, managers, and entrepreneurs.

The results showed that there is indeed a strong locality in the Achterhoek, with a strong foundation of cooperation between companies and governmental layers. This strong foundation has a positive influence on the development of the labour force. An important aspect of locality is the business- and management culture in the region, which is influenced by the noaberschap culture of the Achterhoek. However, there are still improvements possible in the cooperation between organizations. There is already a lot of cooperation on knowledge- and product exchange, but to have a more positive effect on the labour force, there is more cooperation needed on personnel exchange.

Another significant result is the fact that there is a transition needed in the mindset of companies and organizations in the Achterhoek. There is more HR-management needed to be reachable for new employees and/or applicants. And on top of that, the companies and organizations need to support their personnel more in their career path and their development, with the possibilities of training at work. This is all part of the business- and management culture in the Achterhoek, which is, evident from this study, one of the most significant aspects of the concept locality.

So, the locality has a positive influence on the labour market. However, the labour force has almost no influence on the demographic situation. It is the other way around; the demographic situation determines the developments in the labour market. On top of that, the strong locality only has a slight influence on the demographic situation of the Achterhoek. This is mainly caused that the business- and management culture are focused on developing the labour market. It is needed to invest and focus more on the demographic situation in the region. Out of the results, it can be noticed that the demographic situation influences the labour market. The education level and age of the population determine the number of economically active people and with that the labour force in the region.

In fact, it can be concluded that the current demographic situation has a negative influence on the developments of the labour market in the Achterhoek. Especially the out-migration of youth and students causes dejuvenation in the region. The youth that stays in the Achterhoek almost has the same educational level, namely MBO. This also has a influence on the business culture in the Achterhoek, because the technic and agricultural sectors are the largest in the region. An effect of this is a shortage of employees for higher educated jobs.

Furthermore, another important factor in the locality and development of the demographic situation and the labour market is the branding of the region. There is a label needed which is known for everyone in- outside the region, that promotes working and living in the Achterhoek and the potential of the companies in the region. Especially, the innovation in the Achterhoek is a label which can be crucial in making the region more attractive to live in.

All in all, there are investments and projects needed to improve the demographic situation in the Achterhoek. One of those investments is in the business- and management culture, and then especially in the reachability for (possible) employees in the region. But also, on the basic points of infrastructure in a region, namely housing, mobility, and education. With investments at these points there is a growth in population possible, and with that a strengthening of the labour market.

To conclude, the formed hypothesis of this research: '*if the locality in a region is strong, it will have a positive influence on the labour force and eventually on the demographic situation*' can be rejected. When there is a strong locality in a region there is indeed a positive influence on the labour force, however, the labour force does not influence the demographic situation. The demographic situation influences the labour force and is supported by the strength of locality in the region.

6.2 Recommendations

The results of this study showed that there is a strong locality in the Achterhoek, but it can still improve to have even more positive effects on the labour force and demographic situation of the Achterhoek. That is why the following recommendations are made:

- There is currently a lack of HR management and -departments in the region. There are investments needed to stimulate companies in integrating such departments into their organization. With that, there is more cooperation possible within the region on personnel exchange and recruiting new employees.
- The Achterhoek is an innovative region with a lot of potential, however, it is barely known by people in- and outside the region. So, there is an investment needed where a general label is created which can be used by everyone in the Achterhoek. In this way, the branding of the region and also (smaller) companies, that struggle with attracting personnel, will improve.
- Lastly, the potential of the current population in the Achterhoek is not being used optimally. The study programs of schools do not fit properly with the job opportunities in the region. On top of that, there is a focus on attracting university and college students from outside the region. But when there will be more focus on the current youth and supporting them with retraining, there are opportunities to strengthen the labour force in that way.

7. Reflection

When doing this research, I learned a lot of new things. Especially with the focus group, which was the first I used this method of data collection. Looking back on all data collection, and then, in particular, the interviews, it is a shame that I have not used the method of focus group more. It is an effective way to get new insights on a subject from all kinds of actors.

Furthermore, by doing an internship at 8RHK ambassadors I have had a lot of time to work on my thesis and collect the data. In that way, I had a very effective way of working and gained a lot of progression in just a couple of months. If I did not have an internship, I would probably not come this far with my research progress. On top of that, the internship organization has given me new and better insights into the subject labour market of the Achterhoek.

A point of improvement for me is being stricter when conducting an interview. For example, truncate in time when the respondent is wandering off the subject. That is a lesson I learned. The respondents give answers to all my questions, but everything was treated a bit criss-cross what made the data processing more difficult.

What made it difficult to write the findings, results, and conclusion is the fact that I had to write another report for the 8HRK ambassadors as well. However, this had a slight other subject and main question. This made it difficult to keep the two works apart from each other. But overall, I am satisfied with both products.

8. Literature

8RHK Ambassadeurs. (2019). *Achterhoek Visie 2030. Ruimte voor innovatie, groeien in kwaliteit.* Doetinchem: 8RHK Ambassadeurs.

