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# Social capital on the countryside

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## THE CONTRIBUTION OF SIDE ACTIVITIES.

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## SUMMARY

Dutch rural areas face some challenges like population decline and ageing. In order to make rural areas liveable, these communities should be resilient. Resilient communities are able to adapt to changing circumstances. Along with the economic and environmental capital, social capital determines to what extent this community resilience is developed. When the three capitals are well developed and interact in a positive way, a community is likely to be resilient. Social capital could be enhanced through side activities. These small-scale activities of farmers and non-farmers in rural areas tend to contribute to social capital through a high degree of social interaction, a higher attractiveness and an improved quality of life in those rural areas. This research aims to contribute to and provide more insights on this topic seeking an answer to the following central question: "In what way do side activities have impact on the social capital, as part of community resilience, of communities in rural areas?" To provide an answer to this question, a quantitative method has been used. Residents of the villages Nijlande, Ekehaar, Grolloo and Gasteren in the municipality of Aa en Hunze in the province of Drenthe were asked to fill in a questionnaire survey. They were asked about their perception of the contribution of side activities to the social capital of their place of residence. The data show that the resident's perception is that side activities do contribute to the social capital of rural areas. Side activities have impact on the social relations of people within the community. They also have impact on the communication between the residents. So, according to the respondent's perception, side activities stimulate the social interaction and communication and thereby contribute to the social capital of rural areas.

### Keywords

Community resilience ▪ Social capital ▪ Side activities ▪ Rural development

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## 1. INTRODUCTION

### 1.1 Background

#### 1.1.1 Resilient rural communities

Besides the long-existing interest to the community (Chaskin, 2008), the resilience of the community has become a much-discussed subject these days (Wilson, 2010; Steiner & Markantoni, 2014; Steiner & Atterton, 2014). Community resilience as a concept has not only been used often in academic research, but also in policies (Steiner & Markantoni, 2014; Steiner & Atterton, 2014). In the Netherlands some policies are really focussed on the liveability and resilience of rural communities. The Netherlands Institute for Social Research discussed the consequences of changing rural areas. Through changing social circumstances and modern possibilities like having a car, citizens of rural villages have become less dependent on the place of residence. Besides that, rural areas often have to face an ageing and declining population (Vermeij & Steenbekkers, 2015). The institute has been doing research about the social cohesion and its contribution to the liveability and social vitality of rural areas (Vermeij & Mollenhorst, 2008). These studies are elaborated within the broader monitoring program about the social state of the countryside of the Netherlands (Sociaal en Cultureel Planbureau, 2017).

Community resilience relates to the adaptive capacity of the community (Steiner & Markantoni, 2014). It is not about a community being able to control everything that affects it, but it is about being able to respond to change (Magis, 2010). Considering the changes that rural communities in the Netherlands are experiencing, the development of strategies to make them more resilient seems to be an important goal that both communities, researchers and policymakers should strive for. Improving the resilience will help communities to adapt to changing circumstances like ageing and population decline.

#### 1.1.2 The impact of side activities on rural communities

Side activities in rural areas have been considered as a possible element with positive impact on community resilience. Markantoni concentrated her research on non-farmers side activities, getting to the conclusion that they are important for rural development. Side activities help building social capital and social vitality of rural communities. They improve the social well-being and the quality of life (Markantoni et al., 2012). She also concluded that the start-up motives of side activities are important to their contribution to rural communities (Markantoni et al., 2014). Side activities are being started mainly for non-economic reasons and contribute to the side-activity owner's quality of life. Because of that, side activities also help to improve the quality of life and the level of well-being of rural communities as a whole, because they create places for social interaction (Markantoni et al., 2014).

Private sector enterprises in rural areas enhance the community resilience through their adaptive capacity (Steiner and Atterton, 2014). These rural businesses are able to adapt to stresses and changes, which helps to make the rural community more sustainable and vibrant (Steiner and Atterton, 2014).

Scientific literature considers worthwhile to investigate the impact of side activities on the development and resilience of rural communities (Markantoni et al., 2014), in particular research with a regional approach, that could be complementary to existing knowledge about the impacts of side activities (Markantoni et al., 2012) on community resilience.

In line with these considerations, this research investigates the impacts of side activities to communities in rural areas in a regional context, from the perspective of their residents. It elaborates on the existing scientific literature and on a quantitative survey. The goal of this research is to

understand how side activities contribute to the resilience of rural communities. A better understanding of this issue may help policymakers or local authorities with making good decisions.

## 1.2 Research problem

### 1.2.1 Research questions

The aim of this research is to shed light on the impact of side activities on the social capital of communities in rural areas. The results may bring a contribution to the scientific research and to the planning and policy making regarding rural areas and rural development.

To explore this subject, the central question of this research is:

*“In what way do side activities have impact on the social capital, as part of community resilience, of communities in rural areas?”*

The secondary questions that arise out of this central question are:

1. How can side activities be described?
2. What are the different aspects of the social capital of rural communities?
3. In what way could side activities enhance social capital?
4. What do the indicators for social capital point out when using them in rural areas, regarding side activities?
5. What do the results of applying indicators for social capital regarding side activities seem to tell about the community resilience in rural areas?

The first three questions will be answered in the theoretical framework of chapter two. The answers to the fourth and the fifth question will be based on the collected data. These questions will be discussed in the chapter about results and in the conclusions.

