

# Who farms the fields?

New concepts of land grabbing in developed countries

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## **Abstract**

Agriculture as well as rural life are in a process of change due to rural-urban migration and an increasing land concentration fueled by rising land prices. The effects of this global trend on Europe, especially on East Germany, are analyzed in this work. The social perspective on land acquisitions is addressed, which corresponds to an identified research gap.

Central research methods were a literature review and a case study in Saxony Anhalt, consisting of in-depth interviews with 16 resident farmers and a survey with 130 respondents of the rural population. The data analysis was composed of content analysis and a Structural Equation Model.

The Model confirms a correlation between density of resident farmers and inhabitants' relationship to agriculture, which then influences rural place attachment. Thus, the social importance of resident farmers was outlined. The results support that large-scale land acquisitions can have negative consequences for rural population if this means fewer resident farmers. These insights can be interesting for current political discussions in Germany about revising the current land law and limiting large-scale land sales.

## Summary

Agriculture as well as rural life are in a process of change due to rural-urban migration and growing land concentration fueled by rising land prices. Land concentration means that farm size increases while the number of farms decreases. As a result, farms are managed in a centralized way and fewer farmers live in the villages. Rising land prices also mean that fewer buyers can afford the land. The dissertation analyzes effects of this global trend on Europe, especially on East Germany. The addressed issue goes hand in hand with a change in the function of rural areas: Contemporary villages primarily serve as places to live because the infrastructure is thinning out and more and more people are moving to the cities. Agriculture takes a different place in rural life.

Agriculture in Saxony-Anhalt is large-scale and still influenced by collectivization processes of the former German Democratic Republic. The interrelationships between agriculture, land ownership and rural life are the main subject of this work. This is depicted in the title "Who farms the fields?". First, it includes farming, focusing on farmers and their profession. Secondly, it sheds a light on the ownership of arable land. Thirdly, it relates to the rural population, if it known in the village who does farming and if farming has impacts on rural life. The novelty of this approach lies in the fact that it does not focus on economic aspects, but primarily on social aspects related to land acquisition and ownership.

A mixed method approach was chosen to gather insights of both rural population and resident farmers. Qualitative as well as quantitative data was collected and subsequently analyzed, based on a literature review. Central was a case study conducted in four villages of the East German state Saxony-Anhalt in 2016. The case study consisted of semi-structured in-depth interviews with 16 resident farmers and a survey with 130 respondents of the rural population. This includes most of the resident farmers of the villages, but only a small amount of the rural population of the villages. The following data analysis consisted of a content analysis of the qualitative data and a Structural Equation Model for the quantitative data.

Each data analysis delivered results which were subsequently brought together to answer the research questions of this work. Starting point was a discussion of criteria to describe a large-scale land acquisition in a negative sense as "land grabbing". Six socio-cultural criteria were developed. Land acquisitions which could be described as land grabbing according to these criteria were not observed in the research area. Nevertheless, insights about land acquisition processes and the social role of farmers could be gained. Descriptive data from the case study showed that the agricultural enterprises, including both family-run farms and agricultural cooperatives, farmed between 40 to 1,930 ha. A share between 9 and 95% was owned, depending on the farm size and the amount of leased land. The enterprises employed between 1 – 34 local workforces. Thus, the study depicts heterogeneity concerning farm size as well as income from agricultural activity.

Data from the survey was analyzed using a Structural Equation Model. This allowed for relating complex, initially hidden, social relationships. The two constructs “relationship to agriculture” and “attachment to rural place” were developed. They consist of measurable items which were calculated with data from the surveys. The constructs were linked to the value “density of local farmers”, which was determined for each village. The results showed that interaction with farmers had an impact on the villagers’ relationship with agriculture which then influenced rural place attachment. This finding was supported by statements from the farmers themselves about the quality of interaction with fellow rural citizens, which varied because not every interviewed farmer showed the same interest in his or her neighborhood. Nevertheless, personal contacts were helpful for land acquisition, the land market was unanimously described as contested. Density of resident farmers had a positive effect on rural village ties due to its impact on the relationship with agriculture.

The study results were placed in the context of current political developments in Germany, where the revision of the land law Real Property Transaction Act is discussed. One aim of amending the law is to avoid very large-scale farms. In this sense, the recommendations to policymakers resulting from the findings of this work are to further promote adjustments to land law regulations and to work together with farmers to find solutions to the urgent developments of the agricultural land market. The impact of the changes on rural development must be considered. Nevertheless, agricultural structural change is also taking place without major land investments, but large-scale acquisitions promote this process.

## Zusammenfassung

Die Landwirtschaft sowie das Leben auf dem Lande befinden sich aufgrund der Land-Stadt-Migration und der zunehmenden Landkonzentration, die durch steigende Bodenpreise angetrieben wird, in einem Veränderungsprozess. Landkonzentration bedeutet, dass die Größe der Betriebe zunimmt, während die Zahl der Betriebe abnimmt. Dies hat zur Folge, dass die Betriebe zentral verwaltet werden und weniger Landwirte in den Dörfern leben. Steigende Bodenpreise bedeuten auch, dass immer weniger Käufer das Land bezahlen können. In der vorliegenden Dissertation werden die Auswirkungen dieses globalen Trends auf die Landwirtschaft in Europa, insbesondere auf Ostdeutschland, analysiert. Die aufgezeigte Entwicklung geht einher mit einem Funktionswandel des ländlichen Raums: Die heutigen Dörfer dienen in erster Linie als Wohnorte, da die Infrastruktur zunehmend ausdünnt und immer mehr Menschen in Städte abwandern. Die Landwirtschaft nimmt einen anderen Stellenwert im ländlichen Leben ein.

Die Landwirtschaft in Sachsen-Anhalt ist großflächig und noch teilweise von den Kollektivierungsprozessen der ehemaligen Deutschen Demokratischen Republik geprägt. Die Wechselbeziehungen zwischen der Landwirtschaft, dem Bodeneigentum und dem Landleben sind das Hauptthema dieser Arbeit. Dies wird in dem Titel "Wer bestellt die Felder?" dargestellt. Erstens geht es um die Landwirtschaft, wobei der Schwerpunkt auf den Landwirten und ihrem Beruf liegt. Zweitens wird das Eigentum von Ackerland thematisiert. Drittens geht es um die Landbevölkerung und um die Frage, ob Landwirte im Dorf bekannt sind und ob die Landwirtschaft Auswirkungen auf das ländliche Leben hat. Die Neuartigkeit dieses Ansatzes liegt darin, dass er sich nicht auf wirtschaftliche Aspekte konzentriert, sondern in erster Linie auf soziale Aspekte im Zusammenhang mit Landerwerb und -eigentum.

Für die vorliegende Arbeit wurde ein multimethodischer Ansatz gewählt. Durch die Befragung sowohl der ländlichen Bevölkerung als auch der ansässigen Landwirte sollen Erkenntnisse aus mehreren Perspektiven gewonnen werden. Es wurden sowohl qualitative als auch quantitative Daten gesammelt und anschließend auf der Grundlage einer Literaturrecherche ausgewertet. Im Mittelpunkt stand eine Fallstudie, die 2016 in vier Dörfern des ostdeutschen Bundeslandes Sachsen-Anhalt durchgeführt wurde. Die Fallstudie bestand aus leitfadengestützten Interviews mit 16 ortsansässigen Landwirten und einer Befragung von 130 Personen der ländlichen Bevölkerung mithilfe eines Fragebogens. Dies umfasst den Großteil der ansässigen Landwirte, aber nur einen kleinen Teil der Landbevölkerung der untersuchten Dörfer. Die anschließende Datenanalyse bestand aus einer Inhaltsanalyse der qualitativen Daten und einem Strukturgleichungsmodell für die quantitativen Daten.

Jede Datenanalyse lieferte Ergebnisse, die anschließend zusammengeführt wurden, um die Forschungsfragen dieser Arbeit zu beantworten. Ausgangspunkt war eine Diskussion zur Bestimmung von Kriterien um großflächigen Landerwerb im negativen Sinne als "land grabbing" bezeichnen zu können. Dabei sind sechs sozio-kulturelle Kriterien entwickelt wurden.

Landkäufe, die nach diesen Kriterien als Landraub bezeichnet werden könnten, wurden im Untersuchungsgebiet nicht beobachtet. Dennoch konnten Erkenntnisse über Landerwerbsprozesse und die soziale Rolle der Landwirte gewonnen werden. Die deskriptiven Daten der Fallstudie zeigten, dass die landwirtschaftlichen Betriebe, darunter Familienbetriebe und landwirtschaftliche Genossenschaften, zwischen 40 und 1.930 ha bewirtschafteten. Je nach Betriebsgröße und Pachtfläche lag der Eigentumsanteil zwischen 9 und 95 %. Dies unterstreicht die Bedeutung des Bodenmarktes sowohl für den Kauf als auch für die Pacht. Die Betriebe beschäftigten zwischen 1 und 34 lokale Arbeitskräfte. Somit zeigt die Studie eine Heterogenität in Bezug auf die Betriebsgröße und das Einkommen aus landwirtschaftlicher Tätigkeit.

Die Daten der quantitativen Erhebung wurden mit Hilfe eines Strukturgleichungsmodells ausgewertet. Dieses ist prädestiniert, um komplexe, zunächst verborgene, soziale Beziehungen in einen Gesamtzusammenhang zu bringen. Es wurden die zwei Konstrukte "Beziehung zur Landwirtschaft" und "Bindung an den ländlichen Raum" entwickelt. Sie bestehen aus messbaren Variablen, welche mit Daten aus den Erhebungen gefüllt wurden. Die Konstrukte wurden mit dem Wert "Dichte der lokalen Landwirtschaft" verrechnet, der für jedes Dorf bestimmt wurde. Die Ergebnisse zeigen, dass die Interaktion mit Landwirten einen Einfluss auf die Beziehung der Dorfbewohner zur Landwirtschaft hat, was wiederum die Bindung an den ländlichen Raum beeinflusst. Dieses Ergebnis wird durch die Aussagen der Landwirte selbst über die Qualität der Interaktion mit den ländlichen Mitbürgern gestützt. Dabei zeigte nicht jeder befragte Landwirt das gleiche Interesse an seiner Nachbarschaft. Dennoch wurden persönliche Kontakte als hilfreich für den Landerwerb beschrieben, da der Markt für Land einhellig als knapp und begehrt beschrieben wurde. Die Dichte der ansässigen Landwirte wirkt sich positiv auf die dörfliche Verbundenheit aus, da sie sich auf die Beziehung zur Landwirtschaft auswirkt.

Die Ergebnisse der Studie wurden in den Kontext aktueller politischer Entwicklungen in Deutschland gestellt, wo die Überarbeitung des Grundstücksverkehrsgesetzes diskutiert wird. Der landwirtschaftliche Strukturwandel vollzieht sich auch ohne große Landinvestitionen, dennoch fördern großflächige Land- und Anteilkäufe diesen Prozess. In diesem Sinne lautet die Empfehlung an die Politik, die sich aus den Ergebnissen dieser Arbeit ergibt, Anpassungen der bodenrechtlichen Regelungen weiter zu fördern und gemeinsam mit den Landwirten einen Weg zu finden, um Lösungen für die drängenden Entwicklungen auf dem landwirtschaftlichen Bodenmarkt zu schaffen, unter klarer Einbeziehung der Auswirkungen auf die Entwicklung im ländlichen Raum.

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I just wasn't sure about the exact discipline I wanted to get into. A student job on a research project about the EU-Water Framework Directive opened my interest for natural resource management, which I subsequently studied at the Faculty of Agriculture and Horticulture at the Humboldt-University of Berlin. During that time, I took every opportunity to visit farms and learn about agriculture, which led to my further interest in agriculture and eventually cumulated into the possibility of doing a PhD at the Martin Luther University Halle-Wittenberg.

I was very glad when I had the chance to start my PhD at the chair of Agricultural, Environmental and Food Policy with Professor Insa Theesfeld as my supervisor. She always believed in me during this long journey, and when I had doubts about the next steps, she encouraged me and pushed me forward as well. I want to thank her warmly for her guidance and constant support.

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## Abbreviations

BBSR	Federal Institute for Research on Building, Urban Affairs and Spatial Development (Bundesamt für Bauwesen und Raumordnung)
BMEL	Federal Ministry of Food and Agriculture (Bundesministerium für Ernährung und Landwirtschaft)
BMI	Federal Ministry of the Interior, Building and Community (Bundesministerium des Innern, für Bau und Heimat)
BVVG	German Land Administration and Privatization Agency (Bodenverwertungs- und -verwaltungs GmbH)
CAP	Common Agricultural Policy of the European Union
CSR	Corporate Social Responsibility
EALG	Idemnification and Compensation Act (Entschädigungs- und Ausgleichsleistungsgesetz)
FRG	Federal Republic of Germany
FSO	Federal Statistical Office
GAK	Joint Task Agricultural Structure & Coastal Protection Program (Gemeinschaftsaufgabe Agrarstruktur und Küstenschutz)
GDR	German Democratic Republic
GMO	Genetically Modified Organism
GrdstVG	Real Property Transactions Act (Grundstücksverkehrsgesetz)
LpachtVG	German Land Leasing Law (Landpachtverkehrsgesetz)
LPG	Agricultural Cooperative of the GDR (Landwirtschaftliche Produktionsgenossenschaften)
LSLA	Large-Scale Land Acquisitions
MULE	Saxony-Anhalt Ministry for the Environment, Agriculture and Energy (Ministerium für Umwelt, Landwirtschaft und Energie Sachsen-Anhalt)
RA	Relationship to Agriculture (developed concept / own interpretation)
RPA	Rural Place Attachment (developed concept / own interpretation)

Landscape  
*This all looks so fun,  
So well washed the farmhouse,  
grass and tree in morning dew,  
So wonderfully blue the mountain hem!  
Look at the cloud, how it plays  
And cools in the pure ether!*  
Johann Wolfgang von Goethe (1836)  
(author's own translation)

# 1 Introduction

In 1836, Johann Wolfgang von Goethe idyllically described a landscape with a farmhouse, associating rurality with bliss, beauty and even cleanliness. While the farmhouse functioned as a desired item in a landscape portrait, the farmer was absent from this picture. In a certain sense, this scene can be transferred to present ideas of rurality. Rural landscapes have remained a place for idyllic yearnings, while modern agriculture is characterized by an absence of farmers and advanced technical means require a smaller workforce (Pfusterschmid 2016a; Neu 2015).

The romanticizing and transfiguration of rurality, presumably by city dwellers, has always clashed with the reality of hard-working farmers and rural workers (Henkel 2014). In modern East Germany, their profession formed a landscape with large fields, large stables and monoculture crops. The anthropogenically transformed landscape has also led to a decrease in biodiversity (Turrini and Knop 2015).

Therefore, it can be questioned whether this idyllic picture of rural landscapes will remain feasible in the future. How do rural inhabitants perceive agricultural activities in contemporary Germany, and in which ways are farmers still important for their villages?

## 1.1 Problem statement and motivation

Baldock et al. (2001) name two different forms of development in rural areas, namely agrarian and rural development. The functionality and profitability of agricultural production are seen as central points in agricultural development, and the support of the farmer as decisive for the promotion of rural areas since farmers' interests are described as equivalent to the rural interests. This policy was followed by the Common Agricultural Policy (CAP). The CAP's policy Agenda 2000 brought a change towards rural development (Massot 2019). The CAP was then based on two pillars, namely a market-based approach for agricultural products and a second pillar of rural development policy. This approach acknowledged that there are various interests in the countryside, and that farmers are essential actors. But as entrepreneurs, farmers are also

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driven by competitiveness, and they are not necessarily drivers of vital rural areas. Thus, more recent agricultural policy has recognized that there are more local actors than just the farmers. Efforts have been made to involve various civil society actors in the pursuit of successful rural development (Chatalova and Wolz 2019; Baldock et al. 2001). Thus, there has been a shift from agricultural to rural development within policy implementation, which places a focus on the rural population.

Chatalova and Wolz (2019) describe how rural areas are also the subject of expectations due to a rural-urban dichotomy. On the one hand, the countryside is expected to form a counterweight to the city and embody a desire for rural idyll, on the other hand rural areas can also be described as backward, with poorer infrastructure and weaker economic growth than the city. Should the countryside remain different from the city, or should it develop its standards with the aim of achieving similar living conditions in both the city and countryside? Through a cabinet decision on July 18<sup>th</sup>, 2018, the Federal Government of Germany set up the “Equal Living Conditions” Commission<sup>1</sup>. Delivering them in 2019, this Commission intended to develop recommendations for action with regards to different regional developments and demographic changes (BMI 2019a). It described how agrarian development should be included in a Joint Task Agricultural Structure & Coastal Protection Program (GAK), advising that: “Support for agriculture is still important, but it can only be successful if public services in rural areas are also maintained or expanded” (BMI 2019b, p.68). In this recommendation, farmers are not described as central figures of contemporary rural development in East Germany. Historically, the role of agriculture was different in Federal Republic of Germany in comparison to the German Democratic Republic (GDR). In East Germany, agricultural cooperatives were common and fulfilled social tasks and even public services. These services were assigned to the state administration after reunification (Laschewski 2009).

To sum up, contemporary efforts for development in rural areas are aimed at a rural development that recognizes farmers but does not focus on them. Farmers themselves have sensed that profound changes for their profession are in process, with the increases in purchase and lease prices of agricultural land being a driving factor (Emmann et al. 2015). This also influences distribution of landownership, especially in East Germany where land was collectivized during GDR times and subject to privatization processes after 1990. Farming structures changed and new actors emerged on the market (Tietz 2018). These processes are still ongoing, including the possibility that investors from non-agricultural backgrounds can buy land and be competition to existing farmers and farm managers (Tietz 2015; Hüttel and Odening 2018). This adds a new aspect to rural development since a large-scale landowner is not necessarily a farmer, but it can be a company that operates from a headquarters. Thus, the concept of a resident farmer who steers regional development may need to be reconsidered.

In Germany, not everyone is allowed to acquire agricultural land, which is regulated under the Real Property Transactions Act *Grundstücksverkehrsgesetz* (GrdsVG) (Bundesrepublik

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<sup>1</sup> In German: "Gleichwertige Lebensverhältnisse"

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Deutschland 1961). The regulation restricts sales of more than two hectares for persons with a non-agricultural background and favors local farmers by giving them a pre-emption right. This is considered to be an important instrument for shaping the agricultural land market throughout Germany, not only in the East. The preferential treatment of local farmers in land sales is based on principles of agricultural policy, adding a social aspect to landownership. There are various studies on agriculture in East Germany focused on farmers and land acquisition (Tietz 2017a; Forstner et al. 2011; Forstner and Tietz 2013; Weiß et al. 2013; Odening and Hüttel 2018). Van der Ploeg et al. (2015) have assessed whether land transactions are negative if agricultural land is acquired by investors instead of farmers, and have even called these processes “land grabbing”. This term originates in discussions about large-scale land transactions in developing countries, where the local populations do not profit from sales. There have even been cases where rural inhabitants were expelled and lost their livelihoods due to a loss of land rights (Borras Jr. et al. 2011; Von Braun and Meinzen-Dick 2009).

A variety of literature has focused on new investors on the land market, but without linking it to the social needs of farmers or rural inhabitants (Balmann 2015; Odening and Hüttel 2018; Böhme 2016). However, in recent years, more and more studies have focused on large-scale agriculture and land acquisition in Europe and its implications for rural areas (Hajdu et al. 2018; Kay et al. 2015; Petrescu-Mag et al. 2017; Mamonova 2015; Chatalova and Wolz 2019; Leonhardt et al. 2019). Franco and Saturnino (2013) emphasize how farmland concentration and land control can be a problem since landownership is in the hands of a few, which is a first step towards land grabbing. The Johann Heinrich von Thünen Institute has released several studies about land investments in East Germany (Forstner et al. 2011; Forstner and Tietz 2013; Tietz 2015, 2017a). The researchers have pointed out that large farms are often organized as companies or cooperatives (legal entities, personal partnerships), while in West Germany, on the other hand, the legal form of sole proprietorship is dominant. They have shown that investors with a non-agrarian background can circumvent the Real Property Transactions Act by purchasing an agricultural company that includes farmland. In this way, they become landowners and can legally acquire land in the future if they act on behalf of the agricultural business. However, these so-called “share deals” are not registered with the agricultural administration, and the bulk of these farmland investments is typically concentrated in specific regions in East Germany and do not happen everywhere to the same degree. Nevertheless, there are no conclusive insights yet about the effects of those investment activities (Forstner and Tietz 2013). For the Czech Republic, Curtiss et al. (2019) have presented insights in a study that compares access to the land market for large companies in contrast to smaller farms. They concluded: “[...] corporate farms are pushed to even up price bids and their market power finds its new expression in more latent transaction characteristics. It is mainly their success in closing sales transactions on land of on average significantly higher quality and larger plots” (Curtiss et al. 2019, p.1).

The developments of large-scale land acquisitions in Germany have led to a political discussion about whether the land market should be regulated, and whether the existing Real Property



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Transaction Act is sufficient (Finger 2015; ML 2016; MULE 2015). Points of criticism were that a better distribution of land ownership should be achieved, and further concentrations of ownership prevented. Interestingly, a study commissioned by the European Parliament recommends the *Grundstücksverkehrsgesetz* as an “interesting legal provision” (Kay et al. 2015, p.59). The German federal state of Saxony-Anhalt has created a “Guiding Principle 2030” for agriculture, according to which agriculture plays a decisive role for the creation of added value, jobs and the maintenance of the cultural landscape. “This creates an inseparable symbiosis between a locally rooted agriculture and rural areas, in which each part is equally dependent on the other” (MULE 2018a, p.4). This reflects the importance assigned to local agriculture, which is considered to contribute to the identification of people with their homes in rural areas through the presence of local farmers who are involved in civil society. In other words, if land was in the hands of local farmers who are active in civil society, rural areas would be strengthened in their development. The former ministry even suggests adding a law to foster the distribution of landownership among local farmers and prevent higher land prices (MULE 2015), but this was never implemented.

The motivation for this dissertation was to carry out empirical research on the social implications of land acquisition and to subsequently evaluate them. In order to do this, it was necessary to analyze the German land market and the specifics of East German agriculture, as well as to assess field data from farm managers and the rural population. When work on this dissertation started in 2015, ongoing political discussions about a further regulation of the land market raised questions about whether this policy implication could be feasible. In what case would a regulation be desirable? Balmann (2015) and Odening and Hüttel (2018) came to the conclusion that the land market worked well and there was no need for further regulation. At the same time, studies by Kay et al. (2015) and Franco and Saturnino (2013) suggest that European farmers were suffering because the actors on the land market had unbalanced powers. The aim of this dissertation is not to deliver an economic analysis of land market processes, but to investigate complex social interrelationships particularly from the property rights perspective of farmers and rural inhabitants in areas of agricultural structural change. Thus, because there was a lack of empirical evidence about social implications of land acquisitions in East Germany, a research gap was identified. While reports from the Thünen-Institute (Forstner et al. 2011; Forstner and Tietz 2013; Tietz 2015) served as a valuable basis for understanding the issues in East Germany, a study that included the voices of farmers as well as rural inhabitants had not yet been undertaken when this research began in 2015<sup>2</sup>.

### 1.2 Research questions and objectives

The title of this dissertation is a question: Who farms the fields? The answer to this question is threefold, and it can first be understood as a question about farmers’ personalities – a portrait of agriculture today. It can also be understood as a question of ownership and the possession of

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<sup>2</sup> The Thünen Institute is also working on a case study about the effects of super regionally active investors in agriculture on rural areas (Johann Heinrich von Thünen-Institute 2020).

## 1. Introduction

land rights: Who is actually allowed to cultivate the fields? What are the regulations? A third point of view is aimed at the rural population: Do they know who is actually farming, and how does agriculture influence rural life?

Thus, the dissertation at hand bundles land cultivation and its effect into three different issues. One issue encompasses farmers and their relationship to the village, while the second issue deals with regulations of the land market, and the third issue focuses on the rural population.

The aim of this study is to connect the three mentioned realms of rurality, namely agricultural production processes, the distribution and availability of agricultural land as a basis of those processes, and the rural population to achieve a better understanding of land cultivation in East Germany. Regarding the land market in relation to social aspects of rural inhabitants as well as the community against the background of the ongoing processes in East Germany, which is partly a former transition country, but also embedded into the German Federal Republic, this study provides a unique look into the situation of agricultural land and rural life in East Germany.

The main questions of this research are based on scholarly rural development discussions in which farmers remain embedded in rural communities and contribute to rural society in a way that could be threatened by agricultural land concentration (Favareto 2006).

### **1.3 Outline**

Apart from the introduction (chapter 1), methodology section (chapter 2) and the conclusion (chapter 7), this dissertation encompasses four main chapters (chapters 3-6). All four chapters are dedicated to different aspects of the research.

Chapter 2 outlines the qualitative as well as quantitative methods that were used for this dissertation. In addition, the case study that was used for data collection is elaborated upon.

Chapter 3 provides detailed background information about the agricultural structure in East Germany and Saxony-Anhalt and thus this chapter is chiefly of a descriptive nature. It includes information about the agricultural land market, depicts farm structure and rural population data and also sheds light on the agricultural development of East Germany. With a focus on land, the data presented is based on an extensive literature review.

Chapter 4 focuses on the relationship between land and agriculture, but also includes the rural population. A starting point is the assumption that land value encompasses more aspects than financial interests alone. If land is more than a commodity, the sale of land is also more than an economic transaction. In the course of this chapter, criteria are developed to define land sales as land grabbing. These derived criteria are intended to be a basis for further discussion on the topic of land grabbing in developed countries, with a focus on Europe. The chapter is based on an

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extensive literature review, but also contains insights from the field study conducted in the context of this dissertation.

Chapter 5 focuses on the relationship between agriculture and the rural population. It analyzes the question of whether the rural population might be more attached to their village if they have a connection to agriculture. It is assumed that, originally, rurality was shaped by agricultural processes, which are now declining. The chapter is also based on a literature review as well as the field study. Data from the survey is used to calculate complex interactions between rural populations and agriculture, and the analysis is done with a structural equation model, which is based on two concepts. These concepts were derived from the literature review and also from data from the qualitative interviews during the field study.

The qualitative interviews are further analyzed in chapter 6 according to qualitative content analysis and give additional information for answering the research questions of this dissertation. While there is a focus on farmers; rural realities, the questions of land acquisition and social engagement finally connect all of the three subjects that are the focus of this study.

The insights of all four chapters are finally discussed in the conclusion, where they are put into a wider context of the scientific debate. Points for further discussion are outlined, and the limits of the case study's research are also provided. Furthermore, suggestions for future research and implications for political decision makers are made.

## 2 Materials and Methods

The following section provides an overview about the methods that were used for the dissertation at hand. The case study design is also presented in this section, including the investigated region, time period and other characteristics. The data that was gathered is analyzed in detail in chapters 4-6, which is why parts of the methods are further elaborated upon within those chapters.

### 2.1 Case study

The case study was conducted in two regions of Saxony-Anhalt (Figure 1). Located in the central eastern part of the country, Saxony-Anhalt is one of the federal states of Germany (Figure 2) that was a part of the former GDR until reunification. More specifically, the research area was in the Altmark region, which is located near the border to Brandenburg, and about 50 km northeast from Magdeburg, the capital city of Saxony-Anhalt. The second research area was located in the region of Salzlandkreis, about 30 kilometers west of the city of Halle, the largest city in Saxony-Anhalt (241,333 inhabitants) (Stadt Halle 2019). Both areas are about 115 km apart from each other.

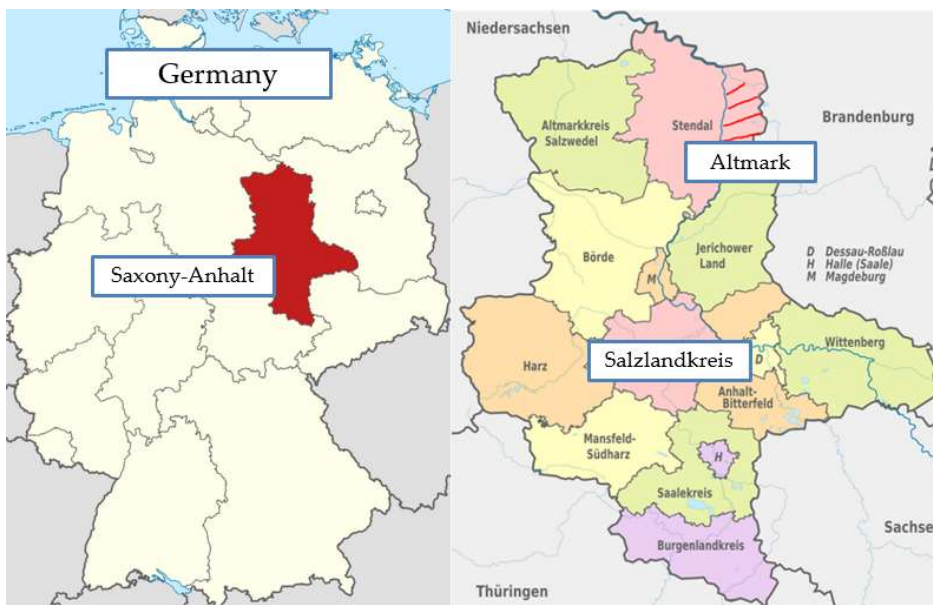


Figure 1: Map of Saxony-Anhalt and the study areas. Source: adapted from TUBE and NordNordWest (2012) and taken from Bunkus and Theesfeld (2018).

As part of the former GDR, Saxony-Anhalt has undergone and continues to undergo a profound transformation in the agricultural sector. After the transition phase following the reunification in 1990, East German agriculture turned out to be dominated by large-scale farms, which are still larger than those in West Germany. These uneven circumstances are due to different development trajectories that had already taken place during the GDR times when large-scale

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agriculture of cooperative farms dominated (for further details about the developments related to agricultural transitions, see, for example, Beckmann and Hagedorn (1997)). In West Germany, the average farm size was 44 hectares (ha) as of 2016 compared to 224 ha in East Germany. In West Germany, single enterprise farms (single owners<sup>3</sup>), which represent about 99.3% of all farms, cultivate about 99% of the farmland. In East Germany, 85.1% of all farm businesses are led by individuals,<sup>4</sup> but they cultivate only 49.8% of the agricultural area. This means 14.9% of farms cultivate about half of the land in East Germany (Tietz 2017, p.4). Furthermore, there are more consolidated plots of land for cultivation in East Germany. Looking more closely at land ownership and land lease structure, the share of leased land in East Germany is comparatively high, amounting to 68% in 2016 (yet declining from 90% in 1993). In West Germany, one can observe the opposite, namely an increasing trend reaching 54% in 2016 (up from 40% of the agricultural land in leasehold in 1993) (BMEL 2015, 2000, 2019). East German agriculture is known to be very productive due to the resulting economies of scale (Boddenberg et al. 2017). In contrast, the economy in the federal states of the former GDR is still weaker compared to the western regions. The unemployment rate in 2017 was 8% in Saxony-Anhalt compared to an average of 4.9% in West Germany (Bunkus and Theesfeld 2018; Bundesagentur für Arbeit 2018a, 2018b) (see more details in chapter three).

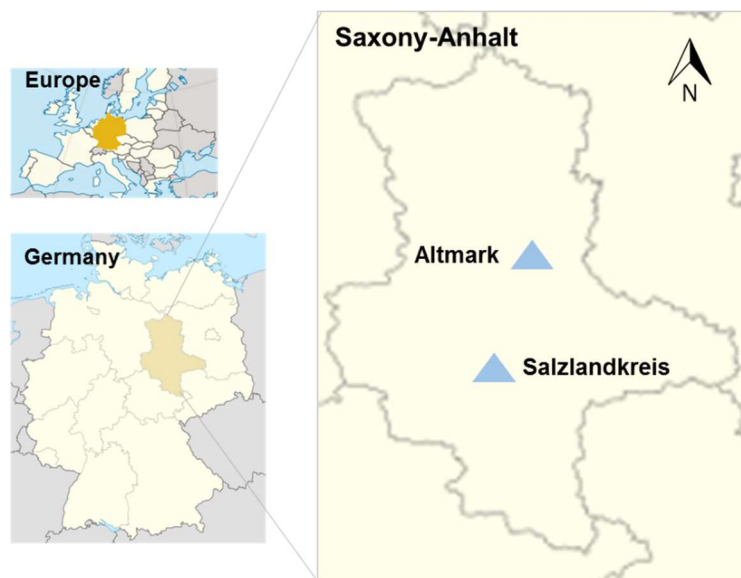


Figure 2: Saxony-Anhalt and the study area. Source: adapted from TUBS (2011) and NordNordWest (2008) and taken from Bunkus et al. (2019).

Why were these regions for the studies chosen? An important criterion for choosing the regions was their difference in soil quality, as soil quality influences land uses and hence the land prices. The best soils in Germany can be found in the “Magdeburger Boerde”, an area located in the center of the federal state, and these soils were considered of interest for this study. The Salzlandkreis region has some of the best soils of Germany, while the soil quality in Altmark is only average to less than average (see Table 1).

<sup>3</sup>In German: Natürliche Personen.

<sup>4</sup> In German: Natürliche Personen.

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An important criterion for choosing the villages was the dominating type of farms there. Village 1 in Altmark was chosen because there was a relatively large number of residential farmers. Village 2 was chosen because it was dominated by an agricultural cooperative, while villages 3 and 4 were supposed to have a similar dominating farm type mirroring the conditions of villages 1 and 2. While village 3 was dominated by an agricultural cooperative as well, village 4, which was supposed to have many family farms, turned out to have no farmsteads in the village itself.

Another criterion for the researched villages was their local infrastructure, which was supposed to be similar in both research regions. Hence, villages with a similar number of inhabitants and comparable importance for the region were chosen. The number of inhabitants when choosing the villages is displayed in Table 1. Villages 1 and 3 were centers of administration, with large supermarkets and health care provisions in the form of local physicians, which made them popular destinations for the surrounding villages with less infrastructure. Villages 2 and 4 were smaller, but they still provided basic local amenities such as small shops, bars, kindergarten, a bakery and local administration offices. Just prior to this research, the bakery and local administration in village 4 closed down, which also happened to the bank and elementary school in village 2.

The case study design for this research thus represents two contrasting village types: Concerning agricultural structure, two villages showed a broad land ownership and lease distribution as well as various farms with both their place of business and family home in the villages. In contrast, two villages with a rather concentrated lease and ownership structure were chosen (Bunkus and Theesfeld 2018); a further overview of the case study region is depicted in Table 1.

The field study in the villages started in July 2016 and was finished in December 2016. The research was conducted in two villages at a time, with the region in the Altmark being visited before the Salzlandkreis. The study encompassed interviews for obtaining qualitative data as well as a survey for obtaining quantitative data. Exploratory interviews were conducted with 16 farmers or farm managers, with the interviews lasting between 30-80 minutes depending on the interview situation. The interviews were carried out at the headquarters of agricultural enterprises, at farmers' homes and once at the workplace of an entrepreneur. The interviews were conducted in German, which is the native language of the researcher and of 15 out of 16 of the interviewees.

The interviewees were found with help of online registries that register farm businesses (Cylex GmbH 2019; Heimische Landwirtschaft UG 2019). There was no sampling frame, or a full list of local experts or farmers to choose from. This was due to German and European data protection and privacy laws and also to the special nature of the data that was required. Later, the leads of previously interviewed farmers were followed up on through chain-referring sampling (Bryman 2012), with some of the farmers passing on telephone numbers for other farmers. Telling a

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potential interviewee about previous interviews with farmers he or she knew would sometimes result in a participant agreeing to do an interview. Nevertheless, some respondents were contacted without a referral. During the interview process, the local networks became more familiar and the knowledge grew (Bryman 2012; Bunkus and Theesfeld 2018), which resulted in understanding hidden characteristics of the local population (Heckathorn 2011). The interview process continued until most of the local farmers had been contacted and saturation in data was reached, that is when no more new and significant information could be expected with a new interviewee. This covered a large proportion of farmers in the researched area (Bunkus and Theesfeld 2018).

While the interview partners are termed “farmers”, a variety of people can take care of a farm. This is the reason why the selection of the interview partners needs to be explained in more detail. Individual enterprises are usually not led by just one person and typically other family members or employees are also involved in farm management. In addition to the farmers who were farm heads of single enterprises, this study also includes a farm manager, an office manager and three co-owners who were leading the enterprise together with their husbands. In addition, one of the interviewed farmers worked at several other estates as a part of his business model. When it came to choosing the interview partners, it was important that the respondent had key insights into the business. The interviewees who were included in this study were all active farmers in the research area and identified themselves in this way. The farm enterprises also had different sizes, varying from between 40 ha and 1,740 ha. Thus, the study depicts heterogeneity concerning farm size as well as income contributions to total income from agricultural activity.

The variety of interview partners illustrates the diversity of rural farmers and suggests that there is also a variety of views towards farming. One interviewee did not farm directly in one of the researched villages, but only lived there, while others had both their farm and residence in the same village, and another interviewee cultivated the fields adjacent to a researched village.

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Table 1: Characteristics of the case study region and gathered data. Source: author's own survey, Geodatendienst Bodenrichtwerte (2018), and Statistisches Landesamt Sachsen-Anhalt (2018).

Characteristic	Village 1	Village 2	Village 3	Village 4	
Region	Altmark	Altmark	Salzlandkreis	Salzlandkreis	
Population (2016)	2,147	1,220	2,526	1,039	
Ground value (Bodenrichtwert)	45	25	85	90	
Dominant type of farm	Sole proprietorship in most cases: Family farm	Agricultural cooperative	Agricultural cooperative	No farmsteads	
Number of interviews (farmers)	7	2	3	4	Total: 16
Number of questionnaires	27	29	27	47	Total: 130
Specifications for research					
Interviews used for analysis in chapter 4	6	2	3	3	14
Interviews used for analysis in chapter 5	7	2	3	4	16
Interviews used for analysis in chapter 6	6	2	3	3	14

Now that a background for the qualitative data collection has been provided, the collection of the quantitative data will be addressed. A standardized survey was conducted in public places of the four villages during the same time the interviews with the farmers were carried out. These places included squares and streets near supermarkets, bars, banks, walking paths and other infrastructure locations. The surveys were also conducted at different times during the day (between approximately 9 a.m. and 8 p.m.). Even though more than 400 villagers were approached, only 130 agreed to participate in the survey (in Salzlandkreis  $n=27$  in village 1,  $n=29$  in village 2, and in Altmark  $n=27$  in village 3 and  $n=47$  in village 4) (Bunkus et al. 2020). The respondents were chosen according to the following criteria: They had to be local inhabitants who didn't live any further away than 30 km and who were also villagers. Since the interviews were only possible with people who were outdoors or in public places during the specified time, the sample is non-random. The researcher tried to achieve quota sampling (Bryman 2012) by approaching villagers of certain age levels or gender; nevertheless, the data still does not display a representative cross data sample for Germany. The sample represents 28



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landowners and 99 non-landowners<sup>5</sup>; of these small-scale landowners (6 ha on average), 95% rent their land out to farmers.

Table 1 also depicts how there was a varying sample size used for analysis, with the number of interviews varying according to the analysis used. Only 14 interviews are used for the analysis in chapters 4 and 6, since one interviewee from village 1 stopped farming and was thus not included, while one interview partner in village 4 was found to cultivate land outside of the research area.

While the interviews were used to determine the density of resident farmers in chapter 5, the *number* of interviews themselves was not included directly in the analysis. They allowed for conclusions to be drawn about the resident farmers, even though not all of the interviewees fulfilled the requirements that were set for the analysis itself (full-time agricultural enterprises with more than 100 hectares).

### 2.2 Methods

The case study in rural East Germany was preceded by an extensive literature review about land grabbing in Europe as well as on a global scale, and about rurality and farming in East Germany (see chapter three). Important scientific databases (Web of Science, Scopus), journals from scientific publishing companies and electronic catalogues from Martin-Luther-University Halle-Wittenberg were researched according to keywords. In the style of a systematic review, the results were collected and subsequently analyzed according to their suitability for the research at hand (Brymann 2012). Chapter 3 especially is built on the literature review, although all the other chapters are based on this review as well.

According to Bryman (2012), it is imperative that empirical works build on theory and subsequently on hypotheses, which have to be tested by studies. The literature review served as a basis for identifying the research focus of the case study. This dissertation's research scope is to connect insights about landownership, rural population and agriculture with a focus on East Germany. For approaching this topic, several hypotheses are set.

Chapter four contains the hypothesis that land grabbing in Germany and Europe takes place when certain criteria are met, which are subsequently deduced. Chapter five follows the hypothesis that a farmer's residency is important for the village, and it is tested with data from the survey and modelled with the Structural Equation Model. Finally, chapter six explores the role of farmers for their villages. Because the hypothesis was made that farmers' residency would be important, the role of farmers is also expected to be significant for the village. Nevertheless, even though the hypotheses are set, there is openness towards the outcomes of the data analysis.

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<sup>5</sup> Not all interviewees responded to that question and thus, three are not counted in.

## 2. Material and methods

This subchapter explores the methods of data collection and analysis. A specific derivation of research questions and hypotheses can be found in the according chapters. The methods chosen for the carrying out of this study were to be suitable for researching the connections between the three discussed realms of landownership, rural population and agriculture. Therefore, using various data from the chosen case study regions in the form of qualitative as well as quantitative data was decided upon. Thus, the study followed a mixed methods approach. The analysis of both data entities was executed separately, but later combined (Bryman 2012). According to Bryman (2012), mixed methods can be used to find unexpected results: “quantitative and qualitative research can be fruitfully combined when one generates surprising results that can be understood by employing the other” (Bryman 2012, p.633). The motivation for conducting a case study with mixed methods was to assess the complexity of the researched situation and to understand its context (Mayring 2016). This design allowed the author to combine information from farmers with that of interviewed villagers. The initial idea of sampling data from farmers and local inhabitants was to see both perspectives of the relationship between farmers and the villagers. An example of this is that of farmer’s social engagement: The qualitative interviews served as a way to get an insight into the farmers’ social activities, while at the same time the quantitative interviews showed how this engagement was perceived by the villagers.

Because it was unclear at the beginning of the study how the farmers were actually integrated with their villages and how they opened their farms to the neighborhoods, the interviews were to have an explorative character. At the same time, the transitions between several topics needed further explanation. The connection between a farmer’s relationship to his or her neighbors, for example, and also the perceived situation of the land market are not self-explanatory. An interviewer was needed to connect these topics in a dialogue so they would make sense to the interviewee. The topic of land acquisition is also rather sensitive and could not be explained in an anonymous query. The chosen method of expert interviews which followed a half-open guideline, namely semi-structured in-depth interviews (Irvine et al. 2013), fulfilled the requirements to enable a discussion with an interviewee, but also to have a common theme throughout the discussion in order to get results that could be compared with other interviews.