Achterhoek VO. (2019). *In beeld: Leerlingendaling in het voortgezet onderwijs.* Doetinchem: Achterhoek VO.

Alfasi, N., & Fenster, T. (2009). Between the "Global" and the "Local": On Global Locality and Local Globality. *Urban Geography, 30(5)*, 543-566.

Baarda, D. D., & de Goede, M. P. (2001). *Basisboek methoden en technieken.* Groningen: Stenfert Kroese.

Bagguley, P., Mark-Lawson, J., Shapiro, D., Urry, J., Walby, S., & Warde, A. (1990). *Restructuring:place, class, and gender.* London: SAGE Publications.

Bleijenbergh, I. (2015). *Kwalitatief onderzoek in organisaties.* Amsterdam: Boom Uitgevers.

Bock, B. B. (2019). Van leefbaarheid naar toekomstkracht; inspiratie voor een nieuw krimpbeleid. In B. B. Bock, H. L. de Groot, G.-J. Hospers, E. van Leeuwen, & F. Córvers, *Land in samenhang. Krimp en regionale kansengelijkheid.* (pp. 10-29). The Hague: Ministry of the Interior and Kingdom Relations, Platform31.

Bock, B. B., de Groot, H. L., Hospers, G.-J., van Leeuwen, E., & Córvers, F. (2019). *Land in samenhang. Krimp en regionale kansengelijkheid.* The Hague: Ministry of the Interior and Kingdom Relations, Platform31.

Bontje, M., & Musterd, S. (2012). Understanding Shrinkage in European Regions. *Built Environment (1978-), 38(2)*, 152-161.

Byrne, D. (1998). *Complexity theory and the social sciences: an introduction.* London: Routledge.

CBS. (2021a, October 13). *Bevolking; kerncijfers*. Retrieved from CBS Statline: https://opendata.cbs.nl/statline#/CBS/nl/dataset/37296ned/line?ts=1641817264568

CBS. (2021b). *Demographic pressure*. Retrieved from CBS Methodology: https://www.cbs.nl/en-gb/onze-diensten/methods/definitions/demographic-pressure

CBS. (2021c). *Green pressure*. Retrieved from CBS Methodology: https://www.cbs.nl/en-gb/onze-diensten/methods/definitions/green-pressure

CBS. (2021d). *Grey pressure*. Retrieved from CBS Methodology: https://www.cbs.nl/en-gb/onze-diensten/methods/definitions/grey-pressure

CBS. (2022). *Vestigingen van bedrijven; bedrijfstak, gemeente*. Retrieved from CBS Statline: https://opendata.cbs.nl/#/CBS/nl/dataset/81575NED/table

Clarke, N. (2013). Locality and localism: a view from British Human Geography. *Policy Studies, 34(5-6)*, 492-507.

Corbin, J., & Morse, J. M. (2003). The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics. *Qualitative Inquiry, 9(3)*, 335-354.

Córvers, F. (2019). De regionale arbeidsmarkten van het randland; eenheid in verscheidenheid. In B. B. Bock, H. L. de Groot, G.-J. Hospers, E. van Leeuwen, & F. Córvers, *Land in samenhang. Krimp*

en regionale kansengelijkheid (pp. 88-110). The Hague: Ministry of the Interior and Kingdom Relations, Platform31.

de Gelderlander. (2018, January 16). *'De groep van 20 tot 40 jaar ontbreekt grotendeels in de Achterhoek'*. Retrieved from de Gelderlander: https://www.gelderlander.nl/arnhem-e-o/de-groep-van-20-tot-40-jaar-ontbreekt-grotendeels-in-de-achterhoek~aaba8274/

de Gelderlander. (2021a, November 3). *Tekort aan personeel in Achterhoek groeit komende jaren verder door vergrijzing*. Retrieved from de Gelderlander: https://www.gelderlander.nl/doetinchem/tekort-aan-personeel-in-achterhoek-groeit-komende-jaren-verder-door-vergrijzing~a3d69bf7/

de Gelderlander. (2021b, December 28). *Achterhoekers gaan massaal met pensioen: grote tekorten in zorg, ict en techniek*. Retrieved from de Gelderlander: https://www.gelderlander.nl/achterhoek/achterhoekers-gaan-massaal-met-pensioen-grote-tekorten-in-zorg-ict-en-techniek~a4800737/

de Gelderlander. (2021c, September 28). *Achterhoek wil studenten in eigen regio vasthouden: als werken online kan, dan studeren ook*. Retrieved from de Gelderlander: https://www.gelderlander.nl/doetinchem/achterhoek-wil-studenten-in-eigen-regio-vasthouden-als-werken-online-kan-dan-studeren-ook~ab83269d/

De Groene Amsterdammer. (2020, October 7). *Het achterland als voorhoede. Noaberschap sells.* Retrieved from De Groene Amsterdammer: https://www.groene.nl/artikel/noaberschap-sells

de Groot, C., van Dam, F., & Daalhuizen, F. (2013). *Vergrijzing en woningmarkt.* The Hague: PBL Netherlands Environmental Assessment Agency.