### 1.2.2 Hypothesis: enhanced social capital

The hypothesis related to the central research question is that, according to the perception of residents, side activities do have positive impact on the social capital of rural communities. Consequently, this impact will have influence on the community resilience, for the social capital is one element of that resilience along with the environmental and economic capitals.

In other words, side activities are expected to have positive impact on relations among rural residents and the side activity owners. Side activities are expected to influence the networks between the local community and a wider range of people, for example customers and tourists. Side activities will influence those relations and networks, or the social resources of communities. It is expected that there are mainly positive impacts of these side activities on the quality of life, the well-being and the social interaction in rural communities.

## 1.3 Structure of thesis

In chapter one theories and concepts will be discussed in the theoretical framework. Previous researches on side activities, community resilience and social capital will be set out, leading to the conceptual model of this research. In chapter two the methodology of this research will be explained. In chapter three the results will be described. Finally, in chapter four some conclusions will be derived from the results. In this last chapter also some reflections on this study as well as some recommendations for further research will be given.

## 2. THEORETICAL FRAMEWORK

Before analyzing the contribution of side activities to the social capital as part of the community resilience, the issue should be defined very clearly. In this chapter, important theories and models will be explained with previous academic research.

### 2.1 Side activities

First the meaning and importance of side activities should be explained. Non-farmers side activities could be seen as micro-businesses or home-based businesses, but this type of small-scale activities only provide a small extra income (Markantoni et al., 2014). Side activities are often operated as part-time jobs in combination with a paid job elsewhere (Markantoni et al., 2012). Non-farmers start a side-activity mainly for non-economic reasons. They value the activity more in terms of lifestyle than in economic terms (Markantoni et al., 2014), for they have individual ambitions and desires to do something enjoyable. The owners set up a small-scale activity to improve their own personal quality of life and well-being. The economic benefits are also considered by non-farmers, but it is seen as an extra income and pleasant contribution to the principal income (Markantoni et al., 2014).

Farmer's side activities, also called pluriactivity or diversification, are similar in concept to non-farmers side activities (Markantoni et al., 2014). Rural areas have become much more multifunctional, for they are used for leisure, recreation and other activities. Farmers often use side activities for additional income by meeting society's different demands. In some cases they also look for an alternative income when their agricultural business is no longer sufficient enough (Markantoni et al., 2014).

Side activities are different from the pluriactivity farmers have, mainly because both have different availability of resources in type and in quantity (Markantoni et al., 2014). Non-farmers often do not have as much land or as many large buildings as farmers do. Non-farmers and farmers also have different knowledge and training.

Businesses in rural areas can help to enhance the rural community resilience. Private sector enterprises can make rural areas more sustainable and vibrant, which means they enhance the adaptive capacity of the community. Focusing more on the social aspect of resilience, we see that small enterprises, farmer's and non-farmer's side activities can contribute to enhanced social capital in the rural community. Side activities in rural areas can be seen as important in the strengthening and promoting of social vitality (Markantoni et al., 2012). Because of the small-scale of the activities, owners can have close relationships with customers and visitors and thereby stimulate and encourage the building of social capital in the community. Side activities also have an economic impact, for they enhance and diversify the local economy and promote rural tourism. The impact on the environment is positive in the way that side activities reinforce the character of rural areas (Markantoni et al., 2012).

### 2.2 Community resilience: the capacity to adapt

This research tries to find how side activities have impact on the rural community by looking at the social capital aspect. Before focusing on social capital the broader concept of community resilience will be explained.

Community resilience refers to the adaptive capacity. It is the capacity of individuals as well as the community to deal with change, wherein the opportunity to change is more important than the ability to keep unchanged (Steiner and Markantoni, 2014). This can be seen as the internal well-being and resilience of a community, influenced by its members and their behaviors (Chaskin, 2008). This resilience shows how the community influences individuals within the community. The concept of

resilience is also to be seen from the outward looking perspective. It can be expressed through the community actively responding to protect or promote itself concerning different kinds of risks such as policies or investments (Chaskin, 2008). So, a community is resilient if it can successfully stand changes from outside or from within the community (Wilson, 2010).

In the literature this adaptive capacity appears to be a concept based on the economic, social and environmental capitals of a community (Steiner and Markantoni, 2014; Wilson, 2010). Resilience can be seen as a balance between these three capitals, or as a situation where many positive aspects of these capitals are evident (Wilson, 2010). It is like a 'critical triangle' of the economic, social and environmental capitals. If the balance is well developed and the capitals interact in a positive way, a community is likely to be resilient (Wilson, 2012; Zwiers et al., 2016).

Economic capital is about the monetary and financial basis a community has (Wilson, 2010). This includes transactions, but also human qualities that have some monetary value (Wilson, 2010). Environmental capital is about the natural resources a community has and how these are maintained (Wilson, 2010). That means it is about the relationship between humans and the environment, and how people use the environment for consumption (Wilson, 2010).

The three different capitals are related to each other, because for example social capital can be converted into economic capital (Wilson, 2010). For the focus of this study is on the social capital, these two capitals will not be explored further.

### 2.3 Social capital

So social capital is one aspect of that triangle. It could be defined as the interaction between people (Markantoni et al., 2012). It consists of networks of social connections and mutual obligations (Wilson, 2010). It is about the value social relations have for individual and group productivity, which can be positive or negative (Thissen, 2010). Social capital can make a community stronger, but it can also be limiting in different ways (Thissen, 2010; Markantoni et al., 2012).