In contrast to a semi-structured interview, a structured interview consists of the exact same interview questions that are asked in a consistent order to each interviewee. The questions are often closed-ended and do not have many options for answering them (Bryman 2012). While both semi-structured and structured interviews aim to obtain comparable information from the interviewees, the quantity of information is different. Semi-structured interviews are conducted in a conversation and consist of open-ended as well as closed-ended questions. “The dialogue can meander around the topics on the agenda [...] and may delve into totally unforeseen issues” (Adams 2015, p.493). This makes semi-structured interviews suitable for exploring an issue at hand, but at the same time the predefined structure makes sure that the different interviewees from each interview provide information on the same topics.

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After identifying a suitable method for implementing the interviews, a method for interview analysis had to be chosen. The method for the following analysis is qualitative content analysis, which is considered a “strategy of searching for themes in one’s data” (Bryman 2012, p.559). The data is first transformed into a text, which then undergoes a subsequent text analysis that’s based on rules defined in advance. This systematic approach leans on quantitative content analysis and provides a “systematic, rule-bound procedure” (Mayring 2014, p.39) on theoretically founded units of analysis.

Qualitative content analysis seemed a suitable method for this study because the data at hand is seen in a context, and the analyzed parts of the interview are considered within the entirety of the interview. In general, the approach does not hide the fact that the interviews are embedded in the context of a whole study that also included a survey. Hermeneutics entails that “attention to the social and historical context within which the text was produced. [...] qualitative content analysis can be hermeneutic when it is sensitive to the context within which texts were produced” (Bryman 2012, p.560). Even though the interview analysis of this study sticks to a rational categorization of the data at hand and could also be categorized by a person uninvolved with the project (intercoder reliability), it also entails context sensitivity. Mayring (2014, p.39) has elaborated, stating that “the material is always understood as relating to a particular context of communication. The interpreter must specify to which part of the communication process he wishes to relate his conclusions from the material analysis”. Thus, the method first helps to put the interview content into a new perspective via a systematic procedure, but it also encourages putting the results back into the context again after the text analysis.

The basis for interview analysis was the interview documentation and, as described in the previous paragraphs, its transformation into text. The minutes of the meetings<sup>6</sup> that were conducted for the study consist of notes which were compiled during the interviews, including significant statements from the interviewees. These notes served as supporting material for written summaries of each interview, which served as a starting point for the interview analysis. According to Mayring (2014), qualitative content analysis begins with a reduction of the material, including summarizing. Thus, the minutes can be seen as the first step of reduction, summarizing the interview content and preparing it for further analysis.

According to Mayring (2014), the material needed to be sorted into categories, which required a certain schema. Two procedures were possible for this: The first one, inductive category development, is described as classical content analysis (Mayring 2000). In contrast to the second, deductive category development, category development does not take place before seeing the material, but the categories are distinguished from the material itself. The semi-structured in-depth interviews of this dissertation already followed an agenda by using a guideline, therefore deductive categorization was chosen. The interview questions followed

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<sup>6</sup> In German: Gesprächsprotokolle.

## 2. Material and methods

several hypotheses which needed further elaboration, and thus the questionnaire allowed for the deduction of categories.

Mayring (2014, 2016) presents a schema for interview analysis consisting of several steps that were followed for this analysis. Mayring (2014, p.96) identifies seven steps for deductive category development (Table 2). For step 1, the text is analyzed according to a pre-set research question, followed by the second step under which the definition of a category system consisting of categories and sub-categories is established. As a third step, a coding guideline is defined. This guide consists of categories with accompanying examples, namely a key definition, an “anchor” example, as well as a coding rule (see Table 12). After the category definition, the text should be worked through line by line with the possibility of also formulating new categories and finding new anchor examples (step 4). When 10-50% of the material are worked through, the categories are tested and fine-tuned (step 5), and then the entire material is analyzed again (step 6). The last step (7) encompasses the results and interprets the content; identification of frequencies is also possible. Mayring (2014, p.96) draws an arrow from step 7 to step 1 and from step 5 to step 2, respectively, thus opening possible feedback loops if a re-interpretation is needed.

Table 2: Schema for deductive category assignment according to Mayring (2014, p.96).

<b>Steps according to Mayring (2014)</b>	<b>Elaboration</b>
<b>Step 1</b>	Research question before theoretical background
<b>Step 2</b>	Definition of category system (categories and sub-categories)
<b>Step 3</b>	Definition of coding guide
<b>Step 4</b>	Reading the text; possibility of finding new categories
<b>Step 5</b>	After reading 10-50% of the material, revision of categories
<b>Step 6</b>	Analyzing the whole material with new categories
<b>Step 7</b>	Results, interpretation of content, identification of frequencies

To be in line with intercoder reliability, a fellow doctoral student was asked to check whether there was agreement, and it was tested whether the text content fits into the fine-tuned categories.

The following elaboration follows the seven steps for inductive category assignment. According to Mayring's (2014) first step, the material was analyzed corresponding to the research questions, which stood behind the formulation of the interview guideline. The three main research topics for the interview analysis in chapter six are elaborated upon within the chapter, as well as a thorough content analysis.

In addition to the questionnaire for the collection of qualitative data, a survey was conducted for the collection of quantitative data. The answers provided by the respondents in the survey form the data basis of the quantitative research of this work. Quantitative research is about creating a sample (Bryman 2012): In the scope of qualitative research, the aim of the case study at hand

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was to interview most of the local farmers of a village, while the aim of the survey was to collect an as representative as possible cross-section of the village population.

The motivation for employing questionnaires among the rural population was to find “hidden correlations” between the answers of the villagers, and also to find out how agriculture and rural life were perceived on average (Bryman 2012). The aim was to find out more about the rural inhabitants, where they worked, whether they were landowners, and if they were connected to agriculture. The interviewer did the survey in person and the interviewees stayed anonymous. The survey consisted of closed-ended as well as open-ended questions, but with a dominance of closed-ended ones to ensure comparability of the data. The open-ended questions were important for painting a picture of things in the respondents’ own words. Only respondents who lived within 30 km of the survey site were admitted for the study. The full questionnaire contained 59 questions, most of them with multiple-choice answers and some with open-ended questions.

Bryman (2012, p. 161) introduces how the process of quantitative research is based on theory, then a hypothesis is developed which forms the basis for the research design and the subsequent operationalization. These steps have to be taken before empirical research begins on site. In the fifth chapter, where an analysis of the quantitative data takes place, the operationalization is adopted in the design of two concepts, which are derived from two theories, namely “rural place attachment” and “relationship to agriculture”. The concepts are structured in such a way that they consist of seven and five indicators, respectively. This is a direct link to the questionnaire: The answers to thirteen questions form the basis of these indicators. Hence the theory was operationalized in such a way that it could be broken down into concrete questions and subsequently used as indicators of a concept.

The next step after data collection was data management and analysis. Firstly, the raw data has to be managed and “prepared so it can be quantified” (Bryman 2020, p.162). The researcher checked the answers in the questionnaire for readability to ensure a smooth analysis. The next steps are data reduction and to create a design for coding. During the conceptualization of the questionnaire, the options for data analysis already have to be kept in mind. Hence, the questions of the survey were collected in a table and the different answer options were assigned a code; for example, in the case of a closed-ended question with five answers as options, the numbers 1-5 were provided. In the case of open-ended questions, the answers were collected in a table. The respective answers were then clustered if the formulation of the question required it. The survey questions were coded as well, and the data allowed it to form new variables. Microsoft Excel was used for this initial ordering of data.

The coding of all questionnaires is quite error-prone due to the abundance of information, which is why all data was first double-checked and later checked using a four-eye principle together with a student assistant.

## 2. Material and methods

The coding and grouping of the gathered data already leads towards data analysis. A further analysis is described in chapter five by employing a Structural Equation Model (SEM) (Byrne 2010). It allows for the calculation of complex interrelationships by recognizing a variety of categories and their relationships. With the model, for example, the effect of one variable can be regarded in its effect through another variable. An SEM is a relatively novel approach in social-ecological research and research aimed at capturing social interactions in an agricultural context particularly (Stofferahn et al. 1991; Welsh 2009; Pambo et al. 2008). The coded data became part of an equation that was calculated with the statistical programs SPSS 23 and AMOS 23 (Bunkus et al. 2020).

The aim of this modelling was to find correlations between two derived concepts in relation to the density of resident farmers, which would give further insights about the importance of farmers' residency. The concepts *relationship to agriculture* and *rural place attachment* were deduced from the literature review as well as insights from the qualitative interviews (more information about the derivation of those concepts can be found in chapter five). These concepts (the structural component of the SEM) are so constructed that they consist of indicators (the measurement component of the SEM Figure 3). *Rural Place Attachment* consists of seven indicators (RPA1-RPA5), while *Relationship to Agriculture* consists of five indicators. The indicators were coded on a scale of 1-5; for the corresponding questions see Table 10 in 5.3. The independent variable in this model is *density of resident farmers*. It classifies the rural inhabitants according to their villages into ones with a high or low density of resident farmers accordingly. The information about density is recoded into an ordinal variable. The "e" for the indicators stands for error term, which includes the information which cannot be explained by the model.

## 2. Material and methods

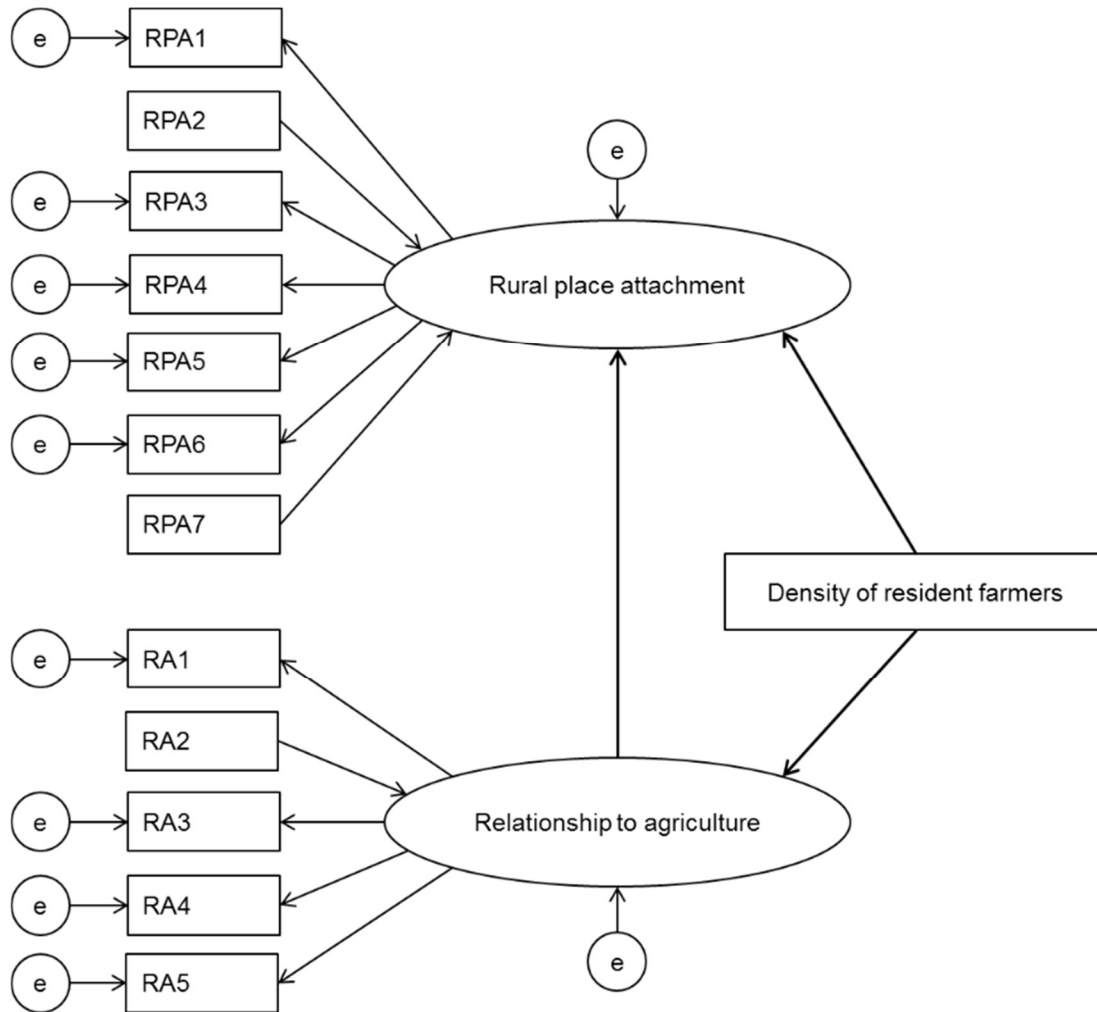


Figure 3: Hypothesized structural equation model. Source: Bunkus et al. (2019). Note: The boldface arrows indicate a structured component, e=error.

The results were used to initiate a discussion in the first place, because the complexity did not allow for clear comprehensive details (see chapter five). Chapter five provides more details about the analysis for further explanation.

Thus, a mixed method approach was constantly used during the research, and the insights from the interviews were used for setting up categories in the structural equation model. They were also used to develop criteria for land grabbing. During the qualitative data collection the interviewees were informed about the surveys with rural inhabitants. The insights of both research strands were brought together in the discussion of the interviewees' results, but also in the conclusion of this study.

### **3 The Agricultural Structure in East Germany and Saxony-Anhalt**

This chapter is of a descriptive nature and introduces information about Germany's agricultural structure with a focus on Saxony-Anhalt.

#### **3.1 The agricultural structure in the GDR and after re-unification**

After World War II, Germany was divided into the Federal Republic of Germany and the German Democratic Republic. While the former was reconstructed with the support of the Western allies, the relationship between the former Soviet Union and the GDR was much more difficult (Faulenbach 2002). Varying developments took place within both society as well as the agricultural sector in each German country. By the time the two countries were reunited in 1990, they had each developed distinct agricultural practices. The case of the former GDR differs from that of other post-soviet transformations because institutions were transferred from Western Germany (Beckmann and Hagedorn 1997).

While agriculture in the GDR became large-scale through the government's expropriation of private farmers and the emergence of agricultural cooperatives, agricultural enterprises in Western Germany continued to operate based on the family-farm unit. The structure of agricultural production to the east of the Elbe, specifically in the regions of East Prussia, Mecklenburg and Pomerania, was traditionally large-scale and dominated by estate ownership. The various phases of land collectivization could hence build upon an existing structure of large-scale agricultural production, though this process was also opposed by traditional small landholder farmers in Central Germany (Neu 2005). The collectivization of the GDR's agricultural production shaped the social relationships and jobs in rural areas. Jochimsen (2010) suggests that agricultural cooperatives in the GDR served to supply the region rather than the market (planned economy) with produce. In addition to providing food security, agricultural cooperatives (LPGs<sup>7</sup>) of the GDR replaced estate ownership and the church and assumed functions such as road maintenance, which were assigned to municipalities in Western Germany's Federal Republic. People who were not able to work in other industrial or cultural sectors would otherwise have been unemployed or worked in the cooperatives; there was still plenty of manual work to be done (Jochimsen 2010). Moreover, the manufacturing industry was closely linked to the LPGs, which created social network. For example, a kindergarten was usually attached to each farm. Another group of rural inhabitants of the GDR were the soldiers, with 30,000 soldiers being deployed to guard the German-German border (Laschewski 2014). Obviously, they were no longer needed after re-unification, and they lost their jobs.

In 1989, the average size of agricultural cooperatives involved in plant production was around 4,300 ha. In former West Germany, on the other hand, the average farm size was about 18 ha

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<sup>7</sup> LPG = Landwirtschaftliche Produktionsgenossenschaft.



### 3. Agricultural structure in East Germany and Saxony-Anhalt

(Neu 2005). Following reunification, the two agricultural systems had to be integrated and policy had to meet the requirements of both systems. In addition, farmers who had been dispossessed wished to get their land back. Laschewski (2014, p.2) states that this process began with the political decision-makers: *“the agricultural minister Borchert, who came into power 1993 following the Bavarian peasant Ignaz Kiechle, represented this new policy focus. Symbolically, this policy shift was reflected in the official terminology - the main policy objective was not anymore on the preservation of peasant farming (“bäuerliche Landwirtschaft”), but the support of farm entrepreneurs (“landwirtschaftliche Unternehmer”).”*

The structure of East Germany's farming system also had to be considered in the formulation of policy aims for the entire country. Nevertheless, scientists, politicians and lobbyists expected West German conditions to be adapted in East Germany and the farms to meet the requirements of the free market (Neu 2005). East Germany's farms adapted to market production, though, in general, they did not change their scale of production: The successors of former LPGs still exist in various ownership forms to this day (Laschewski 2009). The East German agricultural industry was not competitive for various reasons, including outdated technology or overly large numbers of employees (Jochimsen 2010). Even though many jobs were lost in the transformation process, there was still interest, for example among cooperative members, in sustaining large-scale agriculture and establishing successor farms (Jochimsen 2010; Martens 2010). This was possible thanks to cooperative ownership, whereby members of the cooperatives owned their land as well as production goods. In contrast, state-owned goods and land became the property of the trust “Treuhand” of the new federal State of Germany (FRG). Although new small-scale farms were established, they did not become dominant in East Germany (Neu 2005).

The transformation of ownership modes was accompanied by changes in the agricultural structure of production in both parts of reunified Germany. Agricultural structural change involves large increases in agricultural yields while requiring fewer employees in the agricultural sector (Kirschke et al. 2007). The processes that result from the changes in agriculture also fundamentally effect society: Less people are involved in agricultural processes or familiar with them, and since rural areas lack infrastructure, people leave to seek employment and better infrastructure in the cities (Pfusterschmid 2016b).

A fundamental difference between farms in contemporary East and West Germany relates to the form of ownership: In the West, individual entrepreneurs are more common whereas in the East, corporations and cooperatives predominate (Tietz 2017a). In the following section, the role of the German land trust and the privatization of state land after re-unification are discussed, which continues to have implications for the land market today.

## 3.2 The agriculture land market

This subchapter focuses on the current situation of the agricultural land market with a look back on recent German history, namely reunification.

### 3.2.1 Availability of land and models of land acquisition

Germany covers an area of 35,757,693 ha, with 17.1 million hectares or 51.1% of which in agricultural use (Statistisches Bundesamt 2016b). East Germany possesses about 6,060,900 ha of farmland (own calculation based on: Statistisches Bundesamt 2017d). Saxony-Anhalt comprises 2,045,214 ha, and around 60.5% (approximately 1,254,700 ha (Statistisches Bundesamt 2017d)) of its area is in agricultural use (Statistisches Bundesamt 2016b).

Soil quality in Germany is measured on a scale of between 0 and 100 and is called "Bodenzahl". The number reflects yield capacity as well as soil consistency (Schrödter and Altermann 2016). Sandy soils falls lower on the scale because they have a smaller yield capacity. Such soil is often found in northern Germany, including in Mecklenburg-Western Pomerania, Schleswig Holstein, Brandenburg and parts of Lower Saxony. Top-rated soil is found in the black earth region *Magdeburger Börde* in central Germany, with a large part of this region lying in the state of Saxony-Anhalt. A region with a high yield capacity, including Magdeburger Börde, is clearly distinguishable on the map (Figure 4) as the dark brown region in Central-East Germany. The map on the right in Figure 4 shows the state of Saxony-Anhalt, and the *Bodenzahl* gives information about soil quality. The field study regions are marked in yellow; in Altmark (north), the average value is about 40 points, whereas in Salzlandkreis (in the center of the map) the quality of soil is better with an average of 90 points.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

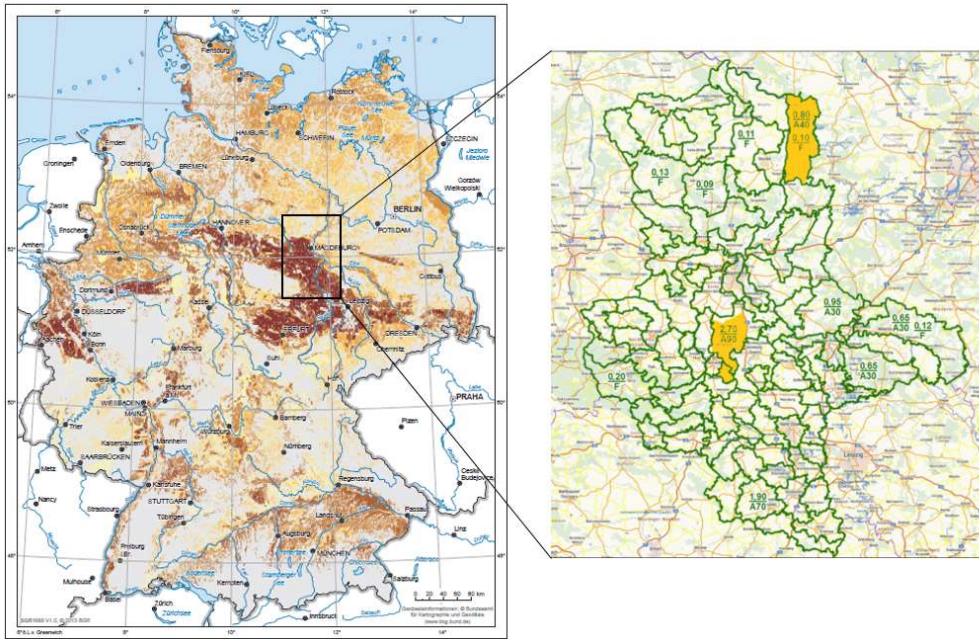


Figure 4: Yield capacity (Ackerbauliches Ertragspotential) in Germany and soil quality (Bodenrichtwerte) in Saxony-Anhalt. Source: Geodatendienst Bodenrichtwerte (2018) (modified) and Stegger et al. (2014).

The East German land market is influenced by processes of privatization and restitution, as well as by global increases in price and demand for agricultural land. Access to this market is shaped by several land laws.

When the former GDR acceded to the Federal Republic in 1990, the state owned about 2.1 million hectares of agricultural land (Jochimsen 2010). About 3 million hectares of GDR farmland were under “peasant ownership”<sup>8</sup>, which could be traced back to single owners using the land registry and was thus not in public ownership (Böhme 2016). The decision to privatize GDR state lands had already been made by the late GDR and was regulated by the Privatization and Reorganization of Publicly Owned Assets Act, called the Trusteeship Act<sup>9</sup> (Böhme 2016). The law included restrictions over the following aspects, stipulating: “[...] that the special economic, environmental, structural and property-law features of the sector had to be taken into account in the process of privatization and reorganization” (European Commission 1999). Another important regulation was the law on agricultural adjustment (Landwirtschaftsanpassungsgesetz), which made it possible for LPGs to change their legal form from cooperatives to companies. The compensation for resources which were brought into the cooperatives by its members was also regulated by this law. According to Jochimsen (2010, p.7), many cooperatives were liquidated or opted to change their legal form, and of 3,844 LPGs only about 1,000 cooperatives remained.

<sup>8</sup> In German: Bäuerliches Eigentum.

<sup>9</sup> In German: Treuhandgesetz.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

The German Land Administration and Privatization Agency BVVG<sup>10</sup> privatized state lands that had gone into the German land trust *Treuhand*, thus providing an acquisition opportunity for interested buyers. BVVG are officially mandated by the federal state to privatize the state land, and act upon the trusteeship act. They started their operation on July 1<sup>st</sup> 1992, and they fulfilled their legal obligations in the states of Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia to privatize formally publicly owned agricultural and forest lands, including the buildings on those lands (BVVG 2016b). Their tasks include leasing farmland and pastures, as well as selling off building lands and mining property. The BVVG is also responsible for possible restitution and plot conveyancing (BVVG 2016b). The privatization of state land was accompanied by various discussions, obscurities and controversies between stakeholders such as former LPG members, *Treuhand* and farmers' associations. The order in which different actors were to be recognized was contested, as was the matter of whether resettled farmers (*Wiedereinrichter*) should be preferred to newly settled farms (*Neueinrichter*) (Jochimsen 2010). Former landowners who possessed more than 100 ha had been expropriated between 1945 and 1949. They were not compensated after 1990, even though the Soviet Military Administration initiated that families who own more than 100 hectares had to be expropriated and evicted. Subsequently, 3.3 million hectares (ha) became state land, about one third of the East German agricultural land. 2.2 million ha were reallocated to smaller farmers and refugees from the East, while the remainder of about 1.1 million ha of the expropriated land was used to establish state farms (Bromley 2017). After reunification parts of this state land was leased to *Neueinrichter* who had the chance to buy that land to a reduced price after the Idemnification and Compensation Act (EALG) of 1994, which also allowed former owners to gain a small compensation or lease or purchase small parts of their former land for a subsidized prize (Bromley 2017, p.82).

In contrast, landowners who had less than 100 ha in 1945 were not likewise expropriated, as they remained their land titles and were not evicted. Their land was largely collectivized. According to the Agricultural Adjustment Act of 1990 collective ownership had to be evaluated in individual units to assess the value. "Individual *LPG* members could then decide how their [...] assets would be re-privatized" (Bromley 2017, p.86).

The BVVG started with a portfolio of 3.2 million hectares in 1996 (Dells 2018) that included forests. By 2015, about 1.5 million hectares had been returned to various former owners. The BVVG had to make sure to seize the plots correctly and to clarify their ownership status, which took time and effort. Between 1992 and 1996, the aim was to stabilize agricultural enterprises and to secure the implementation of land management (Dells 2018). Up until 1997, land was being sold at market value, though in consideration of potentially favorable sales in the future there were 'built-in' restrictions: The BVVG sold land at a reduced price within the scope of the compensation law (*Entschädigungs- und Ausgleichsleistungsgesetz*) (EALG) until the end of 2007 (Böhme 2016). Nevertheless, the sale of state-owned lands was not complete by 2009 (BVVG 2009). When the BVVG started to lease and sell plots, they prioritized resettled farmers (*Wiedereinrichter*), new farmers who had been residents on March 10<sup>th</sup>, 1990, successor

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<sup>10</sup> In German: Bodenverwertungs- und -verwaltungs GmbH.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

companies of LPGs (legal persons), and new farmers (Neueinrichter) who wanted to become residents after March 10<sup>th</sup>, 1990 and cultivate their own farms or cooperate with other resident farmers in doing so (Forstner et al. 2011).

Several legal modifications made it possible to sell land on a larger scale after 2007 (Böhme 2016). After 2009, agricultural land was sold at market value (Dells 2018). It was decided that the BVVG should sell the land up to a certain deadline, and to allocate the sales throughout the years. The initial timeframe was postponed, and since 2018 the aim has been to finish privatization by 2030 (BVVG 2016a). Another legal modification involved the sale of smaller plots of land. The lot size was reduced from 25 to 15 hectares per sale to accommodate local farmers who could not afford to purchase a larger lot (BVVG 2016a). Indeed, the BVVG was often criticized for their practice of selling large plots of land, which benefited buyers with larger investment portfolios and disadvantaged local or young farmers (Kagerbauer and Kruspe 2015; Knigge 2014). The BVVG also had to defend itself against the accusation of forcing up prices (Kraudzun 2015).

Another land management actor in Saxony-Anhalt is the Landesgesellschaft Sachsen-Anhalt. They administrate Saxony-Anhalt's public land and are a partner of BVVG. The corporation, which is mainly owned by the federal state Saxony-Anhalt, is required by statute law to manage agricultural land and buildings for the realization of profits and in the interests of the state (Landesgesellschaft Sachsen-Anhalt 2018). The Landesgesellschaft sells about 800 to 1,200 ha of land per year by publicly calling for bids. The lot size is up to ten hectares and there are no restrictions on participation. The current tenant (if their plot is to be sold by the Landesgesellschaft) usually has the opportunity to enter into the bidding process. The Landesgesellschaft also considers the situation of the current tenant: If the sale is seen to threaten the existence of the current tenants' business, the Landesgesellschaft can renounce the sale (Schoster 2018).

Corporations like the Landesgesellschaft can also be found in several other states. There are eight Landesgesellschaften in total throughout Germany, and they often have several branches (Schoster 2018). Their history dates to the end of the 19<sup>th</sup> century, when their predecessors were responsible for land management and the settlement of rural areas. At the time, there was significant focus on Western Prussia because numerous agricultural workers had migrated into the western parts of Prussia in search of work in industrial production (Schoster 2018). Thus, the corporations have a history of being an instrument for land policy.

Land can be sold and bought at auctions, at responsible offices (Landesgesellschaft Sachsen-Anhalt 2018), and private sales are also common. The acquisition of agricultural land is regulated by the Real Property Transactions Act, in German "Grundstücksverkehrsgesetz" (GrdstVG), which came into force on 01 January 1962 (Bundesrepublik Deutschland 1961). The law restricts the sale of land to persons with non-agricultural backgrounds in favor of local farmers. The law is valid not only in the East, but throughout Germany, and is an important

### 3. Agricultural structure in East Germany and Saxony-Anhalt

instrument that shapes the agricultural land market. Ownership is noted in the land registry, called the "Grundbuch". To change the name of an owner in the land registry, permission must be granted by a competent authority. A competent authority must examine whether the sale was conducted according to the regulations of GrdstVG and is applied differently from state to state. An exemption limit is defined in each state so that the land can be sold without the prior permission of a competent authority in cases where the land is below a certain size. The lowest limit is 0.15 ha in Saarland and the highest limit of 2 ha is effective in Bavaria, Brandenburg, Mecklenburg-Western Pomerania, Saxony-Anhalt and Schleswig-Holstein (Deutsches Notarinstitut 2012). The competent authority, which is assigned by the federal states, can decline an acquisition if the requirements are not met, for example if non-farmers want to buy farmland. Moreover, the competent authority allows local farmers a pre-emptive right to purchase the land (Forstner and Tietz 2013). Nevertheless, there is debate as to whether the law remains an effective instrument to protect the land market. Indeed, several states have drafted or passed new legislation that better protect the land market and supplement the GrdstVG (Forstner and Tietz 2013; Deter 2016; Finger 2015) (see section 3.5). The discussion about changing the GrdstVG has occurred because the law can be circumvented. In that case, not the land itself is sold (asset deal), but parts of a company are sold to a new owner (share deal). These sold companies could include agricultural landownership and thus land can be sold to a non-local non-agricultural investor. The agricultural administration does not keep records of these deals (Tietz 2015). East Germany is more affected by share deals than West Germany because its agricultural structure is dominated by a limited number of companies and legal persons. In West Germany on the other hand, enterprises with sole proprietorship are more common (BMEL 2015). More information on this topic will be included in section 3.3.

Böhme (2016) emphasized that the land market is not like other markets, as land cannot be multiplied and is a means of production. Moreover, since land is immobile, there can only be regional markets, which are highly susceptible to influences on a supra-regional scale. The market in Germany is rather complex and the role of BVVG privatization should be regarded on a differentiated basis. He listed several ways in which privatization could potentially affect the market, namely: the size of the available plot area and the proportion of available plots on a local land market; the length of time over which privatization takes place; access to the plots (for example as a legally preferred buyer or as the highest bidder at land auctions); land prices; and finally, the interplay between land leases and land sales (Böhme 2016, p.16). The availability of land would also influence the price and duration of land leases. Additionally, the published data of official sales by BVVG would display prices that could affect the private market. Hüttel and Odening (2018) analyzed about 10,000 land sales by BVVG between 2007 and 2015 and claimed that these sales made up about 60% of the market share in East Germany.

Another factor that reduces the amount of agricultural land for sale on the market relates to non-agricultural land development. Since 1992, about 1.2 million hectares of German agricultural area was lost to infrastructure and housing projects (Tietz 2018).

### 3. Agricultural structure in East Germany and Saxony-Anhalt

The land market is also influenced by land consolidation. Nevertheless, the amount of land which is exchanged in those transactions is not very high in East Germany. In areas of West Germany such as in Baden-Wuerttemberg, about 180,000 ha of land was exchanged in 2001 (NABU 2003). It is likely that the influence of land consolidation on the land market is not very high, but this procedure is mentioned in this chapter for the sake of completeness. In land consolidation, land is exchanged and not acquired. Farmland is often spread across a certain area and farmers exchange parts of their land in order to attain coherent plots. The farmer is not necessarily the owner, and therefore, the actual user of a piece of land might not even be the lessor of that plot. The government strengthens land consolidation by law<sup>11</sup> (Bundesrepublik Deutschland 1953), particularly concerning land ownership. Their aim thereby is to guarantee competent farming practices, and to ensure good water management and ecological functionality of an area. In addition, the landscape is addressed. Land is also consolidated for infrastructure projects or conservation purposes and involves forcing landowners to exchange their land. There are also initiatives for voluntary land consolidation that can be pursued without the intervention of a competent authority (Landgesellschaft Sachsen-Anhalt 2017). The Landgesellschaft Sachsen-Anhalt, as the land administrator for the state of Saxony-Anhalt, controls the land at the state's power of disposal. At the end of 2017, their portfolio encompassed 40,000 ha, of which 28,600 ha was their own and 11,400 ha was managed for a third party (Schoster 2018). Landowners who are interested in land consolidation can swap their plots with other state-owned plots or with those of other owners who agree to take part in the exchange. Specific criteria are used to evaluate all plots. The first criterion is the land appraisal by the relevant financial authority. The second relates to the type of use and actual plot size. This calculation produces an exchange value. During several discussions, diverging interests are considered and any changes are prepared for the land registry. This procedure has the advantage that there is no need to pay a land transfer tax nor any notary fees (Landgesellschaft Sachsen-Anhalt 2017).

#### **3.2.2 Land tenure and land acquisition costs**

Agricultural land has become a desirable investment around the world with the growing population and increased need for food. Moreover, land promises not only agricultural yields but also a return on investments and prestige for investors (Geisler 2015). There is evidence that prices are also rising in the European Union, which is problematic for local and young farmers who wish to acquire land (Franco and Saturnino 2013; Kay et al. 2015). In Germany, the demand for land is likewise growing, as are land prices (Tietz 2015; Siegmund 2015). In the following section, the development of prices for farmland acquisition and leases in East Germany and West Germany are compared, with a focus on Saxony-Anhalt.

There is a lack of comprehensive data about the German land market. The BVVG provides a comprehensive overview of its own deals. Private sales are more difficult to record. The authorities note only those transactions which they process. Their knowledge of these transactions stems from their role in approval procedures and because they manage the land

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<sup>11</sup> In German: Flurbereinigungsgesetz.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

registry. Nevertheless, the authorities in Germany do not have a centralized database and it is unclear how much land is owned by whom., although the land registry is becoming digitalized (Amtsgericht Braunschweig 2019). Moreover, while the cadaster is accessible to the public, the land registry (Grundbuch) is highly confidential and is only open to the public if a valid reason is given. Sometimes the data in the land registry is not up-to-date and it is difficult for the competent authorities to gather this information, such as in cases where land was not formally assigned to an heir for example (Schmitte 2014). Tietz (2015) used data from several districts in the East German states to display developments on the agricultural market. He was able to gain access to this data by contacting the states directly, who then supplied their employer, the federal research institute Johann Heinrich von Thünen Institute, with the data. Forstner and Tietz (2013) note that purchases of capital shares in agricultural legal entities are still not recorded by the authorities. The price of land that has been sold or leased in those so-called share deals is not recorded since the land is only part of this acquisition, which can also include buildings, machinery and animals. Tietz (2018) points out that the statistic does not assess the buyers of agricultural land, because the status of a buyer is often not displayed in the contract of sale.

Figure 5 displays the area of agricultural land sold without buildings or inventory based on data that was gathered by the Federal Statistical Office. The top line (dark green) displays the data for Germany, the middle line (light green) displays the data for the new states of East Germany, and the bottom line (grass green) displays the sales of the former Federal Republic, West Germany.

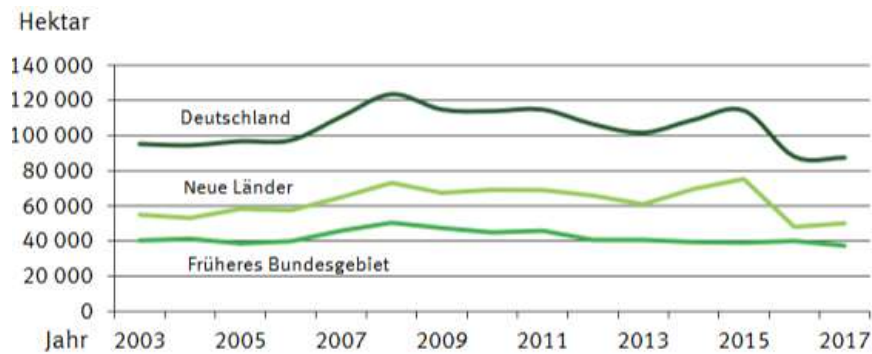


Figure 5: Area of land transactions between 2002 and 2017. Source: Statistisches Bundesamt (2018c).

The graph shows that in around 2015, the number of sales seemed to have passed its peak in East Germany, while the area of land sold in West Germany remained constant. The demand for land seemed to decrease, but more data is required to see if this trend continues or changes over the next few years. Additional insight can be gained from the graph in Figure 6 below, which displays the prices for agricultural land based on the average price paid per hectare. The labeling is the same as in Figure 5, but instead of hectares, prices are displayed on the y-axis.



### 3. Agricultural structure in East Germany and Saxony-Anhalt

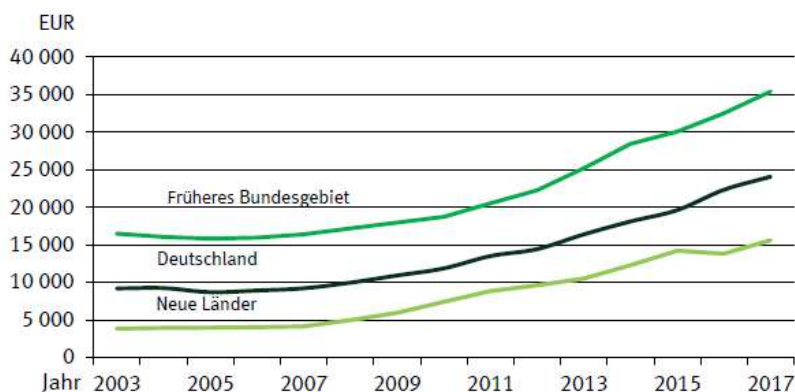


Figure 6: Average purchase value per hectare of agricultural land between 2003 and 2017. Source: Statistisches Bundesamt (2018c).

The price of agricultural land has been rising since 2007 and continues to do so to this day. Noticeably, prices went down in East Germany in around 2015. In Table 3, these prices are displayed in numbers. This data is taken from the Federal Statistical Office. Hemmerling et al. (2015) calculate that prices increased by about 142.4% in Germany between 2007 and 2017 with an increase of 98.3% in West Germany and 234.1% in East Germany.

Table 3: Prices in Euros per hectare for agricultural land (without buildings and inventory). Source: Statistisches Bundesamt (2017b, 2018c, 2014) and Hemmerling et al. (2015).

	2007	2013	2016	2017
<b>Germany</b>	9,205	16,381	22,310	24,064
<b>West Germany</b>	16,394	25,189	32,503	35,394
<b>East Germany</b>	4,134	10,510	13,811	15,626

As a second source, the prices which were obtained at BVVG transactions are displayed in Table 4. Evidently, the BVVG prices apply only to East Germany. Sale prices were consistently higher than the acquisition prices recorded by the statistical office. On average, land with good quality soil in Saxony-Anhalt sold at a higher price than the average price for Germany between 2007 and 2016. Nevertheless, the prices for land were consistently higher in West Germany than in the new states.

Table 4: Price in Euro per hectare for agricultural land (transactions at current market value) for BVVG sales. Sources: BVVG (2018), Deter (2014) and BVVG (2014a), (2008).

	2007	2013	2016	2017
<b>East Germany</b>	5429	15,411	19,381	19,507
<b>Saxony-Anhalt</b>	8,512	19,356	22,783	22,580

### 3. Agricultural structure in East Germany and Saxony-Anhalt

Farmers do not own all of their farmland and often lease additional land. The proportion of leased agricultural land was 71% in East Germany and amounted to 55% in West Germany in 2013 (BMEL 2015). Leases are contracts that can include claims for how the land should be used. For example, the Catholic and Protestant Church of Germany are landowners who attach certain conditions to the lands they lease and might for instance require membership in the church or ban the use of GMOs (Schierholz 2018). Leases can be short or long-term contracts that provide either flexibility or stability for the lessor. Tietz (2018) emphasizes that the competition between farmers for agricultural land drives lease prices and that rivalries increase where land is scarce. Some farm managers cross-subsidize the rent with capital gains from other branches in order to secure a lease of the land. He also mentions that landowners are more likely to demand higher prices if they have no direct contact with the farmer, for example when the owners live in a city or they are a community of heirs. Thus, the relationship between lessor and tenant can be highly important for farmers if they want to ensure a lasting contract. In Germany, a distinction is made between old and new contracts, called *Bestandspachten* (existing leases) and *Neupachten* (new leases). The prices for the latter are usually higher.

Leases have a strong impact on the agricultural structure of Germany as they influence the amount of available land (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015). *Hidden* land concentration is possible where land ownership is diversified, and local owners all rent out to a large farm on a long-term basis. In such cases, land leases are concentrated but ownership is not. In other examples, farmers who lease a large part of their farmland might have to face privatization after their contracts end and the land is sold. For reasons such as these it is important to keep track of leases. In Germany, lessors are required to report their transactions to the authorities. In practice however, this does not often occur, and lessors do not usually face negative consequences for failure to report their leases (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015).

Table 5 displays the lease prices analyzed by the Federal Statistical Office (FSO). These numbers are more difficult to obtain than BVVG data. FSO statistical data is published annually in the so-called "Statistische Jahrbücher" and is based on agricultural surveys<sup>12</sup> conducted triennially. The average cost of leasing land per hectare in Germany (the first row of the table) encompasses pastureland as well as farmland. The second row shows the value of farmland, which is more expensive than the lease of pastureland. The table also shows a rise in lease prices. Between 2010 and 2013, the lease price rose by 16.2% in Saxony-Anhalt. It remains below the price in Germany, which increased by 19.1%. Between 2013 and 2016, the lease price rose by 19% in Germany and 20% in Saxony-Anhalt (Riensch 2017).

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<sup>12</sup> In German: Agrarstrukturerhebung.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

Table 5: Lease prices in Euros per hectare for agricultural land. Source: Deutscher Bauernverband (2017), Statistisches Bundesamt (2019) and agrarmanager (2015).

	2007	2010	2013	2016
<b>Germany</b>	183	204	243	288
<b>Germany (farmland only)</b>	205	230	277	328
<b>Saxony-Anhalt</b>	172	198	231	278

The agricultural ministry of Saxony-Anhalt published lease prices for its districts. Therefore, the numbers for the two districts where the field work was conducted are displayed, namely Salzlandkreis and Landkreis Stendal (see Table 6). The prices are itemized according to the Ackerzahl<sup>13</sup>. A similar Ackerzahl for both districts was chosen to compare the lease prices, as the soil quality in the case study regions differ too much to be directly comparable. While the value depicted in Table 6 for Stendal is exceptionally good and the land is therefore more expensive, Salzlandkreis also has better soil which further increases lease prices.

Table 6: Lease prices in Euros per hectare for agricultural land with the Ackerzahl 71-80 (Ackerland). Source: MULE (2017).

	2010	2013	2016	2017
<b>Stendal</b>	317	391	395	479
<b>Salzlandkreis</b>	301	344	411	438

Table 7 displays the lease prices according to BVVG data. Leases in East Germany were lower than in Saxony-Anhalt. The table shows that the lease prices rose more than compared to the official prices displayed in Table 5.