Derks, W., Hovens, P., & Klinkers, L. (2006). *Structurele bevolkingsdaling. Een urgente nieuwe invalshoek voor beleidsmakers.* The Hague: Rli (Council for the Environment and Infrastructure).

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics (5th Edition).* London: SAGE Publications Ltd.

Government of the Netherlands. (2018, January 23). *Krimpgebieden en anticipeergebieden*. Retrieved from Rijksoverheid: https://www.rijksoverheid.nl/onderwerpen/bevolkingsdaling/krimpgebieden-en-anticipeergebieden

Hoekveld, J. J. (2012). Time-Space Relations and the Differences between Shrinking Regions. *Built Environment (1978-), 38(2)*, 179-185.

Hospers, G.-J. (2019). Stad en land samen verder: nieuwe kansen voor rurale krimpregio's. In B. B. Bock, H. L. de Groot, G.-J. Hospers, E. van Leeuwen, & F. Cörvers, *Land in samenhang. Krimp en regionale kansengelijkheid* (pp. 50-69). The Hague: Ministery of the Interior and Kingdom Relations, Platform31.

Hospers, G.-J., & Syssner, J. (2018). *Dealing with Urban and Rural Shrinkage: Formal and Informal Strategies.* Vienna: LIT VERLAG GmbH & Co.

Korzilius, H. (2008). *De kern van survey-onderzoek.* Assen: Koninklijke Van Gorcum BV.

Koster, R., de Vor, F., & van de Wiel, E. (2021). *Achterhoek Monitor. Editie 2021/22.* Doetinchem: Achterhoek Board, 8RHK.

Loichinger, E. (2015). Labor force projections up to 2053 for 26 EU countries, by age, sex, and highest level of educational attainment. *Demographic Research, 32*, 443-486.

Massey, D. (1993). Questions of Locality. *Geography, 78(2)*, 142-149.

Meier, S., Reverda, N., & van der Wouw, D. (2015). Randland. *Rooilijn, 48(4)*, 272-279.

Meijer, M., & van der Krabben, E. (2018). Informal institutional change in De Achterhoek region: from citizen initiatives to participatory governance. *European Planning Studies, 26(4)*, 745-767.

Morgan, D. L. (1996). Focus Groups. *Annual review of sociology, 22(1)*, 129-152.

Municipality of Aalten. (2018, October). Daadkrachtig, Duurzaam en Dichtbij. Uitvoeringsprogramma 2018-2022.

Municipality of Berkelland. (2021, June 15). *Perspectiefnota 2021*. Retrieved from Gemeente Berkelland: https://berkelland.begrotingsapp.nl/perspectiefnota-2022

Municipality of Bronckhorst. (n.d.). Toekomstbestendig Bronckhorst; Duurzaam en Betrokken.

Municipality of Doetinchem. (2021, June 1). Kadernota 2022.

Municipality of Oost Gelre. (n.d.). Programmabegroting 2022-2025.

Municipality of Oude IJsselstreek. (2020, October 1). *Programmabegroting 2021-2024*. Retrieved from https://oude-ijsselstreek.begrotingonline.nl/programmabegroting-2021-2024-

Municipality of Winterswijk. (2021). Programmabegroting 2022-2025 Winterswijk.

Musikaphan, W., Sawangdee, Y., Chamratrithirong, A., & Jampaklay, A. (2009). The Influence of Existential Locality on Labor Force Age Migration Decision Making. *Journal of Population and Social Studies [JPSS], 18(1)*, 81-102.

Myrdal, G. (1957). *Economic Theory and Underdeveloped Regions.* London: Duckworth.

Province of Gelderland. (2018). *Gaaf Gelderland. Omgevingsvisie.* Arnhem: Province of Gelderland.

Province of Gelderland. (n.d.). *'Smart' werken en wonen. Factsheet gebiedsopgave Achterhoek.* Arnhem: Province of Gelderland.

Relph, E. (1976). *Place and Placelessness.* London: Pion.

Rink, D., Haase, A., & Bernt, M. (2009). Specification of working model. Work package, 1.

Robson, C. (2002). *Real world research.* Oxford: Blackwell Publishing.

Rutgers-Zoet, J., & Hospers, G.-J. (2018). Regional cooperation in rural areas: the case of the Achterhoek. In G.-J. Hospers, & J. Syssner (Eds.), *Dealing with urban and rural shrinkage: Formal and informal strategies* (pp. 87-99). Vienna: LIT VERLAG GmbH & Co.

Sanchez, A. G., Molero, J., & Rama, R. (2016). Local cooperation for innovation. Food and beverage multinationals in a peripheral European country. *International Journal of Multinational Corporation Strategy, 1(2)*, 107-132.