Putnam (1995) describes social capital as the social networks between people and the norms of reciprocity and the trust deriving from the relations. He made a distinction between bonding and bridging social capital. Bonding, or exclusive capital refers to inward looking strong ties which enhance a group's identity. This bonding social capital can be positive for the individuals, but can be limiting for the community on the whole (Thissen, 2010). Bridging, or inclusive capital means more outward looking relations among people wherein weak ties create a broader identity (Putnam, 1995). Now Putnam defines the concept on a macro level by looking at the level of a group of people.

However, Lin (1999) sees it at a more micro level of the individual person. He defines social capital as the resources within a social structure that people within that network have access to. For Lin it is about the resources to which an individual person has access to. Social capital consists, according the definition of Lin, of the structure and embeddedness, the accessibility and the use of the social resources (Lin, 1999). From this point, questions raise about the amount of social resources and the strength of them. It also questions community member's awareness and use of these social resources.

Well-developed social capital could be indicated by close interaction, strong communities and good communication between people or groups in a rural community (Wilson, 2010). Poor developed social capital could be indicated by the outmigration of young people and lack of multifunctionality in services (Wilson, 2010). Lacking leadership and control over future development of the community also show social capital being less developed.



Altogether, social capital could be enhanced by side activities through a high degree of social interaction, attractiveness of the rural area and improved quality of life and social well-being (Markantoni et al., 2012).

## 2.4 Conceptual model

The following conceptual model describes very briefly what this research is about.



*Figure 1 Conceptual model*

The conceptual model of figure 1 shows the three different capitals that influence the community resilience. Side activities can be of influence on the three capital and therefore on the community resilience. The focus of this study is on the contribution of side activities to social capital as one aspect of the community resilience. This contribution will be studied from the perspective of the residents of rural areas.

### 3. METHODOLOGY

In this chapter about the methodology an explanation will be given about why and how questionnaire surveys are being used. Furthermore, it points to some practical aspects of the data collection process. After this the data analysis process will be described.

#### 3.1 Method

##### 3.1.1 Questionnaire surveys

For this research questionnaire surveys have been used. Questionnaire surveys help to understand what people think about a specific geographical topic (McLafferty, 2010). For this is a study about social interaction and the relations between people, this method seems suitable. The use of questionnaire surveys in rural areas helps to find how people think about the side activities localized within the place of residence and what they think about the contribution of these activities to the social capital. The questionnaire survey searches for an understanding of the impact of side activities on the social capital of a rural area. The different statements and the Likert scale answering method contribute to that. The statements address the different aspects of social capital found in literature in relation with the presence of side activities. Respondents read the statement and then answer the question choosing an opinion on the five-point scale from the position 'strongly disagree' to the position 'strongly agree'.

The population of the research can be defined as all residents of rural areas where side activities are present. For this research 67 respondents have filled in the questionnaire survey. The questionnaire that has been used is in the appendix 1. The questions had to be simple, clear and not too long (McLafferty, 2010). Difficult words, or terms used in the literature, have not been used if not necessary. The fixed-response questions were chosen as it facilitates both for the respondents to answer them easily as for the researcher to analyze the data. All questions about the topic are being answered using the Likert scale. When responses to Likert scale questions are consistent, they can be combined using statistics as a representation of the underlying concept (McLafferty, 2010). For this research, combining the responses to the different statements to a composite measure of social capital will help to represent the concept of social capital. Cronbach's Alpha will be used to see if the statements taken together are reliable as one measure for one concept. When  $\alpha \geq 0,7$  the internal consistency is good, which means that the measure will be useful. Because for this research this internal consistency has been verified, as will be explained in the next chapter, the variables of these statements have been transformed into a new variable for social capital. The variable is computed by using the average of the means of the indicators. The means will represent the respondent's valuation in an appropriate way.

##### 3.1.2 Quantitative research

Due to the limited time, this quantitative method seems to be more beneficial than using qualitative methods. Because of a larger number of respondents, the questionnaire surveys say more about people's perception of side activities than a few in-depth interviews could have done. With the large research population questionnaire surveys will give a better and broader understanding of all the different opinions about the subject than using qualitative methods.

#### 3.2 Concepts translation

The words 'social capital' are not used in the survey once it relates to a complex concept. The expectation was that the respondents would not directly understand the concept of social capital. Instead, the words 'social vitality' are being used to describe the same concept. This concept has also been used by the Netherlands Institute for Social Research (Vermeij & Mollenhorst, 2008; Vermeij & Steenbekkers, 2015) and therefore this seems to be a more practically oriented concept. Within the

questions, different aspects of social capital are being mentioned so that it corresponds with the aim of this research. Although people seem to understand what is meant with social vitality, it is still important to be aware of people's own interpretations and understandings of the concept. In an attempt to solve this problem as good as possible, the following definition is given in the introduction of the survey: *'In clear language, social vitality could be expressed as that it makes people feel at home in an area. People feel engaged with each other and connected with the neighbourhood. A socially vital area means that it is safe and well-cared for, wherein people know, pay attention to and help each other'* (Gremmen, 2016).

The introduction of the questionnaire survey also explains what side activities are. The definition is based on the theoretical framework of this research. In the questions about respondent's use of side activities, the same categories have been used as Markantoni (2012) did. There are activities concerning tourism and recreation, service and facilities provision, the sale of home-grown products and activities concerning arts and crafts. Within these categories there are many subcategories, but these are not used for the questionnaire survey would be too complicated to fill in.