Table 7: Lease prices in Euro per hectare of agricultural land from BVVG<sup>14</sup>. Sources: BVVG (2008), BVVG (2009), 2014b, (2014a) and BVVG (2018).

	2007	2013	2016	2017
<b>East Germany</b>	127	311	409	424
<b>Saxony-Anhalt</b>	183	427	547	574

In conclusion, the prices for land and leasing increase over time. This trend is not limited to Germany (Kay et al. 2015). With the opening of the land market across the European Union, new possibilities for land acquisition became possible. Land prices vary considerably between and within member States, with the most expensive farmland being in the Netherlands (at a price of 63,000 Euros per hectare in 2016) and the least in Romania at 1,958 Euros per hectare. The Netherlands also has the highest average rent prices (791 Euros/hectare), whereas the lowest average rent prices can be found in Latvia (46 Euros/hectare) (Stewart and D'Amore 2018).

<sup>13</sup> Ackerzahl is a local specification of the Bodenzahl.

<sup>14</sup> Data for the years 2007 and 2013 distinguish between new leases and existing leases; the table displays the prices of existing leases.

Thus, the perception of “cheap” and “expensive” is relative to the local situation and where the buyer and seller are located.

### 3.3 Farm structure

Farm structure is characterized by farm units and farm size, but it also relates to cropping patterns and land use. This is decisive for agricultural structure, which also encompasses “rural culture, related values and environmental quality” (Knickel 1990, p.383). The trend for farm structure in Germany is clear: The number of farms is decreasing, and their size is increasing. Table 8 displays this development in Germany. It shows that the number of farms up to 100 hectares in size is decreasing, while the number of farms larger than 500 hectares in size is increasing. The table does not distinguish between part-time and full-time businesses.

The highest increase concerns farm enterprises with between 200 and 500 hectares. Their number increased by 28.8% between 2007 and 2016. Farms with less than 10 hectares and 20-50 hectares decreased by 20.9% and 19.4%, respectively. These numbers imply that the benefits of the larger farms have disadvantaged smaller farms. At the same time, however, the absolute number of smaller farms is still higher than those that operate at a large-scale.

Table 8: Structural change – agricultural enterprises in Germany. Source: Hemmerling et al. (2015, p.77).

Farm size	Number of farms		
	2007	2016	Difference, 2016 to 2007
(ha)	(in 1000)		(in %)
less than 10	85.7	67.8	-20.9
10 - 20	67.8	56.6	-16.5
20 - 50	82.8	66.7	-19.4
50 - 100	53.4	47.7	-10.7
100 - 200	21.8	24.3	11.5
200 - 500	6.6	8.5	28.8
500 and more	3.4	3.8	10.9
<b>total</b>	<b>326.1</b>	<b>275.4</b>	<b>-14.4</b>

Table 8 does not display how much land of a farm is actually owned by a farmer. Instead, it illustrates the area of land upon which the farm operates. The land might as well be leased. The amount of tenancy has changed in recent years both in East as well as in West Germany. In 2007, 78.9% of agricultural land was leased in East Germany compared to 53.3% in the West, making 61.8% in total for Germany. In 2016, 67.5% of the land was leased in East Germany, while in the western part of Germany the trend went slowly in the other direction and today 54.1% of agricultural land is leased. The amount for the leased land in the Federal Republic also went down slightly to 58.5% (BMEL 2017).

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In West Germany in particular, the land has traditionally been farmed by private owners. In contrast, former Prussia, which was East of the river Elbe, conducted large-scale farming, whereby a farmer was usually not the owner of the land (Swain 2013). Nowadays, various ownership forms can be found there. The Statistical Federal Office distinguishes between “natural persons” (as a legal term<sup>15</sup>), meaning sole proprietorship, partnerships and associations, “legal persons of private law”<sup>16</sup> (legal term), including registered associations, registered cooperatives, limited liability companies and stock companies; and “legal persons of public law”<sup>17</sup> (legal term) (Tietz 2017a, p.4). In 2016, in the old states of FRG, about 99% of all farmland was maintained by natural persons, with sole proprietorship (82.3%) being the most common form. This looked quite different in the new states, where the majority (50.1%) of farmland was maintained by legal persons of private law, i.e., mainly by limited liability companies (25.2%) and registered cooperatives (23.1%). Still, 71.5% of all farms were held by sole proprietors, though they only managed 27.5% of all farmland. The legal persons of public law constituted a mere 0.1% of the number of farms in West German states and 0.3% in East German states along with about the same amount of hectares (0.3% resp. 0.1%) (see Figure 7).

Agricultural cooperatives usually operate as legal persons. Sole proprietorship is an indicator of a family farm, but of course the legal form does not automatically show how many people are involved, who the shareholders are, nor how the farm is managed (Forstner and Tietz 2013).

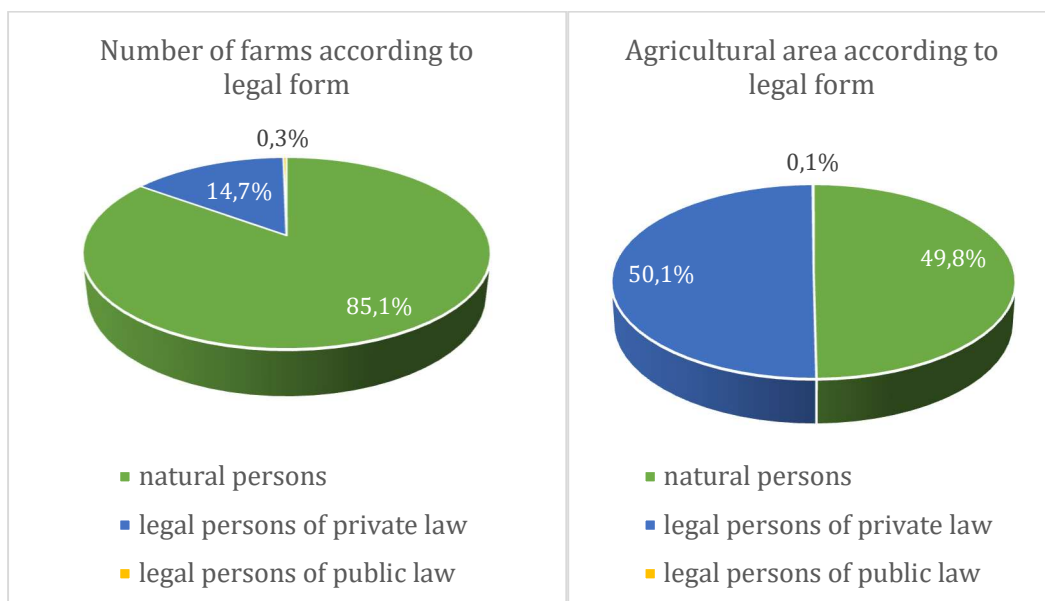


Figure 7: Number of farms and agricultural area (in hectares) according to their legal form in East Germany. Based on: Tietz (2017a, p.4).

It is difficult to gather up-to-date data about the situation in Saxony-Anhalt. The state of Saxony-Anhalt published a report about its agricultural structure in 2016 (MULE 2016). Nevertheless,

<sup>15</sup> In German: Natürliche Personen.

<sup>16</sup> In German: Juristische Personen des privaten Rechts.

<sup>17</sup> In German: Juristische Personen des öffentlichen Rechts.

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insights from the last survey of agricultural structures in 2016 are not included. The report traces the development of farm number and farm size between 1991 and 2013. In 1991, the number of farms was 4,039, while in 1997 there was a high of 5,577 farms. This number went down in 2007, when 4,842 farms were registered, and decreased further to 4,232 farms in 2013. Looking at farm size, the number of farms with 10-50 hectares went up, with 626 farms in 1991 compared to 1,032 farms in 1997 and 1,049 farms in 2013. While there are fewer farms with more than 1,000 hectares, the number of farms with 500 to 1,000 hectares is continuously rising (162 farms in 1991, compared to 305 farms in 1997, and 428 farms in 2013) (MULE 2016, p.8).

Saxony-Anhalt also published the farm size according to legal form. This data does not distinguish between legal persons of public law and those of private law. Table 9 shows that the number of farms in Saxony-Anhalt went down between 2003 and 2013 (from 4,941 to 4,232 farms), while the average farm size increased (from 238 ha to 277 ha). This applies for farms owned by natural persons in particular, whereas the average size of farms owned by legal persons went down (from 978 ha to 840 ha) (MULE 2016). The most common legal form remains sole proprietorship. Even though they farm only a small part of the land, 80.9% of farms were managed by sole proprietors in 2003 and 76.9% in 2013. Thus, there is a connection between farm size and legal form, which shapes agricultural structure.

Table 9: Farm size and farm number according to legal form in Saxony-Anhalt. Based on data taken from MULE (2016, p.10).

Legal form	2003		2013	
	Average farm size (ha)	Number of farms	Average farm size (ha)	Number of farms
Natural persons	145	4,403	181	3,616
Of those: Sole proprietorship	86	3,563	118	2,784
Legal persons	978	538	840	615
<b>Total</b>	<b>238</b>	<b>4,941</b>	<b>277</b>	<b>4,232</b>

The trend that non-farmers or agricultural companies buy land via share deals has an impact on agricultural structure as they can buy at higher prices and the competition for land increases. If someone owns a farm, for example through a share deal, the person is considered to have an agricultural background and thus principally allowed to acquire land. Tietz (2017a) and Forstner and Tietz (2013) have studied the importance of non-local actors with non-agricultural backgrounds in the land market. They analyzed several case studies in Germany's federal Eastern states (except for Berlin). In their latest report, they estimated that about 75% of the agricultural area is cultivated by local active resident farmers (or majority-shareholders), which is provided by about 66% of farms. In Saxony-Anhalt, 85% of the agricultural area is maintained by resident farmers, who make up 78% of all farm enterprises (Tietz 2017a). Local farmers are opposed by non-local farmers, i.e., investors (including those without an agricultural background) who, for instance, are able to buy land via share deals. They are defined as "supra-regional" actors because the majority shareholder lives more than 50 km away from the farm.

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Especially in Mecklenburg Western-Pomerania, the influence of non-local and non-agricultural investors is high, and they farm about 20% of the federal state's agricultural area. About 9% of farms run by supra-regional non-agricultural investors cultivate 7% of all agricultural land in Saxony-Anhalt (Tietz 2017a).

The on-going processes on the land market are claimed to be fueled by non-agricultural investors (Kay et al. 2015; Franco and Saturnino 2013). Non-local and non-agricultural investors are expected to care less about nearby villages and to ignore traditional farming and cultural practices. Nevertheless, it is difficult to find a suitable definition for a non-agricultural investor. For example, in a study by Emmann et al. (2015), German farmers were asked to define a non-agricultural investor. They tended to name capital investors such as investment funds (87.5%). In contrast, only 28.6% of the interviewed farmers defined a wealthy private person with an agricultural background as such an investor.

In both of their studies, Forstner and Tietz (2013) and Forstner et al. (2011) provide definitions for different kinds of agricultural investors depending on their place of residence and the legal forms of their businesses. They suggest that non-agricultural investors' actions are increasingly influencing the land market. At the same time, their influence on production processes and employment was estimated to be "neither one-dimensional positive or negative" (Forstner and Tietz 2013, p.75). The two scholars question whether non-agricultural businesspeople necessarily make different business decisions than those with an agricultural background. They also argue that the knowledge needed to manage a farm and its complex processes requires an understanding of agricultural processes and endurance, and that no investor would be strictly non-agricultural for these reasons. Nevertheless, they emphasize that these investments are leading to a concentration of ownership and that in Mecklenburg Western-Pomerania in particular, there is an increasing tendency towards large-scale land ownership as was common in the 19<sup>th</sup> century.

### **3.4 The rural population and employment**

After providing data about the rural population of Saxony-Anhalt, the employment in the agricultural sector is analyzed.

#### **3.4.1 Rural population**

This subchapter sheds light on the rural population of Saxony-Anhalt: who they are and how they contribute to the vitality of the rural areas. The rural population are the inhabitants of a rural area, although there is more than one definition of a *rural area*, which is typically based on things including the distance to central places like cities, population density, or being located in the periphery (Specht et al. 2013). According to the annual abstract of statistics released by the FSO in 2017, 22.8% of Germany's inhabitants live in sparsely populated areas, 41.5% in intermediately populated areas such as small-towns, and 35.7% in densely populated areas such as cities or major cities (Statistisches Bundesamt 2017d). Thus, rurality is often related to low

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population density. The exact numbers differ according to the definition of density and depend on the criterion for measurement. The Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) reports that, in 2013, 17.7% of the German population lived in predominantly rural areas. These constitute 59.9% of the area of Germany. Areas that were defined as partly urban are home to 15.3% of the population and encompass 19.9% of the area of Germany. Most people (67%) live in predominantly urban areas, which account for only 20.2% of the German area. The majority of jobs are found in urban areas, with 75.5% of employees employed in urban regions (Spellerberg 2016). Apart from Saxony, East German states, are mostly comprised of rural regions. West German states that are likewise predominantly rural include Lower Saxony, Bavaria and Schleswig-Holstein (Spellerberg 2016).

In 2016, 2,241,500 inhabitants lived in Saxony-Anhalt in an area of 20,452 km<sup>2</sup>. About 80% of the inhabitants of Saxony-Anhalt live in rural areas (MULE 2018b). The largest cities are Magdeburg and Halle (Saale), which are each home to about 230,000 inhabitants (Statistisches Bundesamt 2017d, p.26, 30). In 2015, approximately 38,756 people pursued further education after completing compulsory schooling: 42.4% chose an apprenticeship (Lehre); 22.5% continued their schooling in order to gain a higher education entrance qualification (Abitur); and 25.2% started studying (Statistisches Bundesamt 2017d, p.88). There are two universities in Saxony-Anhalt, one in each of the two largest cities of Halle and Magdeburg, with a student body of 20,000 and 14,000, respectively. In addition, there are eight colleges (Hochschulen) located throughout the state. Smaller university and college branches can also be found in the smaller towns (MW 2019).

Between 1991 and 2001, the population of Saxony-Anhalt declined by about 20%. This lowered the birth rate and led to a decrease in the population density in the rural areas (Neu 2015). The state's population is thus aging: In 2015, 25.1% of the state's population was over 65 years old, while 13.9% of the population was 18 years old or younger (Statistisches Bundesamt 2017d, p.32). Migrants constituted about 6.2% of Saxony-Anhalt's population in 2016 (Statistisches Bundesamt 2017d, p.41). After reunification, the former GDR states faced outward migration. Between 1991 and 2001, Saxony-Anhalt lost about 20% of its population. East German states remained in this negative trend, but it is gradually changing (Der Beauftragte der Bundesregierung für die neuen Bundesländer 2018). In addition to this east-west migration, there are processes of rural-urban migration in both East and West Germany, which leads to a further depletion (Neu 2015).

These processes are accompanied by decreasing infrastructure: If there are less children, schools are closed or merged for example. Less infrastructure means larger distances, longer travel times, and fewer public and health care services. This can make the region less attractive for new residents. In remote regions, the car becomes the most important means of transportation, as opposed to public transport, which is important in the cities. In rural East Germany especially, the lack of doctors is becoming a problem (Spellerberg 2016). This is accompanied by fewer available jobs and lower wages. Young and educated women leave the



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countryside, which also increases the problem of an aging society. In some areas, like the Altmark region in northern Saxony-Anhalt, the changes are so drastic that villages are shrinking and even becoming abandoned (Weiß et al. 2013). Villages lose their historical importance as a place for agricultural production and workers, and transform into living areas for commuters (Henkel 2014).

The research by Jantsch et al. (2016) indicates that there are discrepancies in the perceived quality of life between Germany's rural and urban populations. These scholars used panel data, which was gathered by asking the same participants over several years. The participants were not only asked about their materialistic welfare, but also about how they perceive their own situation. Rural participants in West Germany were about as happy as participants who lived in urban areas. This is not mirrored in East Germany, where the rural population was significantly less happy with their life situation than the urban population (Jantsch et al. 2016). One reason might be the post-socialist transformation, which in addition to institutional changes resulted in job loss, outward migration, and a rather insecure future. The transformation of villages in East Germany is not yet complete (Borstel 2010). In the agricultural sector, numerous jobs were lost: 80% were lost in the first three years after the German reunification (Laschewski 2014). Nevertheless, according to a recent Europe-wide study, life satisfaction in Germany is still better than in the other 28 states of the European Union that were surveyed: The level of well-being in 2016 (life evaluation) was 71.0 (out of 100) in Germany compared to 69.1 in Europe (Eurofound 2018).

Social life in rural areas is traditionally centered around clubs: hunting clubs, clubs devoted to local traditions<sup>18</sup>, sports clubs like football clubs, rural women's associations<sup>19</sup>, and volunteer fire departments, for example. There is empirical evidence that volunteer work is more common in rural than in urban areas, and more common in West than in East Germany (according to the latest survey of German volunteers from 2014)<sup>20</sup>. 44.8% of the population in West Germany are engaged in volunteer work versus 38.5% in East Germany (Simonson et al. 2017, p.26). 45.5% of the population of rural areas volunteer, as opposed to 42.7% in urban areas. There is also a difference between the sexes: Men are 7% more engaged than females (49% versus 42%), a difference which is only 2.6% in urban areas (Simonson et al. 2016, p.28). Nevertheless, these numbers reflect formal activities in clubs for instance and do not reflect informal activities such as neighborly assistance. In general, the rural population is traditionally expected to engage in the everyday tasks of their community. This is due to the poorer infrastructure, and the fact that villagers were historically dependent upon one another, and because villagers usually feel responsible for the village commons (Schubert 2018; Henkel 2014).

According to Schubert (2018), the difference between West and East Germany with regard to formal social engagement can be seen as an opportunity. He visited three different communities

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<sup>18</sup> In German: Heimatverein.

<sup>19</sup> In German: Landfrauen.

<sup>20</sup> In German: Deutscher Freiwilligensurvey.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

in Germany, including one village in Saxony-Anhalt. This village lies in the district<sup>21</sup> of Stendal, which is in the north of the state and also happens to be in Altmark. The density of clubs and memberships in this village was lower than in the two other villages in Bavaria and Rhineland-Palatinate that Schubert studied. Schubert (2018) found that the closing of a local school had led to the creation of a citizens' interest group that remained active in the village even after they had failed in their aim to keep the local school. This process led to an increase in political engagement, and eventually the initiator of this citizens' initiative became the new mayor. Since fewer people were active in clubs, there was more potential for new clubs and initiatives to emerge. Thus, a lower density of clubs may foster social innovation and political engagement if there is a potential to activate rural inhabitants (Schubert 2018).

Borstel (2010) analyzed civil society in East German villages and came to the same conclusion that political participation has a potential to be higher there. In contrast to West German villages, which are usually conservative, East German villages would undergo transformations. For example, the areas of Pomerania, which were traditionally governed by large-scale landowners, were not influenced by democratization and participation during the times of the Weimar Republic (after the first World War) at large, and therefore, did not develop their own democratic traditions. When landowners fled at the end of the second World War, a vacuum emerged because the old authorities had left. Moreover, refugees from the East fled to West German villages.

GDR land reform also led to changes such as collectivization (Borstel 2010). As indicated earlier in this chapter, the villages were of high social importance for rural society. When the agricultural system ended, numerous jobs were lost, and the village structure and function deteriorated (Land 2002). This led to challenges in rural society in East Germany. Borstel (2010) concluded that, if they were to participate, rural societies had to feel responsible and positive about doing community work for their village. If there is a lack of community, then there is also a lack of care for the matters of the village.

While on the one side there is a tradition of self-help in the countryside, on the other hand there is an expectation (from policymakers and society) that rural populations should be active in maintaining their infrastructure. This process is called "responsibilisation", i.e., the process of holding someone responsible (Steinführer 2015). Elderly people in particular are expected to perform public services<sup>22</sup>. Steinführer (2015) analyzed the role of locals concerning schools and the provision of a general education, broadband internet, and volunteer fire brigades. She concluded that rural inhabitants help improve the quality of public services, but they do not replace the state as an actor or provider of public services. Civil engagement is taken for granted, but also operates as a way of coping with worsening infrastructure. Weiß et al. (2013) confirm that local farmers engage in public service related tasks. It needs to be acknowledged that studies indicate that rural inhabitants feel responsible for their village and often act accordingly.

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<sup>21</sup> In German: Landkreis.

<sup>22</sup> In German: Daseinsvorsorge.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

Nevertheless, West German villages that faced a different path of transformation appear to be better organized. The importance of old agricultural actors, like farmers or farm companies, might be decreasing. Weiß et al. (2013) show that farmers in Saxony-Anhalt take responsibility for their village and contribute to the vitality of life in rural areas. Important clubs, like rural women's associations or clubs fostering rural traditions, are attached to agrarian traditions. Parts of rural life are still pervaded by the traditions of agricultural production, but it is also evident that the villages are changing, and the rural populations are becoming more focused on the cities (Henkel 2014).

While rural infrastructure is often worse than in the cities, it also has characteristics that are not comparable to city infrastructure. Farm shops are one example: even though they lost importance due to discount supermarkets that opened in larger villages, in 2016 there were at least 153 farm shops in Saxony-Anhalt (Agrarmarketinggesellschaft Sachsen-Anhalt 2016)<sup>23</sup>. These shops provide meeting places for farmers or farm workers with villagers.

Rural life is often romanticized in comparison to city life, and rural areas attract tourists and artists (Ermann 2011). Art and culture are less visible in the countryside, but artists often search for the rural as a contrast to the city. One example is the village of Gerswalde in Brandenburg, which became a magnet for Berliners and is even experiencing gentrification (Pohlers 2018).

#### **3.4.2 Employment in the agricultural sector**

Employment in the agricultural sector is an obvious link between rural inhabitants and agricultural production. But first there is information on the general employment situation in Germany. The unemployment rate in Germany was 6.3% in 2017, while in West Germany the unemployment rate was 5.8% compared to 8.4% in East Germany (Bundesagentur für Arbeit 2018a). Unemployment in Saxony-Anhalt was 8% at the end of 2017 (Bundesagentur für Arbeit 2018b). There is more unemployment in rural areas than there is in urban areas, and higher unemployment in rural East Germany. In East Germany, the unemployment rate in rural areas was about 13.5% between 2003-2012 compared to 6.3% in West Germany (Jantsch et al. 2016), indicating that rural areas in West Germany are more prosperous.

The agricultural sector in Germany does not provide a major source of employment: Only 1.3 of the German workforce was employed in agriculture in 2017. In the European Union, the sector employed on average 4.3% of the total population. Romania has the most important agricultural sector, employing 22.9% of the country's work force in 2018 (Wold Bank 2018). In our research area of Saxony-Anhalt, 2.1% of the workforce was employed in agriculture and fisheries in 2016, with 5% of these jobs in the district of Stendal and 1.8% in Salzlandkreis (Fritzsche et al. 2016). In 2013, 23,800 persons were employed in Saxony-Anhalt's agricultural sector, 12,724 of whom were full-time employees (53%) (MULE 2016).

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<sup>23</sup> I emphasize that this number is not complete, as I could not find a farm shop in a village that I visited in 2016 on this list.

### 3. Agricultural structure in East Germany and Saxony-Anhalt

The number of employees in agriculture is decreasing: In 2010, 1,080,300 workers were employed in agriculture compared to 1,020,500 in 2013 and 940,000 in 2016 (Statistisches Bundesamt 2018a). The number of seasonal workers has also gone down from 330,500 workers in 2010 to 314,300 in 2013, and 285,000 in 2016 (Statistisches Bundesamt 2018b) (see

Figure 8). This trend is also visible in Saxony-Anhalt. In the first quarter of 2017, there was 5.3% less employment in the agricultural sector than in the first quarter of 2018, namely 1,100 fewer workers (Statistisches Landesamt Sachsen-Anhalt 2018b).



Figure 8: The number of workers employed in the agricultural sector in Germany.

Source: Statistisches Bundesamt (2018a) and Statistisches Bundesamt (2018b).

Reasons for this decline can be found in increasing mechanization of agricultural processes, the introduction of minimum wages (which valorizes the workforce), and rural-urban migration. Nevertheless, there is a skilled worker shortage in agricultural production (Gindele et al. 2016; Hentschel and Pfeifer 2014; Paasche 2016). This has various causes. Gindele et al. (2016) argue that structural and demographic changes, as well as low wages, play a role in these processes. On average, the agricultural workforce is older than the workforce in other sectors. When young people leave the villages to live in urban areas, agricultural positions cannot be passed on to new employees. In addition, jobs in agriculture tend to have a negative image (Deutscher Bauernverband 2015) and are not as well paid as jobs in other sectors (Destatis 2011). Working in agriculture also means long workdays, especially when livestock is involved. According to Wiesinger (2005), jobs in the agricultural sector are changing alongside the changing industry and increasing mechanization for instance is leading to an increased need for specialized workers (Weiß et al. 2013).

### 3.5 The current political processes on farm structure governance

This chapter showed that agricultural production is changing and it is highly susceptible to the availability of agricultural land and demand. East Germany faces challenges arising from a

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worldwide trend towards the concentration and commodification of land. As was stated in the introduction, these changes have created debate about suitable policies to govern the land market. In this chapter, I analyzed the importance of agriculture for rural society. Despite the low number of jobs directly related to agriculture, it certainly plays a role in retaining the vitality of rural areas.

According to Favareto (2006), the change of agricultural production and processes in rural societies go hand in hand. He sees a shift in the three interlinked dimensions defining rurality, namely: the relationship to nature, links with cities, and shared knowledge relationships. She refers to these changes as the rationalization of rural life (Favareto 2006, p.22). Urban and industrial society is becoming more important for rural communities, and rural areas are undergoing processes of economic and technological modernization. Nature conservation is also becoming more important and long-held social traditions are being challenged (ibid). Farmers are no longer the key actors in a village, and their work is becoming increasingly specialized and concentrated in the hands of a few due to new technologies. Galdeano-Gomez et al. (2011) have shown that the European rural development policy (under the European Union's Common Agricultural Policy) has tended towards the diversification of economic activities and lifestyles over the last few decades. Rural areas are becoming places of multifunctionality (Wilson and Dünckmann 2009) with various local actors representing diverse social interests. Consequently, a strong farming sector is no longer necessary for the local economy and society and rural areas are no longer necessarily defined as agrarian areas. A more detailed investigation of the relationship between society and agriculture can be found in the fifth chapter. At this stage I do not want to discuss the degree of importance of agriculture for society, but rather to describe how and if the land market may be governed by German institutions.

The data presented in this chapter illustrates how there are fewer farms, larger farm sizes, fewer people employed in the agriculture sector, and a shortage of skilled workers. In East Germany, the pace of change is speeding up over time. Prices for land lease and acquisition are rising in the long-term. The situation in East and West Germany is characterized by on-going processes of privatization of former GDR state land, which is now in possession of the Federal Republic of Germany. To what extent are non-agricultural investors influencing the land market in East Germany? The ongoing processes have been described as "land grabbing" in the media (Endres 2013; Koepp 2016). There are several scientific approaches to elucidate the connection between land sales and state regulation. Such an intervention would allow the state to steer the processes on the land market, which is not a free market in Germany, and concerns the investments of non-agricultural investors (Tietz 2017a, 2015; Forstner and Tietz 2013; Forstner et al. 2011; Balmann 2015; Hüttel and Odening 2018; Hüttel et al. 2016). Hüttel and Odening (2018) and Balmann (2015) argue that the land market is already effectively regulated and that land transactions show that agriculture is a productive sector with a functioning market. The question of how much and in what way could or should the state regulate land sales must be asked. The regulation of land markets has also been discussed by the European Commission, especially regarding the Common Agricultural Policy (CAP) (European Commission 2017b). This

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is in no small part due to the fact that non-agricultural investors are also becoming increasingly common in other parts of the EU too.

In an EU study about land grabbing, the German GrdstVG is named as an interesting example of how an internal market might be regulated (Kay et al. 2015). Even though the GrdstVG seems to be a carefully devised law, its effectiveness is questioned in Germany. Tietz (2018) argues that the influence of non-agricultural investors on the land market would be possible due to the diminished effectiveness of GrdstVG. The competent authorities would not be attentive enough of the need to examine purchase contracts thoroughly. The GrdstVG requires the price of agricultural land to be no more than 50% of the market price of agricultural land, otherwise there would be a price imbalance and the sale could be forbidden. Tietz (2018) argues that the current prices for the sales often fall below this line but are still much higher than a local farmer can afford to pay. Moreover, he suggests that contracts can be used to circumvent the restrictions set in place by the GrdstVG. If the contract of sale for buyers with non-agricultural backgrounds were to be coupled with a long-term lease arrangement, the nature of the contract would stay the same even after a local farmer or authority made use of their pre-emptive purchasing rights. It would be unattractive for a local farmer to buy the land, as he or she could not farm the land which would still be leased out.

Germany created a federal state working group to examine the land market, where the federal states and the federal government were supposed to consult about current processes on the land market and possible instruments of intervention. They published their insights and recommendations in a final report in 2015 (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015). In this report, they named five factors which are contributing to the increasing price of agricultural land and leases. Two of these five points are directly related to an increase in sales, namely the increasing interest of persons with a non-agricultural background, and the privatization policy of the BVVG. Other issues included the rising prices for plant products and the loss of agricultural area to competing land uses, e.g., infrastructure or state-supported energy plants (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015, p.101). They also mention the phenomena of supra-regional holding structures, which lead to land concentration including the power of control of agricultural land, where a further increase of these structures is expected.

After identifying these factors, the report formulated a number of aims that Germany's land market policy should strive to achieve. Firstly, it should serve to maintain and promote a diversified ownership structure, especially if a broad distribution of landownership is formulated as an aim (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015, p.38). Secondly, it should avoid land concentration in local land markets. It should also prioritize farmers in land acquisitions, support sustainable farming practices, restrict prices for agricultural land purchases and leases, give priority to agricultural land use, and improve the transparency of land markets (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015, p.102). Thus, the federal

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state working group formulated aims which seek to protect local farmers over non-agricultural investors.

The report also presented seven reasons why there is a need for action in land policy. It criticized the lack of enforcement of the lease law (LpachtVG) and the fact that many new lease contracts are never reported to the relevant authority. It also criticized the uneven implementation of GrdstVG and the lack of data collection about share deals. Land concentration, the increase in acquisition and land lease prices, and the lack of transparency are likewise addressed. In conclusion, the authors of the report recommended that the agricultural structure be protected by abiding by the land policy aims they stated earlier, and by monitoring acquisitions and harmonizing the data between the states.

Nevertheless, the working group emphasizes that their members held very different opinions on the land law. Thus, the working group could not recommend measures which would apply at the federal level. One insight was that the states were not willing to define farmer/non-farmer, the residency of farmers, needs for financial reinforcement<sup>24</sup>, or price imbalances<sup>25</sup> (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015, p.106). This would impinge upon the agricultural aims of the states too much, and they would lack leeway in their decision-making. Instead, the working group recommended intervening in tax arrangements and BVVG privatization. For the latter, they recommended extending the period of privatization, lowering plot sizes for land sales, and continuing to limit bids on very work-intensive farms, as well as for supporting young farmers.

Interestingly, in 2016 the BVVG followed these recommendations by lowering plot sizes to 15 hectares and extending the privatization period until 2030 (BVVG 2016a). Nevertheless, ecological farmers are critical of the new regulations for not being extensive enough. While they welcome the extended deadline for sales, they demand the lowering of plot sizes to 10 ha to make land more affordable for local farmers. They criticize a minimum bidding price for ecological (work-intensive) farms, and demand that the prices should instead be linked to economic viability (Kagerbauer and Kruspe 2015).

The creation of the federal state working group and the changes at BVVG indicate that there are discussions about changing the framework for the German land market. Some states have considered renewing their regulations regarding the implementation of the GrdstVG. For instance, a “brake” on lease prices was implemented in Lower Saxony and a new law has been drafted but not yet passed in Saxony-Anhalt (Deter 2016; Finger 2015). Thus, the question remains as to how and whether the land market should be regulated, and how such regulations might favor local farmers and investors with an agricultural background. The federal-state working group recommended developing an agricultural guiding principle to clarify how the GrdstVG should be implemented (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015). The

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<sup>24</sup> In German: Aufstockungsbedürftigkeit.

<sup>25</sup> In German: Preismissverhältnis.

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newly elected government of Saxony-Anhalt proceeded by creating an agricultural guiding principle for its state (MULE 2018a). Nevertheless, the process was controversial and some farmer organizations left the negotiations (Mitteldeutscher Rundfunk 2018).

In conclusion, the land market for sales and leases has changed dramatically since reunification due to a number of different developments. One factor has been the privatization of former state land and the restructuring of East German agriculture. Another development is the worldwide trend of investing in agricultural land. This process fuels the on-going privatization in East Germany, as well as the number of transactions in former West Germany. The land market remains an intensely debated topic in current state and federal policy, as well as at the level of the European Union. The following chapter will further examine the situation of the European land market and the conditions which might classify a land sale as land grabbing.



## 4 Criteria for Land Grabbing in Europe and Germany<sup>26</sup>

In this chapter, the question of to what extent processes that can be called “land grabbing” took place in Europe or Germany is raised. The previous chapter showed that there are profound processes on the German land market, such as increasing land prices, for example, and that these processes can be found in other countries as well.

At first it should be noted that the term “land grabbing” is already in use for large-scale land acquisitions in Europe, but without a precise definition behind it. The aim of this chapter is to suggest a definition of land grabbing based on an analysis of recent case studies. The suggested definition consists of six socio-cultural factors.

### 4.1 The concept of land grabbing to capture negative social effects

Land is essential for agricultural production and its availability is decisive for a farmer’s business. However, the extent of an agricultural enterprise can have an impact on the rural area from a social, but also environmental and cultural perspective. With Large-Scale Land Acquisitions (LSLA) increasing in pace and extent in the Global South over the last two decades, the negative social effects for rural people have been widely studied (Borras Jr and Franco 2012; Cotula 2012; Dell’Angelo et al. 2017; Baird 2017). LSLA in the Global South are often especially criticized for constituting enclosures in the affected countries: Former (commonly) used land is regarded as underused or abundant, subsequently removed from the attached rural community, and handed to a new owner. Henceforth, there may be no access to ancestral community lands that may have fulfilled other functions than food production. These enclosures may have political consequences too and they have been described as “neocolonialism” by some authors for cases where former de-facto land rights are ignored (Gunnore 2014; Ince 2014; White et al. 2012; Zoomers 2010). Lacking a legal guarantee for de-facto land rights can even lead to dispossession of land, which has been explored by scholars as a human rights problem (Cotula 2012; Dell’Angelo et al. 2017). Also, negative consequences beyond these areas need to be considered (D’Odorico et al. 2017; Baird and Fox 2015).

The fact that LSLA are accompanied by negative social effects for rural people is not a problem limited to the Global South. LSLA are also increasingly taking place in other regions, for example Europe. In this chapter *Europe* is not understood politically, but broadly as a geographical region comprised of mostly industrialized countries from the west yet also those with a post-socialist background as well. Choosing Europe as an example for these processes, the purpose of this chapter is to emphasize that processes of LSLA with negative consequences occur also in so-called developed countries (Bunkus and Theesfeld 2018).

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<sup>26</sup> This chapter is based on: Bunkus, Ramona and Insa Theesfeld (2018): Land Grabbing in Europe? Socio-Cultural Externalities of Large-Scale Land Acquisitions in East Germany. *Land* 7(3), 98; <https://doi.org/10.3390/land7030098>.

#### 4. Criteria for land grabbing in Europe and Germany

While displacement, dispossession, or deprivation of livelihoods for rural communities has occurred in the Global South in connection to land grabbing, this cannot be mirrored in democratic industrialized countries due to a different legal situation of landownership. Nevertheless, other negative effects can occur. A clear definition of “land grabbing” for those regions is missing. There are, however, various scholars who use “land grabbing” as a synonym for the investments taking place without thoroughly reflecting on what it means in a European context specifically (Constantin et al. 2017; Endres 2013; Franco and Saturnino 2013; Gunnoe 2014; Mamonova 2015; van der Ploeg et al. 2015). Therefore, the aim of this chapter is to highlight the research gap as described by Teklemariam et al. (2015, p.783): “Few works in the literature have set preconditions or criteria for labelling transnational land acquisition as ‘land grabbing’”. This general critique is especially significant for considering whether, and under what conditions, the ‘label’ land grabbing is justified for the LSLA processes taking place in Europe. This contribution consequently presents an approach to the social consequences of LSLA affecting rural people in Europe, without focusing on environmental effects (Bunkus and Theesfeld 2018).

How do changes in land ownership relations influence rural life? To answer this broad question, another issue must first be clarified: whether those who own land or a share of land in a European rural region or village are actually responsible for well-being, which is understood as general contentment (Crisp 2017) and social freedom in rural places. Current examples of government policy presume that this is the case (BMEL 2015; Henrichsmeyer and Witzke 1994; Weingarten 2010). In its last agricultural policy report (BMEL 2015), for example, the German government put forward a policy aim of a broad distribution of land ownership with the goal of agri-environmental policy that is formulated more emphatically today than at any time since the Second World War (Henrichsmeyer and Witzke 1994; Weingarten 2010). Close examination of the political argumentation shows that that broad distribution of landownership is regarded as a basis for the well-being of local economies and rural societies (BMEL 2015), assuming that agriculture and rurality are intertwined (Wilson and Dünckmann 2009). Laschewski and Penker (2009, p.2) support that argument by emphasizing that property regimes have a significant effect on rural development: “processes of rural change can be understood as processes of revalorization of rural property objects”.

However, there is little empirical evidence on the positive or negative impact of broad land ownership distribution. This is the conceptual research gap that will be explored in the following. To do this, the relationships between land allocation, agricultural structural development and the well-being of the rural population must be disentangled. Accordingly, the activities in the land market against the background of the perception of rurality and what shapes and determines rural societies are discussed. These factors are undergoing change anyway due to the diminishing importance of the agricultural sector in the economy. Processes of structural change in agriculture and land concentration are happening even without large-scale investments in land. The increase of the latter reinforces this development. This chapter is

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meant to contribute to a sociological concept of “land grabbing” in a European context. Therefore, it is analyzed whether farmers remain embedded in rural communities and contribute to rural society even if there is agricultural land concentration that is intensified by LSLA.

In the following section, the concept of land values is elaborated on to show the broad implications this has on landownership changes (based on a literature review). Next, the existing state and extent of land grabbing worldwide, and in Europe in particular, are presented (also based on the literature review). The factors that justify conceptualizing a land transaction in a developed country as a land grab are also examined. The field study in East Germany will also be considered, for which the link between social engagement and the identity of landowners has been investigated alongside an analysis of rural interviewees’ understanding of rural life and the importance of agriculture. Following this research, an attempt is made to further develop the sociological concept of land grabbing in Europe by presenting six criteria to characterize land grabbing in industrialized democratic societies (based on the literature review and case study). The results are then discussed in light of the current social meaning and the possession of control over land, as well as general trends of rural development in European societies.

#### **4.2 The multiple values of land**

Owning and farming land encompasses social elements, which can be a personal tie to the land as well as a symbolic meaning applying to national states (D’Odorico et al. 2017). This applies to developed as well as developing countries. In neoclassical economics, land is treated as a commodity with a certain market value, where the public interest and the social appreciation of land are hard to include. However, it is first necessary to understand what makes land (and its cultivation) valuable to society in order to understand what additional values can be taken away or “grabbed” from a land user and the rural population.

The European Union defines farming to include rural landscape management: “Agriculture is the main land user and the resulting high visibility leads to a widespread perception that rural matches with farming” (European Commission 2015). Thus, agriculture is considered to be closely linked to rural livelihoods and to fulfil additional social-cultural functions apart from food production. Sowing, harvesting, and processing are likewise culturally embedded into rural societies and celebrated with feasts like harvest festivals, which are called “Erntedank” in German. Laschewski (2014, p.17) states that the agriculture–rural discourse highlights “agriculture’s ecological and social, local embeddedness.” In the justification of the EU’s Common Agricultural Policy farming is described as land use that provides multifunctionality to societies (Wilson and Dünckmann 2009). Its output is thus stated to be a public good thus affecting rural development.

Alden Wily (2018) observed that in contrast to actual land use, landownership is a social construct and meaningful for state-building as well as economic development. Other studies

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highlight how land ownership creates social value by empowering people (Penalver 2009; Mishra and Sam 2016). In a developed country land ownership brings powers of decision-making and control decisive for rural development and well-being. All of these social values are lost through land grabbing.

There are different types of ownership that are closely connected with assigned bundles of property rights (Schlager and Ostrom 1992). Property rights are considered social relations regarding natural resources, as they are arranged and bargained amongst people (Meinzen-Dick 2014). The land user, thus the tenant, has rights to access and withdrawal of land (Schlager and Ostrom 1992). The tenant may have long-term or short-term rights to the land. The person (or group) with full property rights is the landowner, who can sell the land or inherit it and also decides who can lease the land. It is expected that people with full property rights, thus the landowners, treat the land more sustainably (Meinzen-Dick 2014; Ellickson 1991), although long-term users with secure rights (Loehr 2012) are likewise expected to spend more time on social engagement and invest in collective action as they act in longer time horizons (McKee 2015).

Moreover, land has a symbolic meaning and promotes a sense of identity. Identity can be connected to a place or to a way of life, because representations of oneself can be transferred into objects or manifested in narratives. The loss of identity could be intertwined with the loss of a landscape or the ability to farm a specific piece of land, because the own self-representation would be at stake and the narrative interrupted. Consciousness about one's own identity can also be gained through differentiation (e.g. distinction of a village or land in comparison to a neighboring village) as well as through coherence (e.g. meaningfulness of one's own work or community) (Lengen and Gebhard 2016). Wars have been fought over land and domestic landscapes are referred to as home. Salamon (2003) describes rural societies in the US struggling with processes of suburbanization, through which they lose their identity. Local knowledge, once a privilege of local residents, provides a sense of agency. If new actors are shaping landscapes, agency is no longer in the hands of the locals, and they lose identities.

In her book *The Vanishing Hectare*, Verderey (2003) describes the privatization of land in post-socialist Romania. She particularly documents the people's sense of entitlement to former collectivized land, which also consists of personal claims. Even though marks of land plots were gone, former owners and other claimants tried to recover their pieces of land, showing that there is indeed an emotional bond to the land. This has likewise been described for East Germany, where after reunification expropriated and evicted landowners (who did own over 100 ha in 1945) were not resituated. The German Government did not restore the land. The desire to reacquire former family land was not purely for economic reasons but also for emotional reasons as well as an awareness of a family heritage, as described extensively by Bromley (2017). Preissel et al. (2017) showed that economic interests are not of foremost importance for cultivating land in Northeastern Germany: Farmers like to invest in soil management and long-term development instead of generating high yields immediately.

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Petrescu-Mag et al. (2017, p.174) speak of the cultural significance of land and claim that Romanians “value land as a symbolic and material ground on which the state produces and reproduces itself”. Thus, the feeling of connectedness and its importance for identity are additional social values of land for consideration when defining what can constitute land grabbing in developed countries.