Sohn, C., & Stambolic, N. (2015). The urban development of European border regions: a spatial typology. *Europa Regional, 21(4)*, 177-189.

Trouw. (2020, June 13). *Trots op je streek door de regionale vlag*. Retrieved from Trouw: https://www.trouw.nl/binnenland/trots-op-je-streek-door-de-regionale-vlag~b7831b36/

Urry, J. (1987). Survey 12: Society, Space, and Locality. *Environment and Planning D: Society and Space, 5(4)*, 435-444.

van Dam, F., de Groot, C., & Verwest, F. (2006). *Krimp en Ruimte. Bevolkingsafname, Ruimtelijke Gevolgen en Beleid.* Rotterdam: NAi Uitgevers.

van de Kaa, D. J. (1987). Europe's second demographic transition. *Population Bulletin, 42(1)*, 1-59.

van de Wiel, E., Koster, R., & Hospers, G.-J. (2021). *Arbeidskracht Analyse Achterhoek 2021. Overzicht, inzicht, uitzicht.* Doetinchem: 8RHK ambassadeurs.

van de Wiel, E., Koster, R., & Hospers, G.-J. (2022). *Arbeidskracht Analyse Achterhoek 2022. Overzicht, inzicht, uitzicht.* Doetinchem: 8RHK ambassadeurs.

van Thiel, S. (2010). *Bestuurkundig Onderzoek; een methodologische inleiding.* Bussum: Uitgeverij Coutinho.

Vennix, J. (2019). *Research methodology. An introduction to scientific thinking and practice.* Amsterdam: Pearson Benelux BV.

Verschuren, P., & Doorewaard, H. (2015). *Het ontwerpen van een onderzoek.* The Hague: Boom uitgevers.

Yin, R. (2003). *Case study research: design and methods.* London: SAGE.

Attachments

Attachment 1: Interview Guide

Introductie

Allereerst, heel erg bedankt dat ik u mag interviewen over dit onderwerp. Ik zal het onderzoek eerst even kort toelichten. Ik studeer momenteel aan mijn master *Human Geography: Economic Geography* aan de Radboud Universiteit in Nijmegen. En ik loop een afstudeerstage bij 8RHK Ambassadeurs. Mijn onderzoek focust zich op hoe lokaliteit/een lokaal gevoel een (positieve) invloed heeft op de arbeidsmarkt in de Achterhoek, en daarbij de demografische situatie kan verbeteren. Hierin wordt bijvoorbeeld gekeken naar de aantrekking van jongeren, sociale activiteiten en de woningmarkt. Ik ben zelf heel erg geïnteresseerd in dit soort vraagstukken over demografische krimp en de arbeidsmarkt, omdat ik dit sinds jongs af aan al heb ervaren in de regio waar ik ben opgegroeid, Zeeuws-Vlaanderen.

De antwoorden die u geeft op mijn vragen worden alleen in de resultaten van dit onderzoek gebruikt. Bovendien heeft u het recht om anoniem te blijven in dit onderzoek. Het interview zal 30 tot 45 minuten in beslag nemen. U mag het interview altijd onderbreken of stopzetten als er iets tussen komt.

Ook wil ik u vragen of ik de audio van dit interview mag opnemen, zodat het verwerken van dit interview beter en eenvoudiger kan verlopen. Heeft u daar problemen mee?

Heeft u nog verdere vragen voordat we gaan beginnen?

Vragen

Algemeen

1. Wat is uw huidige functie binnen uw organisatie?

Huidige demografische situatie

2. Als u vanuit uw werkveld reflecteert, hoe ervaart u de huidige demografische situatie in de Achterhoek?
3. Hoe heeft de demografische situatie zich de afgelopen jaren ontwikkeld?
4. Investeert uw organisatie om de demografie in de regio te verminderen?
    a. Zo ja, wat voor soort investeringen?

Lokaliteit

5. Op welke manieren werkt uw organisatie samen met andere organisaties?
    a. Welke thema's krijgen de aandacht?
    b. Hoe verloopt zo'n samenwerking?
6. Een kenmerkend fenomeen van de Achterhoekse cultuur is *naoberschap*. Op welke manier is dit fenomeen terug te herkennen in het bedrijfs-/bestuur leven?
7. Worden er activiteiten tussen organisaties georganiseerd om de band en betrokkenheid te versterken?
    a. Zo ja, wat voor activiteiten?
    b. In hoeverre kunnen deze activiteiten leiden tot een sterkere arbeidsmarkt?
    c. In hoeverre kunnen deze activiteiten leiden tot een ontwikkeling van de demografische situatie?
8. Hoe wordt er binnen uw organisatiecultuur aandacht besteed aan de aantrekking en doorstroming van studenten in de regio?

9. Wordt er tussen organisaties samengewerkt om studenten, stagiaires, en/of hoogopgeleiden aan te trekken?
    a. Zo ja, op welke manier?
    b. Wordt er ook aandacht besteed aan het doorstromen van deze groep binnen andere organisaties in de regio?