### 3.3 Ethical issues

Within the research design, it is important to consider ethical issues. Being ethical helps to protect the people involved in the research. It also makes researchers being able to conduct more work that is valuable for the environment and society as a whole (Hay, 2010). This also applies to this research. Regarding ethical issues, anonymity and discretion are considered to be important. The introduction of the questionnaire survey makes clear to respondents that their answers will be treated confidentially and anonymously. Another ethical issue is the survey's question about the gender of the respondent. Because this is a subject that has become controversial to some extent, respondents can answer the question with 'prefer not to say'.

### 3.4 Research strategy

Respondents for the questionnaire were sought-after and found in the municipality of Aa en Hunze in the province of Drenthe. This municipality counted many side activities in the research of Markantoni et al. (2012) which makes it compatible for this research. The villages of research within the municipality of Aa en Hunze were Nijlande, Grolloo, Gasteren and the five villages that form a region which is called 'de Broekstreek', namely Ekehaar, Eleveld, Eldersloo, Geelbroek and Amen. As will be explained below, the data from these five villages are being used as they are from one village. The research area can be seen in the map in figure 2 below. Each colour stands for one group of research.

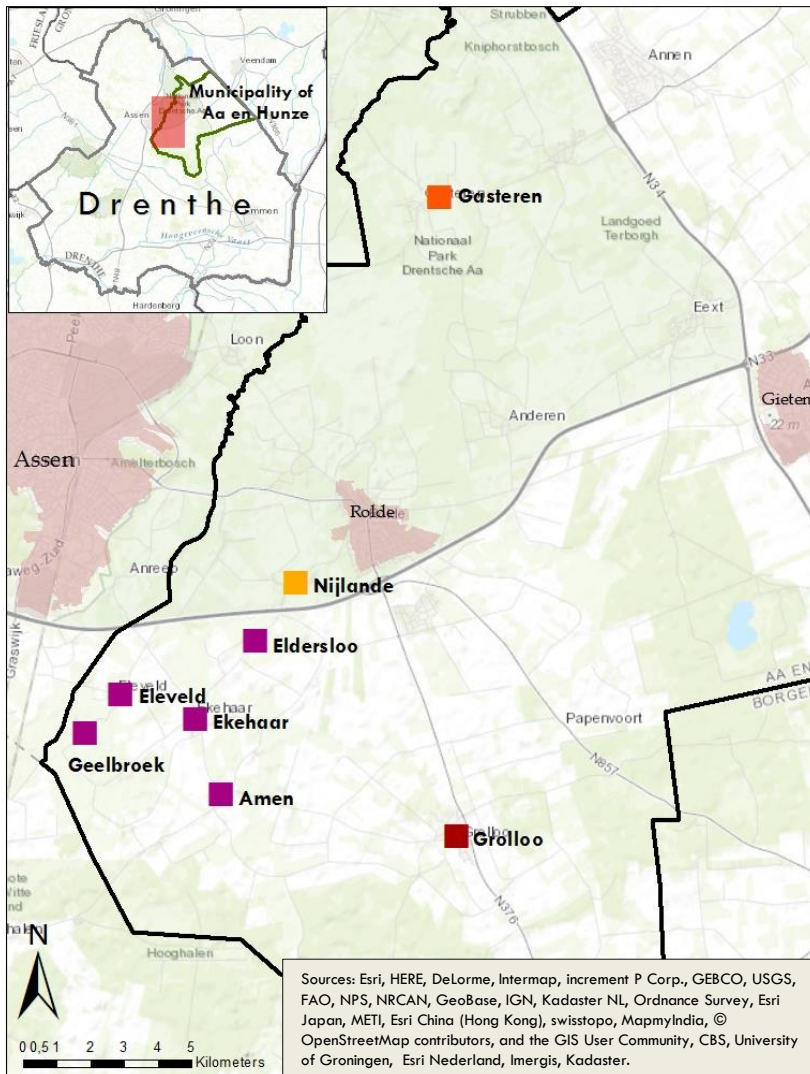


Figure 2 Map of the four different research areas within the municipality of Aa en Hunze, province of Drenthe.

Residents of the four different villages have been asked at their door to fill in the questionnaire survey. The total number of respondents is 67. The table of figure 3 on the next page gives an oversight about the process. Next to going through doors, questionnaire surveys have been spread at meetings in Ekehaar and Grolloo. In Ekehaar the local interest group had its annual meeting on Wednesday 5<sup>th</sup> of April 2017. This interest group represents five villages of which Ekehaar is one. The chairman was willing to hand out the questionnaire survey to the persons present. In Grolloo a resident’s festive meal was being organized at Thursday 6<sup>th</sup> of April 2017 at the local community centre. The organization handed out the questionnaire survey which respondents could deliver afterwards. The figure also makes clear some problems or difficulties of the data collection method. At the meeting in Ekehaar residents of five different villages were present, while the questionnaire survey did not contain a question about the place of residence of the respondent. There is no information about which village is the place of residence of each respondent. Another difficulty, for both surveys in Ekehaar and Grolloo, is a bias in the variation of respondents. Only a certain group of people are member of the local interest group or join the activity in the community centre. Residents that are actively participating in community activities could have a different perception of side activities and social capital then rural residents feeling less engaged.