There are no definite numbers to define “large-scale”. According to the EU’s Common Agricultural Policy, small and medium-sized enterprises are up to 95 hectares; a large-size enterprise would thus have more than 95 hectares (BMEL 2015). In this work “large-scale” is defined as a relatively big proportion of available land. When focusing on the social outcomes of large-scale agriculture, which is supported by a land ownership concentration process, an important sociological discussion about the negative outcomes of industrialized agriculture has to be mentioned: The idea that large-scale farming can have adverse effects for rural communities stems, for example, from the research of Goldschmidt (1978) who studied three communities in California in the 1940s. He found that the industrialization of agriculture leads to an urbanization of rural communities and thus a change in the interpersonal relationships of rural inhabitants. Extensive studies in the following decades either confirmed or discarded the Goldschmidt-Hypothesis (Lobao and Meyer 2001; Lobao et al. 1993). A recent macro-level study about rural Canada (Parkins 2015) tried to transfer the findings into contemporary agricultural structure and rejected the thesis that areas with large-scale agriculture possess worse socioeconomic conditions than those which are family farm dominated. This study at hand is not targeting the macro-level however, but the perception at a regional level.

Furthermore, large-scale land acquisitions are not limited to the purpose of agricultural production: Acquisition of areas for wildlife protection, environmental protection, ecosystem services or mining take place globally as well (Fairhead et al. 2012; Evangelia and M. 2015). Fairhead et al. (2012) connects this appropriation of land with the theory of “accumulation by dispossession’ by Harvey (2004), in which he argues that capital accumulation processes would be fueling class differences and eventually lead to an enrichment of the proprietary classes. Fairhead et al. (2012) argues that within this theory, nature is not only a commodity, but transformed into an asset, for example with the idea of ecosystem services. Natural processes would be reinterpreted as the creation of assets for new markets; for example, the natural carbon sink potential of trees can be used for CO<sub>2</sub> certificates in emissions trading. In the end, the rich would be the ones who could afford to privatize, even if the acquisition would be, for example, a “green” transaction to protect wildlife. Transferred into the context of agricultural land, there is indeed an indication that the land is sold to those who have capital available.

### 4.3 Understanding land grabbing

Worldwide the trend of foreign and domestic actors securing large tracts of land for mostly agricultural production has increased substantially in frequency and extent (Cotula 2012; Deininger 2011; Deininger and Byerlee 2011; Dell’Angelo et al. 2017; Margulis et al. 2013; Von

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Braun and Meinzen-Dick 2009; Zoomers 2010; McMichael 2014). Based on the latest figures from the Land Matrix (accessed February 2018), the area of completed transnational as well as domestic deals is 50,257,227 ha (The Land Matrix Global Observatory 2018). The liberalization of land markets has made it possible to buy or lease land around the world. The buyers and long-term lenders, the investors that is, are often states and multi-national companies. Next to profit maximization, food provision can be a concern of investors from countries with poor soils and adverse hydrological conditions. Likewise, land became an interesting target for investors with a non-agricultural background after the food crisis of 2007-2008 (Von Braun and Meinzen-Dick 2009), as can be seen by the fact that only 20% of the transferred area has been cultivated (D'Odorico et al. 2017).

Land acquisitions and land concentration processes can result in land grabbing, but not necessarily (Theesfeld 2016). There can be positive outcomes like more cost efficiency of production, productivity, employment, and improved infrastructure (Azadi et al. 2013; Deininger and Byerlee 2011).

Frequently mentioned socially negative consequences include a widespread loss of employment, expropriation, displacement, or social unrest. Only when such negative consequences occur should the notion of land grabbing be applied (International Land Coalition 2011). The 2011 Tirana conference of the International Land Coalition defined land grabbing as land acquisitions that are in violation of human rights, without prior consent of the preexisting land users, and with no consideration of the social and environmental impacts (International Land Coalition 2011). Well-studied cases occur mostly in the Global South where so-called "underused land" is given to investors who expel the rural population from their land (Borras Jr and Franco 2012; De Schutter 2011; Deininger 2011; Von Braun and Meinzen-Dick 2009). Social organizations embraced and captured the issue when it was recognized a decade ago, denouncing land grabbing (International Land Coalition 2011; FAO 2012; World Bank et al. 2010).

Insights from the literature point to various social aspects of LSLA. One important aspect is the emergence of enclosures, which are created by restricting the local population's access to land they had traditionally used, such as a common area that was a key to community life (Borras Jr. et al. 2011; Ince 2014; Makki 2014; McMichael 2014). Ince (2014, p.105) links "capitalism as an irreducibly colonial formation with global inceptions" to contemporary land grabs. This leads to the critique that land is treated as an asset, degraded to simply an item of a portfolio. Furthermore, new landowners might not realize the complexity of land but focus on a single value, like market value (Penalver 2009). The commodification of land is particularly caused by new, institutional landowners, like pension funds or hedge funds or private equity firms (Gunnoe 2014; Kay et al. 2015). McMichael (2014, p.51) points out that modern agribusiness treats "land as an economic resource rather than as socioecological wealth", assuming that in this mode of production utilization is more important than sustainability.

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Issues of human rights come into play when rural societies are affected by displacement and expropriation. Irregularities like corruption appear and lead to greater disparity in power relations (Cotula 2012; Makki 2014; Zoomers 2010). Makki (2014) notes that expulsion or relocation of inhabitants erases cultural practices, collective memories, and social ecologies.

Thus, an analysis of whether a particular case of land acquisition turns into land grabbing has to be based on a multi-criteria analysis of the output and long-term results. This first requires a debate on how to define such criteria, which researchers are just beginning to explore for the European context. Some authors have developed new sociological concepts of land grabbing on which this study can draw upon. Friis and Nielsen (2016, p.18) describe a shift in land grabbing research from focusing on hectares and the power of foreign actors to examining “the distribution of power and agency between local and foreign investors, smallholders, middlemen and state authorities”. In that regard the definition from Borras Jr. et al. (2012, p.850) is significant, stating that land grabbing is “essentially control grabbing”, meaning grabbing the power to control land and other associated resources in order to derive benefit from such control. Both studies point out that LSLA, and land grabbing, can be subtle. It could be beneficial regarding further insights to combine these definitions with the theoretical “powers of exclusion” framework by Hall et al. (2011), who talked about four aspects of the power of exclusion. These are (1) regulation, (2) force, (3) legitimation, and (4) market power. These mechanisms can lead to less access to land and represent land grabbing. Thus, in this study at hand it is proposed to understand land grabbing as control grabbing, defined by various types of power of exclusion, in particular legitimation and market power.

#### **4.4 Land grabbing in Europe**

Which of the negative externalities of LSLA apply in a European context? Agriculture provides a workplace for only 4.4% of employed persons in the EU (World Bank 2014) and only a minority of people depend on access to land to sustain their livelihoods. Further, the legal irregularities familiar in the Global South are presumed to not occur there to this extent due to an institutional environment ranging from land registries to conflict regulation mechanisms. Is the term land grabbing misleading in the context of developed countries, since so many implications are different? Or are there commonalities?

In the study *Extent of Farmland Grabbing in the EU*, which was commissioned by the European Parliament's Committee on Agriculture and Rural Development, land grabbing in Europe is treated as a fact, measured by “the degree of foreign ownership of land, the capturing of control over extended tracts of land and by the irregularities that have accompanied various land transactions” (Kay et al. 2015, p.11). In the study it is argued that the impacts of farmland grabbing must be placed within the context of broader structural changes within EU agriculture. Kay et al. (2015) further argue that farmland grabbing would be a limited phenomenon in Europe compared to the processes in Africa or Asia. They present data, based on various sources including Land Matrix and anecdotal evidence, about Romania, Bulgaria, Hungary, Poland,

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Slovakia, Czech Republic, Lithuania, and Latvia. Thus, mainly former transition countries are involved. The Transnational Institute has published a collection of case studies about European land issues (Franco and Saturnino 2013). According to those studies, the reasons for the rush to buy farmland in Europe are investment opportunities because of low interest rates, relatively cheap land prices (but prices that local small-scale farmers cannot afford) and the EU area payments. The latter are decoupled from actual land cultivation, which means that large farms are subsidized according to their size (Franco and Saturnino 2013).

Another driver of land deals is the willingness to change existing arrangements on the part of current owners. For example, in East Germany shareholders of agricultural cooperatives might want to sell their share when they retire. The cooperatives might need outside investors who can pay off the shareholder. Moreover, it can be problematic to find a successor for existing agricultural enterprises: If there is an heir, he or she might still not be interested in continuing farming and thus the land is sold (Forstner and Tietz 2013).

Good data is lacking on LSLA in Europe. It appears that Europe faces land concentration, but there is no reliable data about the scope of LSLA (Antonelli et al. 2015). The Land Matrix Global Observatory (2018) includes only deals over 200 ha and made in severe economic situations—only 155 out of the 1,520 listed deals were in Europe (access date 22 February 2018, omitting deals in the Russian Federation). Qualitative case studies on the effect of land concentration pushed by further investments for the rural societies, can rather be found for post-socialist European countries (Constantin et al. 2017; Fidrich 2013; Mamonova 2015) and only to a minor extent for Western Europe, for example Germany (Tietz 2017a) or Scotland (McKee 2015; Wightman 2013). Scotland faces a high land concentration fueled by the history of feudal structures.

Nevertheless, there is available data about land prices that shows a driver behind large-scale land acquisitions: The land prices of East Europe are much lower compared to those in West Europe. For example, a hectare in the Netherlands cost an average of 63,000 € in 2016 compared to 1,958 € in Romania while the rent was 791 € per hectare in the Netherlands in comparison to only 46 € per hectare in Latvia (Stewart and D'Amore 2018). Even though the regions differ in soil quality and infrastructure, the prices are also shaped by national economies. Within the European Union there is a free internal market that enables land acquisitions (Kay et al. 2015), which allows buying and selling land across countries. Thus, a hectare in Romania would be very cheap for a Dutch buyer, but for a Romanian farmer who already witnessed an increase, this would not be cheap at all. What all European countries have in common is that they face rising prices for their lands because of the increasing global demand for land.

In this work, drawing on Specht et al. (2013); Knickel (1990) and Chavas (2001), agricultural structural change is defined as a long-term transformation in structures including farm units, farm size, people employed in the agricultural sector, and structurally induced changes in



cropping patterns and land use. These developments are connected to peripheralization, which means the decrease of rural infrastructure (Henkel 2014) and rural-urban migration (Neu 2015).

### 4.5 Developing six criteria for land grabbing in Europe

To propose a sociological concept of “land grabbing”, in this section categories derived from the literature review are supplemented with empirical materials from the case-study in the East German federal state of Saxony-Anhalt, which was further described in chapter 2.

Thus, the empirical materials consist of quantitative and qualitative data. The 16 interviews conducted with farmers from agricultural enterprises that were used for this analysis provide insights about land acquisition strategies and experiences. The sample from the survey represents 56 interviewees from villages with a broad land ownership distribution and 74 interviewees from villages with rather concentrated lease and ownership structure. Likewise, the sample represents 28 landowners and 99 non-landowners<sup>27</sup>, and of these small-scale landowners (6 ha on average), 95% rent out their land to farmers.

The focus of the empirical study is to explore how and to what degree, land ownership, agriculture, and rural life are perceived as important from the perspective of rural inhabitants. How are these spheres interlinked, e.g., does land ownership makes a difference in how people farm and whether or how rural people recognize the importance of farming for their village? Farmers were asked about their perspective on how they assess their individual engagement in the social life of the village and whether their involvement in general is influenced by the share of land they own. The goal was to examine assumptions that socially embedded farmers are important for rural society and that a certain share of landownership implies a connectedness with the rural region. This then allows to draw conclusions on what the social-cultural implications of land grabbing would be. According to Bryman (2012), qualitative studies are suitable for *moderatum* generalizations, which are of a different nature to quantitative generalizations. *Moderatum* is used in contrast to total generalizations, which can be problematic from an epistemological point of view when a specific statement should be covered by the general laws. According to Mayring (2007), *moderatum* generalizations mean to specify the extent of generalizations. When keeping in mind their limitations, they can nevertheless lead to insights by finding parallels with comparable studies. Thus, the case study of this work is used for *moderatum* generalizations in line with insights from our literature review. Even though the number of studies about LSLA in Europe is limited, it is a starting point for further research.

When proposing criteria to identify land grabbing in Europe, the East German case study is supplemented with qualitative case descriptions found in the literature, in order to see whether the initial way of depicting the socially negative consequences of LSLA holds on a larger

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<sup>27</sup> The other three respondents from the survey did not answer this question.

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European scale. The patterns of contested agricultural land in Europe should be illustrated, which is not homogenous itself, but may also have similarities to the patterns in the Global South. East Germany is a former transition country which embodies institutional arrangements of “West” Germany. Thus, it can serve as a bridging example between the East and West, as a western-oriented geographical economic area.

Which factors justify conceptualizing a land transaction in a developed country as a land grab? The findings are subdivided into six empirically ground criteria. Not all six of them have to be applicable at the same time to speak of land grabbing, but they are strong indicators that there are negative occurrences around LSLA. Approaching a stage of land grabbing could justify political intervention in order to safeguard and guarantee social wellbeing in rural areas.

##### **4.5.1 Legal irregularities**

The first assumption is that, although it is assumed in this work that European countries are like Germany with a working legal system, plus a high share of trust in government and the rule of law (Arpe 2009), there can be irregularities with land contracts that should serve as a criteria of land grabbing. New actors bring “extra-economic forces” (van der Ploeg et al. 2015), which are described in the EU study as “[...] special conditions offered by state-apparatuses (at the national, regional and/or local level), good political connections, full support of administrators, and the practice of ‘skirting the law’, such as ‘pocket contracts’ in Hungary” (Kay et al. 2015, p.50). The term “pocket contracts” in Hungary “originally referred to land deals that omitted the date of the purchase, keeping the contract “in the pocket” until the land transaction’s moratorium (which restricted the deal) is lifted. Only then is the date filled in and the contract legalized and submitted to the land-registry authorities. The term is now used to describe a diversity of contracts that aim to find “solutions” to legal restrictions on land deals” (Fidrich 2013, p.132).

In Germany, former owners who possessed below 100 ha during GDR times and had been expropriated between 1945 and 1949, have been allowed during several rounds of land reform and land privatization to buy back parts of their original land (in ideal boundaries) for a reduced price from the Land Administration and Privatization Agency (BVVG). The latest amendment to the land purchase program from 2011 gave a final deadline for those favored sales (Bromley 2017). The latest amendment to the land purchase program from 2011 gave a final deadline for those favored sales. There is anecdotal evidence from the field study that in light of the current high land prices in Germany, non-agricultural investors tried to find those former owners, offering them money to buy back their land, and asking for similar kinds of pocket contracts to transfer ownership to them after the moratorium on resale, a condition of these favored sales, had passed.

##### **4.5.2 Non-residence of landowners**

Do resident farmers invest more into social involvement and civil society than non-resident farmers? In East Germany farmers are not equivalent with landowners, given the high

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percentage of leaseholds. Under the circumstances of ongoing land concentration, the question of whether landowners engage differently in local communities depending on their residence arises.

Most of the investors with a non-agricultural background in East Germany operate from outside the region, although few are from outside Germany, a quarter of them are from other East German states (Tietz 2015). A study comparing the distance between the registered agricultural headquarters' addresses and registered shareholders' places of residence (defining residence as within a commuting distance of 50 km) found that only 9% of out-of-region investors are from other European countries, with the majority (67%) coming from West Germany and a share of 24% being from the East German states themselves (Tietz 2015). Forstner et al. (2011) identify investors as those who own the majority of the share of an enterprise and distinguish them from other shareholders. Tietz (2015, p.62) pointed out that what is important is neither the origin of capital nor the location of the headquarters, but the way the revenue is used and how this is connected to rural areas and other farms. Some investors like to show their engagement for rural societies in the form of sponsor. For example, KTG Agrar, the largest agroholding in Germany that went bankrupt in 2016 (Grossarth 2016), displayed its engagement to local sports clubs in Oranienburg, where the company had an office (KTG Agrar SE 2015). In order to better identify the benefits or losses for a community, closing the research gap on the total share and the regional spread of the actual activities of these investors and whether those differ depending on their agricultural background would provide a lot of insights.

The former agricultural ministry of Saxony-Anhalt, which was in charge until 2016, regarded the land ownership structure as crucial for social embeddedness and stated in several press releases that a broad ownership structure should be ensured to prevent a small amount of investors having market power. This means that fewer big and influential landowners are desired, but rather local, small landowners who are supposed to have a closer bond to their land. The ministry proposed a law aimed at restricting farm size in the land deals of both sales and leases (the agricultural ministry of the federal state Lower Saxony also planned for a similar law after 2016 (ML 2016)). Rural inhabitants were assumed to be 'tied' to the countryside if they own land (MULE 2015). There is further the claim that enterprises actually engaged in farming have a prime interest in dealing with social responsibility at their operating site and supporting the local communities. Moreover, landowners feel even more connected to their village if they own land there (Bunkus and Theesfeld 2018).

Information from the field study supports the assumption that owning local agricultural land can lead to a closer tie to the community. A resident farmer of a medium-sized enterprise argued that one only engages in local social activities if the center of one's life is there, too. Another interviewee stated that she considers herself a resident farmer because she "lives here, works here, is engaged in the rural community including clubs and starts a family'. The collected data also indicates that landowners are more tied to the village. Only 14 out of 128 respondents answered that they considered leaving the village in the next three years. For analysis, the

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respondents were divided into a group of landowners and a group without landownership. As landowners are considered owners of agricultural farming land, excluding houses, extended gardens or allotments. Figure 9 shows the answers to the question “Would you consider leaving your village in the next three years?” according to the status of landownership. Respondents who own a piece of land answered less often that they considered leaving (14% compared to 23%). However, this group difference is not statistically significant, and many other factors influence migration, for example the search for a job.

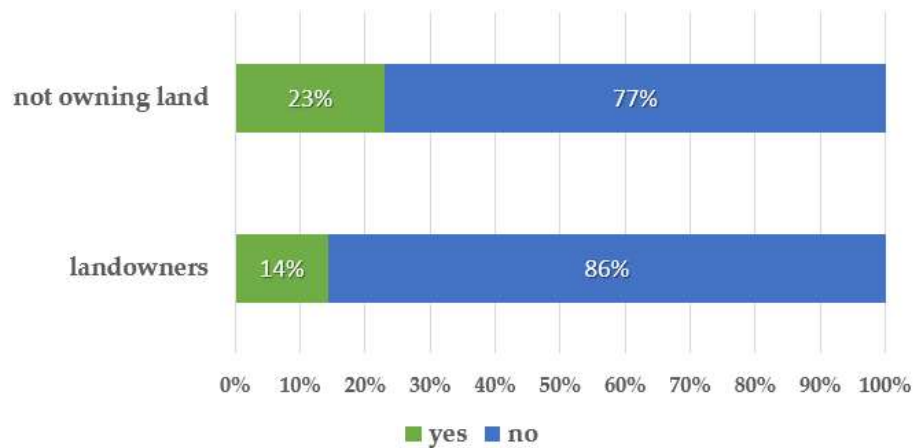


Figure 9: Would you consider leaving your village in the next three years?

Source: Bunkus and Theesfeld (2018).

Findings of the study indicate that there is, however, considerable complexity to the issue of residence: Large farms' fields are typically spread among more than one village even though one village is the main place of business. The interviews with farmers show that they do not necessarily call their place of business their home. They try to bring social involvement to all places of operation, but there is an unequal distribution: The location of the farm's headquarters is the main place that profits from their engagement. Several interviewed farmers mentioned that they help by shoveling snow in winter or with construction work at the village sports field. Thus, it can be assumed, with bigger land-holding structures and fewer farm headquarters, fewer communities can benefit from farmer's engagement.

Non-residence of agricultural investors can lead to various social tensions. A farmer told about an investor who rented land that was subsequently marginalized by a group of private landowners who prohibited their tenants from swapping plots with him. This resulted in a disadvantage for all agricultural producers as they had only little leeway to conduct the swaps that were common.

Residency also influences whether rural people are aware of agriculture. The survey showed that only 6.1% of interviewees in East-Germany associate agriculture with rural life. The connection between farm owner residency and awareness of agriculture was measured by

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asking villagers the number of farmers they could mention. In all villages<sup>28</sup> there were at least three farm headquarters. In the village with the highest density of farms more villagers were able to name a farmer. When asked to name up to three farmers or enterprises, 50% of the respondents in that village could do so (Altmark 1) (see Figure 10). In the villages with higher land concentration and a distinct agricultural structure, only 27.5% of the interviewees named three farmers on average.

This shows that especially having a headquarters locally leads to visibility of the farm. Inhabitants of a village with a higher density of resident farmers and an underlying broader distribution of agricultural land ownership find agriculture more important for their village, as can be seen in Figure 10. On a 1 to 5 scale, 65.2% of the interviewees in the village with the highest density of farms found agriculture to be “very important”, opposed to 39.2% on average in all other villages together.

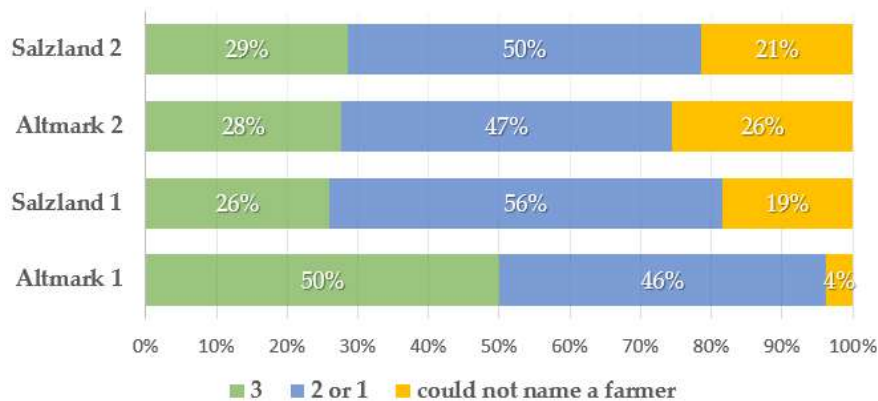


Figure 10: Please name up to three farmers in the near distance. Source: Bunkus and Theesfeld (2018).

#### 4.5.3 Centralization in decision-making structures

This criterion focuses on centralization in decision-making structures, which means centralized decisions in production processes. These automatically lead to standardization of production processes. With land concentration, huge tracts of land are controlled by a small number of people and hence farming processes are decided by few. Large-scale agriculture changes landscape aesthetics because monoculture starts to dominate (van der Ploeg et al. 2015). Further van der Ploeg et al. (2015, p.9) argue that the large tracts of land (and extended herds) require a standardization of the production process, which greatly increases the use of chemical inputs and preventive medicines. The authors referred to a farm in Romania where about 99 people cultivate 12,000 hectares. Nevertheless, labor requirements also depend on the farm animal, crop or production system. It cannot necessarily be concluded that there are relatively few workers in large-scale farming. Kay et al. (2015) connected land degradation with large-scale agriculture, namely improper application of manure, greater ploughing for energy crop cultivation, and disadvantages for wildlife through an increased biodiversity. Not mentioned was

<sup>28</sup> Including districts. In German: Ortsteile.

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the aesthetical-cultural dimension that shapes the countryside with large agriculture, such as the large-scale greenhouses in Spain or the Netherlands.

Centralization processes can mean that even if individual farm entities are kept, the whole company is nevertheless managed centrally and more management decisions are taken from a distance. Distance from the local problems does not allow for adapted, specialized solutions and does not allow for local people's engagement in the processes (Larson and Ribot 2004). Mamonova (2015) conducted a case study in Ukraine, where she found out that rural inhabitants were not fond of monocultures and the uses of pesticides as it decreased biodiversity in the near proximity and the use of the fields for leisure activities. Rural inhabitants thus became less involved with the landscape around them. Moreover, agricultural cultivation should not be regarded as the only form of land use (Alden Wily 2018).

In the study in Saxony-Anhalt, 38.1% of interviewees named at least one agricultural connotation when asked about soil. Yet a statistically significant difference in what landowners (of agricultural land) and non-landowners associate with the term "land" could be found. Interviewees who were landowners associated more often positive notions with "soil": A share of 42% cherish "fertility", or "high quality", versus only 25.4% of those who are not landowners. In total 57% of landowners mentioned agricultural terms versus 34% of those who do not own land. This shows that rural people do not necessarily think about agriculture when asked about soil, in contrast to landowners who are more engaged in this topic. It likewise illustrates the distance between agriculture and rural people, due to an increase in centralized decisions with an inherent decrease in participation.

##### **4.5.4 Land as an investment object**

Obviously, land is also regarded as property. Investment in farmland in the EU involves a huge diversity of actors. Kay et al. (2015 p.26) found that the investment activities would even lead to the emergence of "a new asset class made up of large banking groups, as well as pension and insurance funds". Low interest rates make land appear as a safe investment, but other functions and values of land are lost, from local employment to biodiversity to rural society's identification of a landscape as home (Constantin et al. 2017; Gunnoe 2014). De Schutter (2011) points out that the productivity per hectare is lower in large-scale production processes, but their crops are cheap because neither environmental nor social costs are included. For example, the negative impacts on soil and climate are not included.

When land is treated purely as an investment object it might be sold again quickly, compared to traditional turnover in rural areas, which happens in response to capital market opportunities (Gunnoe 2014). The impact of such short-term investment and more frequent ownership changes on the agricultural sector are not yet well understood. It can be assumed that without a longer-term engagement, there is less involvement in social activities or efforts to become part of rural communities.

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However, these negative effects must be limited in one aspect. Anecdotal evidence from the field study shows that farmers call in “their” related investors if a plot of farmland that they lease is about to be sold. They ask their investor to buy the land and continue the lease with them. Tietz (2015, p.23) calls these actors “local farmers who have investors with minority interest”. Thus, for the surrounding community nothing will change for the medium term, although the underlying ownership structure of land changed. It is an open question if the hidden LSLAs should be called land grabbing, since at first sight, they have few negative consequences.

##### **4.5.5 Decision power concentration**

This point is closely related to 4.4.3 but focuses on a different scale. It is significant that for example in Germany, most of the local planning processes, land consolidation processes, flood-protection programs, and all planning and civic participation in infrastructure projects are tied to land ownership. The owner is not obliged to consult the farmer-tenant to get involved. With ownership concentrated in the hands of a few, these few monopolize most of the decisions about the development of the village (in some villages the concentration process appears like a reintroduction of feudalism, with one influential family running things (Knigge 2014)). The family sponsors the sports club and is involved in all kinds of local activities. Thereupon all decisions seem to be taken in accordance with them. Mamonova (2015) described how in rural Ukraine small landowners lease their land instead of selling it. This was done in order to retain some decision-making power.

In their framework, Hall et al. (2011) describe that one form of excluding others from decisions is by “legitimation”, in this case by land ownership. Another notable example is Scotland, where about 30% of private land is owned by 115 landowners (Wightman 2013). McKee (2015) showed that these landowners exert remarkable influence in rural communities.

Another example for power relations is also described by Mamonova (2018, p.15): Among Ukrainian villagers’, discontent with large-scale agribusiness grew with the political changes in the country: “Many villagers began to identify large-scale land investments as ‘land grabbing’, and openly criticized extractive activities of agribusiness and its control over the state.” As an effect, rural inhabitants started to foster small-scale agriculture, which Mamonova connected to growing patriotism. She also depicted a growing wish for food sovereignty with the desire to gain more control over food production.

Added value of food production and farmland cultivation has been discussed by several scholars (Visser et al. 2012; Borrás Jr and Franco 2012; Evangelia and M. 2015) examining “the purposes of resource extraction geared towards external consumers” (Visser et al. 2012, p.901). In general, German law forbids the sale of agricultural land to non-agricultural entrepreneurs, but this can be circumvented by buying the share of a company which owns land. Hence, agricultural land is sold also to non-farmers (Tietz 2017a). This happened to the former farmland of KTG Agrar. After insolvency the land was sold to Munich Re, a large reinsurer, by selling a certain share of a subsidiary company (Herz 2017). The subsequent critical discussion of farmers, who

felt overlooked, led to a reaction of the municipalities. For example, the federal state Brandenburg started to withdraw its permits for local land deals (Lehmann 2017).

##### **4.5.6 De-facto limited land market access**

In the “power of exclusion framework” (Hall et al. 2011), market power is described as another means of gaining control. The high prices of land can become a barrier which prevent local people from accessing the land market and reduces their chances of buying land.

In the study in Saxony-Anhalt, all interviewed farmers complained about high land prices (for sale or lease likewise). Some even considered it uneconomical to buy land at current market prices, as it was not certain whether the costs could be covered. More than one farmer reported that land was sold to a non-agricultural bidder by the BVVG, and in one case the buyer was not even aware of the actual poor soil quality of the land. In contrast, Hüttel et al. (2016) found that land sale processes have the most influence in shaping land prices rather than the participation of non-farmers. Open transparent bidding systems, as practiced by the BVVG, lead to price increases (Hüttel et al. 2016). As a response to the enduring criticism, BVVG started to sell smaller parcels of land to also enable farmers who can only afford to buy a smaller piece of land to compete.

LSLA leads to concentration in the land market, market domination, and hindrance in the functioning of land markets (BMEL 2015). Constantin et al. (2017) describe how foreign buyers drive national Romanian buyers off the market, as the latter are not able to afford the prices paid. The fear of losing land to foreigners in this manner was long given as a reason for a moratorium in land markets in many Eastern European post-socialist countries. The fear of losing the production base and thus partly the chance for food sovereignty and security to foreigners suggests a social aspect of land grabbing, too (Bunkus & Theesfeld 2018).

#### **4.6 Chances and limitations of the derived criteria**

These criteria provide a starting point for discussing whether there is land grabbing in Europe. The fact that land is at largely regarded as an investment object, and thus recently increasingly owned from people outside the region, does not necessarily mean there is land grabbing (Bunkus & Theesfeld 2018). When land is “controlled” from outside the rural community, it is important to examine what the social consequences in the rural areas are (Tietz 2017a). Even though it is not the focus of this work, the environmental implications have to be kept in mind, too. A corresponding view has been expressed by scholars who point out the process-based nature of land grabbing (Borras Jr and Franco 2012; Friis and Nielsen 2016; Hall et al. 2011). These arguments are brought together in this chapter by emphasizing the amount of exerted control, which can be rather subtle. In general, the conditions of access to land and whether control over land diminishes the social values of land are crucial for identifying land grabbing.



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What is similar among cases of LSLA in both developing and developed countries is the likelihood that they are driven by an economic view of reasoning in which land is a commodity (Bunkus & Theesfeld 2018). What are the negative social consequences of those transactions? It should not be assumed that all LSLA necessarily have negative consequences. Azadi et al. (2013), for instance, differentiated clearly between four possible outcomes of LSLA. They include win-win deals with the potential to significantly promote the agricultural sector and the rural societies of host regions or countries.

The mention of host regions or countries invites consideration of what “Europe” encompasses as a term used here in the chapter. Europe has been identified previously as a *western-oriented geographical economic area* (p.41), but Europe can be thought of to be smaller or larger: For example, the Land Matrix includes Russia in Eastern Europe, while EU studies obviously focuses on the member states of the European Union. This work at hand includes case studies from Ukraine, which is partly western oriented, but also partly controlled by Russian-friendly forces. Nevertheless, it was decided that Ukraine would be included because it was presumed that “Europe” does not stop at the EU border. It also needs to be considered that neighboring countries, like Serbia and Macedonia, are candidates for EU integration (Kocjancic 2018).

Is farming connected to contemporary rural societies, and if so, to what extent? This chapter is focused on the negative side effects of land concentration for rural society, but it is important to keep in mind that these questions are very much connected. If rural people do not care for agriculture at all and do not experience a connection to it, there wouldn't be an issue to discuss here. Nevertheless, there are various clues and the degree of this connectedness is further explored in chapters five and six.

Previous studies suggest focusing on the rural people – large scale agriculture connection (Geisler 2015; van der Ploeg et al. 2015; Franco and Saturnino 2013) with a critical view towards the motivation of large-scale investors. The skepticism against land acquisitions may even stem from a nationalistic tendency with prejudice towards foreigners (Tesser 2014; Burger 2006). In this study at hand, fear of foreign investors was not detected, however prejudice against investors from former West Germany was. Moreover, the collection of case studies by Franco and Saturnino (2013) and other studies (Mamonova 2018; Preissel et al. 2017; Kristensen 2016; McKee 2015) suggest that farming is desired in agricultural areas, but often the main problem would be an adequate access to land. However, there are general observations about rural–urban migration, including that rural areas provide less jobs (Specht et al. 2013; Neu 2015), while another explanation could be that there is a decline of interest in agricultural processes (Zander et al. 2013). The case study in Saxony-Anhalt shows that non-farmer rural inhabitants consider agriculture as important for their village, but they lack knowledge about agricultural production. Furthermore, the interviewed farmers are fond of their lifestyle and regard the availability of acquiring or leasing land as the basis for their enterprise (see chapter six). Studies about land grabbing suggest that large investors do not seek a certain rural lifestyle, but security for capital investments (Deininger and Byerlee 2011; Geisler 2015; Von Braun and

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Meinzen-Dick 2009). Geisler (2015) even calls these *trophy lands*. Overall the literature suggests that there is a declining affinity to farming in rural areas, but still an interest in agricultural processes.

When speaking about the societal effects of LSLA, there is naturally a focus on rural areas. The meaning of rural areas for society is a topic widely discussed in fields like geography or rural sociology. Even though rural society is no longer very much aligned with the agricultural sector, when members of the rural societies were asked in the case study about what they associate with the term “land”, 16.7% of the 114 respondents still answered “field”, followed by “soil” (11.9%) and “home” (7.1%). The latter in particular is a strong sign that land has an intrinsic value that is difficult to express in monetary terms and is easily overlooked in frequent land transactions.

When freely associating, only three out of 134 words stated by respondents referred to a monetary value of land. A strong indicator that rural inhabitants appreciate the special recreational value of land is that 58.9% of the interviewees claim that they associate “tranquility” (In German: Ruhe) with the notion of rural life. Interestingly, the associated “tranquility” was also mentioned by rural inhabitants who live next to a military training area with shooting ranges or those who live next to a bigger road or a farm in harvest season. Thus, “tranquility” might also be a perceived way of life versus merely an actual description of quietness and levels of noise. This opens new perspectives about the interpretation of the respondent’s perceptions and could even lead to a philosophical discussion.

It also has to be pointed who is actually cultivating owned and leased land in East Germany. With a tenancy rate of 71% for East Germany (2013), the landowner is not the one who cultivates the land (BMEL 2015). If the land is leased, the tenant can additionally swap the fields with another farmer to make the farm cohesive. Given these three layers—owners, tenants and cultivators—the important factor is how control over land is exerted. Large-scale agriculture is not necessarily negative for rural development. East Germany’s history of agricultural structure shows that large farm units differed very much from the smaller family farms in Western Germany but were likewise a part of the rural community. However, as Laschewski (2014, p.17) contends, “general processes of peripherization” are afflicting rural areas in East Germany with a slow economy and rural-urban migration. At the same time, there are exceptions, especially in areas around larger cities like Berlin or Potsdam, where there are influxes of new inhabitants to rural areas accompanied by increasing prices for housing and a fueling of the rural economy. In Germany, these areas are called “Speckgürtel”, which describes the sprawl of suburbs. The processes of peripherization and suburbanization also apply to the European countryside. It must be noted that LSLA intensifies those developments, and therefore has negative effects.

Even though the case study cannot be representative for whole Germany or Europe, the findings are indicators of villagers’ relationships to agricultural production in Saxony-Anhalt. As was mentioned earlier, moderatum generalization can be drawn from qualitative data and more case

studies about LSLA from Europe are needed to integrate these findings with insights from other studies (Bunkus & Theesfeld 2018).

### 4.7 Concluding remarks

A further look should be taken at the dimension of ownership: When estimating socially negative effects of an agricultural land transaction, it is not of foremost importance who actually owns the land. A local tenant with secure long-term rights could care as much for the land as an actual owner (Loehr 2012; Meinzen-Dick 2014). However, it is important how (visible) farmers shape the rural life and environmental landscape through their social and agricultural activities. This analysis suggests six criteria for investigating the interdependencies between LSLA and the social implications in the rural areas of Europe: legal irregularities, non-residence, centralization in decision-making structures, land as an investment object, decision-power concentration, and de-facto limited land market access. Pursuing these criteria allows for an indication of whether the disadvantageous consequences of LSLA affecting rural people in European industrialized countries can be “labeled” as land grabbing, and therewith advance that term as a sociological concept. LSLA and ownership change can have negative side-effects, such as aesthetical changes of rural areas due to standardized size-dependent production processes, leading to a different local perception of agricultural landscapes and even a loss of identity. In many European countries, as in Germany, ownership itself qualifies for participation in local decision-making. Likewise, LSLA and the related further concentration of land also means centralized decision-making, which leaves less agency for the villagers. De-facto access to land is also an issue when an average farmer has a lesser chance to buy agricultural land due to raising prices or too large of plots offered. Access to land can also be limited if a farmer is confronted with (supra-regional) capital-intensive investors with or without agricultural backgrounds. Finally, land acquisitions can to some extent be accompanied by irregularities in contracts (Bunkus & Theesfeld 2018).

An argument for political action can only be drawn if some conditions are met: The effects of LSLA have to be addressed more systematically if they lead to discontent among rural people, an increase in migration, social injustices, or hardships. As not all types of LSLA are negative, the consequences of LSLA need to be carefully considered. Agricultural structural change happens even without large-scale land transactions; but if LSLA push current processes of agricultural structural change too far, this could be a normative justification for political action. The reasoning of this chapter shows that neither hot spot conflicts nor objective measurable impacts, but rather social subtle effects, are what make up a land-grab effect in Europe. If the observed phenomenon includes the described negative consequences and can be called land grabbing and if society's concerns were to persuade politicians to control land transactions, a broad societal discourse is still needed. Societies must debate whether such aims can be placed above the prevailing property order in democratic industrialized countries. For instance, in Germany, steering land deals in a government-preferred direction is in conflict with the German constitution (§ 14) that protects the freedom to sell private property. Thus, state intervention

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would require careful legal considerations in other European countries too, with similar systems of property ownershi

## 5 The importance of farmer's residency for the village<sup>29</sup>

The suggested definition of “land grabbing” leads to further points of investigation. The analysis in chapter four indicates that large-scale landowners are not necessarily on the ground (non-residence of landowners), which is linked with the points of “centralization in decision-making” as well as “decision power concentration”. Hence it is of interest to find out more about the impact or reasons for farmers' residency. The complexity of these points is addressed in this chapter by using a structural equation model to find correlations among defined variables, which should depict contact points between farmers and the village.

### 5.1 The Significance of Agriculture for Rural Areas

While agriculture is primarily a producer of food, it is also accompanied by socio-ecological processes, connections between agricultural companies, farmers and rural society. There is an increasing importance of agriculture because of a continuously growing need for food in many countries across the globe. Yet with the unprecedented levels of industrialization and urbanization, the presence of agricultural processes seems to be decreasing. Germany represents such a case with a declining presence of agriculture in everyday life (Zander et al. 2013). Even though the country has more than enough food to feed its population, only 1.28% of the workforce is employed in agriculture (World Bank 2018). The agricultural output of Germany is immense: In 2016 Germany exported food and fodder<sup>30</sup> worth €51.04 billion. However, when compared to the top three goods, vehicles, machinery and chemical products, exports were worth €504.46 billion (Statistisches Bundesamt 2016c). Thus, agriculture can be seen as an important but not outstanding sector of the economy (Bunkus et al. 2020).

The industrialization of agriculture led to a decreased understanding of agricultural processes in society (Zander et al. 2013; Neu 2015). One can expect that the change from agrarian to industrial society, and nowadays to a service and information society (Pierenkemper 2010), has implications on how inhabitants in rural areas see agriculture and how they perceive life in rural settings. Earlier rural settlements were mainly formed by the needs of agricultural laborers, feudal landowners and other professions involved in agricultural productivity, which might still be visible in historical parts of various village centers (Henkel 2014). Contemporary rural settlements look different, often because they fulfill different needs: Inhabitants of rural areas increasingly commute greater distances to their workplaces, and single-family homes with gardens are more prominent in contemporary villages than wind-protected farmhouses (Bredenbeck 2014). The function of a village, where agriculture has been traditionally organized

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<sup>29</sup> This chapter is based on Bunkus, Ramona; Soliev, Ilkhom and Insa Theesfeld (2020): Density of resident farmers and rural inhabitants' relationship to agriculture: Operationalizing complex social interactions with a Structural Equation Model. *Agriculture and Human Values* 37, 47–63. <https://doi.org/10.1007/s10460-019-09966-7>. It has been available online since 2019.

<sup>30</sup> Including processed food and fodder.

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and embedded into the community, is clearly going through fundamental transformations (Bunkus et al. 2020).

The analysis in this chapter centers on data collected in the four presented villages of Saxony-Anhalt (see chapter 2.1). More specifically, it is explored how rural inhabitants associate themselves with agriculture, the main function of their rural place in the recent past. Rural inhabitants' attachment to their villages should be explored and whether there is a bond to agriculture that plays a role in forming their current place attachment. The underlying research question is whether and to what extent production and current farm structures play an important role for today's rural inhabitants. Answering this question could give further indications about the connection between agrarian and rural development processes (Baldock et al. 2001; Galdeano-Gomez et al. 2011; Lyson et al. 2001).

Do rural inhabitants with a stronger relationship to agriculture also have a stronger attachment to their villages? As a hypothesis, they have insights into and experiences with agricultural processes that lead to the creation of both an attachment to and tolerance of various agricultural processes. Examples include appreciation for fields in bloom or an understanding of the necessity that tractors slow traffic during harvest time. In general, visible agricultural processes such as sowing, harvesting and machinery moving on the main roads between fields are often referred to as typical for rural life (European Commission 2017a). But does agriculture constitute only the sum of visible agricultural activities? Agriculture is increasingly seen not only as a basis for food production, but also for meeting societal needs (Zander et al. 2013; European Commission 2016), which indicates that farmers might be of social relevance for the villages. The interaction between the residents of rural areas who are not directly involved in agriculture and farmers is a two-way relationship. Thus, whether and how far the density of resident farmers might be favorable for forming inhabitants' relationships to agriculture (through contact with farmers) needs to be analyzed. Nevertheless, this notion of relationship to agriculture is rather complex, and the knowledge and experience with agricultural processes might not necessarily result in tolerance or appreciation of these processes. Even if residents understand that harvesting is important and it needs tractors, that doesn't have to mean that residents won't be upset about the dirt on the roads.