Arbeidsmarkt

10. Wat ziet u als het grootste probleem van het arbeidstekort in de Achterhoek?
11. Houdt uw organisatie zich bezig met het arbeidstekort in de regio?
    a. Zo ja, wat voor soort beleid en/of maatregelen voert uw organisatie om het arbeidstekort aan te pakken?
12. Ervaart uw organisatieproblemen met het afnemende aantal economisch actieve mensen in de regio?
    a. Zo ja, op welke manier en hoe?
13. Is er binnen uw organisatie een beleid om werknemers of stagiaires van verschillende generaties vast te leggen?
    a. Zo ja, waarom?
    b. Zo nee, zou dit mogelijkheden kunnen bieden?
14. Op welke manier is uw organisatie betrokken in het SmartHub principe in de Achterhoek?
15. Wordt er bij de werving van hoogopgeleiden/studenten/werkzoekenden aandacht gelegd op het aantrekkelijk wonen in de regio?
    a. Zo ja, op welke manieren wordt hier beleid op gevoerd?
    b. Zo nee, weet u waarom dit niet gebeurt?
16. Op welke manier wordt er bij het aantrekken van arbeiders rekening gehouden met hun woonwensen?
17. Zijn er lopende promoties over de Achterhoek namens uw op universiteiten of andere onderwijsinstellingen om studenten aan te trekken?
    a. Zo ja, op wat voor manier?
18. Op welke manier wordt de arbeidsmarkt beïnvloed door de demografische situatie?
19. In hoeverre ziet u kansen voor de arbeidsmarkt als de demografische situatie stabiel wordt?
20. Denkt u dat er voldoende wordt samengewerkt tussen relevante partijen om de kansen van de arbeidsmarkt te benutten?

Afsluiting

We zijn aan het einde gekomen van het interview. Nogmaals hartelijk dank voor uw bijdrage aan mijn onderzoek, ik waardeer het heel erg. Wilt u de eindversie van het onderzoek toegestuurd krijgen via de mail? Heeft u verder nog vragen over het verloop van het onderzoek en hoe uw bijdrage wordt verwerkt?

Attachment 2: Code Book Interviews

Code	Code Groups
○ 'MBO-economy' dominant in the Achterhoek	Labour market Education level
○ Achterhoek as innovative region	Labour market Innovation in the Achterhoek
○ Achterhoekers are proud on the region	Social activities/relations Living environment
○ Activities and events to stimulate youth to stay or come to the Achterhoek	Demographic situation Labour market Cooperation Social activities/relations
○ After Covid-19 pandemic companies experience trouble with hiring new employees	Labour market
○ Aim on attracting thirty-year-olds or starters	Business culture Demographic situation Management culture
○ Aiming on keeping the population at the same level because the quietness is attractive	Demographic situation Living environment
○ Already established companies expand in the region	Business culture Labour market
○ Arrival of European migrants to work in technic sector	Demographic situation Labour market
○ Arrival of high educated employees will not be the biggest problem	Demographic situation Labour market Education level
○ Attractive school just across the border	Education level Relation with Germany
○ Before Covid-19 pandemic lot of international relations and cooperation between companies	Cooperation Social activities/relations
○ Before Covid-19 pandemic, companies had no trouble with hiring employees	Labour market
○ Big differences between larger and smaller cores	Demographic situation Labour market Housing market Living environment
○ Bigger companies participate less at regional cooperation	Business culture Cooperation
○ Border still seen as an obstacle	Relation with Germany
○ Bronckhorst most greying municipality	Demographic situation
○ Companies cooperate when partners need a job in the region	Labour market Cooperation
○ Companies cooperate with each other	Business culture Cooperation
○ Companies could cooperate more on long-term vision	Business culture Cooperation
○ Companies educate their employees	Business culture Labour market Education level

○ Companies have initiative in attracting employees towards the Achterhoek	Business culture Labour market Cooperation Management culture
○ Companies in the Achterhoek should be better findable for employees	Business culture Labour market
○ Companies need to get awareness of projects by the regional cooperation	Business culture Cooperation
○ Companies participate with SmartHub, but almost never have interns	Business culture Labour market Cooperation Social activities/relations
○ Companies should invest in facilities to attract employees	Labour market Infrastructure Living environment
○ Companies that are originated in the Achterhoek have moved or expanded outward the region	Business culture Labour market
○ Cooperation between border-regions	Cooperation Relation with Germany Social activities/relations
○ Cooperation between companies and governmental layers	Cooperation
○ Cooperation between companies and governmental layers should improve	Cooperation
○ Cooperation has a good foundation	Business culture Cooperation Management culture
○ Dejuvenation and greying in the region	Demographic situation
○ Demand for houses in small cores	Housing market Living environment
○ Demand for technical employees	Business culture Labour market
○ Demographic shrinkage appliable in the whole Netherlands, but stronger in Achterhoek	Demographic situation
○ Demographic situation influences the labour market	Demographic situation Labour market
○ Demographic situation is stable	Demographic situation
○ Develop a common Achterhoek interest, which is known for everyone	Business culture Labour market Cooperation
○ Development of an app to create awareness of companies in the Achterhoek	Business culture Labour market Management culture
○ Development of project to stimulate HR management at SMEs	Business culture Labour market Cooperation Management culture
○ Development of station area to attract students and interns	Demographic situation Infrastructure
○ Difference in visions of municipalities	Management culture