<i>Village</i>	<b>Nijlande</b>	<b>Ekehaar</b>	<b>Grolloo</b>	<b>Gasteren</b>
<b>Number of questionnaire surveys</b>	11	13	23	20
<b>Used method for collection data</b>	Rang doorbells Spoke to residents outside around their homes	Questionnaire survey was handed out by the chairman of the local interest group on the annual meeting	Rang doorbells Spoke to residents outside around their homes Questionnaire survey was handed out on a resident's festive meal at the rural community centre	Rang doorbells
<b>Problems</b>		No information about exact place of residence of respondents Bias: only a certain group of people present at meeting	Bias: only a certain group of people present at meeting	

Figure 3 Table of the data collection process in the four research areas

### 3.5 Data analysis

The software of SPSS has been used to analyse the data from the surveys. The main question of this research is in what way side activities have impact on the social capital of communities in rural areas. The hypothesis here is the following: there is a positive relation between resident's perception of side activities' contribution to social capital and their overall valuation of social vitality. Or in shorter terms: there is a correlation between the variables *sasoccap* and *socvital* within the SPSS dataset.

Within the process of data analysis, first some descriptive are given to provide some general information. To investigate the above mentioned hypothesis, different tests are used to see whether there is a significant relation. The output tables are in the appendix 2.

## 4. RESULTS

In the following chapter the results from the data analysis will be described. Because the questionnaire survey used the words 'social vitality' instead of 'social capital', only throughout this chapter both names are being used to describe the concept of social capital.

### 4.1 Descriptives

The total number of respondents (n) of this research is 67 of which 30 were male and 37 female. The average age of the respondents is 57 years, while the youngest was 16 and the oldest respondent 89 years old. The respondents lived in the villages Nijlande (n=11), Ekehaar (n=13), Grolloo (n=23) and Gasteren (n=20) in the municipality of Aa en Hunze in the province of Drenthe. Most respondents (n=28) had Higher Vocational Education as their highest education level. 18 respondents had followed Intermediate Vocational Education, 12 finished university and for only 9 out of the 67 secondary school was the highest education level.

#### 4.1.1 Respondent's perception of the social capital

More interesting for this research, is that no respondent did value the social vitality in their place of residence as (really) bad. Most respondents found the social vitality good (n=40) and some even valued this as really good (n=16). 11 respondents were neutral about this. Connected to this is the question how dependent the respondents feel to their place of residence concerning their relations with others. Most respondents said to feel independent about this (n=26) followed by neutral about this question (n=24). 9 respondents even feel completely independent about this statement. Only a minority of respondents feels dependent (n=7) or completely dependent (n=1).

Although not based on an academic theory, there seems to be an interesting point about this. It is interesting to see that although the social capital is often valued as good or really good, residents of the research area most often feel independent to their place of residence concerning their own social relations. This could indicate that the social capital is not really based on people being dependent on the community. However, this relationship cannot be described as significant.

#### 4.1.2 Respondent's view on side activities

In Nijlande most respondents estimate the number of side activities to be between 0 and 5. In Ekehaar most respondents estimate this to be between 10 and 15, in Grolloo between 5 and 15 and in Gasteren between 5 and 10. The side activities were often seen as important, for personal or general use. Although this is a quantitative research instead of qualitative, some remarks respondents wrote at the questionnaire survey are worth mentioning. One respondent said the following about the use of side activities: *"The side activities do not really satisfy my desires, but I like them to be here and that these options are served."* Another respondent stated: *"Side activities as mentioned here only cover a small part of the social activities. These side activities determine the social livability as well as those other activities do."* This last remark to some extent shows that side activities' contribution to social capital can be seen along other contributions to it.

### 4.2 Measure for social capital

For Likert scales it can be checked with Cronbach's Alpha whether the data can be used as one index (Brown, 2011). For this research it shows whether the data about the statements is reliable to use as one measure of social capital. The measure can show the internal consistency between these different statements about side activities in relation with social capital. The Cronbach's Alpha turns out to be very strong, namely 0,911. See appendix 2 for the results. Looking at the values in the 'Cronbach's Alpha if item deleted' column, this excellent internal consistency cannot be enhanced by leaving one of the statements out.

Justified by this Cronbach's Alpha, the variables can be transformed into one new variable to represent social capital. The values of the new ordinal variable consist of decimal digits. These are being recoded into four values of 2 through 5.

### 4.3 Side activities and social capital

Different tests are being used to see if there is a correlation between the contribution of side activities to social capital, which is the new variable, and the overall valuation of social vitality of rural communities.

#### 4.3.1 Chi-square test

The Chi square test seems to be the most useful test, because both variables have an ordinal scale. But even after recoding the values 4 and 5 within the *sasoccap* variable into only one value, the data cannot satisfy the Chi-square requirements. More than 20% have an expected value less than 5 and the minimum expected count is below 1, so this Chi-square cannot help to find a correlation.

#### 4.3.2 Spearman's Rank-Order Correlation

The Spearman's Rank-Order Correlation is useful for ordinal variables. This non-parametric test works well but gives an insignificant outcome, namely 0,280 compared to the limit of 0,05.

#### 4.3.3 Fisher's Exact Test

Because the variables do not satisfy the Chi-square requirements, the Fisher's Exact Test has also been used. This test also gave an insignificant outcome, namely 0,579.

#### 4.3.4 One Way ANOVA

Using both variables as ordinal variables seems to give no significant outcome. For the One Way ANOVA test the *socvital* variable can be used as the dependent ratio variable, while using the *sasoccap* variable as the ordinal factor variable. This gives the p-value of 0,217 which is also insignificant.