The second notion of interest in this chapter is rural place attachment. This was treated as one component for strengthening the vitality of rural life according to the present political will in Germany (Landesregierung Sachsen-Anhalt 2010; MULE 2018a; LNV 2004; Koomen 2011). It needs to be explored if the above-described relationship to agriculture can, among all the other complex socioeconomic factors and processes, play a role in forming the place attachment of rural inhabitants, directly through farm activities or interaction with farmers and visual appreciation of farming processes of all kinds. The definition of place attachment can be understood as the desire of an inhabitant in an area to stay in the area or to return to it once left due to a combination of bonds formed with social and physical attributes of the area (Low and Altman 1992; Quinn and Halfacre 2014; Eisenhauer et al. 2000). McAndrew (1998, p.411)

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mentions that strong place attachment would cause expectations of future stability and would be attended by local knowledge and a “greater investment of time in resources in that place.” Besides, rural place attachment in this context is also a complex notion as rural areas increasingly fulfill the most diverse functions apart from agriculture. Villages often function as residential areas, and serve as places for small to big non-agricultural businesses (Henkel 2014). Place attachment also draws from connections of individuals to broader values involving relationships with family and friends as well as feelings that might be related to physical attributes of places (Stedman 2003). Rural place attachment, as well as a relationship to agriculture, can vary from weak to strong and are largely characterized by social and cultural connections individuals build throughout time. Additionally, knowledge about and fondness towards the physical characteristics of a place also play a part (Bunkus et al. 2020). In summary, rural areas are historically intertwined with agriculture, and it can be expected that their physical as well as social aspects play a crucial role in the perception of them among their inhabitants.

This chapter aims to fill a research gap in the current literature for explaining how all these individual elements from agricultural and rural development are linked together in a broader sense. Based on Quinn and Halfacre (2014, p.129), who noted that “future research should also examine place attachment developed by consumers who frequent particular farms and have a relationship with farmers”, insights are offered from the attempt to disentangle the complex relationships among three identified key variables. The first two are latent, not directly observable constructs: inhabitants' *rural place attachment* and *relationship to agriculture*. The third one is based on whether the “density of resident farmers” is relatively low or high, which is determined based on the number of resident farmers in relation to total area and number of residents. The researched villages were purposefully sampled to identify the effects of this variable. Thus, the objective of the chapter is four-fold: First, it should initiate a discussion on possible interdependencies within and between the two latent constructs. Second, it should be discussed whether the initial findings show whether density of resident farmers has an effect on the degree of these two latent constructs. Third, a model-based approach is offered that attempts to measure and quantify these latent variables and their nuanced interrelations using observed variables in a Structural Equation Model (SEM). Finally, the results from an initial operationalization of this model are illustrated and discussed, using available empirical data from the field study. The gathered data is the foundation of the analysis in this chapter (Bunkus et al. 2020).

### **5.2 Two concepts: Rural place attachment and relationship to agriculture**

The interrelations among the three above named variables (rural place attachment, relationship to agriculture, number of resident farmers) are crucial for present agricultural policymaking. Yet, they are taken for granted in the ongoing political debate (Landesregierung Sachsen-Anhalt 2010; MULE 2018a). This research contributes to the operationalization of these interrelations with a suitable modeling approach. We firstly need to highlight the reasoning behind the concept

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of place attachment and indicators that determine *rural place attachment*. Second, indicators for *relationship to agriculture* among rural inhabitants are provided; these observed indicators help to operationalize both concepts and develop an initial model capable of generating evidence about their interconnectedness. *Density of resident farmers* is treated as an exogenous variable in the model.

It is assumed in the following that the *density of resident farmers* affects rural place attachment directly through contributing to forming a certain relationship to agriculture, which then affects the rural place attachment of rural residents. Besides, a farmers' presence might affect rural inhabitants' place attachment directly but also indirectly (Bunkus et al. 2020). While *place attachment* has a background as an operationalized term in social sciences and geography, *relationship to agriculture* is a concept that was developed for this model.

### 5.2.1 Place attachment and its conceptualization

The difference between "place" and "space" has been reflected in spatial social sciences thoroughly: Place can be regarded as a construct, a perception, a social relation as well as a geographical place (Bowen 2011). In geography and landscape sciences, for example, it is important to distinguish between the concepts of place and space. The latter refers to the physical entity, while the former focuses on social relations within space (Hunziker et al. 2007). There seems to be a lack of agreement as to the exact definition of space and its delineation from place. For example, from Bowen's perspective, space is not just natural space but also a product of social interaction (Lefebvre 1991). The sociologist Giddens (1990, p.18) states that place "is best conceptualized by means of the idea of locale, which refers to the physical settings of social activity as situated geographically". In this work spatial-social interactions are analyzed. The relationship between the individual and their physical and social surroundings are the center of observation – the sphere of what encompasses *place* (Bunkus et al. 2020). This means that the term in place attachment already stands for an interdisciplinary understanding of a certain place.

The relationship between people and places is important for natural resource management (Wynveen et al. 2017). Place attachment is analyzed in human geography (Brown et al. 2015; Lu et al. 2018; Lokocz et al. 2011), environmental psychology (Raymond et al. 2010; Hernández et al. 2007; Scannell and Gifford 2017) and other broader research areas such as sociology (Rodriguez Castro 2017) and anthropology (Low and Altman 1992). Scannell and Gifford (2017, p.256) regard place attachment from a psychological point of view and describe it as a "cognitive-emotional bond that forms between individuals and their important settings". Stedman (2003) emphasizes that the physical dimensions of a place are also important for place attachment. Windsong (2014) shows that connections to physical land and social interactions around land are intertwined and relevant. A neighboring concept to place attachment is place identity, which means that the physical appearance of a place is crucial for a person's identity and belongingness (Wester-Herber 2004; Lijadi and Van Schalkwyk 2017). The analysis at hand is built on a more comprehensive and nuanced definition by Scannell and Gifford (2010, p.5),



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who suggest that place attachment “[...] is a bond between an individual and a place that can vary in terms of spatial level, degree of specificity, and social and physical features of the place, and is manifested through affective, cognitive, and behavioral psychological processes”. Thus, the relationship between the individual and the place is subjective and encompasses social as well as physical components. It will be likewise treated here as a proxy for vitality of rural life, representing a strong political will and taken as an argument, for instance, to design certain agricultural land and structural policies (Landesregierung Sachsen-Anhalt 2010; MULE 2018a, 2015). Once again, this assumption of a relationship between the role of agriculture and vitality of a rural place is yet to be scientifically tested (Bunkus et al. 2020).

A limited number of scholars have also reflected on the role of land ownership for place attachment. Riger and Lavrakas (1981) distinguish between social bonding (social dimensions, such as involvement in the neighborhood) and physical rootedness (physical dimensions of a place, such as ownership and period of residence). They researched an urban neighborhood and found that the two dimensions are correlated. For example, young families usually have higher interactions than elderly people, but both groups tend to stay in the area if they are homeowners. Nevertheless, Riger and Lavrakas (1981) do not label their findings directly as *place attachment*. Their study shows a connection between ownership and residency in an urban context. Sargeson (2018) highlights the potentially adverse consequences of transforming land ownership. She found that collective land ownership stimulated community engagement, while private property would weaken participation in self-governance of a local community. Although the example is in the context of China, interestingly, it addresses the transformation of collectively owned land into state ownership and its subsequent privatization. While property ownership might strengthen the relationship to a place, it also shows that the social bonds are not necessarily strengthened by it. These two studies show that the relationship between social and spatial entities in relation to landownership is not trivial. Nevertheless, they provide a good starting point for further research and an indicator to further explore for the subsequent model of this thesis.

There are a few studies that aim to measure place attachment. The approaches range from several elaborated and combined proxies to direct questions on the perception of place attachment. Researchers tried to measure the bond between people and place either from its spatial context, using for example GIS technologies (Brown et al. 2015), or from psychological standpoints (Scannell and Gifford 2010). The latter created a three-dimensional, person-process-place organizing framework, based on an empirical study, where people were asked about their bond to a certain place (Scannell and Gifford 2010, p.1). Raymond et al. (2010) add a fourth and fifth dimensions and reduced the psychological components in their reasoning. They measure place identity, place dependence, social bonding (including family and friend bonding) and nature bonding. Hinojosa et al. (2016, p.310) were less proxy-based, asking mountain farmers directly to indicate their attachment to their municipality on a scale from 1 (not attached at all) to 10 (fully attached). Wynveen et al. (2017) analyze the limitations of comparing place attachment across cultures and suggest assessing place attachment scales for

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various research areas. This thesis should contribute to the work of these scholars with the measurement approach of place attachment, which is developed in this chapter (Bunkus et al. 2020).

Interestingly, the literature related to rural place attachment focuses more on farmers and less on non-farmer rural inhabitants. Farmers are expected to have a stronger level of rural place attachment, as their livelihoods depend on land use. Hinojosa et al. (2016) study place attachment of farmers in the higher alps. Their findings point to the assumption that the farmers were committed to pursuing agriculture despite the difficult terrain because they felt attached to their place. Focusing on behaviors that could lead to place attachment, Quinn and Halfacre (2014) ask farmers in the US about attachment to their land, finding that farmers received security from their land which led to strong place attachment.

Walker and Ryan (2008) are among the few scholars that have researched place attachment of inhabitants in rural areas. They confirm a positive correlation between social engagement and place attachment. In contrast, Theodori and Luloff (2000) indicate that attachment based on specifics of location might vary but could not confirm that community attachment would be higher in rural areas than in urban communities.

Moroney and Castellano (2018) analyze how differently urban and rural populations deal with the loss of farmland due to urban growth, discovering that rural people were more concerned about farmland loss due to urbanization. Moroney and Castellano (2018) assumed that this could be explained by place attachment. Unfortunately, they did not ask the respondents about their personal relationship to agriculture. Another relevant aspect to consider is that nowadays rural inhabitants are usually mobile and not as place-dependent as they were historically (Henkel 2014). They have to reach their workplaces, which are increasingly further away from their residences, and the rural infrastructure in terms of supermarkets, medical services and public transportation is often inadequate (Neu 2015). Nevertheless, a mobility study in Germany confirmed that commuters who were homeowners were more attached to their residence than those with a temporary lease (Meyer et al. 2003).

This overview of the evidence from the academic literature on place attachment is the first step in developing a concept for this thesis. It serves as a basis for the operationalization of the concept of *Rural Place Attachment* (RPA) by forming seven indicators for its measurement. These indicators allow a picture to be painted about the degree of attachment to the rural area. Each indicator is derived from the literature with empirically-based reasoning on related themes. This means that most of the above-mentioned studies are based on empirical research, often reported as a case study, whereas two are studies of theoretical nature (Moore 2000; Rao 2018). Even though the study areas differ (e.g., research has been conducted in Canada, USA, Israel, Europe), all of them help to reveal various important dimensions of rural place attachment in the context of developed countries. These studies are also useful because of their methodology. It was important to find indicators that were already tested and that demonstrate

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potential to contribute to the concept of rural place attachment. While there are regional differences between the case study areas, there was a focus on the methodology of deriving relevant indicators that could explain rural place attachment. Thus, what creates a bond to rural places is compared and how it could be measured with various indicators (Bunkus et al. 2020). In the following, each indicator and its derivation are explained. Starting with the insights of Windsong (2014), who finds in researched rural communes in the US that, since the early settlement of residents in 1960s, the social interactions have decreased while a commitment to the physical environment remained strong. The respondents were asked to describe the environment, and the researcher detected only positive descriptions. Referring to Windsong (2014), we asked the respondents to indicate their *fondness of their home village (RPA1)* on a scale from 1 (very fond) to 5 (not fond at all) using a scale that resembles the common school grades in Germany. The second and third indicator are based on Riger and Lavrakas (1981, p.59) who distinguish between three factors that represent the extent to which a person is settled or rooted in their neighborhood. From these three, we adopted the *duration of residence (RPA2)* as an indicator affecting rural place attachment (Hernández et al. 2007) and the question of whether the rural inhabitant *planned to leave their place of residence in the next 3 years (RPA3)*. According to Casakin et al. (2015) people might be willing to leave should they not succeed in creating a bond to their place of residence. This led to the fourth indicator based on Ngo and Brklacich (2014), who observe how new farmers in Canada attempt to create a sense of place, emphasizing place identity. For this concept an *identity (RPA4)* indicator was also formed. The respondents were asked to name how they identified themselves in terms of place. If the respondents mentioned, for example, a village name, that would mean they associated themselves with the name of their residential village, while broader associations could be Eastern German, German or European, or even names of other places. For example, if a person refers to themselves with names closer to the home village, a stronger place identity for that specific rural area is assumed. This leads to the fifth indicator. In accordance with Moore (2000, p.207), who shows that home transcends the material characteristics of domestic space, an indicator was elaborated by openly asking *what home means (RPA5)*. The answers were clustered according to physical place, social relationship and feeling as well as a combination of these three. It was assumed that respondents have the strongest attachment when they include terms of all three categories. In cases when expressions of two or single categories were named, an order was established: Social relationship, feeling and place were used to measure the relative degree of attachment. This leads to indicator number six. To check whether the respondent is an active member of the community, and thus has a social bond, the indicator of *social engagement of the respondent (RPA6)* was introduced. A direct question on whether they are culturally-socially engaged, accompanied by various examples, was asked to measure this indicator. A similar indicator has been used in a study across the member-states of the European Union about quality of life (Eurofound 2018), where the authors found that civic engagement was higher in the countryside (both Europe-wide). In addition, a seventh indicator was found that's based on Meinen-Dick (2014) and Rao (2018) called *land ownership (RPA7)* and associated with non-farmer rural inhabitants. This agricultural or forestry land might be rented out, but it was important to exclude housing and family gardening property.

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The impact of land ownership can be difficult to analyze when acknowledging that there could be a causality between rural place attachment and land ownership in two directions: One might acquire land after forming rural place attachment, as well as form rural place attachment because of land ownership. Nevertheless, there is a clue about how to handle this problem: Non-farmer residents are restricted from purchasing agricultural land under the German law Real Property Transaction Act (Bundesrepublik Deutschland 1961), and those who own agricultural land mostly inherited it or were formerly farmers. For the purposes of analysis of this work, it is assumed that owning land in the studied villages was likely to cause rural place attachment and not otherwise (Bunkus et al. 2020).

Following the concept of place attachment, the aim of the concept of *rural place attachment* is to highlight the relationship between villagers and their village, trying to better understand the role of their relationship to agriculture.

### 5.2.2 Relationship to agriculture and its conceptualization

Similarly, indicators for measuring the concept of *relationship to agriculture* are based on a combination of factors derived from the literature. However, there is not a dedicated theory particularly dealing with the notion the way it is defined here. In other words, there is no corresponding concept of "relationship to agriculture" as there is for "place attachment" in the scientific literature. Central for this work is the relationship between non-farmer rural inhabitants and locally visible or experienced farm-life or agricultural production processes in broader terms. Thus, the meaning of *relationship to agriculture* is rather derived from exposure of rural inhabitants to agricultural processes. The literature review shows that the *relationship to agriculture* can also be understood in an economic context, for example as employment or expenditures of a household for agricultural products (Hawkins et al. 1993; Nkegbe et al. 2018; Mensah 2017), but also with a social connotation (Obach and Tobin 2014; Migliore et al. 2014; Sumner et al. 2010). A large part of Germany's rural society is neither employed in agriculture nor in their villages, commuting to cities or suburbs instead (Neu 2015). Thus, relationship to agriculture does not only mean, in a narrow sense, being employed in agriculture or having a small home garden, but it also encompasses the sense of a social bond or engagement (Obach and Tobin 2014), or experiencing agriculture and perceiving it in a certain conscious way. In this study, the socioeconomic relationship between farmer and non-farmer inhabitants is integrated. This is also widely analyzed in studies using the concept of embeddedness of food production (Penker 2006; Constance 2017).

Relationship to agriculture, in the way that's meaningful for this work, is also found in relation to "civic agriculture" (Obach and Tobin 2014). Civic agriculture stands as an alternative to profit-oriented large-scale agriculture and comprises locally oriented, small-scale agricultural enterprises. These farms utilize more traditional farming methods and emphasize the importance of direct distribution of agricultural products. Farmers can connect with consumers through farmers' markets (Obach and Tobin 2014), and farm shops also open up agriculture for

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local people. The recently booming organizational form of community-supported agriculture also belongs to the concept of civic agriculture (Obach and Tobin 2014). Migliore et al. (2014) show that agricultural production processes, when embedded in society, could create civic agriculture, thus forming a social relationship to agriculture through insights to the production processes. Furthermore, Obach and Tobin (2014, p.307) found a “higher level of voluntarism and engagement in local politics among civic agriculture participants relative to the general population”. Civic agriculture could thus be regarded as a bridge between villagers and agricultural production, but the consumers or participants of civic agriculture tend to be inhabitants of urban areas engaged with agriculture rather for idealistic reasons such as to reject the capitalistic mode of production (Boddenberg et al. 2017). This is a somewhat different target group than the one that's supposed to be studied in this thesis, namely the rural population. To sum up, there are studies concerning the relationship between civic society and agriculture, but the relationship between rural people and agriculture still lacks a thorough study.

As described above, the concept of relationship to agriculture among rural inhabitants encompasses economic engagement in agriculture as well as social bonds towards farmers and agricultural processes more generally. In the subsequent operationalization of relationship to agriculture, five indicators for its measurement are formed that allow expressing the degree of relationship to agriculture. These indicators were elaborated on based upon literature (Weiß et al. 2013; European Commission 2016; Zander et al. 2013) that provided empirical work on related themes.

A study by Weiß et al. (2013) showed that farmers' engagement could be a connecting point between a village and a farm. Standardized survey data underlines such relationship and the importance of the farm managers' behavior as well. For instance, European citizens are regularly surveyed about their opinion on agricultural policy in the European Union. The latest survey was conducted in 2015 and included questions on the responsibilities of farmers that are perceived as important for society (European Commission 2016). “Supplying the population with a diversity of quality products” was named as important by 42% of the respondents, while “maintaining employment in rural areas” was mentioned by 29%. An answer most related to our research focus “encouraging and improving life in the countryside” was named as a responsibility of farmers by 24% of the respondents (European Commission 2016, p.12). Thus, a first indicator on the *perceived engagement of farmers (RA1)*, which alludes to whether respondents of our survey believe that farmers are engaged in social activities, is included. Mirroring insights from the literature review, economic aspects are included as indicators for engagement in agriculture. The second indicator is derived from whether the respondent is or was *employed in agriculture (RA2)*. Here, in terms of direction of causality, similar to the reasoning related to RPA2 and RPA7, it is proposed that employment in agriculture affects individuals' relationship to agriculture and not the other way around, which leads to the third indicator. The mentioned directive of causality controlled for the awareness of resident farmers by asking the inhabitants to *name up to three farmers (RA3)* in the vicinity, which provided information about the farmers' visibility in the community. Zander et al. (2013) found that

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German citizens have different expectations concerning agriculture depending on their own exposure to agricultural processes. Thus, for a fourth indicator, *how often the interviewee visits a farm (RA4)* was asked. Finally, by asking directly *how important agriculture is for the respondents' village (RA5)*, on a scale from not at all important to very important, the fifth indicator was introduced (Bunkus et al. 2020).

### 5.2.3 Density of resident farmers

Following the two sections above, there is a clear indication that rural inhabitants' relationship to agriculture can be influenced by their possible interactions with farmers.

Farmers do not live evenly distributed over the villages. As has been pointed out, due to its historic development (see chapter three), the contemporary farms of East Germany are often quite large. Borstel (2010) asserts that the collectivization in agriculture during GDR times led to a division of individual homesteads in the village and agricultural production. As traditional structures were eliminated, farmers worked apart from their homestead. Often one large agricultural enterprise, as has become common since GDR times, has its headquarters in one village where most of the social interaction with rural inhabitants is likely to take place, while lands are cropped additional around several villages. This contrasts with a structure that can be observed, for example, in West Germany or occasionally in some areas of East Germany, where agricultural enterprises with individual plots of land are spread across villages more densely. Because these farms are smaller, more farmsteads are spread within the villages (Bunkus et al. 2020). If the density of resident farmers is higher, it can be supposed that it is more likely for rural inhabitants to have interactions with these farmers or with farming businesses in general.

Nevertheless, it needs to be noted that the importance of the agricultural sector and the high employment rates in that sector during the GDR times created a new bond between villages and agriculture. However, this changed significantly after reunification, when about 80% of jobs in agricultural cooperatives were lost due to the withdrawal of centralized funding, and only those that continued to produce were considered important. These disruptions are mentioned as one reason villagers might be discontent (Borstel 2010). Weiß et al. (2013) conduct a study on demographic change in East Germany, including aspects of farmers' engagement in the rural community. In general, Weiß et al. (2013) count farm enterprises' engagement as communal engagement and, thus, see from the perspective of the agricultural producer many bonds between the village and the farm. To explore the effects from contrasting structural settings, the sampling of the villages for this study was purposefully selected: Villages with a higher and lower density of resident farmers were considered.

This leads towards the ambivalence of naming resident farmers: On the one hand, due to centralization, their headquarters were not necessarily located in every village. On the other hand, because of the history of peasant labor, numerous people worked on large farms, but could not necessarily be called "farmers". For this thesis, *farmers* are considered as persons who have a leading role in the farm enterprise. This can be the main owner or a farm manager, while farm

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workers were not considered as farmers. To qualify as a *resident* farmer, farmers were considered who either lived or had the headquarters of a farming enterprise in the selected villages. Furthermore, their farms needed to cultivate a respective part of their land in the village district area (in German: Gemarkung) or adjacent to it. Furthermore, only full-time agricultural enterprises with agricultural land under production greater than 100 hectares were considered for the analysis of this chapter. It was assumed that a certain size was needed to become "visible" to the non-farm rural inhabitants (Bunkus et al. 2020).

### 5.3 Analytical approach and specifications of the Structural Equation Model

Now the three important components for the Structural Equation Model are introduced. To understand how *relationship to agriculture* is related to *rural place attachment*, these two concepts can be quantified and operationalized. At the same time, the effects from *density of resident farmers* on these two concepts can be regarded. A corresponding model is thus set up for testing its ability to show correlations among them.

Based on two relative parameters of density, that is number of resident farmers versus total agricultural area and number of resident farmers versus total number of rural inhabitants, it could be identified that village 1 can be seen as one with a clearly higher density of resident farmers compared to the other three. At the same time, having all four villages from the same federal state ensures that they experienced a very similar historical background of agricultural and social transition from the former GDR. Thus, the agricultural structural change may differ locally, but overall, there are similarities.

The analysis at hand combines data from the structured survey with rural inhabitants and semi-structured interviews with farmers. The focus is on the quantitative data analysis, but insights from qualitative data analysis were used to validate some indicators and the model's conceptual set-up.

The two concepts *relationship to agriculture* and *rural place attachment* are explored as "building blocks of theory" (Bryman 2012, p.163). Both are latent variables that cannot be observed directly. One way to account for effects of latent variables is to develop observable indicators that can be better measured. The analysis at hand employs seven and five indicators accordingly to operationalize the two concepts, as described in the previous section<sup>31</sup>. At the same time, it is aimed at understanding not only the direct but also indirect effect from the density of resident farmers on rural place attachment. Using an indirect effect helps to see whether density of resident farmers contributes to forming place attachment through its influence on relationship to agriculture by non-farmer rural inhabitants. For the analysis of such complex, or so-called mediated, interactions, where the effect of one variable can be seen in its

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<sup>31</sup> Hair et al. (2010) suggest at least three indicators.

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effect through another variable, an early version of a Structural Equation Model (SEM) was adopted. The SEM is a relatively novel approach in social-ecological research, particularly aimed at capturing social interactions in an agricultural context (Stofferahn et al. 1991; Welsh 2009; Pambo et al. 2008). The application of an SEM as an analytical method seems particularly appropriate for the case at hand, as it integrates a number of multivariate techniques into one model fitting framework. It includes a measurement of concepts, factor (latent variable) analysis, path analysis, regression, and simultaneous equations (see for example Byrne (2010) and Doering et al. (2016)). Nevertheless, the purpose of the model here is not to reach conclusive results on the questions at hand, but to initiate a discussion and demonstrate a way to start disentangling the complex social interactions in an agricultural context using a SEM (Bunkus et al. 2020).

The complex interrelationships are conceptualized in a hypothesized SEM graphically (see Figure 3 in chapter 2.2). "Rural place attachment" is a structural component of the SEM and its measurement component consists of the indicators from RPA 1 to RPA 7. The error terms (e) include the information that cannot be explained by the model. "Relationship to agriculture" is another structural component of the SEM, with RA 1 to RA 5 being the measurement indicators. The independent variable in this model, density of resident farmers, classifies the rural inhabitants according to their villages into ones with a high or low density of resident farmers accordingly. The information about density is recoded into an ordinal variable to fit the capabilities of the statistical packages (SPSS 23 and AMOS 23) used in this research, where village 1 corresponds to 5 (a high density of resident farmers) and each of the other three is 1 (low density of resident farmers). Similar recoding is implemented for RPA7 and RA2 (see original questions in Table 10). Overall, dealing with dichotomous variables can be seen as a challenge as well as an opportunity of working with SEM (e.g. in a large sample with two groups of comparable size, the issue with the dichotomous variable could be addressed through calculating a separate model for each of the groups). In Figure 3, circles represent latent variables and rectangles represent measure variables (Bunkus et al. 2020); figure 11 shows the model with values from the analysis.

In the following Table 10, the questions used to derive indicators for both concepts, the sets of answers, and their codes for the model calculation are displayed.

Table 10: List of indicators to measure rural place attachment (RPA) and relationship to agriculture (RA), with answers recoded into an ordinal scale from 1 (weakest indication) to 5 (strongest indication). Source: Bunkus et al. (2020).

Indicator	Question	Answers	Re-coded
<i>Rural place attachment (RPA)</i>			
<b>RPA1</b>	How fond are you of living in this village?	not at all not so much neither like nor dislike quite a lot very much	1 2 3 4 5
<b>RPA2</b>	What is the duration of your residence in this	less than 1 year 1-5 years	1 2



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	village?	6-10 years 11-25 years more than 25 years	3 4 5
<b>RPA3</b>	Would you like to stay in this village over the next 3 years?	no rather not not sure rather yes yes	1 2 3 4 5
<b>RPA4</b>	How would you identify yourself in terms of place?	answer matches "beyond country level" answer matches "on the country level (e.g. German)" answer matches "on the regional level" answer matches "on the district level" answer matches "on the village level"	1 2 3 4 5
<b>RPA5</b>	What does "home" mean to you in terms of place?	claims it is not related to "place" answer contains "feeling" only answer contains "feeling and relationship" or "relationship" answer contains "place" or "place and feeling" or "place and relationship" answer contains "place, feeling and relationship"	1 2 3 4 5
<b>RPA6</b>	Would you consider yourself as socially engaged?	no rather no neither no nor yes rather yes yes	1 2 3 4 5
<b>RPA7</b>	Do you own land in this village?	no yes	1 5
<i>Relationship to agriculture (RA)</i>			
<b>RA1</b>	Would you consider farmers in this village as socially engaged?	no rather not neither engaged nor disengaged rather yes yes	1 2 3 4 5
<b>RA2</b>	Are you currently employed or were you employed in the past in agriculture?	no yes, in the past yes, currently employed in agriculture	1 4 5
<b>RA3</b>	How many farmers from your village do you know by name?	I don't know any farmer I know a farmer or farmers but can't remember the name I know one farmer I know two farmers I know three farmers	1 2 3 4 5
<b>RA4</b>	Which of these represents best for how often you visit a farm in your village?	never annually monthly weekly daily	1 2 3 4 5
<b>RA5</b>	In your opinion, how important is agriculture for your village?	not at all important relatively unimportant neither important nor unimportant relatively important very important	1 2 3 4 5

There are two further procedures that are recommended before discussing the empirical results of the model, namely internal reliability of multiple-indicator measures and model fit. Bearing in mind that the sample at hand, although it represents real empirical data, is limited and non-probabilistic, testing for internal reliability for multiple-indicator measures ensures coherence among the used indicators. A reliability test shows that although it would be needed to re-visit the items measuring *rural place attachment* (Cronbach's alpha  $\alpha = 0.489$ ), there is evidence of internal reliability close to the recommended threshold in the construct *relationship to agriculture* ( $\alpha = 0.607$ ; (Nunnally 1967)). Hence, it can be used in similar contexts, as no context-

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specific scales yet exist in the literature. In this sense, this study provides a proof of concept for the usefulness of the SEM application for the data at hand (Bunkus et al. 2020).

The results demonstrate an acceptable model fit. Maximum likelihood parameter estimation was chosen as an estimation method without removing any observations. Depending on whether the data are normally distributed or not, the researcher might make decisions as to the method of the estimation (e.g. see Gao et al. (2008) for a detailed discussion of the advantages and disadvantages of various strategies). In this model at hand, the model fit is acceptable, as can be seen in the root mean square error of approximation (RMSEA)=0.074 (general rule being  $RMSEA < 0.06$  to  $0.08$  for acceptable fit) and chi-square/degrees of freedom < 5 (see e.g. Schreiber et al. (2006)), although two other indices of model fit (TLI=0.583, CFI=0.711) are below recommended thresholds (recommended  $TLI \geq 0.95$  or  $0 > TLI > 1$  for acceptance and  $CFI \geq 0.95$  for acceptance). Post-hoc modifications of the model were not conducted because of a rather small sample and a demonstrative purpose of this SEM example, but it should be noted that the SEM allows such modifications by reorganizing the relationships and indicators (Bunkus et al. 2020).

### 5.4 Key factors of residency and its limitations

What is the relevance of residency for the outcomes of this analysis? As noted in the previous section, a particular advantage of using SEM is that it allows testing for both direct and indirect effects of independent variables. While density of resident farmers can directly affect rural place attachment, it was assumed beforehand that it would also have an indirect effect through its impact on relationship to agriculture. This is particularly important in this example, where analysis of both direct and indirect effects is relevant (Bunkus et al. 2020).

Figure 11 illustrates the results of the analysis with from the SEM. First, looking at direct effects, it can be seen that relationship to agriculture was predictive of stronger rural place attachment (standardized coefficient=0.05) (standard error=0.02,  $R^2=0.27$ ), and higher density of resident farmers was predictive of stronger relationship to agriculture (standardized coefficient=0.31, standard error=0.05,  $R^2=0.22$ ). These are in line with the previous assumptions. However, what can seem a somewhat surprising finding is that density of resident farmers had a direct negative effect on rural place attachment (standardized coefficient=-0.32). Although this result seems contrary to the findings by Walker and Ryan (2008), who confirm a positive correlation between social engagement and place attachment, the result is also in line with their findings in that it highlights the importance of quality of interaction. For this analysis it was assumed that inhabitants' relationship to agriculture was influenced by possible interactions with farmers. The result indicates that this relationship might be affected by both quantity and quality of interactions. The quality of interaction, and not only the quantitative aspect reflected in density of farmers, may influence the image of agriculture and rural areas associated with agriculture. Also, in the interviews with farmers, most farmers stated that it was quite important to them to make a positive impression on the non-farmer inhabitants, as they were aware of a generally unattractive image of agriculture. That in turn seems to be in line with recent findings on

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farmers' social engagement by Weiß et al. (2013), who, in the example of Saxony-Anhalt, found that farmers often took over public services in the community. According to them, farmers are indeed quite active, yet most of the services they take over seem to be of technical nature (e.g. cleaning the streets, fire services, transportation services, disaster prevention), emphasizing the need to assess the interactions between farmers and non-farmer residents not only with a quantitative approach, but also qualitatively (Bunkus et al. 2020).

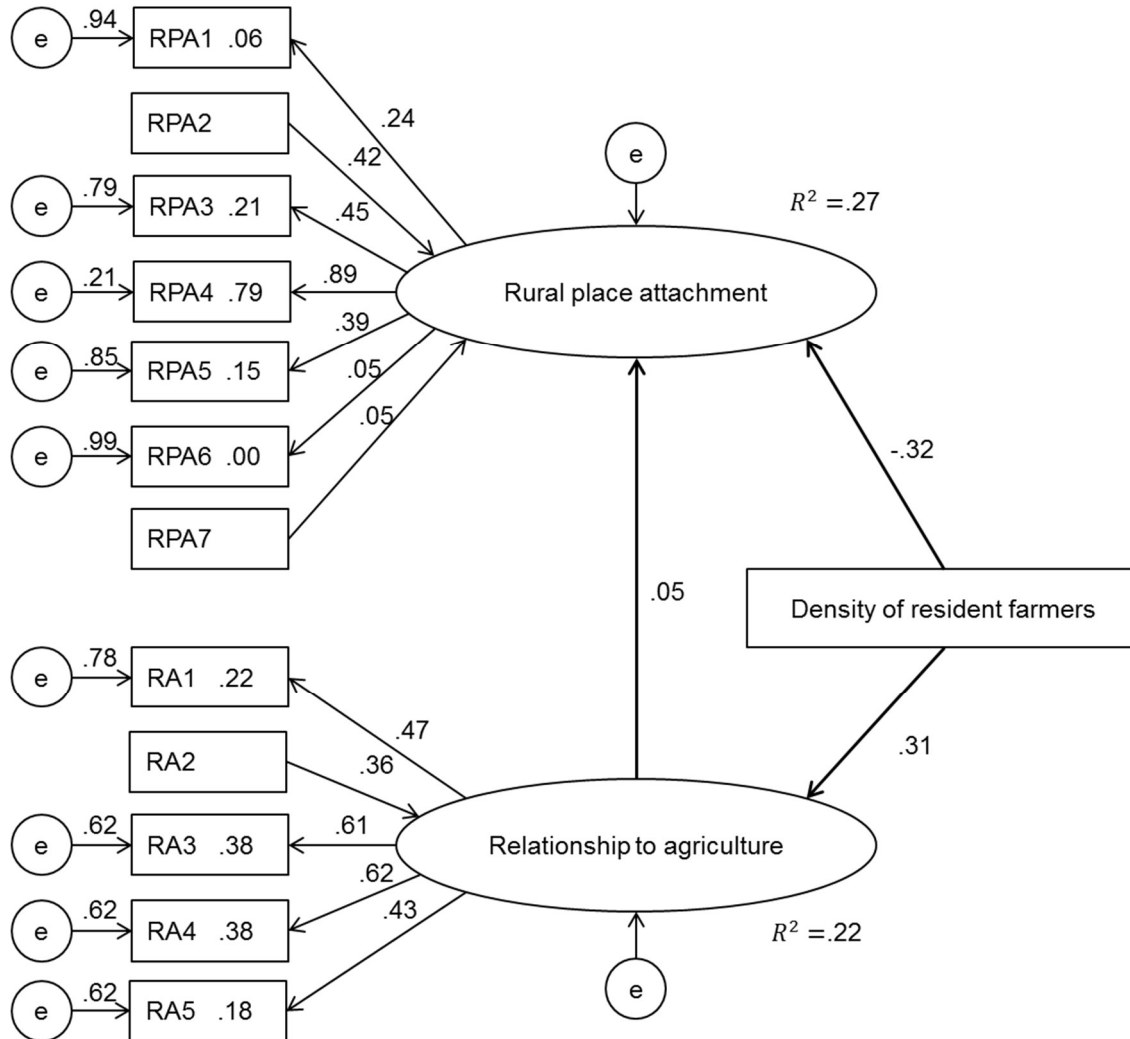


Figure 11: Results for the Structural Equation Model. Source: Bunkus et al. (2020) based on SEM results. Note: TLI = 0.583; CFI = 0.711; RMSEA = 0.074; chi-square = 107.281; degrees of freedom = 63; e=error. Indirect effect from density of resident farmers on rural place attachment = 0.01 (standardized coefficient).

Second, only by looking at indirect effects it can be revealed that density of resident farmers has a positive effect on rural place attachment through its impact on relationship to agriculture. In the case at hand, this is reflected in the positive standardized coefficient of 0.01. This is a strong indication that farm presence and rural place attachment are positively correlated, although the relationship is not straightforward. This is perhaps because the number of factors affecting rural

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place attachment, which was used as a proxy to rural vitality actively debated by policymakers (Landesregierung Sachsen-Anhalt 2010; MULE 2015, 2018), might be considerably broader than just density of farmers. The positive effect of density of farmers could be captured only through a mediating variable, another broader construct of relationship to agriculture in the case at hand. Thus, this analysis reveals that the construct *relationship to agriculture* can be seen as the missing link that allows for a better understanding of the effects of farm presence on rural vitality. This shows that the density of farmers is likely to affect the image of non-farmer inhabitants about agriculture first, which then influences their perception about rural place. Once again this makes the quality of interaction between farmers and non-farmer residents important for whether non-farmer rural inhabitants feel more attached to a rural place as a result of more interaction with farmers. This finding also highlights how complex perception about agriculture can be. Relationship to agriculture can be influenced by a wide range of factors, not only direct social interactions with farmers and awareness about agricultural processes as included in the model, but also additional factors such as particularly outstanding aesthetics of farms or particularly positive or negative experiences a respondent might have had. Besides, perceptions are also formed by how the agricultural sector is currently presented in the media, which the used model does not capture. All of these points support the notion that there is a need for a more in-depth qualitative understanding of relationships between farmers and non-farmer rural inhabitants, as well as whether and how the density of farmers affects this quality of interaction (Bunkus et al. 2020).

While looking at the quantity of resident farmers, clearly also the quality of the interaction with them and the rural population needs to be considered. Insights from the interviews with farmers show that the quality of interaction might vary from farmer to farmer. First of all, the interviewed farmers themselves reported a varying degree of social engagement; for example, about two-thirds of them reported being very active through their participation in local clubs (e.g. sports, fishing, hunting, clubs dedicated to local traditions, etc.) or gatherings at local churches. About one-third did not report being so active beyond their work in agriculture. In addition, it could also be observed during the interviews that farmers' personalities might play a role in the quality of interactions with other rural people. The conducted interviews usually lasted for about one hour, where it was possible to get a glimpse on how outgoing and welcoming the farmers were. For example, this was seen in how they answered a request for an interview from someone unknown, but also in their reactions to issues that in a way put their activities under scrutiny. While this is not sufficient for making a conclusive statement on the effects of their personalities, it is probably safe to assume that personal characteristics do influence the quality of interactions. Further, perceptions on the desirable quality of interaction seem to vary on the farmers' side, too. Some farmers, for example, seemed content with the monetary contribution they make through their donations in the village, while others seemed to place importance on personal interaction with neighbors or fellow villagers overall (Bunkus et al. 2020). About half of the interviewed farmers reported to have cooperated with kindergartens or schools to provide insights to agriculture for educational purposes, which indicates that they were keen to show their work (and also somehow their world) to others.

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Coming back to the data analysis, regression weights of individual relationships in the model showed that if the density of farmers went up by one unit, the strength of relationship to agriculture likewise went up by 0.133. This can be used to show further indication that relationship to agriculture is affected by farm presence, which weakens if land concentration increases. This finding shows to be very relevant to the current political debate on the role of distribution of land ownership and with that farmsteads resp. headquarters or active resident farmers in the villages. One of the topics of current political debate within the agricultural sector in Germany revolves around this very subject with some government attempts to refine laws and regulations concerning agricultural land ownership and tenancy transfers (MULE 2015; Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015). The debated changes are about whether and to what extent non-agricultural and non-regional capital-strong investors should be prevented from buying agricultural land, leaving the preferential right in the hands of (regional) farmers. Changes in the legislation (GrdsVG) have been largely debated at the federal state level. Lower Saxony, for instance, plans to pass a law to regulate the rental market (Deter 2016), while the former government of Saxony-Anhalt saw a broader distribution of landownership as a basis for rural vitality as well as a strengthened role of farmers (MULE 2015). These processes were ongoing during the interviews, namely the government has not been able to pass the new law, however, most of the issues related to socio-economic and policy-institutional consequences of regulating the agricultural land market remain. Discussing these ongoing-political issues were not part of the used questionnaire, but nevertheless the topic came up during the interviews. Some farmers discussed this question with the researcher, and most of them expressed clear dissatisfaction about the idea that the state could adopt more regulations and introduce a limit on the amount of owned land. This illustrates an interesting case of ongoing struggles in political framing and resistance related to agricultural change and rural development. Initially, one reason of the government to draft the law was to strengthen local farming. The process showed that certain groups of farmers turned out to be the main and powerful enough group that resists such a reform (Bunkus et al. 2020).

The next step is to see how the results fit with existing literature. Findings of using SEMs for analysis of the collected empirical data seem to be in line with the earlier studies concerning industrialization of agriculture, such as increases in large-scale farming. For example, a seminal review of 51 empirical studies of community effects from industrialized farming by Lobao and Stofferahn (2008) demonstrates that industrialized farming can lead to deterioration of socioeconomic well-being (e.g. lower incomes, higher unemployment rates); social fabric (e.g. declining populations; increased inequality; lower civic participation and quality of local governance); and environment (depletion of resources and pollution). Similarly, Pedrolí et al. (2016) discussed how rural practices of industrialized agriculture can become disconnected from their affected communities, accompanied by a loss in landscape diversity. This study using the model at hand complements these discussions by revealing how rural inhabitants' perceptions can be affected by these trends of industrialization and urbanization, and how non-farmer residents' perception of agriculture might push them further away from agricultural

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processes. Even though rural inhabitants claimed that agriculture was important for their village, only few (36%) of the interviewed rural inhabitants actually visited a farm more often than once a year, while 39% of them reported that they'd never visited a farm, and only about half of the respondents (55.1%) could name two or three regional farmers. Farmers, on the other hand, while aware of the decreasing social role of agriculture in rural areas, seem to be in favor of less state involvement, although there's the aim to change structures towards a broader distribution of land ownership and less concentration of land ownerships and tenancy. This explains the vicious cycle in the ongoing processes between agriculture as a sector and human perceptions towards this sector at least to some degree. Less exposure to agriculture results in a declining perceived importance of agriculture, which in turn prevents agriculture from attracting new employees or the attention of the broader population, thereby leading to a declining understanding of agricultural processes (Bunkus et al. 2020).

### 5.5 Concluding remarks

Even though the results have their limitations, such as, for example, the data being collected from just four villages amongst all villages in Saxony-Anhalt, the findings point towards pressing questions in contemporary agriculture. Although the farmers' presence and density is increasingly debated in the policy arena, particularly in relation to rural vitality, studies demonstrating and measuring its effects remain scarce in the literature. This concerns both the direct effects of forming a specific relationship with agriculture among the non-farming rural population as well as the indirect effects on forming a bond with a rural place. This analysis should also contribute to filling this gap. It can be concluded that the presence of agriculture is indeed diminishing in today's society: It provides only a small percentage of jobs, and the number of visible farms that can provide exposure to agricultural processes is continuously decreasing. Thus, it is hypothesized that the exposure to agricultural processes, whether it is a direct involvement with farm activities or through interaction with farmers and visual appreciation of farming processes of all kinds, influences rural inhabitants' relationship to agriculture. This analysis found that the latter indeed played a role in how far inhabitants were attached to their place, and more specifically, their perceived rural place. The rural place today is still associated largely, although decreasingly, with agriculture. Therefore, it was investigated how these complex social interactions between farmers and rural inhabitants, both observable and unobservable, interacted with each other and offered an initial test of the theoretical constructs using a structural equation model (SEM). The SEM described here is not without its own challenges such as the selection of latent variables, observable indicators, and hypothesized causal relationships. Yet it proved to be advantageous, particularly in measuring latent constructs and disentangling complex interactions among variables. Clearly, further research with comparable data is needed to improve the model and theoretical understanding presented here. While the construct *relationship to agriculture* as suggested seems to have a fairly satisfactory internal reliability among its indicators, the construct *rural place attachment* appears to require a much broader set of indicators capable of capturing its effects. Overall, the analysis shows that agricultural structural change and rural development are connected, and

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density of resident farms, or more generally farm structure, plays a role in shaping development processes in rural areas (Bunkus et al. 2020).