○ Difficulties in finding young talent	Demographic situation Labour market
○ Difficulties with differences in laws between border	Relation with Germany
○ Difficulties with finding employees in health care	Labour market
○ Doetinchem as core grows	Demographic situation Living environment
○ Doetinchem as key player in the development of the Achterhoek	Demographic situation Living environment Management culture
○ During and after Covid-19 pandemic more regional cooperation between companies	Business culture Labour market Cooperation Social activities/relations
○ Dutch people working in Germany, but Germans working in the Achterhoek is scarce	Labour market Relation with Germany
○ Educated youth at schools in Germany are possibilities	Labour market Education level Cooperation Relation with Germany
○ Elderly people arriving in the region, what strengthens the greying population	Demographic situation
○ Elderly people stay longer in their houses	Demographic situation Housing market
○ Enough and attractive housing needed	Housing market
○ Expanding and preserving the character of the Achterhoek as point of interest	Business culture Living environment Management culture
○ Expected shortage in craftmanship	Labour market
○ Expected shortage in students	Labour market Education level
○ Facilities not evenly spread through region	Living environment
○ Family businesses in the Achterhoek are characteristic	Business culture Labour market
○ Family businesses have potential	Business culture Labour market
○ Family businesses part of culture	Business culture
○ Family businesses struggle with successors	Business culture Labour market
○ Governmental layers have a limited role in the activities of companies	Cooperation Social activities/relations Management culture
○ Governmental layers lack innovative mindset	Innovation in the Achterhoek
○ Governments and managers do not take culture and sense of community into account when developing policies	Management culture
○ Greying	Demographic situation
○ Greying wave 1	Demographic situation
○ baby-boom generation	Demographic situation

○ Greying wave 2	Demographic situation Infrastructure
○ people are getting older in general	Demographic situation
○ Greying wave 3	Demographic situation
○ people stay longer at their house, later towards a nursing home	Demographic situation
○ Groups departed their towns because there were no houses available	Demographic situation Housing market
○ Growth on industrial areas	Business culture Labour market
○ Health care will face the biggest labour shortage	Labour market
○ Help partners of employees with finding a job in the region	Business culture Demographic situation Labour market Social activities/relations
○ HR management at SME or companies can help with attracting new employees	Business culture Labour market Cooperation
○ Improve awareness of the potential and attractiveness of the Achterhoek	Labour market Social activities/relations Living environment
○ Improvement of efficiency and innovation at companies improve work situation and productivity	Business culture Labour market
○ Information point for people working across the border	Relation with Germany
○ Initiative to develop affordable housing for starters	Demographic situation Housing market
○ Intention to work together via 8RHK board	Cooperation Social activities/relations
○ Internal moving within the Achterhoek is large	Demographic situation Housing market
○ Internet and fibre glass is present in the Achterhoek	Infrastructure
○ Invest in making the Achterhoek an innovative green region	Cooperation Innovation in the Achterhoek
○ Investing in growth, might cost more than it yields	Business culture Demographic situation Labour market Management culture
○ Investments in facilities and society to make the Achterhoek attractive	Demographic situation Labour market Housing market Cooperation Infrastructure Living environment
○ Investments mobility needed	Mobility
○ Keep departed students 'warm' with the Achterhoek	Business culture Social activities/relations Management culture

○ Labour force and market is regional interest	Labour market Cooperation
○ Labour market has a slight influence on demographic situation	Demographic situation Labour market
○ Labour productivity is lower in the Achterhoek	Business culture Labour market
○ Lack of awareness of the potential in the Achterhoek	Labour market Living environment
○ Lack of focus on relation between housing- and labour market	Labour market Housing market
○ Lack of housing for starters	Demographic situation Housing market
○ Lack of HR management at companies	Business culture Labour market
○ Lack of long-term vision in staff management	Business culture Labour market
○ Landscape and quietness as point of interest	Management culture
○ Landscape and quietness are attractive, that needs to be preserved	Living environment Management culture
○ Larger cores grow, but smaller cores stay behind/shrink slightly	Demographic situation
○ Limited number of houses built because of the name shrinkage region	Demographic situation Housing market Management culture
○ Lots of investment in regional cooperation	Business culture Cooperation Management culture
○ Lots of SME companies	Business culture Labour market
○ Managerial cooperation should improve	Cooperation
○ Managers of companies and entrepreneurs have difficulties in helping interns or developing projects for interns	Labour market Management culture
○ Merging of schools in the Achterhoek	Demographic situation Education level Living environment
○ Migration from Randstad towards middle of the Netherlands, and just a few towards the Achterhoek	Demographic situation
○ Migration towards the Achterhoek is limited	Demographic situation
○ Mobility and reachability are not a point of interest	Mobility
○ Modesty in the Achterhoek, despite the quality of their technic/technology sector	Business culture Labour market Management culture
○ More focus on MBO-students	Education level
○ More focus on uneducated people/employees	Labour market Education level
○ More houses needed because of household dilution	Housing market