So far no significant outcomes were found. Different tests have been used to see if there is a correlation between the contribution of side activities to social capital and the overall valuation of social vitality of rural communities. The Chi-square test, the logical choice with two ordinal variables, did not work well because of the test requirements, as already explained. Also the other tests, Spearman's, Fisher's and the One Way ANOVA test gave no significant value.

The next statistical analyses will describe some more results. Some findings turn out to help to answer the research question.

#### 4.3.5 Linear Regression Analysis

A regression analysis shows that there is a significant relationship between the contribution of side activities to social capital and the overall valuation of social capital. For the Linear Regression both variables are set as numeric. Now there turns out to be a significant relationship between the variables with a p-value of 0,049889. See appendix 2 for the results. The Pearson Correlation has a value of 0,241. So there is a positive weak relationship.

The measure for social capital, with its high internal consistency, is related to the overall valuation of social vitality in rural areas. This means that at this point the hypothesis for this study, namely that the resident's perception is that side activities do have a positive impact on the social capital of rural

communities, can be confirmed. According to the residents, side activities do have positive influence on the social relations, the networks and the social resources within rural communities.

#### 4.4 Two statements

Testing the different statements used in the questionnaire survey gives insights into which statements are most related to the valuation of social vitality. The results can be seen in appendix 2. Because the variables do not satisfy the requirements of Chi-Square, the level of significance of the Fisher's Exact Test should be noticed. Two statements appear to significantly correlate with the respondent's overall perception of social vitality.

##### 4.4.1 Social relations and social capital

The first is the correlation between valuation of social vitality and the statement that side activities are important for social relations between people in general. With the Fisher's Exact test the p-value is 0,039. Using the tau-c measure for association the value of 0,250 indicates that the relationship is positive in direction but weak in strength. So the statement that side activities are important for social relations in general is related to the valuation of social vitality in rural areas. Social relations, enhanced by side activities, seem to be part of the social capital of rural communities.

Here it is interesting to notice that the statement that side activities are important for the respondent's own social relations does not have a significant correlation with the overall valuation of social vitality. So it seems that the respondents see side activities important for social relations in general rather than for their own relations.

##### 4.4.2 Communication and social capital

Also for this test the Fisher's Exact Test turns out to be useful. With a p-value of 0,013 there is a significant relation between the communication between people and de valued social vitality in rural areas. Also this relationship is positive but weak in strength, as the tau-c value is 0,231. Side activities are important for communication which seems to be part of the social capital of rural communities.

So within the finding that, according to the respondent's perception, side activities contribute to social capital and therefore relate to social capital, two values or statements seem to be of significant importance. Side activities appear to be important for social relations between people in rural areas. This contributes to the social capital of these areas. They also seem to be important for the communication which also contributes to the social capital.



## 5. CONCLUSIONS

Side activities seem to be important for the social capital of communities in rural areas (Markantoni et al., 2012). They can improve the social well-being and the quality of life within those areas. Building on previous studies on side activities this study focusses on the impact of side activities on the social capital of rural communities as part of community resilience. This research has tried to find an answer to the main question:

*“In what way do side activities have impact on the social capital, as part of community resilience, of communities in rural areas?”*

Within the quantitative research it was hypothesised that there is a positive relation between resident’s perception of side activities’ contribution to social capital and their overall valuation of social vitality. So side activities are expected to have impact on the networks, the communication and the amount of trust among residents of rural areas where these activities take place. Also the quality of life, the well-being and the social interaction of these residents could be enhanced by the presence of side activities.

The questionnaire survey’s statements about respondent’s perception of the contribution of side activities to different aspects of social capital were used for one measure of social capital. That measure of the concept was tested with the respondent’s overall valuation of the social capital in the place of residence.

As expected, there is a relation between respondent’s perception of social capital and the contribution of side activities to it. The rural areas of research were already valued as being socially vital, but side activities seem to enhance the social capital. Side activities in rural areas are important in strengthening and promoting the social vitality (Markantoni et al., 2012). Based on the resident’s perception, this research confirms this relation between social capital and side activities. It can be concluded that, according to the perception of rural residents, side activities enhance the social capital of the rural community and thereby contribute to the community resilience.

Looking at those statements more closely, side activities seem to influence social relations between people in general which contributes to the social capital. This is in line with the theory that side activities enhance social capital through a high degree of social interaction (Markantoni et al., 2012). It is interesting to see that the respondents see side activities as important for social relations in general rather than for their own relations. This is an interesting point, because on the one hand the theory can be confirmed, while on the other hand new questions raises about that social interaction. General social interaction seems to be contributing to the social capital, while personal social interaction appears to be of less influence.

Another aspect of social capital is communication. According to respondent’s perception, side activities also seem to have an impact on the communication between residents. This communication is related to the respondent’s overall valuation of social capital: the strong social capital is enhanced by the communication within the rural community. This is in line with Wilson’s (2010) theory about social capital, in which good communication results in well-developed social capital.

## REFLEXIONS

This study has brought some more insights into the contribution of side activities to social capital as part of the community resilience of rural areas. With the use of a questionnaire survey in a regional context this study has given a broader understanding of how residents of rural areas think about this issue.

A weakness of this study is that it is only based on quantitative methods. For it has only used questionnaire surveys to find how side activities have impact on the social capital, the study could be further developed by conducting interviews to get deeper insights. A qualitative study would be of great value in its contribution to this quantitative research. Also a study based on mixed methods, or triangulation, would enrich the scientific literature about side activities and community resilience.