The focus of this chapter's analysis was to connect both the qualitative as well as the quantitative data in a complex analysis with a suitable model to shed light on the interrelationships between a rural population and farmers. The data analysis raises further questions about the *quality* of the interaction and what is done by the people involved to achieve it. Therefore, the next chapter focuses on this question.

## 6 The Role of Farmers for their Village

Today's rural society is influenced by agricultural structural change (Becker and Tuitjer 2016). Agricultural structural change means a long-term transformation of "farm units, farm size, people employed in the agricultural sector and structurally-induced changes in cropping-patterns and land use" (Bunkus and Theesfeld 2018, p.7). In the western World, including Europe, we experience an agricultural structural change where farms become larger, but at the same time the number of employees in agriculture declines. With the number of workplaces in agriculture diminishing (World Bank 2018), rural inhabitants often have to commute to work (Neu 2015). There are fewer farmsteads in the villages, and there is a tendency towards rural-urban migration while at the same time, people from the cities discover villages as a place for living, and rural areas experience an ongoing urban sprawl (Becker and Tuitjer 2016; Neu 2015). What role does farming play in today's rural society? Laschewski et al. (2019a) have applied theories from rural sociology to the post-modern village: Spatial references is replaced by social constructions of place; mobility becomes more important, and it becomes socially relevant that many villagers are temporally absent and work outside the village. This influences the village, and society, for example, becomes more heterogeneous concerning social groups. Agriculture was not described in detail, but the authors gave the example that agricultural field work was done by a seasonable workforce. Hence, agriculture is only one of many factors which define rurality in today's villages.

This development can also be placed in an international context: Studies have shown that agricultural structural change and its influences on villages, like rural-urban migration and diminishing jobs in agriculture, is not limited to Germany, but has also occurred, for example, in Europe (Franco and Saturnino 2013) and North America (Moroney and Castellano 2018). This affirms that the economic and cultural role of agriculture for today's villages is in question. Galdeano-Gomez et al. (2011, p.56) have observed that, for the European Union, "agriculture remains a strategically significant policy sector and is the major force determining the rural development". The authors emphasize that the European rural development policy has aimed to diversify economic activities and lifestyles. Thus, agriculture is regarded as significant, but at the same time its dominant position for rural areas is declining. Baldock et al. (2001) elaborate on the difference between agrarian and rural development, questioning the impact of agriculture on rural areas. In a society characterized by agriculture, farmers' interests are the same as rural interests, and rural areas depend economically and socially on farming activities. In contrast, in a rural development which is not dominated by farming, local actors represent various interests. Farmers are driven by competitiveness and do not necessarily shape vital rural areas. Studies from developing countries have indicated that communities characterized by agriculture were unsettled by economic changes in their system, namely investors who bought large areas of land (Borras Jr. et al. 2011; Margulis et al. 2013; Kuusaana and Gerber 2015). While investments can bring a positive notion to poor regions, those investments were not necessarily embedded in the communities and the local farmers were not the driver for those developments. Thus, local farmers did not have the power to shape rural areas but lost a decisive amount of this ability to



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the new landowners. There are studies that have researched agricultural structural changes and the role of large-scale land acquisition in western countries or Russia (Visser et al. 2012; Constantin et al. 2017; Visser and Spoor 2011; van der Ploeg et al. 2015; Kay et al. 2015). Their questions pertained to the farmers' situation in developed countries. What is the local farmers' ability to enrich village life? How much are the farmers willing to engage socially? The study at hand aimed to research farmers as actors in their community.

The changing role of agriculture for rural society supposedly has an impact on the village as well as on the farmers. They face rural inhabitants not experienced with agricultural processes, and they have to find employees in regions with outmigration (Weiß et al. 2013). The farmers and farm managers might also come from outside the region and are not necessarily rooted in the village (Tietz 2015; Emmann et al. 2015). This is connected to land prices and access to the land market, hence farmers or businessmen with suitable capital at hand are more likely to buy land, as a trend to larger farms emerges (Deininger and Byerlee 2011; Banski 2011). Especially in Germany, the question of restitution and other topics relating to Unification are connected to the fact that agricultural landowners often do not stem from the region (Forstner and Tietz 2013).

### 6.1 Scope and research questions for content analysis

This subchapter explores how the case study conducted for this dissertation serves as a source for exploring the role of farmers for their village. The relationship between a farmer and their adjacent village, including its inhabitants, is explored and the topic of landownership examined. It is of interest to find out how farmers actually acquire their land.

This means that the analysis, which consist of 14 interviews, also includes an interview with a farmer who maintained his business as a side project while he held a main job as a farm manager outside the research area. One interview that is included was with a farmer of an enterprise which comprised only 40 ha that was actually a full-time business with a specialization in direct marketing.

This analysis only includes farmers who were active in the research area. Therefore, two interview partners were excluded from the interview analysis in this chapter, as one of them gave up his farm previous to the interview and the other one had her business outside of the research area. But as the two excluded interview partners were closely connected to the researched villages, it was unknown before the interview that they might not fit into the research design. In Table 14 of the following section 6.2.1 a table depicts information about the 14 farms that are included in the study.

While the East German land market has become more and more interesting for investors in the last 10 years, which can be seen via the rise of average purchase value of agricultural land (Tietz 2018; Forstner et al. 2011), in the research area large-scale land acquisitions by non-agricultural investors did not take place during the study or were not detectable at least. Emmann et al.

(2015) asked farmers in Germany about their definitions of farmland investors. 87.5 % of the interviewed farmers said that capital investors (e.g. investment funds, land funds, holding companies, etc.) were non-agricultural investors, followed by wealthy private individuals without agricultural backgrounds, and completely unrelated entrepreneurs. The respondents were asked to assess the proportion of agricultural land in their region that was already owned by non-agricultural investors. The respondents from East Germany estimated a proportion of 21.7% in contrast to the average 14.8% of all regions. This leads to the question of whether the farmers interviewed during the field study for this dissertation were farmland investors.

The aim of the study was to find out about the relationship between the farmer and the village where he or she lived and also had their farm. Another aim was to discover the farmers' strategies for land acquisition and how they founded their businesses. The research agenda thus consisted of a multiplicity of topics, and the study required elaborate answers from farmers. The study is unique in its exploration of the land market in relation to the social aspects of the inhabitants and the community. Various literature has focused on the land market without connecting it to the farmers' or the rural inhabitants' social needs (Balmann 2015; Odening and Hüttel 2018; Böhme 2016), but this is also due to the choice of focusing on the economic side of land transactions. In contrast, there are various studies that have connected a social perspective to the land market concerning *land grabbing* in developing countries, which is of course more transforming than large-scale land transactions in East Germany (Von Braun and Meinzen-Dick 2009; Boamah and Overå 2016; Moreda 2017).

According to the method for the interview analysis elaborated on in detail in chapter 2.2, the interview analysis follows the seven steps for inductive category assignment (see Table 2). According to Mayring's (2014) first step, the material<sup>32</sup> was analyzed corresponding to the research questions which stood behind the formulation of the interview guideline. The three main research topics are elaborated on in the following section.

### **6.1.1 How is land actually acquired by farmers (in Germany)?**

Data about land ownership in Germany is not centrally retrievable yet but is available from each responsible land registry<sup>33</sup>. Nevertheless, the land registry is in the process of going electronic (Amtsgericht Braunschweig 2019). Data about land purchases is gathered by the responsible authorities since land sales need to be approved by notaries who have the duty to forward all contracts of purchases. Data about purchase values is published annually by the statistical offices of the German federal states (Tietz 2018). In contrast, data about sellers is more difficult to find. Tietz (2015), for example, worked with data from selected rural districts<sup>34</sup> of federal states in East Germany when he tried to estimate the amount of agricultural enterprises that operate as a limited liability company. The data stem from several databases as well as the respective governments of the federal states. Tietz (2018) writes about the lack of data on the

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<sup>32</sup> The material includes all collected data from the interviews.

<sup>33</sup> In German: Grundbuchamt

<sup>34</sup> In German: Landkreise

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German lease market. The most important source is the triennial agrarian structure survey, which was published by the Federal Office of Statistics. New data is also only published on a rural district scale every 10 years. In this process, farmers are asked about their leases. Nevertheless, farmers are not sanctioned if they do not register their transactions.

The undersecretary<sup>35</sup> of the German Ministry of Agriculture Jungehülsing (2018) elaborated on the non-transparency of the land market and claimed that about 20-50% of land sales cannot be recorded because they are share deals<sup>36</sup>, about 75% of the lease agreements cannot be controlled, and only around 5% of land purchases to investors could be prevented by using preemption.

Thus, it is interesting to learn about ways in which land is acquired outside of public sales or auctions, and to get information about the private rental market. This is hence why the question of how land is actually acquired by farmers (in Germany) is of an explorative nature.

Farmers often do not farm only their own land and there are several reasons why farmers give up farming, but subsequently do not want to sell their land. Grubbström and Eriksson (2018) have explained that retired farmers often stick to their land for emotional reasons, or because they do not find a suitable successor. In East Germany there are more reasons for land leases, because GDR expropriation and collectivization led to a redistribution of landownership (Martens 2010; Laschewski 2009). Nevertheless, data about land leases shows that about 58.5% of farmland was leased with a buoyancy in the countries of former West Germany (54.1% in 2016 compared to 52.7% in 2010) in comparison to East Germany (67.6% in 2016 compared to 74.1% in 2010) (BMEL 2017). This means that there are dynamics on the land market, but it also shows that farmers often lease a certain amount of their land. It is of interest to find out about the specifics of leases and landownership in East Germany; therefore, the first research question is to find out how the interviewed farmers acquired their land.

### **6.1.2 What role does a farmer's social engagement play? Also with regards to land acquisition?**

Tenancy necessarily implies not only the relationship between a lessor and the land, but also that of the landowner and a tenant. Leonhardt et al. (2019) show that lessors cared for their land, and that leasehold did not influence crop choice. Interestingly, they found out that personal relationships between the lessor and the owner were beneficial for soil conservation behavior. A study from Denmark indicates that "relations among landowners had become weaker and fewer with the social changes in the study area. Specifically, the use of renters and contractors for help and services had decreased mutual exchange relations between neighbors" (Richardt 2016, p.120). Thus, also community engagement and neighborly help play a role for interpersonal relationships between landlords and lessors.

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<sup>35</sup> In German: Ministerialrat

<sup>36</sup> Definition of share deals taken from chapter 3: "If not the land itself is sold (asset deal), but parts of a company are sold to a new owner (share deal), they could include agricultural landownership and thus land can be sold to a non-local non-agricultural investor. These deals are not even recorded by the agricultural administration (Tietz 2015)."

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One link between farmer and tenant may be the social life within the village, provided that the landowner lives in the same village or shares a community. Weiß et al. (2013) show that farmers often take over multiple tasks in a village, ranging from neighborly help to municipal tasks. Moreover, Chatalova and Wolz (2019) describe how smaller agricultural enterprises help more in an immaterial way like voluntary work, while larger enterprises often make financial contributions. This leads to the question about the extent of a farmer's social engagement. What role does the farmer's social engagement play in the village? This also concerns land acquisition, because both the landlord and tenant(s) could likely be both active members of civil society. As an indicator of their relationship, the farmers and farm managers were asked during the interviews if they knew their tenants in person. Of course, these questions are interlinked with a farmer's land acquisition for buying purposes.

The hypothesis is that farmers are socially active in their villages, but their motivation needs to be analyzed. Therefore, the interviews from the case study at hand were analyzed with regards to the social efforts of farmers in Saxony-Anhalt.

### 6.1.3 What is the relationship of farmers towards the village?

The third question for the analysis of the interviews in this study refers to a farmer's relationship towards the village in the sense of a farmer's connectedness. While the analysis concerning the tenant-lessor situation tries to determine the amount of social engagement of a farmer, this point of the analysis is interested in understanding the motives and enjoyment of living in a certain rural community. Does the farmer feel at home in the village? There are several studies that show how farmers try to involve themselves within their communities (Weiß et al. 2013; Kaska 2011; Grubbström and Eriksson 2018; Preissel et al. 2017) and about their relationship towards their land (Gunnoe 2014; Rao 2018). As a next step, the aim of the analysis is to find out how the farmer *feels* towards their community. What is the relationship of the farmer towards the village?

### 6.1.4 Further analysis

The three main research questions had to be transformed into a category system (Mayring 2014). The questions helped to deduce six different main categories (step 2), namely: about the farm, background of interviewee, relationship to the village, landownership, tenancy including relationship to tenant, and experiences with farmland investors.

If there are passages of the interviews which could be allocated to more than one category, they are marked in both. It was not the aim to separate the content of the transcripts as well as possible, but to find insights for answering the initial research questions. The categories are listed in Table 11.

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Table 11: Explanation of categories. Source: Author's compilation.

<b>Category</b>	<b>Description</b>
<b>About the farm</b>	Descriptive data about the age and size of company, also how the farm enterprise was established
<b>Background of the interviewee</b>	Does the interviewee have a background in agriculture, what was his or her education, did the interviewee grow up in the region
<b>Relationship to village</b>	Number of local employees, social engagement of farmer
<b>Landownership</b>	Plot size and how the land was acquired
<b>Leasehold</b>	Plot size and relationship to tenants, contract duration
<b>Investors</b>	Experiences with farmland investors

These categories are of descriptive nature, and there are subcategories which are more closely related to the research questions. All these categories also consist of subcategories, which were refined during the process of coding. The relationships between farmer and tenant, for example, are subsumed as part of the category "leasehold". The subcategories of "leasehold" are "acquisition of leased land and term of lease", "relationship to tenants" and "information about tenants". In order to answer the questions in 2 (What role does a farmer's social engagement play? Also with regards to land acquisition?), the information about "acquisition of leased land" is employed. For example, an interviewee reported that after he became more familiar with the village, residents started to offer their land for lease to the new farmer. To manage these practical challenges, a coding guide has been created (step 3), as presented in Table 12.

While during the process of revision (step 4 and 5) the description of categories remained relatively similar to those formulated at the beginning, in particular the fine-tuned names of categories and sub-categories changed during the process. An excerpt from the coding guide, as used in step 6 (final work through), is illustrated in Table 12. The anchor examples were anonymized. The example in Table 13 shows how information about the farm enterprise was extracted. The information gained about the foundation of the farm enterprise helps to clarify under which circumstances the farm was founded. This helps to answer research question 1 (How is land actually acquired by farmers (in Germany)?) as it mirrors the first acquisition. Moreover, the information also touches research question 3 (What is the relation of the farmer towards the village?) because the answer also concerns the roots of the farmer in the region.

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Table 12: Excerpt from coding guide. Source: Author's own survey. Table based on Mayring (2014).

Category	Definition	Anchor example	Coding rules
<b>About the farm (blue marked)</b>			
<b>Information about the foundation of the farm enterprise</b>	All text passages in which the interviewee describes how the agricultural enterprise was acquired.	The farm manager is his father. He is a resettled farmer ("Wiedereinrichter"), but they only had a few hectares in his family before collectivization. These were separated from the former local agricultural cooperative (LPG) after reunification.	Circumstances that have led to the acquisition of land ownership and the establishment of the operational structure. Not included: Number and exact acquisition of hectares of land ownership.
<b>Information about branches of the company</b>	All references in the text to farm managers, farm branches, etc.	Main business. Pure arable farm. Photovoltaic system on barn.	All descriptive data about the farm enterprise. Not: Number and exact acquisition of hectares of land ownership. Not: Number of employees.

Further challenges during the interview analysis came up when information could not be allocated clearly to the categories. For example, it seems evident that the history of a farm could be closely connected to the interviewee's family, but this is more likely to be the case with a family farm (sole proprietorship, often legal form of natural persons) and not with an agricultural cooperative (mostly in the legal form of legal persons). Therefore, there are statements which could be connected to different sub-categories. Mayring (2014) referred to these kinds of difficulties by employing the process of revision (step 5). Another difficulty which came up during the interview analysis were inconsistencies or a lack of data. It was possible that an interviewee did not want to talk about certain aspects of their life or business, or that a fact got lost during the conversation. Therefore, there is missing data for the analysis of some of the answers. This does not touch every category.

Mayring (2014, p.98) has called the last step (7) analysis, where "the result [...] is at first the distributions of categories per recording unit. [...] frequencies of assigned categories over all recording units [...] can be analyzed statistically." He suggests using the collected information for statistical outcomes. For the analysis at hand, only simple statistical measures (e.g. percentages of answers according to interview partners) are used. The number of interviews did not seem to include enough evidence to make calculations. Nevertheless, the method of deductive category formation enabled the structuring of the material well enough to find results in the material. This is in line with the idea of Mayring (2014) to use this method for structuring. In the following section, the results of this structuring are presented.

## 6.2 Empirical evidence of farmer's role

The findings from the interviews with the farmers are arranged thematically and descriptively in this subchapter. This encompasses the analysis according to step 7 by Mayring (2014) (see Table 2).

### 6.2.1 Description of researched farms with focus on land acquisition

The foundation of a farm enterprise is based on the acquisition and availability of land<sup>37</sup>. This was confirmed in the interviews, because all the interviewees described how their farm was dependent on acquired land.

The following enumeration shows the origin of the farmer's land which served as a basis for its foundation (Table 13). Seven of fourteen (50%) interviewees claimed that their farm was founded on the basis of former family property. The land was taken away from their ancestors for collectivization during GDR times. They re-established their farm enterprises by getting the land back after 1990. In German, these new farmers are called "Wiedereinrichter". The seven interviewees established the legal form of sole proprietorship for their farm.

Newly established farms without such family ties are called "Neueinrichter". Three of the interviewed persons (21%) claimed that they had the chance to establish a farm with former GDR state land by acquiring property from the German Land Administration and Privatization Agency BVVG<sup>38</sup>. Two of them formed a single enterprise, and one a private limited company. Four interviewees (28%) claimed that their farm was a transformation of a former agricultural cooperative of the former GDR (LPG)<sup>39</sup>. In three cases those were transformed into agricultural cooperatives, while one former LPG was divided between several shareholders, who consisted of five families.

Table 13: Origin of the interviewee's land for farm establishment and new legal form.

Source: Author's survey.

Origin of the land	New legal form	Wiedereinrichter/Neueinrichter
<b>Former family property (acquisition from BVVG)</b>	sole proprietorship	Wiedereinrichter
<b>Land acquired from BVVG (no former family property)</b>	sole proprietorship, private limited company	Neueinrichter
<b>Transformation of former LPG into agricultural cooperative</b>	agricultural cooperative, joint venture	Wiedereinrichter/Neueinrichter

This overview shows that the foundation of new farm enterprises was strongly influenced by the transformation processes of the GDR, especially regarding landownership. No farm was established before 1990 in the state it was in during the time of the interviews.

<sup>37</sup> "Acquisition" means mainly land purchase, but it also encompasses land leases.

<sup>38</sup> For more information about BVVG see chapter 2 and 3 of this work.

<sup>39</sup> In German: Landwirtschaftliche Produktionsgenossenschaft.

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The transformation of a former LPG also had consequences for the new legal form; thus, not only the land stayed in the business. The three interviewees who claimed that their farm enterprise was a successor of a former LPG also confirmed that the farm maintained some structures of the former form of organization. One interviewee from the Altmark region stated that they kept the employees from the agricultural sector, so there was no fundamental disruption in that respect. The interviewee herself was also employed in the former LPG, but the title of her job changed over time. Evidently it was necessary to keep the cultivated land for the new enterprise.

The successor farms succeeded in maintaining a large amount of their land as well as their lessors. One interviewee of the agricultural cooperative talked in a negative way about the fact that a farmer dissolved his family's land out of the cooperative. She referred to this act as unnecessary, because the agricultural cooperative gave employment to several families, while the farmer already had a job in agriculture. The loss of land would always be negative for an enterprise. In contrast, the farmer who was a "Wiedereinrichter" claimed that there were family ties to this land, and he felt a right to get this land back. Besides that, he had the impression that the process of re-establishing his family's land went well.

The case of other Wiedereinrichter in the Altmark had fundamental consequences for one former LPG: The families who once owned the land and who went into exile – mostly to the neighboring Lower-Saxony – decided to acquire their land back. They met and talked about the future of their families' former land. In this process, members of five families decided to return to the village and continue farming that was disrupted by collectivization. The other families suggested renting their land to these five families. In this process, the land of the former LPG was divided, and the LPG was dissolved<sup>40</sup>.

There is also an example of families in the Salzlandkreis region who took over the land of a former LPG. In contrast, not all of these families were originally from the area. They did not split the land into several enterprises, like in the Altmark, but run the business together. When the process started, three families took over the land of an LPG, and later it was divided between five families. They founded their enterprise as a joint venture, which is different to the foundation of several single person enterprises, as had happened to the other former LPG. Two of those families came from the former West, while three of them were locals or had local ties.

Neueinrichter got the chance to start a business. Former collectivized land became state land<sup>41</sup>, and the privatization of this land was possible after the German reunification. One interviewee came from the Netherlands and claimed that there was no possibility to acquire land in his native country, because it was neither available nor affordable. After 1990 he took the chance and acquired land from BVVG and settled in the Altmark. He got the opportunity to rent several hundred hectares of land without equity capital. Another interviewee was also a Neueinrichter.

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<sup>40</sup> This case is listed in the table as "former family property" – because the LPG was not transformed into a cooperative.

<sup>41</sup> As described in chapter 3.



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The farmer described that he saw the opportunity to acquire land for extending his business. He originally came from Bavaria, a distance of about 400 km, and still had a farm there, where he traveled to around two to three days a week. After 1990 he purposefully searched for land which he could acquire. He found what he was looking for in Salzlandkreis, where he assessed that the locals were less optimistic about farming, and he took the chance to buy land from a dissolving LPG. He also rented land by taking over rent contracts. The third interviewed Neueinrichter came to Salzlandkreis because his father acquired former stables with land. The interviewee took over from his father in 1997.

Every interviewed farmer started with a certain amount of owned land and enlarged their property size over time. Nevertheless, the possibility to rent land is also important for a farm business. Table 14 shows the actual farm size and the amount of landownership according to the interviewees. Between 9 and 95% are owned by the farm enterprise.

Table 14: Percentage of landownership. Source: Author's survey.

Farm	Farm type	Farm size (in ha)	Landownership (in ha)	Percentage of private land (in %)	Nb. of local employees
<b>Altmark</b>					
1	Sole proprietorship	360	90	25	3
2	Sole proprietorship	100	50	50	
3	Agricultural cooperative	1,930	643	33	34
4	Sole proprietorship	300	110	36	4
5	Sole proprietorship	400	80	20	7
6	Sole proprietorship	170	15	9	1
7	Agricultural cooperative	1,120	400	36	14
8	Sideline family farm	80	50	63	1-2
<b>Salzlandkreis</b>					
9	Agricultural cooperative	700	no data	no data	4-5
10	Sole proprietorship	160	21	13	1
11	Sole proprietorship	40	38	95	2
12	Private limited company	700	233	33	5
13	Sole proprietorship	500	250	50	10
14	Joint venture	1,740	348	20	10

The overview also shows diverse types of farming. The predominant farms of sole proprietorship<sup>42</sup> were in fact managed by the farmers' families. The "agricultural cooperatives" called themselves this way and were managed by a group of people in an employment

<sup>42</sup> In German: Einzelunternehmen.

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relationship. The “private limited company” was described as such by its owner and displayed a model of farming that was unique in this study. The “joint venture” was the legal form of a farm that was managed by several families together.

Table 14 also displays farm size, percentage of landownership and the number of local employees of each farm. Regarding the employees there is no distinction between part-time and full-time employees in the table. The table shows that the number of employees does not necessarily correspond to farm size. This can have several reasons. For example, the huge farms no. 14 and no. 3 had differing types of farming activity. While the farm in the Altmark also encompassed cattle breeding, the farm in Salzlandkreis focused on land cultivation. Cattle is more labor-intensive, which could be an explanation for the higher number of employees.

### **6.2.1.1 Interviewees' viewpoints on buying and selling land**

The interviews showed that landownership served as the basis for setting up a farm enterprise in most of the cases, even though a low percentage of landownership also indicates the importance of renting land. As one interviewee declared: “Owned land is the basic existence of the enterprise”. Therefore, the interviewees were asked whether they perceived a difference between rented and owned land. Some understood this as an emotional question and reported whether they felt a difference towards the land, others interpreted the question from an economic angle. From this latter perspective there was a consensus that the interviewees treated rented land as carefully as owned land, and that it made no difference for farming processes. One emotional standpoint was the following: One interviewee claimed that the look upon the owned fields made her proud when seeing a very fine harvest. She stressed an emotional value, which was added to owned land. One Wiedereinrichter combined statements of emotion and economical reasoning, stating that, “Owned land feels different. It is important for creditworthiness, and it is stable in value”.

Besides that, there were several statements in the interviews about the economic value of land emphasizing that it would most importantly mean security: “It gives security for decades”; “one can plan long-term without thinking about rent”; “it gives security towards the bank”; “land gives security, but one should not stick to native soil<sup>43</sup>.”

The interviewees were also asked about their criteria for buying land: The price had to be affordable and still economic, and the plots should be at a convenient distance from the farm.

One farmer added the importance of fairness as a criterion. He described that someone offered a piece of land to him, but the interviewee knew that a neighboring farmer cultivated the land. Therefore, he talked to this neighbor about the case in order to maintain the peace. He even suggested selling the land to the neighbor. Another interviewee talked about the rivalry that stemmed from land acquisition. When she was asked whether she considered settling

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<sup>43</sup> In German: Eigenes Land gibt Sicherheit, aber man soll nicht an der eigenen Scholle kleben.

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somewhere else, she said that she would not like to start somewhere new, because “the market for land is contested. Thus, you are not popular when you settle somewhere else”.

Because there was a lack of suitable offers, not everyone bought land over the last five years. None of the interviewees reported selling land.

How much land should be owned and how much rented for maintaining a farm business? Three interviewees declared that owning land would be desirable: “100 Percent of owned land would be the best”; “[...] as much as possible, I cannot express that in numbers”, while the third one declared plainly “the more land, the better”. In contrast, another interviewee stated that he favored only about 15% percentage of private land because land was very expensive and there might not be a good trade-off from buying. Another interviewee also stressed the importance of flexibility and thought it was better to rent land short-term.

When asked about the ways land was acquired in the last five years, five out of nine interviewees who answered this question (55%) said that they bought land from their lessors or private contacts. Other sources were the Landgesellschaft Sachsen-Anhalt and the BVVG. One interviewee stated: “Most of the sales stem from private contacts”. As an example, he claimed that a farmer who gave up his farm enterprise would probably not sell to the highest bidder, “but a person who would be trusted with this task.”

Two interviews showed different ways of land acquisition. One interviewee from the Altmark mentioned that new land would be rather expensive. When she found out that land was about to enter the market, but the agricultural cooperative where she worked did not have the means to buy it, she found other ways. There were owners of large coherent land plots<sup>44</sup> who used them mostly for hunting. The owners were supposedly from western Germany. The interviewee stated that these owners were also powerful lessors: “They’ve got us in their hands”. But she also admitted that she called them in when the agriculture cooperative wanted to acquire land which it could not afford to buy. The new owners leased the land to the agricultural cooperative with long-term contracts, up to about 20 years. A win-win situation could be achieved by this arrangement.

Another concept of land acquisition was presented by a farmer from Salzlandkreis. He owned land in Salzlandkreis as well as in Bavaria and had two “classical” farms. He also cultivated plots for lessors. He stated: “I sell know-how.” The interviewee cared for the land of others for a specified amount of money. Therefore, he created a limited liability company, which the lessors could join. In this case the lessors would have the risk as well as the opportunity to gain from a good harvest. The interviewee thus “outsources the risk”.

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<sup>44</sup> The interviewee calls them in German „Jachten“.

### **6.2.1.2 Land leases**

Another point discussed in the interviews was the duration of contracts for leased land. Long-term planning can be achieved without owning land if there are long-term contracts for leases. Most of the interviewees preferred long lease contracts. The interviewees stated that in general the communities of heirs preferred shorter lease contracts plus higher prices, in contrast to local owners, who were often elderly people with farming experience of their own.

The following are examples of short and long-term leases. One interviewee was also head of another farm, which lay adjacent to the research area. This farm had a hereditary leasehold, which meant "18+12 years". This seemed like quite a long time for rents, because such a long time span was not mentioned by other interviewees. The longest contract lasted for about 12 years. Interestingly, the interviewed farmer with the long-term rent preferred to be more flexible at his other farm within the research area. His actual lease contracts were not longer than five years. He mentioned that he did not want to be dependent on renting expensive plots and would rather be flexible in his production.

The main sources for land leases were local people: 100% of the interviewees who answered this question (one of 14 did not give information) stated that they rented their land from locals, or communities of heirs who inherited the land from local inhabitants but lived somewhere else. These statements stress the importance of the private rental market. Two interviewees emphasized that all of their rented land stemmed from private contacts. One Neueinrichter stated that when his family started in the village, they did not have any local lessors. After some time, the family got to know the villagers, and they started offering their land to the interviewee. Other lessors who were mentioned by the interviewees were the Protestant church and Landgesellschaft Sachsen-Anhalt.

### **6.2.2 The relationship between the farmers and villages and relationships with tenants**

The interviews indicate that personal relationships between farmers, locals and lessors are an important outlet or sales opportunity for land. This section analyzes the study's insights about the relationship between the farmers and the villages. The farmers were asked what they did to interact with villagers, as well as about their relationship to neighbors and other farmers.

First of all, the farm enterprises provided workplaces for local inhabitants. Small farms only provided a living for the farming family, but larger enterprises had a stronger impact on the village. One interviewee explained proudly that the agricultural cooperative where she worked provided jobs and "supported income for 14 local families". The number of local employees (in Table 14) indicates economic importance for the village as well as surrounding villages.

Two of the interviewees complained that it was not easy for them to find employees who are, for example, willing to wake up early to feed cows. One farmer explained that he recruited qualified employees from Poland. He said that this proved to work and that the men lived at his farm for

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several months at a time and were always accompanied by someone from Poland who already knew the business and could translate.

Regarding the relationship to neighbors, there were no direct problems described by the interviewees. "If someone has a problem with noise or dirt, nobody says it directly". Nevertheless, some farmers considered that rural inhabitants might be annoyed by farming. It would be the dirt and tractors on the roads plus the noise during harvest time that made people angry.

One farmer said that the neighbors were not necessarily friends, just people who lived there at the same time. Another farmer, on the other hand, described that he had an open ear for the other villagers and every day someone came around to drink coffee with him. He was not native to the village and considered this a plus, because there would be no feuds from the past to stand between him and his neighbors: "I am maybe the only person who has access to every house of the village."

The relationship to neighboring farmers was assessed to be functioning well overall, but to different degrees. One interviewee from the Altmark explained: "There's a lot going on over the machine ring, and we support each other in larger jobs, such as driving silos, borrowing machines or workers from each other." The machine ring<sup>45</sup> is an association that functions as a farm cooperative, where several enterprises share machinery like harvesters, for example. Another farmer from the same village confirmed the local cooperation in the machine ring by stating that many of the neighboring processes had been integrated more and more into the machine ring. They were now organized via the association. A third farmer from the same village confirmed this. In the second village in the Altmark, similar stories about neighborly farmer cooperation were told by the interviewees. In contrast, they did not organize via a machine ring but in an informal way.

The interviews in Salzlandkreis show a similar exchange of help and machinery. Two farmers from the same village exemplified their neighborly help, displaying that they managed their needs informally and without a machine ring. Interestingly, no such thing was reported in the fourth village. One interviewee stated: "You solve problems for yourself". Two other interviewees from this village did not make statements about their relationships to other farmers.

### **6.2.2.1 Relationship between tenant and lessor**

Another relationship in land acquisition is the one between the farm and the farmland lessors. Two interviewees reported that they strengthened the relationship between their enterprise and their lessors by inviting them to the farm. One interviewee reported that about once a year the lessors were invited to a festival with field trips and food. This was intended to promote a bond between the landlords and the company.

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<sup>45</sup> This is a direct translation of the German word "Maschinenring".

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A special case is the village in the Altmark in which a community of Wiedereinrichter decided to rent the land to the families they agreed upon. One interviewee stated: "We don't know where we're going. We trust that they [the tenants] will lease it back to us because we have known each other for years and always pay rent, and they work well with us."

According to concurring reports by the interviewees, most of the landlords renting out their land were getting older. While the older people were supposed to have a bond to the land or know farming from their own youth, the heirs who inherited the land often lived somewhere else and had no connection to this land. This made it more difficult to strengthen a relationship.

One farmer stated that he was very involved in the matters of his landlords. He tried to maintain a close relationship with them. Therefore, he met with the respective landlords every two years to discuss the current rents, also in relation to current prices of the rent index. Through this confidence-building measure, he wanted to ensure that the land continued to be leased to him, as he strived for market transparency. He also discussed the exchange of land plots<sup>46</sup> with the landlords. In addition, he helped older people in their dealings with bureaucracy, because a lot of administrative work had to be done for each plot. In addition, he tried to settle disputes within communities of heirs.

The farmers did open up their farm not only for their lessors, but most of them gave the rural inhabitants the opportunity to visit their enterprise. Seven interviewees stated that school classes or kindergarten groups regularly visited the farm. One interviewee stated that the local kindergarten came once a year "namely when the calves are born". Another interviewee confirmed: "The calves are particularly popular". A farm festival was held by two enterprises. Other ways of receiving public visitors were a holiday flat and a farm shop.

### **6.2.2.2 Social engagement of farmers**

As personal contacts prove to be important for renting and buying land, the question arises whether farmers are socially engaged in their villages. The entanglement due to land acquisition might be a reason, but nevertheless not all lessors were actually living in the adjacent villages. There was often talk about the community of heirs, who lived somewhere else. All of the interviewees except one claimed to be socially engaged in their village. During the interviews, statements about the motivation to be engaged in the community were collected.

There were various motivations for social engagement. Three interviewees had the impression that there was a negative image of farming, and they wanted to set a positive example. One of them was active in a nationwide image campaign meant as a reaction to an annual demonstration in Berlin with the title "We have had enough" (Kampagne Meine Landwirtschaft 2015). The demonstration mobilized around 35,000 participants in 2019 (Tiemeyer 2019). The campaign is a protest against conventional farming practices in fear that it pollutes the

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<sup>46</sup> In German: Flurtausch

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environment and is cruel to animals. This imputation made the interviewee feel defensive, and she felt the need to explain to the public what farmers were doing in the fields, and that they did not intend to harm the environment or be cruel to animals. Another farmer stated that he always tried to be friendly, since he did not want agriculture to have a bad image and he did not want to offend people with arrogance or something similar.

Another motivation for social engagement was the expectation to fulfill a traditional farmer's role for the village. During GDR times, the former cooperatives also fulfilled social tasks for the village. An interviewed farmer expressed the feeling that this was still expected of him. A third motivation was the improvement of quality of life. Two interviewees stated that they wanted to shape rural life for the better by making it more interesting with activities. This seemed like an intrinsic motivation which can also be found in people without an agricultural background.

After looking at the farmers' motivations, questions arise about the area of farmers' social engagement. Indeed, there was a certain range of activities. Some interviewees stated that they were members in various clubs, donated money to local events or clubs, or were politically active. There was also a degree of informal engagement, like fulfilling the role of an advisor for the neighborhood. A reflection of this role would be the official position of arbiter, which was exerted by another interviewee. Other examples of informal engagement were cutting grass or shoveling snow if required.

The interviewees were active in the following clubs, but their role is not differentiated in the enumeration: Country women's club<sup>47</sup>, riding club, rifle club, hunting association, carnival club, local history club<sup>48</sup>, sports club. Other domains were the voluntary fire brigade and church. Social engagement also happened in an agricultural context. One farmer was on the board of the local machine ring and also on the board of the local milk producers. Three interviewees were actively involved in politics. One had a seat in the district council of a neighboring village, one in the district council of an association of municipalities<sup>49</sup>, whilst another interviewee was also active in a district council located outside the study area. She was engaged in the area of her farm in Lower Saxony.

Figure 12 shows the realms of social engagement, which were named by the participants of the study. The figure also includes engagement which was covered in the previous section of this chapter, namely actions which opened up the farm to the public, like school visits. Multiple answers were possible, and the answers mirror the realms of engagement, and not the engagement per farmer or village. The number of answers cannot be higher than 14, because n=14 represents all respondents. The figure accumulates the areas of activities without weighting the actual amount of engagement. The areas of activity were clustered according to the respondents' answers.

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<sup>47</sup> In German: Landfrauen.

<sup>48</sup> In German: Heimatverein.

<sup>49</sup> In German: Verbandsgemeinde.

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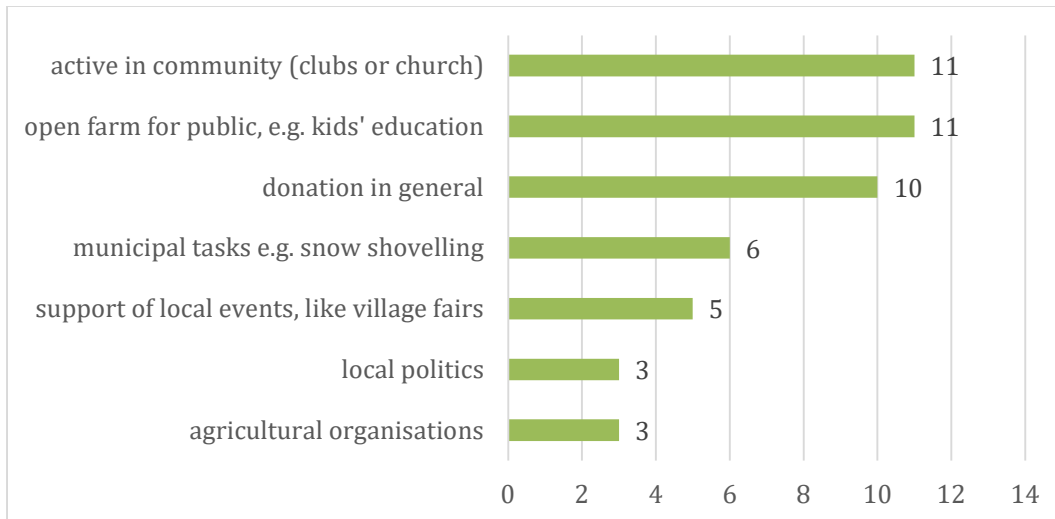


Figure 12: Engagement of farmers or businesses. Number of respondents=14. Multiple answers possible. Source: Author's survey.

Most of the activity fell into the category of community engagement, such as active membership in clubs or in the local church (78.5%). The same amount of respondents were engaged in public events, like welcoming kindergartens or school classes on the farm enterprise. This point encompasses also fairs for lessors or open farm days. Being “open” did not necessarily mean that the farm was open to everyone, but rather to a selected audience. An example are the lessors, who were exclusively invited to the farm in two cases. Nevertheless, farmers or enterprises took the time and effort to show agricultural processes to people with a non-agricultural background. A less personal practice was that of donations, which was reported by 10 respondents (71.4%). The donation could be directed to a club or to a village fair, for example. The donation was not included in the point “support of local events”, which encompassed help by providing land, machinery or other help to enable a village fair, a carnival parade or a horse show. This was reported by 35.7% of the interviewees.

Farmers can also help in taking over municipal tasks. Clearing village roads from snow and grass cutting was done by six interviewees, as they possessed the fitting machinery for this task. Thus, they helped the community. Social engagement also means that farmers were active in local politics, for example the local council. Three out of 14 interviewees (21%) described political engagement.

Three interviewees stated that they were engaged in organizations that were labelled in this figure as agricultural organizations. This encompassed the membership in the farmers' lobby organization “Wir machen euch satt”. Two interviewees stated their engagement in the farmer's machinery ring as social engagement. Interestingly, there were several other members of local machinery rings, but they did not label this fact as social engagement. The two respondents in this figure held voluntary positions in the organizations.



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In the following, there are a few examples of social engagement: A very active farmer of a family-led farm explained that he was on the board of a machinery ring and the association of local milk producers. He was not active in any club, but a passive member of the riding club. Apart from that, he donated money to the choir, the hunting club and the local rifle club. He donated hay bales to the riding club, helped with the maintenance of the riding arena and offered the club the use of his grounds when organizing a horse show. Not every interviewee was that active for the community. One interviewee from the same village, who also ran a family-led farm, reported that she did not have the time to be socially active. She and her partner had to feed and milk the cows on their farm early in the day. The couple also had school-age children who needed to be looked after. The interviewee said that she would like to be more engaged in the community, but her partner contributed by being on the board of the hunter's association.

One interviewee from Salzlandkreis enumerated that he donated money to all local clubs, for example the poultry breeding club, sports clubs and Volkssolidarität, an independent welfare-organization active in East Germany. He was a council member in the village where the main farmhouse was located, and active in the club for local history.

The interviews confirmed that engagement was often limited to a certain locale. Often this engagement was concentrated on the main farmhouse or the place of living. One interviewee had land plots on the adjacent villages and donated to local clubs there as well, but nevertheless he was more active in one particular village. Another interviewee, the director of an agricultural cooperative, was very active and engaged, also on behalf of the farm, in the place of the main farmstead and where he lived. He also managed the smaller cooperative in one of the villages in the research area. There, the engagement was limited to donations for the local history club in the village where the farm was located, but not in the adjacent village, which was the main place of the community.

This restriction on place also seemed to hold true for larger distances: One interviewee reported that she was council member in the community in Lower Saxony where she had a second farm. Another farmer, who had a farm in Bavaria, reported that he considered the village in Saxony-Anhalt as suitable for living, but did not see a need to engage in society just because he was a farmer. Nevertheless, he felt responsible and donated money to clubs and the village fair, and he also helped with clearing snow in winter. He did not find nice words for the village fair, which he considered "second-rate".

### 6.2.3 Connectedness to the village

This section explores how the role of private land ownership impacts the way farmers feel about the place where they live and farm.

During the field study, the interviewees were asked where they came from and whether they grew up in the region. Six of fourteen persons (42%) came from Lower Saxony and subsequently settled in the research area of Saxony-Anhalt. All the Wiedereinrichter from one village came

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from Lower Saxony. Two Neueinrichter (14%) came from further away, one from the Netherlands and the other from Regensburg in Bavaria. Five interviewees (35%) were originally from Saxony-Anhalt, but not necessarily from the same village where they lived during the interviews.

The question is how the farmers or farm managers feel connected to their (new) place of living, and whether they call it home. This also refers to several differing notions of land, because there is supposed to be an emotional component towards owned land (Rao 2018). What makes farmers feel that they are residents, and even consider their place of living “home”? Therefore, the interviewees were asked if they would call themselves “residents” and how they define “home”.