○ Municipalities should not compete with each other, but work together	Cooperation
○ Municipalities stimulate part-timers towards a full-time job	Labour market Management culture
○ Municipalities support youth with finding a job in the region	Labour market Management culture
○ Municipality Doetinchem has the schools	Education level Living environment
○ Municipality supports with financial investments	Cooperation Management culture
○ N18 should improve for better mobility	Mobility
○ New industrial areas needed	Business culture Labour market Infrastructure
○ No organization for the flow and help of job-seeking students, it is done individually	Business culture Labour market Management culture
○ Noaberschap as point of interest	Management culture
○ Noaberschap culture has potential and is an incentive	Business culture Social activities/relations
○ Noaberschap has advantages and disadvantages	Business culture Social activities/relations Management culture
○ Noaberschap recognisable in business culture	Business culture
○ Noaberschap recognisable in management culture	Social activities/relations Management culture
○ Often focus and interests on own municipality when cooperating with each other	Cooperation
○ People are lured towards bigger cores to preserve facilities	Demographic situation Infrastructure Management culture
○ People getting older and needing more support and/or health care	Demographic situation
○ People in the Achterhoek prefer the quietness, growth is not necessary	Demographic situation Living environment
○ People like green countryside as living environment	Living environment
○ People live in Germany, because it is cheaper, but activities remain in the Achterhoek	Relation with Germany Social activities/relations Living environment
○ Policies are not directly focused on attracting employees and with that develop population growth	Management culture
○ Possible loss of facilities because of demographic shrinkage	Demographic situation Living environment
○ Potential in innovative companies	Business culture Innovation in the Achterhoek
○ Potential of general HR management, but initiative should be at companies	Business culture Labour market Cooperation Management culture

○ Potential with Ruhr area as borderland	Relation with Germany
○ Pressure on the region from elsewhere, that they need to grow	Demographic situation
○ Projects to build more houses	Housing market Management culture
○ Projects to develop education possibilities for thirty-year-olds	Business culture Labour market Education level Cooperation Management culture
○ Projects to develop the flow within the housing market	Housing market Management culture
○ Projects to increase retraining	Business culture Labour market Education level Management culture
○ Projects to promote the Achterhoek region	Business culture Social activities/relations Management culture
○ Projects with cooperation between companies and governmental layers to help job transitions	Business culture Labour market Cooperation Management culture
○ Public transport should improve	Mobility
○ Quality of life as point of interest	Living environment
○ Regional cooperation is on a top-level	Cooperation Social activities/relations Management culture
○ Retraining of MBO students	Labour market Education level
○ Risk of building too much, which decreases the attractiveness	Housing market Living environment
○ Role of governmental layers is unknown	Cooperation Management culture
○ Shortage at labour market	Demographic situation Labour market
○ Shortage of 1900 employees per year	Labour market
○ Shortage of employees in hospitality	Labour market
○ Shortage of employees in industry	Labour market
○ Shortage of houses due to failures in management and policies	Housing market Management culture
○ Shortage of uneducated people/employees	Labour market Education level
○ Slight population growth because of migration	Demographic situation
○ Slight population growth in the Achterhoek	Demographic situation
○ Small cores experience loss of facilities	Demographic situation Living environment
○ Smaller companies struggle more with labour shortage than bigger companies	Business culture Labour market

○ Some companies are not participating at the regional cooperation	Business culture Cooperation
○ Starters want to buy houses no rent	Housing market
○ Surplus of companies in technic sector	Labour market
○ Technic sector is on a top-level	Education level Innovation in the Achterhoek
○ The potential of cross-border relations is not reached	Cooperation Relation with Germany
○ The Regio Deal made cooperation easier	Cooperation Social activities/relations Management culture
○ The supply of MBO studies in the Achterhoek not fitting on demand	Labour market Education level
○ Theme table feels responsible for labour shortage after Covid-pandemic	Labour market Cooperation Management culture
○ Theory of Christaller affects the small cores in the Achterhoek	Demographic situation Infrastructure
○ There is so-called 'triple greying'	Demographic situation
○ Upcoming wave of retirement	Demographic situation Labour market
○ Vision of growth in quality, and not in population growth	Living environment Management culture
○ Westside of the Achterhoek has a better reachability than other parts of the Achterhoek	Labour market Mobility
○ Work from home trend has potential for a region like the Achterhoek	Labour market
○ Youth departs for study, and mostly does not return	Demographic situation
○ Youth stagnates, elderly increase, so shrinkage is decreasing	Demographic situation

Attachment 3: Format Focus Group

Introductie

Welkom allemaal bij deze bijeenkomst. Ik wil jullie heel erg bedanken voor jullie deelname en komst!