Further research could also focus on the resident's individual connectedness and personal ties with the rural community and the role of side activities. The results of this study suggest that rural residents often feel independent to the community and that side activities do contribute to general social interaction rather than resident's personal social interaction. Deeper understandings about these relationships and the influence of side activities could enrich scientific literature and policies concerning rural development and especially community resilience.

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## Appendices

### Appendix 1: Questionnaire survey

#### - Nevenactiviteiten en sociale vitaliteit op het platteland – Enquêteformulier ...

Bedankt dat u wil deelnemen aan deze enquête! Ik ben derdejaars student Sociale Geografie & Planologie aan de Rijksuniversiteit in Groningen. Voor mijn afstudeerscriptie onderzoek ik hoe nevenactiviteiten zoals die in uw woonplaats kunnen bijdragen aan de sociale vitaliteit in die plek.

.....

#### Waar gaat het dan over?

##### ▪ Nevenactiviteiten

Met nevenactiviteiten worden kleinschalige activiteiten van bewoners en boeren in deze woonplaats bedoeld. Dit zijn kleine bedrijvigheden in en rondom iemands huis of boerderij. U kunt bijvoorbeeld denken aan het verkopen van groente en fruit uit eigen tuin, een bed & breakfast, een kleine kunstgalerie of bepaalde diensten. Deze activiteiten worden vaak uit interesse, als hobby of uitdaging gedaan. Ze zorgen vaak maar voor een klein extra inkomen.

##### ▪ Sociale vitaliteit

Mijn vraag is hoe deze nevenactiviteiten kunnen bijdragen aan de sociale vitaliteit van uw woonplaats. Sociale vitaliteit betekent dat mensen zich thuis voelen in een gebied. Men voelt zich verbonden met elkaar en met de buurt. Een sociaal vitale woonplaats is veilig, goed verzorgd. Het is een plek waarin mensen elkaar kennen, op elkaar letten en elkaar helpen.

Uw antwoorden zijn van grote waarde voor mijn onderzoek! Het invullen van de enquête kost ongeveer 5 minuten. Uw antwoorden zullen vertrouwelijk en anoniem worden verwerkt.

.....

#### Sociale vitaliteit

1. Hoe vindt u de sociale vitaliteit, zoals hierboven uitgelegd, in uw woonplaats?	Erg slecht	Slecht	Neutraal	Goed	Erg goed
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Als het gaat om uw relaties met andere mensen, hoe afhankelijk voelt u zich dan van uw woonplaats?	Helemaal onafhankelijk	Onafhankelijk	Neutraal	Afhankelijk	Helemaal afhankelijk
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Nevenactiviteiten

3. Hoeveel nevenactiviteiten zijn er in uw woonplaats (naar schatting)?	0-5	5-10	10-15	15-20	20-25
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Hoe vaak maakt u gebruik van de onderstaande typen nevenactiviteiten in uw woonplaats?	Dagelijks	Wekelijks	Maandelijks	Jaarlijks	Nooit
Toerisme en recreatie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diensten en faciliteiten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verkoop van eigen producten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kunst en handwerk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anders, namelijk:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Geef uw mening over de volgende stellingen:	Helemaal mee oneens	Mee oneens	Niet mee eens, niet mee oneens	Mee eens	Helemaal mee eens
6. "Ik waardeer de nevenactiviteiten in mijn woonplaats."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. "Nevenactiviteiten zorgen voor meer omgang tussen bewoners van deze woonplaats."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. "Nevenactiviteiten zijn belangrijk voor de relaties tussen mensen in het algemeen."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. "Nevenactiviteiten zijn belangrijk voor mijn eigen relaties met anderen."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. "Nevenactiviteiten zijn belangrijk voor de communicatie tussen mensen in deze woonplaats."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. "Door de nevenactiviteiten voel ik me meer verbonden met deze woonplaats."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. "Nevenactiviteiten zorgen ervoor dat deze woonplaats aantrekkelijker is."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. "Nevenactiviteiten verbeteren de leefbaarheid in deze woonplaats."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. "Door nevenactiviteiten kan ik voldoen aan mijn behoefte aan sociaal contact."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. "Nevenactiviteiten zorgen voor vertrouwen tussen mensen in deze woonplaats."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. "Nevenactiviteiten maken deze woonplaats sterker."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Afsluiting

18. Wilt u iets toevoegen aan het bovenstaande? Heeft u vragen of opmerkingen over dit onderzoek?

### Persoonlijkheden

19. Leeftijd	
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20. Geslacht	Man	Vrouw	Liever geen antwoord
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. Wat is uw hoogst genoten opleidingsniveau?	Basisschool	Middelbare school	Middelbaar Beroepsonderwijs (mbo)	Hoger Beroepsonderwijs (hbo)	Universiteit	Anders
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

.....  
 Hartelijk bedankt voor het invullen van deze vragenlijst!