One interviewee defined “resident” as the residence in the first place: “A resident is someone who lives in a place, knows people and is greeted by them”. Another interviewee’s definition encompassed more detail: “[...] that one lives here and has one’s residence here, that one gets involved in village life, works here, has employees, starts a family – such things. That one is involved in clubs, perhaps also in politics.” An interviewee in Salzlandkreis had similar criteria: He emphasized that residents were involved in the village, employed people and worked there. A third interviewee was also rather specific. According to his definition, a local resident did not only live in the village, but also spent his free time there, and got involved in a circle of acquaintances as well as in clubs. A similar definition from another interviewee specified “someone who has their focus in the village”.

A farmer from a neighboring village also defined “resident” in connection to agriculture. For him, “resident” meant that the farmer must be on site every day, unlike farmers of larger enterprises, who he considered to be no longer in the village.

All the interviewees who defined “residence” in detail were rather involved in the village’s matters and issues in a sense that they enumerated their engagement in several clubs or initiatives. There was only one self-critical statement, where an interviewee hesitated to call herself a resident. She stated that her husband had his first residence in the village and that they belonged there. Then she pointed out that they were not in the village for most of the year, but she was positive that the overall situation might change in the future. This means that she had a comprehensive idea about residence but felt that she did not fulfill its criteria.

While there seemed to be less hesitation to feel like a “resident”, the concept of “home” was more contested amongst the interviewees. One interviewee plainly said that she did not know the meaning of ‘home’ and chose not to answer this question. The task seemed too abstract to her.<sup>50</sup> One interviewee gave a vague definition. When asked what home meant, he replied: “This here – you know what you do, what you farm”. One interviewee from the Altmark related to the

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<sup>50</sup> In contrast to the questionnaire for the villagers, the question about “home” in the semi-structured interviews was an open question.

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concept of home when asked why she returned to her village after leaving it for education. She said that she earned less money in the village than elsewhere, but that the attraction was to return home. “Home is where you feel at home. But you can also find a home far away from where you were born.”

Coming back to the fact that 53% of the interviewees originate from outside Saxony-Anhalt, it remains to be seen whether the “new residents” actually want to stay in Saxony-Anhalt, and whether they feel at home. One farmer explained that because he came to his village as a child and recovered the farm of his grandfather, he felt in no way like a “newcomer”<sup>51</sup>. One of the farmers in Salzlandkreis, who was very involved in rural society and called himself a local, explained that he did not want to leave.

Two interviewees differentiated between the place where they came from and the one where they lived now. “There's an old home and a new home.” An interviewee who lived in the same village and who also came from somewhere else called it his “second home”. In contrast, another interviewee from Lower-Saxony called his place of residence in the research area his home.

The interviewee from the Netherlands assumed that he stayed in the village because he developed a good relationship with the neighborhood and cherished his farm, but also kept the option of leaving. The farmer from Bavaria indicated that he did not want to grow old in Salzlandkreis.

### **6.3 Consequences for the understanding of the social and economic dimensions of farmers' engagement in their village**

This section encompasses the interpretation of the results of the content analysis according to Mayring (2014). The interviews showed that the farmers were fond of their farm and their work. As entrepreneurs, but also as employees, farmers are dependent on what they farm and how well the cultivation unfolds and blooms. Farmers are very place-dependent, but the research showed that place-dependency was not necessarily that strong when the dependence occurred on more than one place. In the following, each of the three main research questions will be discussed in light of the findings from the interview analysis.

#### **6.3.1 Insights: How is land actually acquired by farmers (in Germany)?**

The interviews gave insights into how the interviewed farmers acquired land. First, the qualitative study depicted the importance of BVVG sales. The official BVVG sales enabled several interviewed farmers, *Neueinrichter*, to start their businesses in East Germany after the Reunification. The BVVG<sup>52</sup> also enabled farmers, the “*Wiedereinrichter*”, to acquire the land that was collectivized and taken away from their ancestors. Interestingly, the BVVG lost its

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<sup>51</sup> In German: *Zugezogener*.

<sup>52</sup> For more information about BVVG please see chapters 2 and 3 of this work.

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importance as a lessor and seller once a farm was established, because most of the interviewees stated that they then acquired land mostly by personal contacts. The importance of socializing and cultivating contacts to lessors or possible lessors seems evident.

Thus, the interviews showed that land transactions did not necessarily aim to achieve the most money, but also depended on personal contacts and trust on the side of buyer and seller. This runs contrary to the market-based belief that “the field moves towards the better host” (Fertig 2004). While the German agricultural land market is already regulated and landowners are not allowed to sell their land to just anyone, the interviews showed that not every farmer wished to sell it to the potentially highest bidder. This is in line with insights by Fertig (2004), who researches the mechanism of a historical land market in 19<sup>th</sup> century Westphalia and finds out that the land market was not purely market-based even then. The allocation of land also depended on institutions like family-bonds, traditions, or the necessity to redistribute land plots. The insights from the case study are also in line with Rao (2018), who described various social values related to landownership in a more general way<sup>53</sup>.

The BVVG has been an important actor influencing the East German land market (Böhme 2016). While there has been criticism of the BVVG about the fueling of land prices (Kagerbauer and Kruspe 2015), the BVVG also regards the regulation of the land market as one of their core tasks (BVVG 2014b). Both functions of the BVVG were shown in this study: The BVVG acted as an organization to “return” the land of ancestors, but also enabled persons without previous bonds to start a farm in the region based on their willingness to invest in land. During the interviews, the BVVG was not specifically criticized. But it became clear that most of the interviewees were not satisfied with the situation on the land market, as they complained about high land prices.

The case of the Wiedereinrichter combined aspects of both an emotional relationship with the land and the way in which it was returned by the BVVG. Bromley (2017) describes how it was difficult for many families to get their ancestral land back, partly because of government land trust policy, but also because by then it belonged to other people, who were economically dependent on the land as well. Besides, “those families who have managed to return to the east and remain have brought financial equity and managerial abilities to their ancestral villages. But most have faced impediments at every turn” (Bromley 2017, p.108). The emotional component of land and restitution has also been analyzed by Verderey (2003), who found an emotional attachment to land in Romania. These points were partly reflected in the findings of this case study. One village in the Altmark region profited from the returning farmers and their know-how. In the other village in the Altmark there was the case of a farmer who dissolved his father’s land from the local agricultural cooperative, and while he seemed content, the interviewee from the cooperative regarded this act as unnecessary and negative for the cooperative. Nevertheless, there were no difficulties in the process of returning. Other respondents also did not mention difficulties in land restitution.

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<sup>53</sup> She attributed the values to land in general, and not necessarily to a certain region.

The study further shows that local sales, but also leases, were much influenced by personal contacts. This is also interesting in light of regulations of the land market. Not one of the interviewees declared that they felt hindered by German law to sell their land to whomever they wished. On the contrary, they feared a regulation that would hinder the acquisition of new land.

### **6.3.2 Insights: What role does a farmer's social engagement play? Also with regards to land acquisition?**

The interviews indicated that the farmers were usually socially active in their community. This was in line with Weiß et al. (2013), who have shown that farmers in Saxony-Anhalt took over tasks for the community. While the engagement itself is easily figured out, it is more difficult to distinguish the role of farmers' engagement for the community, and especially what this means for the relationship towards the lessors.

Although it is difficult to disentangle motivations for social engagement, three different motivations could be detected from the interviews. One motivation was to fulfill or refute the general expectation towards the farmer's profession, one was the farmer's enjoyment of the community, and a third one was the motivation to strengthen the farming enterprise itself. This third motivation is especially connected to the maintenance of relationships towards the landlords.

The first motivation was related to the profession itself, that is the role of the farmer in the village. During GDR times, farms took on tasks for the community (Laschewski 2009), which might set expectations for the present. Interestingly, the farmers did not indicate during the interviews that they felt explicitly responsible for the village, but they saw themselves as part of the village community. Some farmers identified tasks that they attributed to their job, like shoveling snow in the village or cutting grass, because they had the suitable machinery at hand. According to Mahlerwein (2007) or Henkel (2014), village communities were different when villages were still dominated by farming and farmers. Consequently, contemporary farmers have lost their visibility and also their importance for the village, and maybe even their social status as caretakers for the village. They might even be confronted with a negative image as producers of noise and pollution, but also as associated with intensive animal husbandry (Pfusterschmid 2016a). While the older population of East German villages might expect a socially active farmer, the population who settled in the countryside because of lower house prices or a romantic rural image (Laschewski et al. 2019a) might be prejudiced against farming. Thus, this first motivation of farmers for their social engagement might be described as image cultivation of agriculture in general. Hajdu et al. (2018) have analyzed interviews with farm managers from large-scale farms in Ukraine and their engagement for social corporate responsibility. The farms were organized as companies, and engaged in infrastructure, donations and community development. The researchers identified the importance of maintaining or improving the loyalty of the rural population as a key motive for social engagement. Other aims were to ensure the recruitment of qualified personnel and the goodwill of their landlords. Interestingly, the companies had public relations offices responsible for corporate social responsibility. The farms in the study at hand

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were much smaller, but the wish to create a positive image of farming was a motivation that could be deduced from the interviews as well. Farmers used their engagement for public relations, which might not be an altruistic motive in the first place: Some interviewees considered the fact that people might be annoyed by agricultural outputs. One farmer stated that he was friendly to everyone with the aim of improving the image of farmers. Another farmer reported that she welcomed spontaneous guests on the farm and also sold milk to people from Berlin who had a weekend house in their village. She remarked that they liked to drink the milk, but at the same time she found out that they were complaining about the emissions of the local agriculture.

In conclusion, while the farmers wished to create a positive image of farming, a consistent approach seemed to be missing. While the example of organized public relations was the engagement of one farmer in the farmer's initiative "Wir machen euch satt", most of the interviewees' approaches seemed to be acts of neighborly help or general friendliness. There was an attempt to be recognized as farmers in the village, but it was not done systematically. Next to the concern about the general image of agriculture, it can also be supposed that the farmers tried to fulfill their social role as a farmer, which could be a remainder of the farmer's former social role in the village. The interviewee who worked as a farm manager outside the research area was involved in the village where he had his job as well as in his village of residence. Another farmer from the Altmark reported that the mayor of the village asked him to participate in certain clubs. Thus, the motivation can be twofold when farmers get involved in village life: They want to better the image of their work in general, but they also feel that they might have to fulfill expectations towards their profession.

The second and third motivation can be interconnected, and it is again not possible to disentangle both motives easily. While it could be expected that a farmer is active because of their business, it could also mean that the farmer only engages because they like to be busy and enjoy the community and have no ulterior motives. Nevertheless, a farmer doesn't have to be always viewed as a representative for a farm, and they could be active as a private person but also represent the farming enterprise. The distinction between family-led farms and agricultural cooperatives depicts this duality. While a family farmer who has a farm of sole proprietorship often stands for the business with their name, he or she might be identified as a farmer first. An employee of an agricultural cooperative has another role within the enterprise. A farm manager might act as a representative, but a farm hand might not be regarded as a representative at all. Thus, the problem is that sometimes the "private" and the "public" personae cannot be told apart immediately.

The interviews revealed that in the case of family farmers there was no clear distinction between private person and professional role. An example in the study at hand is the help between farmers via the machinery ring. Of all those who stated their activity in a machinery ring, only two labelled it as a form of social engagement, with those two having leading roles in the cooperative. The other interviewees who mentioned their participation considered it

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neighborly help or cooperation between farmers. In gaining a (voluntary) position and displaying their name, the two farmers formalized their engagement and thus regarded it as social engagement. They would not be active in this organization if they did not have a farm.

The interviewees' answers showed that they acted as farmers (respectively entrepreneurs) in the first place when donating money to clubs of the community in which they were not active in person. In contrast, one active family farmer mentioned that he liked to live in an active community where things are happening. Therefore, he showed motivation to be engaged as an inhabitant and not as a farmer in the first place. In line with this, one interviewee from Salzlandkreis, who declared being socially active, stated that he felt at home in the region and liked to be engaged as his motivation for this. In contrast, another interviewee from Salzlandkreis described his engagement in his place of residence. He was interviewed about his job at a smaller agricultural cooperative in the research area where the cooperative financially supported a local club, and not in relation to the farmer himself. He did not appear to be personally interested in the place of the research area and only acted as a professional there, which matches the initial motivation.

The quantitative study in the villages showed that the respondents often did not know about a farmer's social activities and even considered them not engaged at all (see chapter five). This does not necessarily mirror a lack of engagement by a farmer, but it could also show that the respondents were not fully aware of the activities in their community. Thus, a closer look is needed at the activity itself. For example, someone who rides horses in the horse club of one researched village in the Altmark would not necessarily know that the field used in a riding tournament was made available by a certain farmer. Consequently, if a farmer does not visibly appear as a donor, the efforts may be known only to a small number of people, and the motivation to appear as a sponsor for his enterprise would not be obvious.

Moreover, after learning about the importance of social contacts for land acquisitions, one could ask whether farmers were active in the community because it was beneficial for them. In other words, the engagement would pay off. Chatalova and Wolz (2019) explain that the extent of social engagement in regional development seems to be directly related to the size of the enterprise as well as to its profitability, and often economic reasons stood behind social engagement. The farmers in the research area often had good relations with their lessors and consulted them on a regular basis. The quantitative research among the local inhabitants showed that those who were landowners claimed to usually rent out their land to the same farmer. The interviews with the farmers showed that their land lessors were sometimes a specific target group in social activities. The examples illustrate that the farmers were keen to strengthen the relationship with their tenants. Social engagement in the community may be a piece of this picture, and another one is the attempt to establish a good relationship with the tenant in person. In conclusion, as the land market is contested, it seems vital for a farmer to ensure a good relationship to their lessor.

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The mentioned case study by Hajdu et al. (2018) shows how agricultural companies acted on behalf of their image in public relations. The interviews from the study at hand gave insights about the professional role of the farmer. Both agricultural cooperatives as well as family farms were of course enterprises. Farmers had to do a lot of administrative work, as two interviewees emphasized, and they were also entrepreneurs. One farmer described himself as an entrepreneur in the first place. In their discussion of social engagement of German companies, Braun and Backhaus-Maul (2010) have described it as a readjustment of the division of tasks between the state, market, civil society and private households. According to Weiß et al. (2013) or Steinführer (2015), farmers in Germany did not replace the state in public services, but they helped to support the public services. In a discussion, Braun and Backhaus-Maul (2010, p.128) locate the social engagement of companies between philanthropic and patronage-based voluntary participation of entrepreneurs in society, donation or sponsoring, and the concept of “corporate citizen”, which went beyond the purpose of the company but nevertheless did not lose its connection with the economic activity of the company. The tension lay between actual usefulness for a society, and the benefit for the company itself. The authors further elaborated the discussion and mentioned that social corporate commitments might be embedded in specific social-cultural and welfare state traditions in Germany. This assumption would be in line with the specific expectation towards a traditional social role of a farmer. Nevertheless, farmers might as well act because they expect benefits from their engagement, for example the possibility to rent land, when they show themselves to be reliable. This enumeration shows that farmers might understand their own engagement in light of their traditional role qua profession, but also as entrepreneurs. Those interviewees in the study at hand who managed the largest farms described themselves as farmers and seemed to see themselves in line with their traditional role. In contrast, a farmer who developed a business model for his farm services described himself as an entrepreneur first and as a businessman who sold his know-how. This transition shows that there is potential for a new understanding of farming as a farm business, as described for Ukraine (Hajdu et al. 2018). The only farmer who actually had contact to large-scale farming investors in East Germany explained that they were not popular in the village and that inhabitants did not regard this company as a farmer or a benevolent actor for the village.

The interview analysis revealed that farmers were more eager to be socially engaged in a place that was important for them. The interviewed farmers were socially active in their villages, but with a focus on their place of residence respective to where the main farmhouse was located. Having farmers as residents would consequently lead to a higher local engagement. The analysis in the previous chapter shows that the farmers’ residence did not strengthen rural place attachment of villagers, but nevertheless could strengthen the inhabitants’ relationship to agriculture. The inhabitants stated that they cherished agriculture and considered it “important” or “very important” for their village (page 55). This shows a positive notion.

In conclusion, farmers had various motivations to be socially active in their villages. One can distinguish between a farmer’s place of living and the place of the main farmhouse, but it is not so easy to distinguish between a farmer’s engagement because of their enjoyment of the



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community and an engagement because of business reasoning. Farmers cared for the relationship with their lessors, and it seemed beneficial for them to be visible in the village's community. At the same time, farmers avoided creating a negative image of farming and felt responsible for maintaining a good relationship with their villages.

### **6.3.3 Insights: What is the relation of the farmer towards the village?**

How do farmers feel towards their village? The study showed that the interviewees were fast in declaring themselves "residents" but remained hesitant when it came to the notion of "home".

The interviewed farmers were reserved to talk about "home", which might point towards the assumption that it is easier to find "residency" than a "home". Another interpretation would be that both concepts might be regarded as very similar, so there was no need to distinguish between the two. Two interviewees distinguished between a first and a second home. A further reflection about the meaning of "residency" and "home" could also help to fine-tune this question for possible future research in the direction of place attachment. It is also possible that local farmers who originally came from the area did not have to argue about their own attachment, because they did not question it. Especially those farmers who came from another area seemed eager to attach themselves to the community. In contrast, farmers who came to the research area and who already possessed a second farm were less socially engaged than the people who had their farm exclusively in the research area. One of those farmers declared that he was not sure whether he would grow old in the research area or move back to his home region.

Another lesson from the interviews is that "residence" was not considered to be a special bond to the land. Just because a resident seems to prefer a locale does not mean that they must stay there exclusively. Not every interviewed farmer or farm employee felt like they belonged to their village in the first place, but there might be ties to places where they have lived before. The interviews also showed that farmers who acquired land and moved to a community might fully become part of their community and their place, as was the case with three interviewees. In order to emphasize their connectedness, they were eager to describe themselves as residents and to describe what they did for the community.

These insights are remarkable in light of the farming profession. While farmers have traditionally been described as very dependent on the locale (Mahlerwein 2007; Henkel 2014), the study at hand depicts a certain mobility and some farmers are commuters. There was not necessarily a bond between the farmer and the land showing such a metaphysical dimension that it would not allow the interviewee to live somewhere else. Nevertheless, the study showed that even the bonds to the region were variable, and the availability of land was a contributing factor. The Wiedereinrichter especially had a relationship to the land of their ancestors and, in a way, followed their traditions. Even though the farmers created bonds towards their community, they also had bonds to a former home if they came from another region into the research area. The history of the GDR and collectivization contributed to the disruption of the agrarian tradition in East Germany, but it also created a new agricultural self-image. Successors of former

LPGs already followed a newly created “tradition”, and the managers of local agricultural cooperatives who came from the area itself did not question their form of organization but described it in a positive way. There was no clear distinction between Wiedereinrichter and Neueinrichter in their relationship towards the local community. This could mean that the farmers were more dependent on individual efforts towards the community and about the openness of the community itself than on the fact that they were landowners, tenants and farmers.

### 6.4 Concluding remarks

To conclude, the entanglement between farmer and village was indicated to be very important for the business because land acquisitions often take place on an informal market. Farmers' social engagement can lead to a strengthened relationship between landowners and farmers. The field study depicted the case of a farmer who told a potential land seller to offer the land to his neighbor, the landowner, first. This illustrates how life in the village community can be linked to the land market. Since personal contacts have proven to be important for renting and buying land, the question arises whether the farmers in their villages are socially engaged for this reason. Nevertheless, the farmers might simply enjoy living in the countryside and see their social involvement as one of the advantages of rural life. This would also explain the farmers' willingness to define themselves as a *resident*. Other motivations can be an expectation towards the farming profession and the former social roles of the LPGs (Laschewski 2009; Weiß et al. 2013).

However, not every interviewed farmer showed the capacity for a wide-ranging social involvement, because agriculture can be very labor intensive. Social engagement also seemed to be related to the farmer's personality. The research showed that farmers often think not only about their business, but also about their villages.

The notion that large-scale landowners care less about their adjacent villages (van der Ploeg et al. 2015) could be refuted in this case study. According to Chatalova and Wolz (2019), the extent of social engagement of agricultural enterprises appeared in direct relation to farm size and its financial performance. There is some indication from the case study at hand that farmers of large enterprises were not socially active in the place where they farm fields. Their engagement was often focused on their places of residence or the main place of the farmhouse. Also, having a second farm further away from the research area seemed to prevent farmers from settling in the research area for good, as they were divided between both regions. In the case of larger enterprises, this would mean that they would not be strengthening rural life in general.

Agricultural structural change has led to a decline of farming enterprises in East Germany's rural areas. This qualitative study has shown that in some villages, local farm managers seemed to be important actors of civil society, while in other villages their engagement was less or at least less visible.

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The interviews have shown that farmers saw investments in a positive light. While there were no signs of a negative influence of large-scale land investors in the research area, it cannot be ruled out that this could not be a problem in the future. In contrast, two other farmers reported about investors who were helpful for their own business, which means that investments are in no way negative per se for farmers.

## 7 Overall Conclusions

The insights from all four chapters are summarized and discussed in this conclusion. Afterwards, the limitations of the case study at hand are elaborated on, and ideas for future research are presented. The work concludes with recommendations for policymakers.

### 7.1 Overview of results and discussion

Who farms the fields in Saxony-Anhalt? The research in the case study regions shows a variety of characters and approaches towards farming. In order to answer the question, types of the farmers' businesses, farm size, and the history of the respective farms were assessed with the help of semi-structured in-depth interviews. The agricultural companies in the study farm a wide range of land – between 40 and 1,930 hectares. The farm type of the respondents also varies, with nine (64%) farms of sole proprietorship and three (21%) agricultural cooperatives, and the other two (15%) as a joint venture resp. a private limited company. The sole proprietorship farms are led by family farmers with a single property, but interestingly five of them are concentrated in one village, which means that there were fewer of this farm type in the other three villages. All except one of the interviewed farmers or farm managers claim to be socially active in their villages, which means donations, activities in local clubs or inviting parts of the public onto their farm, for example. The interviews showed that the amount and area of social engagement differ between the interviewed farmers. Reasons were personal interests, time, as well as actual presence on site. The engagement was higher, meaning there was a larger quantity of social engagement, in the villages where the farmer lives or where their farm has its headquarters. This means that a farmer's residence as well as the company's headquarters can be decisive for social engagement, which puts the importance of location into focus. Especially for larger farms, which encompass land in the areas of several villages, this means that not every location is of the same importance for a farm. The commitment also raised questions about motivation, such as whether a farmer becomes active for personal or professional reasons. Engagement at the place of the headquarter could be an indicator for professional reasons, and the place of residence could point to a personal preference. Additionally, the farmers or farm managers were asked about their relationship towards farming as well as towards their rural home, if they prefer to call it a home, and whether they feel as though they are residents. The research shows that the respondents are willing to define themselves as residents, but often remain hesitant about defining "home". On the one hand, "home" seems more abstract for the respondents and harder to grasp. On the other hand, it shows that some respondents had mixed feelings about "home" because they could not or did not want to reconcile this with a specific place. In retrospect, it became clear how relevant this question was. The interviews show that only 35% of the interviewees had remained in the (wider) area where they grew up and also acquired a farm or found a job. The other interviewees mostly came from the neighboring state of Lower-Saxony, but also from further away. The origin of the farmers is closely connected to the history of East Germany, which was shaped by German reunification and its accompanying

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processes. A majority of the interviewed farmers were “Wiedereinrichter”, which means that they got their land back after reunification, after their families had been expropriated by the German Democratic Republic (GDR). The families were, for instance, able to buy their land for a reduced price from the German Land Administration and Privatization Agency BVVG, which was commissioned by the “Treuhandaanstalt” land trust of the late GDR (these processes are described in chapter three). The possibility of regaining land made 50% of the interviewed farmers come back to the land of their ancestors. This might not necessarily have been for sentimental reasons, but for the opportunity to acquire land on the contested land market. In contrast, 21% of the interviewed farmers or farm managers had no past connection to the region and came because there was an opportunity for land acquisition. Apart from one, all the interviewees claim that the rising prices for buying or leasing agricultural land were negative for them, and that they would be glad if there was an opportunity for land acquisition.

Prices for land sales and leases have risen in the last ten years, accompanied by an increase in farm sizes and a decrease in the number of farms (Statistisches Bundesamt 2018c, 2017c). While some authors have described cases of land grabbing in Europe (Petrescu-Mag et al. 2017; Fidrich 2013; Franco and Saturnino 2013), and a study was undertaken by the EU Directorate-General for Internal Policies (Kay et al. 2015), a comprehensive definition of land grabbing in developed countries is still missing. Within this dissertation, the criteria for land grabbing were developed based on literature research as well as findings from the case study. The subtitle of this dissertation is “New concepts of land grabbing in the developed world”. First, it should be noted that the term “land grabbing” describes negative consequences for the rural population, whereas the term “large-scale land acquisition” is used as a neutral description. These terms should not be used synonymously. A discussion of possible criteria for land grabbing takes place in chapter four. The premise is the assumption that land embodies social values. The novelty of this analysis was to recognize socio-cultural criteria. Thus, it is not a specific number of hectares or the number of landowners that is highlighted as a cause for defining an acquisition as land grabbing, but the circumstances for the rural population. At the same time, it is not assumed that investment in land is bad per se. The derived criteria are legal irregularities, non-residence of landowners, centralization in decision-making structures, treating land as an investment object, concentration of decision-making power, and limited access to land markets. Given these criteria, it means that under certain circumstances, large-scale land acquisitions can have so many negative effects accompanying them that these transactions could be described as land grabbing.

A connection between land ownership and power is particularly emphasized, for example in the criterion *centralization in decision-making structures*, and the criterion *concentration of decision-power*. A distinction must also be made between owners and tenants. In East Germany, the research area of this dissertation, the lease rate was 71% in 2013 and 67.5% in 2016 (BMEL 2015, 2017). Thus, it is often not the landowner who actually cultivates the land, and land control is also not limited to the owner. Additionally, a farmer can farm other farmers’ fields in a plot exchange in order to achieve coherent plots. This means that a certain power of disposal

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over<sup>54</sup> the land can be exerted by owner, tenant and cultivator. The important factor is how that control of the land is exercised. A local tenant with secured long-term rights can take care of the land in the same way as a real owner, the difference being that he cannot sell it or lend money on it. However, the perspective on the "new" landowner and farm structure, for instance whether it is a private farmer or a group of companies, is linked to whether the farmer contributes to the local community and hires local labor.

The discussion about criteria for land grabbing has shown that farmers shape rural life as well as the landscape through their social and agricultural activities. Land, agriculture and rural population are recognized as intertwined when agricultural land is not only regarded as a commodity but encompasses social aspects. While large-scale agriculture is not regarded as negative per se, it is possible that modern and mechanized agriculture will encourage large-scale fields with monoculture crops and fewer agricultural jobs. Large-scale land acquisitions may reinforce these developments, but agricultural structural change and peripheralization take place, nevertheless. This aspect leads to another important point of this work: the impact of these processes on the local scale, the village. Rural-urban migration means that fewer and fewer people are living in villages, that infrastructures are thinning out and further distances must be covered for local supplies, work and education (Neu 2015). The function of the villages is changing; they are no longer considered primarily as places of agricultural production, but as places of residence for commuters, for example (Henkel 2014). Is there a connection between the rural inhabitants' relationship to agriculture and their attachment to their village? The meaning of place attachment for rural inhabitants and the role of agriculture for the villages were described in the fifth chapter, "The importance of farmers' residency for their village". It was hypothesized that farmers are important social actors in their villages and that a higher density of resident farmers could have positive effects on the rural community. It is further assumed that insight into agricultural processes would influence the rural populations' relationship to agriculture. This formed the basis for calculations with a Structural Equation Model (SEM) to understand and analyze the two concepts *relationship to agriculture* and *rural place attachment*. These were linked to the factor *density of farmers* by the SEM and filled with data from a survey that was administered in the four researched villages, encompassing 130 rural inhabitants. The analysis shows that interaction with farmers influences the relationship of villagers to agriculture. The quality and quantity of these interactions is reflected in the statements of the farmers themselves, because not every interviewed farmer shows the same interest for their neighborhood. By considering the indirect effects of the SEM, it can be shown that the density of resident farmers has a positive effect on rural place attachment through their effects on the relationship to agriculture. The density of farmers will therefore first influence the image that non-agricultural inhabitants have of agriculture, which will then influence their perception of rural areas. Therefore, the quality of the interaction between farmers and non-agricultural inhabitants is important, because in a way it determines whether non-agricultural inhabitants feel more connected to the rural place.

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<sup>54</sup> In German: Verfügungsgewalt.

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These findings from the SEM suggest that farmers could be important local actors, but this also depends on their character and whether they are skillful multipliers or not. In chapter six, “Role of farmers for their villages”, the possibility was discussed that farmers are socially active because they could also benefit from that situation. The statements suggest that farmers often know their tenants personally, especially if they live in the same village. It was estimated by some of the interviewees that a personal relationship leads to the continued offer of leased land. This is often different in the case of communities of heirs, who tend to live in the city, which makes it more difficult to establish contact locally.

In the field study for this dissertation, it was investigated whether attachment to a place leads to more commitment (see chapter five). This attachment can be emotional, but it can also be physical. Farmers are very place-dependent qua profession. But does rural place attachment also work for them through their agricultural activities? The researcher looked at biographies of the interviewed farmers to see whether a farmer might not also take advantage of their opportunity for mobility. Two interviewees claimed to be attached to another farm outside the research area. They did not rule out moving to this other farm after retirement. It is thus significant that even the most local of all types of employment does not necessarily lead to local dependency over a certain period of time. Still, the respondents’ agricultural activities on the other farm can be the reason for a strengthened relationship to that place, which would not contradict the thesis that agriculture leads to a local commitment. Nevertheless, there is still a possibility that farmers will move away, as shown by the fact that 65% of the respondents were new residents. Some, however, were putting down roots and emphasized that they had become residents. The interviews also show that people from East Germany were often skeptical about new farmers from West Germany. One farmer described how he overcame the prejudices of others by engaging socially and gaining the trust of the locals, until they offered him their land for lease. A fear of strangers is also reflected, in a way, in the skepticism towards resettled farmers who removed land from the former LPGs. Nevertheless, the surveys of this study shows that the rural population often has a positive attitude towards farming and considers it of importance for their village, even though personal contacts to farmers often remain scarce, and there is a certain level of ignorance about agricultural processes. What rural inhabitants cherish about the countryside is “Ruhe”, which is a German word meaning tranquility, rest, quiet, peace, and silence synonymously. The differences of the synonyms already indicate that one cannot conclude what is actually meant by that word. It came up quite often during the survey (58.8% of the respondents used it), even in one village situated in close proximity to a military training area – in that context, it is not very likely to mean “silence”. A woman from another village reported that she lived next to a relatively noisy street in the countryside, but nevertheless emphasized that she liked the “Ruhe”. It is possible that the village is perceived as a counter model<sup>55</sup> to the city, which is busier. It can also mean another design of life, a clarity of structure.

In summary, the results of the presented study show that for the rural population, rural life is mainly connected to agriculture through the perception of visible agricultural processes, like

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<sup>55</sup> In German: Gegenentwurf.

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harvest, and through contact with farmers, which itself is not too frequent. Farmers are connected to their region through their work, and additionally they try to get socially involved in village life. It is also beneficial for them to be in closer contact with their tenants. Available agricultural land is described as scarce, and farmers try to cultivate as much as they can economically create. For the villages it can be important to have resident farmers, because they can be important local actors and also open up agriculture for the rural population. The general development towards fewer farmers and larger enterprises would therefore be detrimental to the village. Nevertheless, large scale land acquisition would need further disadvantages in the socio-cultural area to be considered as land grabbing. The study has shown that the researched villages in Saxony-Anhalt are probably not cases of land grabbing, but they showed a tendency towards land concentration.

### 7.2 Limitations of this study and ideas for future research

Limitations of this study can be found in the amount of gathered data, the amount of time and also the decision for the unit of analysis<sup>56</sup>.

One constraint surely is time. The research started in 2015, and the data collection took place in the second half of the year 2016. Parts of this dissertation were published as peer-reviewed articles in 2018 and 2019. It is now 2021, and even though new data has been published in the meantime, it was necessary to make a “cut”, because it would not be possible in the framework of this dissertation to update the literature again and again. The latest developments (until winter 2020) were recognized in the last part of this conclusion, where recommendations for policymakers are provided. Another constraint connected to the problem of time was the situation in the villages during the study. It was a rather hot summer and autumn, and sometimes it was difficult to find rural inhabitants willing to participate in the survey, because people preferred to stay inside or did not want to remain outside. Even though the researcher tried to get a balanced target group, mostly elderly people were present in the villages during the day. Thus, the survey was also implemented during the evening. The researcher additionally got in contact with locals by visiting a pub and the local administration – all in a public environment and upon invitation of locals.

While the data of this qualitative study represents only a cross-section of farmers in Saxony-Anhalt, the research at hand captured most of the agricultural companies in the four researched villages. In that sense the study enables a clear picture of the situation in the four villages to be drawn. The villages were selected according to certain characteristics, like soil quality or importance within the region. The aim was to find meaningful data, which could be used for moderatum generalization (Bryman 2012). This means that the limitations should be recognized - namely that it is very unlikely that the results can be generalized. But they can be used to find parallels in similar studies, such as from Weiß et al. (2013) or Tietz (2015), as well as those

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<sup>56</sup> Further limitations for chapter four and five are already addressed within those chapters.



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published in the future. Thus, the farmer interviews lead to insights about Saxony-Anhalt as well as East Germany, but they are obviously not comparable to the situation of farmers in Ethiopia, for instance. It is important to mention this again in this part of the dissertation, because the subtitle refers to “new concepts for land grabbing in developed countries”. The moderatum generalization is feasible for discussing processes of large-scale land transactions in Europe or other developed countries, but it does not hold true for situations of land grabbing in developing countries. It might even be fruitful to find a new term for these processes in developed countries, because the term “land grabbing” can be misleading. This could be one idea for future research. If there were more case studies like this in Europe, they could contribute to a clearer picture of ongoing processes. By recognizing cases from, for example, Romania (Constantin et al. 2017; Petrescu-Mag et al. 2017), Ukraine (Mamonova 2015) or Hungary (Fidrich 2013) in connection with the case study at hand, criteria were developed. By adding this example from East Germany, a former transition country is included, with the advantage of serving as a bridging example between new institutions of East and West. It was already elaborated in chapter three that the derived criteria can serve as a starting point for future research.

It was also emphasized in the fifth chapter, on the use of SEM, that the results at hand could be regarded as a starting point for further discussion. Suggestions for a better readjustment would be, next to more data, some changes in the design. The concept of place attachment, as it was considered for the SEM, encompassed the villagers’ assessment of home. The farmers’ interviews showed that the respondents distinguished between “residence” and “home”. A comprehensive definition of “home” could be helpful. Thus, the SEM could be adjusted to get better results.

While the research area depicted different farm types, there was no non-agricultural investor who bought land on a large scale. A suggestion for further research would be to investigate rural areas where such processes are taking place. This was, for example, done by the Johann-Heinrich von Thünen-Institute between 2017 and 2019, in a project entitled “Effects of supraregionally active investors in agriculture on rural areas”, but to this date<sup>57</sup> a comprehensive report has not yet been published. One finding of that project is that new organizational forms of farming businesses are emerging, and the authors recommend that agricultural statistics move on from the dichotomy of distinguishing between “family vs. corporate farming” (Laschewski et al. 2019b, p.16).

The discussion about motivations of farmers for social engagement have shown that it is not easy to determine whether farmers are socially active because of personal preferences or because they want to represent their business. The discussion about Corporate Social Responsibility (CSR) could be a starting point to further investigate this point. Even though there can be mixed motivations, it could be interesting in light of large-scale farms. The study has shown that farmers are often more active in places that are important to them. For large-scale

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<sup>57</sup> This was written in winter 2020.

farms, this would mean that there could be a concentration on fewer places. An analysis of the CSR of large farms could be a starting point, as shown by Hajdu et al. (2018).

In general, what the socio-cultural topics of this dissertation have in common is their description of complex processes. While the analysis is done very carefully, due to this complexity there are no simple or straightforward answers.

### **7.3 Current political processes and recommendations for policymakers**

This section deals with the classification of the study results in current political processes. Subsequently, recommendations for policymakers are made.

How important is agriculture for rural vitality? The latest agricultural policy report emphasizes that the guiding principle of the federal agricultural ministry is to strive for agriculture that fosters vital rural areas (BMEL 2019b). Germany's federal government advocates for an agricultural structural development with a focus on family-run enterprises, but also emphasizes that a structural diversity of farm types should be maintained. One way to promote the desired agriculture is to take the ownership structure into account. A balanced agricultural structure is advocated for, and it is also explained that land ownership diversification is the basis for a sustainable and intergenerational agriculture. Superregional corporate structures are less welcome in the guiding principle. The report states: "The federal states should be supported in the amendment of land property law for a balanced agricultural structure and to ward off non-agricultural investors" (BMEL 2019b, p.18). This is an explicit announcement, because it means extending the existing Real Property Transactions Act (GrdstVG). In fact, the Federal Republic of Germany cannot intervene in a regulatory role, as the responsibility for the current land law has remained at the federal state level since 2006 (Höber 2020). When, in 2015, left-wing politician Kirsten Tackmann asked a parliamentary question, the Ministry of Agriculture replied that "the introduction of a permit reservation under the Real Property Transaction Act [...] is the exclusive legislative responsibility of the federal states" (Bleser 2015). Tackermann complained that the federal government hid themselves behind the federal states. What was needed was a fundamental reform of land law (Tackmann 2015).

Germany's federal agricultural minister Julia Klöckner expressed her views on this topic in September 2019 at the Conference of Agriculture Ministers in Mainz. She stressed that "non-agricultural investors are taking advantage of regulatory gaps that need to be closed. No speculation with farmland!" (BMEL 2019a). The Ministry issued an informal paper as a press release, entitled "Examples of regulatory gaps in agricultural land law and possible solutions" (BMEL 2019a). The paper suggests extending GrdsVG to include share deals, which means that sales in which an investor buys an agricultural company that includes land should also be regulated by GrdsVG. These sales are not yet assessed by GrdsVG, only agricultural land deals are. The federal states should improve their enforcement, and administrations should consider price reduction for using the preemption right for land sales for local farmers. Besides,

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improvements should be made to the land sale statistics, and sanctioning should be applied if land leases are not reported to the relevant authority.

The interviewed farmers in this study were also asked for their opinion on the regulations of the GrdstVG proposed by the former Environment Minister of Saxony-Anhalt, Hermann Aeikens, who was secretary of the state between 2016 and 2019. Particularly the idea of limiting the size of the area of a farm was viewed negatively by some respondents, but they reported this confidentially in the conversation after the main interview, and thus it cannot be elaborated upon in detail and it is merely an indicator and not generalizable. But to summarize, farmers felt like they could be affected negatively, even though they were not agricultural investors. Farmers of larger enterprises fear that they will not be allowed to continue growing.

The discussion about the GrdsVG also shows that the federal states have not been very successful in implementing their own reforms. During his time in office, Aeikens was not successful in his efforts in Saxony-Anhalt, as opposition came mainly from the farmers' associations (Finger 2015). Mecklenburg-Western Pomerania's farmers' association also opposed such a law, as the Bauernverband rejected the state regulation (Deter 2017). The Lower Saxony approach for changing the Agricultural Structure Protection Act (Agrarstruktursicherungsgesetz) was even examined for unconstitutionality, based on an expert opinion, which was commissioned by an agricultural association for family farms in this state (Eder 2017a). So far only the federal state of Baden-Württemberg has achieved its own implementations by a new Agricultural Structure Improvement Act (Agrarstrukturverbesserungsgesetz), replacing GrdsVG and German Reich Settlement Act (Reichssiedlungsgesetz) from 1919 (Eder 2017b; Netz 2018).

It is a bit of a paradox that there is a strong resistance from farmers who are after all supposed to benefit from the law. The position of the farmers is divided on this point, with some welcoming (Deter 2018; Dettmer and Valverde 2019; Wöllert and Janßen 2016) and others opposing (Maurin 2018; Apprecht 2015; Deter 2017) suggested changes in legislation. This leads to the question where the policy starts with the farmers. On the one hand, current developments on the land market call for changes to stop non-agricultural investors from investing further into agricultural land. Indeed, this study indicates that it would be desirable to foster agricultural enterprises that support farmers or farm hands who are residents. The social role of farmers or farm managers in their villages emphasizes that agriculture should not be without local agriculture with resident farmers. This would be at stake if large agricultural investors invested into agriculture production that's managed centrally. On the other hand, there are scientific discussions indicating that the land market already works well and needs no further regulation, and that investors are not decisive on the market (Balmann 2015; Hüttel et al. 2016). This is in line with farmers' associations, who fear that a strong regulation could prove to be a backlash. The discussion in this section has also shown that there are discrepancies in actual policies to implement a useful regulation. The impression of the author of this dissertation is that the farm structure in Germany is too diverse to foster one opinion among farmers. It is

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not clear even to the farmers themselves which regulation would be beneficial for them. Even though they would agree in their aim of obtaining an agricultural structure dominated by actual farmers, the formulation of the regulation is central. It is not helpful for the cause of land regulation that the federal state, who cannot or does not want to formulate changes in the land regulation, makes demands, while the ministries of the federal states cannot promote this policy locally. Federal states and the federal government already collaborated in a working group about the land market (Bund-Länder-Arbeitsgruppe Bodenmarktpolitik 2015), which could serve as a starting point for further policy action.

Interestingly, the latest demands by the federal agricultural ministry have not mentioned an upper limit for land sales. This is often strongly opposed by farmers' associations. Thus, finding *softer* instruments could be a possibility for conciliating those who hesitate to further regulate, as they fear that *ownership* could be touched. The distinction between owner, tenant and cultivator should also be kept in mind.

Agricultural structural change happens even without large-scale land investments. Nevertheless, they foster these processes. It has already been described in this dissertation whether large-scale land acquisitions by non-agricultural investors have a proven negative impact, and this could be used as a normative justification for further political action. In this sense, the recommendation for policymakers would be to further promote changes in land law regulations, and, together with farmers, to find a way to create solutions for the pressing developments on the agricultural land market. If there are resident farmers, this would indeed have advantages for the villages.