Mijn naam is Meyron Cauwels en ik studeer Economische Geografie aan de Radboud Universiteit in Nijmegen. Voor mijn afstudeerstage en -opdracht loop ik stage bij 8RHK ambassadeurs, voornamelijk bij de thematafel Onderwijs & Arbeidsmarkt. Ik doe namens 8RHK ambassadeurs een onderzoek, wat bestaat uit mijn scriptie en een rapport, naar de rode loper binnen de arbeidsmarkt van de regio. Met de rode loper wordt geïnitieerd om studenten en jong opgeleide werknemers aan te trekken en behouden in de regio, door bijvoorbeeld stageplekken en banen aan te bieden.

Tijdens deze bijeenkomst zullen er een aantal vragen, onderwerpen en stellingen behandeld worden met een focus op dit thema. Deze zijn van tevoren opgesteld, en het verloop van de discussie bepalen of bepaalde vragen, stellingen en onderwerpen behandeld worden of niet. Het doel van de bijeenkomst is om inzichten te krijgen in de processen die er spelen binnen de kernen en netwerken van de Achterhoek bij het ontwikkelen van de arbeidsmarkt en/of de krapte van de arbeidsmarkt tegen te gaan.

Om een goed verloop van de analyse en uitwerking van de resultaten, wordt het geluid van deze bijeenkomst opgenomen.

Wat verder nog belangrijk is om te vermelden, is dat de resultaten van deze bijeenkomst anoniem verwerkt zullen worden.

Om deze bijeenkomst in goede banen te leiden zijn er een aantal regels en praktische mededelingen waar met zijn allen ons aan moeten proberen te houden:

- **Totale beschikbare tijd vermelden**
- Ieder zijn mening telt.
- We spreken niet door elkaar heen, en ieder persoon heeft het recht om zijn verhaal af te ronden.
- Om ervoor te zorgen dat iedereen meekrijgt wat er gezegd wordt, is het belangrijk dat er maar één persoon tegelijk aan het woord is.
- De voorzitter van de bijeenkomst mag ingrijpen zodra er wordt afgedwaald van het onderwerp, of een persoon het woord geven als deze telkens niet de kans krijgt om het woord te nemen.

Vragen, stellingen en onderwerpen

Praktische mededeling: Mocht er bij een vraag weinig respons zijn, is het mogelijk om er een stelling van te maken, waar de deelnemers kunnen kiezen tussen eens en oneens. Op deze manier kan er een discussie of gesprek op gang gebracht worden.

- Hoe interpreteren jullie de Rode Loper? Doe je extra moeite als een sollicitant niet bij jou terecht kan?
- Een kenmerkend fenomeen van de Achterhoekse cultuur is *noaberschap*. Op welke manier is dit fenomeen terug te herkennen in het bedrijfs-/bestuursleven?
- Wordt er tussen organisaties samengewerkt om studenten, stagiaires, en/of hoogopgeleiden aan te trekken?
    - Wordt er ook aandacht besteed aan het doorstromen van deze groep binnen andere organisaties in de regio?
- Hoe wordt er binnen de organisatiecultuur aandacht besteed aan de aantrekking en doorstroming van studenten in de regio?
    - Hoe wordt er binnen de organisatie geschakeld wanneer er gesolliciteerd wordt?
    - Hoe worden plannen uit de bestuursorganisatie en -lagen, als 8RHK, (uitgevoerd of) doorgegeven op de werkvloer?
    - Zijn alle organisaties binnen de regio hier bekend mee?
- Waar kan er nog verbeterd worden tussen de samenwerking? Of intensiveren? Wat is er nog nodig?
- Hoe groot is het belang van een HR-afdeling binnen bedrijven voor het doorsturen van studenten en stagiaires?
    - Zou een algemene HR-afdeling voor meerdere bedrijven bij elkaar, hierin een doorbraak kunnen zijn? Waarom wel? Waarom niet?
- Wat wordt er van HR verwacht? Is het alleen uitvoer of ook een strategie?
- Als je dit vraagstuk bekijkt vanuit een HR-perspectief is er daar nog winst te boeken?
    - Wat zijn jullie ideeën daarbij?

Afsluiting

We zijn aan het eind gekomen van de beschikbare tijd van deze bijeenkomst. Ik wil jullie nogmaals heel erg bedanken voor jullie komst en jullie input. Er is veel ter sprake gekomen en er zijn denk ik ook hele interessante uitkomsten boven tafel gekomen. Deze uitkomsten zullen anoniem verwerkt worden in mijn afstudeeropdracht en het rapport zal naar ieder van jullie gestuurd worden.