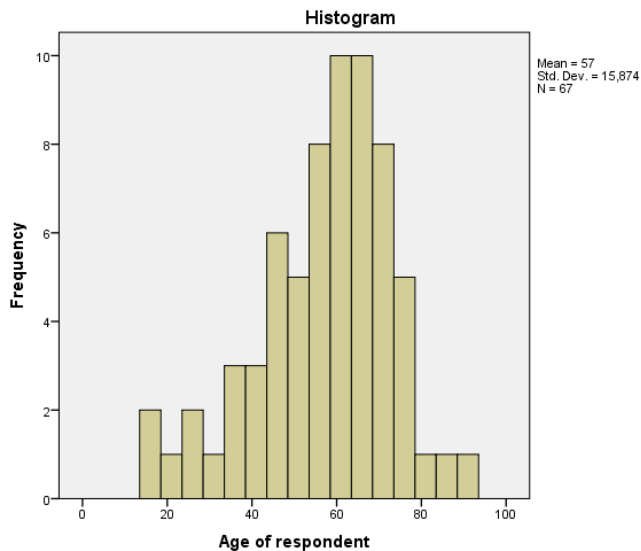
## Appendix 2: SPSS Output

### Descriptives

#### Frequency of males and females

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	30	44,8	44,8	44,8
	Female	37	55,2	55,2	100,0
	Total	67	100,0	100,0	

#### Histogram for age of respondent



#### Place of residence are of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nijlande	11	16,4	16,4	16,4
	Ekehaar	13	19,4	19,4	35,8
	Grolloo	23	34,3	34,3	70,1
	Gasteren	20	29,9	29,9	100,0
	Total	67	100,0	100,0	

#### Education level of respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary school	9	13,4	13,4	13,4
	MBO	18	26,9	26,9	40,3
	HBO	28	41,8	41,8	82,1
	University	12	17,9	17,9	100,0
	Total	67	100,0	100,0	

**Respondent's valuation of the social vitality in their place of residence:**

<b>Question 1: How do you value the social vitality, as explained above, in your place of residence?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neutral	11	16,4	16,4	16,4
	Good	40	59,7	59,7	76,1
	Really good	16	23,9	23,9	100,0
	Total	67	100,0	100,0	

**Respondent's dependency to place of residence concerning social relations:**

<b>Question 2: Concerning your relations with other people, to what extent are you dependent of your place of residence?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completely independent	9	13,4	13,4	13,4
	Independent	26	38,8	38,8	52,2
	Neutral	24	35,8	35,8	88,1
	Dependent	7	10,4	10,4	98,5
	Completely dependent	1	1,5	1,5	100,0
	Total	67	100,0	100,0	

**Crosstabs about the estimation of side activities by respondents in their places of residence:**

<b>Place of residence are of respondent * Question 3: How many side activities do you estimate to be in your place of residence? Crosstabulation</b>							
Count		Question 3: How many side activities do you estimate to be in your place of residence?					Total
		0-5	5-10	10-15	15-20	20-25	
Place of residence are of respondent	Nijland e	7	4	0	0	0	11
	Ekeha ar	2	4	5	2	0	13
	Grollo o	3	7	7	5	1	23
	Gaster en	1	12	4	3	0	20
Total		13	27	16	10	1	67



Statistical analysis

**Cronbach's Alpha**

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,911	,913	11

**Chi-Square Test & Fisher's Exact Test**

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	3,189 <sup>a</sup>	4	,527	,544		
Likelihood Ratio	3,902	4	,419	,522		
Fisher's Exact Test	2,881			,579		
Linear-by-Linear Association	1,650 <sup>b</sup>	1	,199	,217	,130	,055
N of Valid Cases	67					
a. 4 cells (44,4%) have expected count less than 5. The minimum expected count is ,82.						
b. The standardized statistic is 1,285.						

**Spearman's Rank-Order Correlation**

		Question 1: How do you value the social vitality, as explained above, in your place of residence?	Contribution of side activities to social capital.	
Spearman's rho	Question 1: How do you value the social vitality, as explained above, in your place of residence?	Correlation Coefficient	1,000	
		Sig. (2-tailed)	,134	
		N	67	
	Contribution of side activities to social capital.	Correlation Coefficient	,134	1,000
		Sig. (2-tailed)	,280	.
		N	67	67

**Linear Regression Analysis**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,541	1	1,541	3,993	,049889 <sup>b</sup>
	Residual	25,086	65	,386		
	Total	26,627	66			
a. Dependent Variable: Question 1: How do you value the social vitality, as explained above, in your place of residence?						
b. Predictors: (Constant), Contribution of side activities to social capital.						

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,241 <sup>a</sup>	,058	,043	,621
a. Predictors: (Constant), Contribution of side activities to social capital.				
b. Dependent Variable: Question 1: How do you value the social vitality, as explained above, in your place of residence?				

**Question 1: How do you value the social vitality, as explained above, in your place of residence? \***  
**Statement 8: Side activities are important for social relations between people in general.**

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	13,432 <sup>a</sup>	6	,037	,028		
Likelihood Ratio	11,603	6	,071	,066		
Fisher's Exact Test	11,361			,039		
Linear-by-Linear Association	6,837 <sup>b</sup>	1	,009	,012	,006	,004
N of Valid Cases	67					
a. 7 cells (58,3%) have expected count less than 5. The minimum expected count is ,16.						
b. The standardized statistic is 2,615.						

**Question 1: How do you value the social vitality, as explained above, in your place of residence? \***  
**Statement 11: Side activities are important for the communication between people within this place of residence.**

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	16,483 <sup>a</sup>	6	,011	,011		
Likelihood Ratio	15,220	6	,019	,027		
Fisher's Exact Test	13,736			,013		
Linear-by-Linear Association	6,163 <sup>b</sup>	1	,013	,013	,009	,005
N of Valid Cases	67					
a. 8 cells (66,7%) have expected count less than 5. The minimum expected count is ,82.						
b. The standardized statistic is 2,482.						