## Bibliography

- Adams, W. 2015. Conducting Semi-Structured Interviews. In *Handbook of Practical Program Evaluation*, eds. K. E. Newcomer, H. P. Hatry and J. S. Wholey, 492 - 505. Hoboken: John Wiley & Sons, Inc.
- agrarmanager. 2015. Bodenmarkt. Berlin: Deutscher Landwirtschaftsverlag.
- Agrarmarketinggesellschaft Sachsen-Anhalt. 2016. Verzeichnis der Direktvermarkter in Sachsen-Anhalt. Infos für Verbraucher. <https://www.direktvermarkter-lsa.de/infos-fur-verbraucher/>. Accessed 20.11.18.
- Alden Wily, L. 2018. Collective Land Ownership in the 21st Century: Overview of Global Trends. *Land* 7 (2):68. doi:10.3390/land7020068.
- Amtsgericht Braunschweig. 2019. Grundbuchamt. [https://www.amtsgericht-braunschweig.niedersachsen.de/wir\\_sie/grundbuchamt/grundbuchamt-70695.html](https://www.amtsgericht-braunschweig.niedersachsen.de/wir_sie/grundbuchamt/grundbuchamt-70695.html). Accessed 23.11.19.
- Antonelli, M., G. Siciliano, M. E. Turvani, and M. Rulli. 2015. Global investments in agricultural land and the role of the EU: Drivers, scope and potential impacts. *Land Use Policy* 47:98-111. doi:10.1016/j.landusepol.2015.04.007.
- Apprecht, C. 2015. Bauernverband distanziert sich von Aussagen im top agrar-Interview zum Agrarstrukturgesetz. Magdeburg: Bauernverband Sachsen-Anhalt e.V. <https://www.bauernverband-st.de/2015/04/21/bauernverband-distanziert-sich-von-aussagen-im-top-agrar-interview-zum-agrarstrukturgesetz/>. Accessed 1.3.2020.
- Arpe, J. 2009. Vertrauen in Deutschland. Eine qualitative Wertestudie. Zusammenfassung der Ergebnisse. Gütersloh: Bertelsmann Stiftung.
- Azadi, H., E. Houshyar, K. Zarafshani, G. Hosseininia, and F. Witlox. 2013. Agricultural outsourcing: A two-headed coin? *Global and Planetary Change* 100:20-27. doi:10.1016.
- Baird, I. 2017. Resistance and Contingent Contestations to Large-Scale Land Concessions in Southern Laos and Northeastern Cambodia. *Land* 6 (1):16.
- Baird, I., and J. Fox. 2015. How Land Concessions Affect Places Elsewhere: Telecoupling, Political Ecology, and Large-Scale Plantations in Southern Laos and Northeastern Cambodia. *Land* 4 (2):436.
- Baldock, D., J. Dwyer, P. Lowe, J.-E. Petersen, and N. Ward. 2001. The Nature Of Rural Development: Towards A Sustainable Integrated Rural Policy In Europe. London: Institute for European Environmental Policy.
- Balmann, A. 2015. Braucht der ostdeutsche Bodenmarkt eine stärkere Regulierung? *Agra Europe* 13 (15):1-7.
- Banski, J. 2011. Changes in agricultural land ownership in Poland in the period of the market economy. *Agricultural Economics* 57 (2):93-101.
- Becker, H., and G. Tuitjer. 2016. Ländliche Lebensverhältnisse im Wandel 1952, 1972, 1993, 2012. *Aus Politik und Zeitgeschichte* 66 (46-47):6.
- Beckmann, V., and K. Hagedorn. 1997. Decollectivisation and privatisation policies and resulting structural changes of agriculture in Eastern Germany. In *Agricultural privatization, land reform and farm restructuring in Central and Eastern Europe*, eds. J. F. M. Swinnen, A. Buckwell and E. Mathijs. Aldershot: Ashgate.
- Bitsch, V. 2001. *Qualitative Forschung in der angewandten Ökonomie. Schwerpunkt: Landwirtschaft*. Aachen: Shaker Verlag.
- Bleser, P. 2015. Fragen für den Monat Februar 2015. Berlin: Bundesministerium für Landwirtschaft und Ernährung.
- BMEL. 2000. Agrarbericht 2000. Agrar- und ernährungspolitischer Bericht der Bundesregierung. Berlin: Bundesministerium für Ernährung und Landwirtschaft.
- BMEL. 2015. Agrarpolitischer Bericht der Bundesregierung 2015. Berlin: Bundesministerium für Ernährung und Landwirtschaft.
- BMEL. 2017. Daten und Fakten. Land-, Forst- und Ernährungswirtschaft mit Fischerei und Wein- und Gartenbau. Berlin.

## Bibliography

- BMEL. 2019a. Agrarministerkonferenz in Mainz In *Pressemitteilung Nr. 196* Berlin: Bundesministerium für Ernährung und Landwirtschaft, 27.9.2019.
- BMEL. 2019b. Agrarpolitischer Bericht der Bundesregierung 2019. Berlin: Bundesministerium für Ernährung und Landwirtschaft.
- BMI. 2019a. Gleichwertige Lebensverhältnisse. <https://www.bmi.bund.de/DE/themen/heimat-integration/gleichwertige-lebensverhaeltnisse/gleichwertige-lebensverhaeltnisse-node.html>. Accessed 19.01.2020.
- BMI. 2019b. Unser Plan für Deutschland. Gleichwertige Lebensverhältnisse überall. Berlin: Bundesministerium des Innern für Bau und Heimat.
- Boamah, F., and R. Overå. 2016. Rethinking Livelihood Impacts of Biofuel Land Deals in Ghana. *Development and Change* 47 (1):98-129. doi:10.1111/dech.12213.
- Boddenberg, M., M. H. Frauenlob, L. Gunkel, S. Schmitz, F. Vaessen, and B. Blätzel-Mink. 2017. Solidarische Landwirtschaft als innovative Praxis – Potenziale für einen sozial-ökologischen Wandel. In *Soziale Innovationen für nachhaltigen Konsum: Wissenschaftliche Perspektiven, Strategien der Förderung und gelebte Praxis*, eds. M. Jaeger-Erben, J. Rückert-John and M. Schäfer, 125-148. Wiesbaden: Springer Fachmedien Wiesbaden.
- Böhme, K. 2016. Privatisierung in Ostdeutschland. Zur Rolle der BVVG am Markt. *Bodenmarkt* 7:16-20.
- Borras Jr, S. M., and J. C. Franco. 2012. Global land grabbing and trajectories of agrarian change: A preliminary analysis. *Journal of Agrarian Change* 12 (1):34-59. doi:10.1111/j.1471-0366.2011.00339.x.
- Borras Jr., S. M., J. Franco, S. Gómez, C. Kay, and M. Spoor. 2012. Land grabbing in Latin America and the Caribbean. *The Journal of Peasant Studies* 39 (3-4):845-872. doi:10.1080/03066150.2012.679931.
- Borras Jr., S. M., R. Hall, I. Scoones, B. White, and W. Wolford. 2011. Towards a better understanding of global land grabbing: an editorial introduction. *The Journal of Peasant Studies* 38 (2):209-216. doi:10.1080/03066150.2011.559005.
- Borstel, D. 2010. Zivilgesellschaft in dörflichen Kontexten – eine ostdeutsche Perspektive. In *Stadtentwicklung, Zivilgesellschaft und bürgerschaftliches Engagement*, eds. E. Becker, E. Gualini, C. Runkel and R. Strachwitz. Stuttgart: Lucius & Lucius.
- Bowen, S. 2011. The Importance of Place: Re-territorialising Embeddedness. *Sociologia Ruralis* 51 (4):325-348. doi:10.1111/j.1467-9523.2011.00543.x.
- Braun, S., and H. Backhaus-Maul. 2010. *Gesellschaftliches Engagement von Unternehmen in Deutschland*. Wiesbaden: VS Verlag für Sozialwissenschaften,.
- Bredenbeck, M. 2014. Neu-Wilhelmsdorf, Wertheim Village und der Wiederaufbau der Frankfurter Altstadt. Der Einfluss dörflicher Strukturen auf die Architektur der Gegenwart. In *Imaginäre Dörfer. Zur Wiederkehr des Dörflichen in Literatur, Film und Lebenswelt*, eds. W. Nell and M. Weiland, 157-174. Bielefeld: Transcript.
- Bromley, J. E. 2017. *German Reunification: Unfinished Business*. Abington: Routledge.
- Brown, G., C. M. Raymond, and J. Corcoran. 2015. Mapping and measuring place attachment. *Applied Geography* 57:42-53. doi:https://doi.org/10.1016/j.apgeog.2014.12.011.
- Bryman, A. 2012. *Social Research Methods*. 4. Aufl. Oxford: Oxford University Press.
- Bund-Länder-Arbeitsgruppe Bodenmarktpolitik. 2015. Landwirtschaftliche Bodenmarktpolitik: Allgemeine Situation und Handlungsoptionen. Bonn.
- Bundesagentur für Arbeit. 2018a. Arbeitslosenquote in Deutschland nach Bundesländern (Stand: Dezember 2017). <https://de.statista.com/statistik/daten/studie/36651/umfrage/arbeitslosenquote-in-deutschland-nach-bundeslaendern/>. Accessed 25.01.18.
- Bundesagentur für Arbeit. 2018b. Monatliche Arbeitslosenquote in Sachsen-Anhalt von September 2017 bis September 2018. <https://de.statista.com/statistik/daten/studie/762478/umfrage/arbeitslosenquote-in-sachsen-anhalt/>. Accessed 16.04.18.
- Bundesrepublik Deutschland. 1953. Flurbereinigungsgesetz (FlurbG). <https://www.gesetze-im-internet.de/flurbg/BJNR005910953.html>. Accessed 5.3.2020.

## Bibliography

- Bundesrepublik Deutschland. 1961. Gesetz über Maßnahmen zur Verbesserung der Agrarstruktur und zur Sicherung land- und forstwirtschaftlicher Betriebe (Grundstückverkehrsgesetz - GrdstVG), ed. Bundesrepublik Deutschland. Bonn: Bundesrepublik Deutschland. <https://www.gesetze-im-internet.de/grdstvg/BJNR010910961.html#BJNR010910961BJNG000100325>. Accessed 5.3.2020.
- Bunkus, R., I. Soliev, and I. Theesfeld. 2019. Density of resident farmers and rural inhabitants' relationship to agriculture: operationalizing complex social interactions with a structural equation model. *Agriculture and Human Values* 37, 47–63 (2020). doi:10.1007/s10460-019-09966-7.
- Bunkus, R., and I. Theesfeld. 2018. Land Grabbing in Europe? Socio-Cultural Externalities of Large-Scale Land Acquisitions in East Germany. *Land* 7 (3):98. doi:10.3390/land7030098.
- Burger, A. 2006. Why is the issue of land ownership still of major concern in East Central European (ECE) transitional countries and particularly in Hungary? *Land Use Policy* 23:571–579.
- BVVG, Bodenverwaltungs- und -verwertungs GmbH. 2008. BVVG hat 2007 im Bundesland Sachsen-Anhalt 13.200 Hektar Agrarflächen und Wald verkauft [http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM7\\_webaktuell/\\$File/pm7.pdf](http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM7_webaktuell/$File/pm7.pdf). Accessed 5.11.18.
- BVVG. 2009. BVVG erwirtschaftet 366 Millionen EUR Überschuss im Jahr 2008 [http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM23\\_webaktuell/\\$File/pm23.pdf](http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM23_webaktuell/$File/pm23.pdf). Accessed 5.11.18.
- BVVG. 2014a. Erfolgreiche weitere Privatisierung der BVVG-Flächen in Sachsen-Anhalt [http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM86\\_webaktuell/\\$File/pm%20sa%2027.2.2014.pdf](http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM86_webaktuell/$File/pm%20sa%2027.2.2014.pdf). Accessed 5.11.18.
- BVVG. 2014b. Verkauf an Alteigentümer und berechtigte Pächter stand 2013 im Fokus der BVVG [http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM81\\_webaktuell/\\$File/pm9.1.2014.pdf](http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM81_webaktuell/$File/pm9.1.2014.pdf). Accessed 7.11.18.
- BVVG. 2018. BVVG verkauft in 2017 rund 9.700 Hektar landwirtschaftliche Flächen und 1.800 Hektar Wald [http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM113\\_webaktuell/\\$File/pm113.pdf](http://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM113_webaktuell/$File/pm113.pdf). Accessed 29.10.2018.
- BVVG. 2016a. BVVG auf neue Vorgaben ausgerichtet. [https://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM107\\_webaktuell/\\$File/P107.pdf](https://www.bvvg.de/Internet/waktuell.nsf/vbroinfo/dPDFPM107_webaktuell/$File/P107.pdf). Accessed 5.11.18.
- BVVG. 2016b. BVVG in Zahlen und Fakten. Berlin: Bodenverwaltungs- und Verwaltungs GmbH.
- Byrne, B. M. 2010. *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. Second Ed. New York: Routledge Taylor & Francis Group.
- Casakin, H., B. Hernández, and C. Ruiz. 2015. Place attachment and place identity in Israeli cities: The influence of city size. *Cities* 42:224–230. doi:<https://doi.org/10.1016/j.cities.2014.07.007>.
- Chatalova, L., and A. Wolz. 2019. Die Probleme der Anderen: Sind Landwirte für den ländlichen Raum zuständig? *Berichte über Landwirtschaft* 97 (2).
- Chavas, J.-P. 2001. Structural change in agricultural production: Economics, technology and policy (Chapter 5). *Handbook of Agricultural Economics* 1 (1):263–285. doi:10.1016/S1574-0072(01)10008-3.
- Constance, C. Z. 2017. *What if the trucks stop coming? Exploring the framing of local food by cooperative food retailers in New Mexico*. Wageningen: Wageningen University.
- Constantin, C., C. Luminița, and A. J. Vasile. 2017. Land grabbing: A review of extent and possible consequences in Romania. *Land Use Policy* 62:143–150. doi:10.1016/j.landusepol.2017.01.001.
- Cotula, L. 2012. The international political economy of the global land rush: A critical appraisal of trends, scale, geography and drivers. *The Journal of Peasant Studies* 39 (3-4):649–680. doi:10.1080/03066150.2012.674940.

## Bibliography

- Crisp, R. 2017. Well-Being. <https://plato.stanford.edu/entries/well-being/>. Accessed 12.07.18.
- Curtiss, J., L. Jelinek, T. Medonos, and M. Hruska. 2019. Are large (corporate) and small farms equal competitors in farmland markets? Paper presented at the 165. EAAE seminar Agricultural Land Markets – Recent Developments, Efficiency and Regulation Berlin, 4.-5.4.2019.
- Cylex GmbH. 2019. Cylex - Lokale Suche und mehr. <https://web2.cylex.de/>. Accessed 1.11.2019.
- D'Odorico, P., M. C. Rulli, J. Dell'Angelo, and K. F. Davis. 2017. New frontiers of land and water commodification: socio-environmental controversies of large-scale land acquisitions. *Land Degradation & Development* 28 (7):2234-2244. doi:doi:10.1002/ldr.2750.
- De Schutter, O. 2011. How not to think of land-grabbing: three critiques of large-scale investments in farmland. *The Journal of Peasant Studies* 38 (2):249-279. doi:10.1080/03066150.2011.559008.
- Deininger, K. 2011. Challenges posed by the new wave of farmland investment. *The Journal of Peasant Studies* 38 (2):217-247. doi:10.1080/03066150.2011.559007.
- Deininger, K., and D. Byerlee. 2011. *Rising global interest in farmland*. Agriculture and Rural Development. Washington D.C.: The World Bank.
- Dell'Angelo, J., P. D'Odorico, M. Rulli, and P. Marchand. 2017. The tragedy of the grabbed commons: Coercion and dispossession in the global land rush. *World Development* 92:1-12. doi:10.1016/j.worlddev.2016.11.005.
- Dells, K. 2018. Management und Privatisierung von staatlichen landwirtschaftlichen Flächen. In *Guest Lecture Natürliche Ressourcen, Agrar- und Umweltpolitik I*, ed. K. Dells. Martin-Luther Universität Halle.
- Der Beauftragte der Bundesregierung für die neuen Bundesländer. 2018. Demografische Situation in den ostdeutschen Ländern. [https://www.beauftragter-neue-laender.de/BNL/Navigation/DE/Themen/Gleichwertige\\_Lebensverhaeltnisse\\_schaffen/Demografie/Demografische\\_Situation/demografische\\_situation.html](https://www.beauftragter-neue-laender.de/BNL/Navigation/DE/Themen/Gleichwertige_Lebensverhaeltnisse_schaffen/Demografie/Demografische_Situation/demografische_situation.html). Accessed 16.10.18.
- Destatis. 2011. Verdienste und Arbeitskosten. Verdienste in der Landwirtschaft. Wiesbaden.
- Destatis. 2017. Statistisches Jahrbuch 2017. Wiesbaden: Statistisches Bundesamt.
- Deter, A. 2014. BVVG-Verkaufspreise erneut deutlich gestiegen. <https://www.topagrar.com/news/Home-top-News-BVVG-Verkaufspreise-erneut-deutlich-gestiegen-1323859.html>. top agrar online. Accessed 05.11.2018.
- Deter, A. 2016. Niedersachsen plant Pachtpreislösung in der Landwirtschaft. top agrar online. <https://www.topagrar.com/news/Home-top-News-Niedersachsen-plant-Pachtpreislösung-in-der-Landwirtschaft-3947136.html>. Accessed 28.06.17.
- Deter, A. 2017. MV: Bauernverband lehnt Agrarstruktursicherungsgesetz ab. top agrar online. 31.5.2017. <https://www.topagrar.com/management-und-politik/news/mv-bauernverband-lehnt-agrarstruktursicherungsgesetz-ab-9452963.html>. Accessed 5.3.2020.
- Deter, A. 2018. Bauernbund rechnet in Sachsen-Anhalt fest mit Agrarstrukturgesetz. top agrar online. 24.01.2018. <https://www.topagrar.com/management-und-politik/news/bauernbund-rechnet-in-sachsen-anhalt-fest-mit-agrarstrukturgesetz-9456592.html>. Accessed 5.3.2020.
- Dettmer, J., and A. Valverde. 2019. Wo bleibt das Agrarstrukturgesetz ?, ed. Bauernbund Sachsen-Anhalt e. V. Quedlinburg: Bauernbund Sachsen-Anhalt e. V.
- Deutscher Bauernverband. 2015. Landwirtschaft und Gesellschaft – Wege zu besserem Verständnis. Berlin: Bauernverband e.V.,
- Deutscher Bauernverband. 2017. Situationsbericht 2017/18. Berlin.
- Deutsches Notarinstitut. 2012. Freigrenzen im Grundstücksverkehrsrecht (Stand 1.1.2012). [http://www.dnoti.eu/DOC/2012/Vorkaufsrechte/Freigrenzen\\_120206.pdf](http://www.dnoti.eu/DOC/2012/Vorkaufsrechte/Freigrenzen_120206.pdf). Accessed 25.10.2018.
- Doering, N., J. Bortz, S. Pöschl, C. S. Werner, K. Schermelleh-Engel, C. Gerhard, and J. C. Gäde. 2016. *Forschungsmethoden und Evaluation in den Sozial- und Humanwissenschaften*. Berlin: Springer.



## Bibliography

- Eder, J. 2017a. Agrarstruktursicherungsgesetz soll verfassungswidrig sein. agrarheute. 11.04.2017. <https://www.agrarheute.com/politik/agrarstruktursicherungsgesetz-verfassungswidrig-533613>. Accessed 5.3.2020.
- Eder, J. 2017b. Pacht und Bodenpreise dämpfen: Meyer bringt Gesetzreform in Landtag ein. agrarheute. <https://www.agrarheute.com/politik/pacht-bodenpreise-daempfen-meyer-bringt-gesetzreform-landtag-534487>. Accessed 01.03.2020.
- Eisenhauer, B. W., R. S. Krannich, and D. J. Blahna. 2000. Attachments to Special Places on Public Lands: An Analysis of Activities, Reason for Attachments, and Community Connections. *Society & Natural Resources* 13 (5):421-441. doi:10.1080/089419200403848.
- Ellickson, R. 1991. *Order without law. How neighbors settle disputes*. Cambridge: Harvard University Press.
- Emmann, C. H., D. Surmann, and L. Theuvsen. 2015. Charakterisierung und Bedeutung außerlandwirtschaftlicher Investoren: Empirische Ergebnisse aus Sicht des landwirtschaftlichen Berufsstandes. Göttingen.
- Endres, A. 2013. Europas neue Großgrundbesitzer. Zeit. <http://www.zeit.de/wirtschaft/2013-04/landkonzentration-landgrabbing-europa>. Accessed 28.6.17.
- Ermann, U. 2011. Kunst und Kreativität als Faktor ländlicher Ökonomien: vernachlässigbar oder unterschätzt? *Geographische Rundschau* 63 (2):20-28.
- Eurofound. 2018. Social cohesion and well-being in Europe. Luxembourg: Publications Office of the European Union.
- European Commission. 1999. Commission Decision of 20 January 1999 on the acquisition of land under the German Indemnification and Compensation Act (1999/268/EC). *Official Journal of the European Communities* L 107 (21).
- European Commission. 2015. Glossary: Agriculture and landscape. [http://ec.europa.eu/agriculture/envir/landscape/index\\_en.htm](http://ec.europa.eu/agriculture/envir/landscape/index_en.htm). Accessed 02.05.2016.
- European Commission. 2016. Europeans, Agriculture and the CAP. Special Eurobarometer 440. Brussels: European Commission.
- European Commission. 2017a. The EU explained: Agriculture. A partnership between Europe and farmers. Luxembourg: Publications Office of the European Union.
- European Commission. 2017b. Mitteilung der Kommission zu Auslegungsfragen über den Erwerb von Agrarland und das Unionsrecht (2017/C 350/05). *Official Journal of the European Communities* C 350 (5).
- Evangelia, A., and A. W. M. 2015. Neoliberal Capitalism and Conservation in the Post-crisis Era: The Dialectics of "Green" and "Un-green" Grabbing in Greece and the UK. *Antipode* 47 (1):15-35. doi:doi:10.1111/anti.12102.
- Fairhead, J., M. Leach, and I. Scoones. 2012. Green Grabbing: a new appropriation of nature? *The Journal of Peasant Studies* 39 (2):237-261. doi:10.1080/03066150.2012.671770.
- FAO. 2012. *Voluntary guideline on the responsible governance of tenure of land, fisheries and forests in the context of national food security*. Rome: Food and Agriculture Organization of the United Nations.
- Faulenbach, J. 2002. Die DDR zwischen Moskau und Bonn. In *Zeiten des Wandels*, ed. Bundeszentrale für politische Bildung/bpb. Informationen zur Politischen Bildung. Bonn: bpb.
- Favareto, A. 2006. The rationalization of rural life. *Estudos Sociedade e Agricultura* 2:9-30.
- Fertig, G. 2004. „Der Acker wandert zum besseren Wirt“? Agrarwachstum ohne preisbildenden Bodenmarkt im Westfalen des 19. Jahrhunderts. *Zeitschrift für Agrargeschichte und Agrarsoziologie* 52 (1):44-63.
- Fidrich, R. 2013. The return of the White Horse: Land grabbing in Hungary. In *Land concentration, land grabbing and people's struggles in Europe*, eds. J. Franco and S. Borrás Jr, 128-145. Amsterdam: Transnational Institute.
- Finger, D. 2015. Agrarstrukturgesetz auf Eis gelegt. *Bauernzeitung*. 07.07.2015
- Forstner, B., and A. Tietz. 2013. Kapitalbeteiligung nichtlandwirtschaftlicher und überregional ausgerichteter Investoren an landwirtschaftlichen Unternehmen in Deutschland. Braunschweig: Johann Heinrich von Thünen-Institut.

## Bibliography

- Forstner, B., A. Tietz, K. Klare, W. Kleinhanss, and P. Weingarten. 2011. Aktivitäten von nichtlandwirtschaftlichen und überregional ausgerichteten Investoren auf dem landwirtschaftlichen Bodenmarkt in Deutschland. Endbericht 2, aktualisierte Fassung. Braunschweig: Johann Heinrich von Thünen-Institut.
- Franco, J., and B. J. Saturnino. 2013. *Land concentration, land grabbing and people's struggles in Europe*. Amsterdam: Transnational Institute
- Friis, C., and J. Ø. Nielsen. 2016. Small-scale land acquisitions, large-scale implications: Exploring the case of Chinese banana investments in Northern Laos. *Land Use Policy* 57:117-129. doi:10.1016/j.landusepol.2016.05.028.
- Fritzsche, B., M. Fuchs, and A. K. Orth. 2016. Strukturbericht Sachsen-Anhalt. Nürnberg.
- Galdeano-Gomez, E., J. A. Aznar-Sánchez, and J. C. Pérez-Mesa. 2011. The Complexity of Theories on Rural Development in Europe: An Analysis of the Paradigmatic Case of Almería (South-east Spain). *Sociologia Ruralis* 51 (1):54-78. doi:doi:10.1111/j.1467-9523.2010.00524.x.
- Gao, S., P. Mokhtarian, and R. Johnston. 2008. *Non-normality of Data in Structural Equation Models*. Davis: UC Berkeley.
- Geisler, C. 2015. Trophy lands: why elites acquire land and why it matters. *Canadian Journal of Development Studies / Revue canadienne d'études du développement* 36 (2):241-257. doi:10.1080/02255189.2015.1041881.
- Geodaten dienst Bodenrichtwerte. 2018. Bodenrichtwertzone land- und fortwirtschaftliche Flächen Sachsen-Anhalt. [https://apk.lvermgeo.sachsen-anhalt.de/ASWeb/ASC\\_Frame/portal.jsp](https://apk.lvermgeo.sachsen-anhalt.de/ASWeb/ASC_Frame/portal.jsp). Accessed 19.10.18.
- Giddens, A. 1990. *The Consequences of Modernity*. Cambridge: Polity Press.
- Gindele, N., S. Kaps, and R. Doluschitz. 2016. Betriebliche Möglichkeiten im Umgang mit dem Fachkräftemangel in der Landwirtschaft. *Berichte über Landwirtschaft* 94 (1). doi:http://dx.doi.org/10.12767/buel.v94i1.
- Goethe, J. W. v. 1836. *Goethe's poetische und prosaische Werke in zwei Bänden*. Trans. R. Bunkus. Stuttgart und Tübingen: Verlag der J. G. Gotterschen Buchhandlung.
- Goldschmidt, W. 1978. *As you sow: Three studies in the social consequences of agribusiness*. Montclair: Allanheld, Osmun & Co Publishers.
- Grossarth, J. 2016. So kaufte sich die KTG Agrar ihr eigenes Getreide ab <http://www.faz.net/aktuell/finanzen/anleihen-zinsen/mittelstandsanleihen/ktg-agrar-taueschte-ueber-jahre-oeffentlichkeit-und-banken-14534275.html>. Accessed 28.06.17.
- Grubbström, A., and C. Eriksson. 2018. Retired Farmers and New Land Users: How Relations to Land and People Influence Farmers' Land Transfer Decisions. *Sociologia Ruralis* 58 (4):707-725. doi:10.1111/soru.12209.
- Gunnoe, A. 2014. The Political Economy of Institutional Landownership: Neorentier Society and the Financialization of Land. *Rural Sociology* 79 (4):478-504. doi:10.1111/ruso.12045.
- Hair, J., W. Black, B. Babin, and R. Anderson. 2010. *Multivariate data analysis: a global perspective*. Harlow: Pearson.
- Hajdu, A., T. Gagalyuk, and F. Schaft 2018. Gesellschaftliche Verantwortung in der ukrainischen Landwirtschaft. *Ukraine-Analysen* 210:11-16.
- Hall, D., P. Hirsch, and T. Li. 2011. *Powers of Exclusion: Land Dilemmas in Southeast Asia*. Honolulu: University of Hawai'i Press.
- Harvey, D. 2004. The 'new' imperialism: Accumulation by dispossession *Socialist Register* 40:63-87.
- Hawkins, E. A., J. M. Bryden, N. Gilliatt, and N. MacKinnon. 1993. Engagement in agriculture 1987-1991: a west European perspective. *Journal of Rural Studies* 9 (3):277-290. doi:https://doi.org/10.1016/0743-0167(93)90072-R.
- Heckathorn, D. D. 2011. Snowball versus respondent-driven sampling. *Sociological Methodology* 41 (1). doi:10.1111/j.1467-9531.2011.01244.x.
- Heimische Landwirtschaft UG. 2019. Die Mitgliedsbetriebe der Heimischen Landwirtschaft. <https://www.heimischelandwirtschaft.de/mitglieder-liste/umkreis>. Accessed 1.11.2019.
- Hemmerling, U., P. Pascher, and S. Naß. 2017. Situationsbericht 2017/18. Trends und Fakten zur Landwirtschaft. Berlin: Deutscher Bauernverband e.V.

## Bibliography

- Hemmerling, U., P. Pascher, S. Naß, A. König, and C. Gaebel. 2015. Situationsbericht 2015/16. Trends und Fakten zur Landwirtschaft. Berlin: Deutscher Bauernverband e.V.
- Henkel, G. 2014. *Das Dorf. Landleben in Deutschland – gestern und heute*. Bonn: Bundeszentrale für politische Bildung.
- Henrichsmeyer, W., and H. P. Witzke. 1994. *Agrarpolitik Band 2*. Stuttgart: Ulmer Verlag.
- Hentschel, T., and B. Pfeifer. 2014. Handlungsbedarf Demographischer Wandel in der Landwirtschaft. Berlin/Frankfurt am Main.
- Hernández, B., M. C. Hidalgo, M. E. Salazar-Laplace, and S. Hess. 2007. Place attachment and place identity in natives and non-natives. *Journal of Environmental Psychology* 27 (4):310-319. doi:<https://doi.org/10.1016/j.jenvp.2007.06.003>.
- Herz, C. 2017. Der Bauernkrieg der Munich Re. <https://www.handelsblatt.com/finanzen/banken-versicherungen/rueckversicherer-der-bauernkrieg-der-munich-re/20555670.html>. Accessed 11.07.18.
- Hinojosa, L., E. F. Lambin, N. Mzoughi, and C. Napoléone. 2016. Place attachment as a factor of mountain farming permanence: A survey in the French Southern Alps. *Ecological Economics* 130:308-315. doi:<https://doi.org/10.1016/j.ecolecon.2016.08.004>.
- Höber, A. 2020. Hamburger Milchbauer verliert Hof. 14.02.2020. Norddeutscher Rundfunk <https://www.ndr.de/nachrichten/hamburg/Hamburger-Milchbauer-verliert-Hof,milchhof100.html>. Accessed 16.2.2020.
- Hübner, H. 1995. *Allgemeiner Teil des Bürgerlichen Gesetzbuches*. Berlin: Walter de Gruyter & Co.
- Hunziker, M., M. Buchecker, and T. Hartig. 2007. Space and Place – Two Aspects of the Human-landscape Relationship. In *A Changing World*, eds. F. Kienast, O. Wildi and S. Ghosh. Landscape Series. Dordrecht: Springer Netherlands.
- Hüttel, S., and M. Odening. 2018. Zur Rolle juristischer Personen und ausländischer Investoren bei Bodenmarktauktionen. In *Methoden für eine evidenzbasierte Agrarpolitik - Erfahrungen, Bedarf und Entwicklungen. Tagungsband der 28. Jahrestagung der Österreichischen Gesellschaft für Agrarökonomie*, ed. Österreichische Gesellschaft für Agrarökonomie, 81-82. Wien: Österreichische Gesellschaft für Agrarökonomie.
- Hüttel, S., L. Wildermann, and C. Croonenbroek. 2016. How do insitutional market players matter in farmland pricing? *Land Use Policy* 59:154-167. doi:10.1016/j.landusepol.2016.08.021.
- Ince, O. U. 2014. Primitive accumulation, new enclosures, and global land grabs: A theoretical intervention. *Rural Sociology* 79 (1):104-131. doi:10.1111/ruso.12025.
- International Land Coalition. 2011. Tirana Declaration "Securing land access for the poor in times of intensified natural resources competition". Tirana, Albania.
- Irvine, A., P. Drew, and R. Sainsbury. 2013. 'Am I not answering your questions properly?' Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. *Qualitative Research* 13 (1):87-106. doi:10.1177/1468794112439086.
- Jantsch, A., C. Wunder, and N. Hirschauer. 2016. Lebensqualität in Deutschland - Ein Vergleich von städtischen und ländlichen Regionen. Paper presented at the 56. Jahrestagung der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaues e.V., Bonn, 29.09.2016.
- Jochimsen, H. 2010. 20 Jahre grüner Aufbau Ost *Berichte über Landwirtschaft* 88:203-247.
- Johann Heinrich von Thünen-Institute. 2020. Projekte im Arbeitsbereich "Wirtschaft und Arbeit". <https://www.thuenen.de/de/lr/projekte/wirtschaft-und-arbeit/>. Accessed 30.01.2020.
- Jungehülsing, J. 2018. Boden an der Schnittstelle zwischen Kapital und Profit. Paper presented at the Fachtagung Kommission Bodenschutz beim Umweltbundesamt, Berlin.
- Kagerbauer, S., and H. Kruspe. 2015. Bioland kritisiert neue Privatisierungsregeln der BVVG als völlig unzureichend. Positionspapier. Greifenhagen/Berlin: Bioland.
- Kampagne Meine Landwirtschaft. 2015. 50 000 Menschen fordern den Stopp von Tierfabriken, Gentechnik und TTIP. Bauern und Verbraucher gehen vereint für eine Agrarwende auf die Straße. 17.1.2015. ed. Kampagne meine Landwirtschaft". Berlin: Wir haben es satt! Demo-Organisationsbüro. <http://www.wir-haben-es-satt.de/start/home/rueckblicke/berlin-demo-2015/>. Accessed 5.11.2018.

## Bibliography

- Kaska, K. N. 2011. Building trust: How farmers manage social interactions in their home communities. Iowa State University, Ames.
- Kay, S., J. Peuch, and J. Franco. 2015. Extend of farmland grabbing in the EU. Brussels: EU Directorate-General for Internal Policies. Policy Department B.
- Kirschke, D., M. Odening, A. Häger, and O. Mußhoff. 2007. Strukturwandel im Agrarsektor. *Humboldt-Spektrum* (1):24-31.
- Knickel, K. 1990. Agricultural Structural Change: Impact on the Rural Environment. *Journal of Rural Studies* 6 (4):383-393. doi:10.1016/0743-0167(90)90051-9.
- Knigge, A. 2014. Ausverkauf der ostdeutschen Landwirtschaft. Deutschlandfunk. [http://www.deutschlandfunk.de/landgrabbing-ausverkauf-der-ostdeutschen-landwirtschaft.724.de.html?dram:article\\_id=274916](http://www.deutschlandfunk.de/landgrabbing-ausverkauf-der-ostdeutschen-landwirtschaft.724.de.html?dram:article_id=274916). Accessed 28.06.17.
- Kocjancic, M. 2018. EU Enlargement – State of play. [https://europa.eu/newsroom/highlights/special-coverage/enlargement\\_en](https://europa.eu/newsroom/highlights/special-coverage/enlargement_en). Accessed 20.07.18.
- Koepp, V. 2016. Landstück: Salzgeber & Co. Medien GmbH. Film.
- Koomen, E. 2011. Indicators of rural vitality. A GIS-based analysis of socio-economic development of the rural Netherlands. Amsterdam: Faculty of Economics and Business Administration.
- Kraudzun, H. 2015. "Wir sind keine Preistreiber" 26.02.2015. Märkische Oder Zeitung. <https://www.moz.de/artikel-ansicht/dg/0/1/1371191/>. Accessed 13.11.2018.
- Kristensen, S. B. P. 2016. Agriculture and landscape interaction-landowners' decision-making and drivers of land use change in rural Europe. *Land Use Policy* 57:759-763. doi:<http://dx.doi.org/10.1016/j.landusepol.2016.05.025>.
- KTG Agrar SE. 2015. Gesellschaftliches Engagement. <http://www.ktg-agrar.de/werte/engagement.html>. Accessed 11.05.2018.
- Kuusaana, E., and N. Gerber. 2015. Institutional Synergies in Customary Land Markets—Selected Case Studies of Large-Scale Land Acquisitions (LSLAs) in Ghana. *Land* 4 (3):842.
- Land, R. 2002. Zur Analyse von Produktionsmodellen in der Agrarwirtschaft Ostdeutschlands. Thünen-Institut für Regionalentwicklung e.V.:Bollewick.
- Landesgesellschaft Sachsen-Anhalt. 2017. Flächentausch - ein Tausch bei dem alle gewinnen! Newsletter. <https://www.lgsa.de/upload/dokumente/newsletter/Newsletter201710.pdf>. Accessed 08.11.18 2018.
- Landesgesellschaft Sachsen-Anhalt. 2018. Corporate Identity der Landgesellschaft Sachsen-Anhalt. <https://www.lgsa.de/de/ueber-uns/corporate-identity-der-landgesellschaft.html>. Accessed 25.10.2018 2018.
- Landesregierung Sachsen-Anhalt. 2010. Landesentwicklungsplan 2010 des Landes Sachsen-Anhalt Magdeburg: Landesregierung Sachsen-Anhalt.
- Larson, A. M., and J. C. Ribot. 2004. Democratic decentralisation through a natural resource lens: an introduction. *The European Journal of Development Research* 16 (1):1-25. doi:10.1080/09578810410001688707.
- Laschewski, L. 2009. Der Umbau der ländlichen Gesellschaft in den Neuen Bundesländern. *Land-Berichte* 3:73-94.
- Laschewski, L. 2014. Rural restructuring and conflicting definitions of the rural (problem) in East Germany. Cottbus: B. Cottbus-Senftenberg.
- Laschewski, L., and M. Penker. 2009. Editorial. Rural change and the revalorisation of rural property objects. *International Journal of Agricultural Resources, Governance and Ecology* 8 (1).
- Laschewski, L., A. Steinführer, T. Mölders, and R. Siebert. 2019a. Das Dorf als Gegenstand sozialwissenschaftlicher Forschung und Theoriebildung. Zur Einführung. In *Das Dorf: Soziale Prozesse und räumliche Arrangements*, eds. A. Steinführer, L. Laschewski, T. Mölders and R. Siebert, 3-56. Rural areas: Issues of local and regional development. Ländliche Räume. Berlin: LIT Verlag.
- Laschewski, L., A. Tietz, and E. Zavyalova. 2019b. From individual farms to agriholdings: Methodological implications. An explorative regional case study in East Germany. Paper

## Bibliography

- presented at the 165. EAAE Seminar 'Agricultural Land Markets –Recent Developments, Efficiency and Regulation', Berlin, 4.-5.4.2019.
- Lefebvre, H. 1991. *The social production of space*. Cambridge: Blackwell.
- Lehmann, N. 2017. Landkreis wideruft KTG Agrar-Flächendeals. agrarheute. <https://www.agrarheute.com/management/recht/landkreis-wideruft-ktg-agrar-flaechendeals-539980>. Accessed 11.07.18.
- Lengen, C., and U. Gebhard. 2016. Zum Identitätsbegriff. In *Landschaft, Identität und Gesundheit*, eds. U. Gebhard and T. Kistemann, 45-62. Wiesbaden: Springer.
- Leonhardt, H., M. Penker, and K. Salhofer. 2019. Do farmers care about rented land? A multi-method study on land tenure and soil conservation. *Land Use Policy* 82:228-239. doi:<https://doi.org/10.1016/j.landusepol.2018.12.006>.
- Lijadi, A. A., and G. J. Van Schalkwyk. 2017. Place identity construction of Third Culture Kids: Eliciting voices of children with high mobility lifestyle. *Geoforum* 81:120-128. doi:<https://doi.org/10.1016/j.geoforum.2017.02.015>.
- LNV. 2004. Agenda voor een Vitaal Platteland. Den Haag: Ministerie van Landbouw Natuur en Voedselkwaliteit.
- Lobao, L., and K. Meyer. 2001. The Great Agricultural Transition: Crisis, Change, and Social Consequences of Twentieth Century US Farming. *Annual Review of Sociology* 27 (1):103-124. doi:10.1146/annurev.soc.27.1.103.
- Lobao, L., and C. W. Stofferahn. 2008. The community effects of industrialized farming: Social science research and challenges to corporate farming laws. *Agriculture and Human Values* 25 (2):219-240. doi:10.1007/s10460-007-9107-8.
- Lobao, L. M., M. D. Schulman, and L. E. Swanson. 1993. Still Going: Recent Debates on the Goldschmidt Hypothesis1. *Rural Sociology* 58 (2):277-288. doi:doi:10.1111/j.1549-0831.1993.tb00495.x.
- Loehr, D. 2012. Capitalization by formalization? – Challenging the current paradigm of land reforms. *Land Use Policy* 29 (4):837-845. doi:<https://doi.org/10.1016/j.landusepol.2012.01.001>.
- Lokocz, E., R. L. Ryan, and A. J. Sadler. 2011. Motivations for land protection and stewardship: Exploring place attachment and rural landscape character in Massachusetts. *Landscape and Urban Planning* 99 (2):65-76. doi:<https://doi.org/10.1016/j.landurbplan.2010.08.015>.
- Low, S. M., and I. Altman. 1992. Place Attachment. In *Place Attachment*, eds. I. Altman and S. M. Low, 1-12. Boston, MA: Springer US.
- Lu, T., F. Zhang, and F. Wu. 2018. Place attachment in gated neighbourhoods in China: Evidence from Wenzhou. *Geoforum* 92:144-151. doi:<https://doi.org/10.1016/j.geoforum.2018.04.017>.
- Lyson, T. A., R. J. Torres, and R. Welsh. 2001. Scale of Agricultural Production, Civic Engagement, and Community Welfare. *Social Forces* 80 (1):311-327.
- Mahlerwein, G. 2007. Dörfer ohne Bauern. In *Aufbruch im Dorf: Strukturwandel im ländlichen Raum Baden-Württembergs nach 1950*, 93-170. Stuttgart: J.B. Metzler.
- Makki, F. 2014. Development by dispossession: Terra nullis and the social-ecology of new enclosures in Ethiopia. *Rural Sociology* 79 (1):79-103. doi:10.1111/ruso.12033.
- Mamonova, N. 2015. Resistance or adaption? Ukrainian peasants' response to large-scale land acquisitions. *The Journal of Peasant Studies* 42 (3-4):607-634. doi:10.1080/03066150.2014.993320.
- Mamonova, N. 2018. Patriotism and Food Sovereignty: Changes in the Social Imaginary of Small-Scale Farming in Post-Euromaidan Ukraine. *Sociologia Ruralis* 58 (1):190-212. doi:10.1111/soru.12188.
- Margulis, M. E., N. McKoen, and S. M. Borras Jr. 2013. Land Grabbing and Global Governance: Critical Perspectives. *Globalizations* 10 (1):1-23. doi:10.1080/14747731.2013.764151.
- Martens, B. 2010. Landwirtschaft in Ostdeutschland: der späte Erfolg der DDR. Berlin: Bundeszentrale für politische Bildung.

## Bibliography

- Massot, A. 2019. The common agricultural policy – instruments and reforms. <http://www.europarl.europa.eu/factsheets/en/sheet/107/the-common-agricultural-policy-instruments-and-reforms>. Accessed 15.11.19.
- Maurin, J. 2018. Die Verräter vom Bauernverband. 19.4.18. taz. <https://taz.de/Ausverkauf-der-Landwirtschaft/!5498480/>. Accessed 1.3.2020.
- Mayring, P. 2000. Qualitative Content Analysis. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 1 (2).
- Mayring, P. 2007. On Generalization in Qualitatively Oriented Research. *Forum Qualitative Sozialforschung* 8 (3). doi:<http://dx.doi.org/10.17169/fqs-8.3.291>.
- Mayring, P. 2014. *Qualitative content analysis: theoretical foundation, basic procedures and software solution*. Klagenfurt: Beltz.
- Mayring, P. 2016. *Einführung in die qualitative Sozialforschung*. Weinheim: Beltz
- McAndrew, F. T. 1998. The measurement of 'rootedness' and the prediction of attachment to home-towns in college students. *Journal of Environmental Psychology* 18 (4):409-417. doi:<https://doi.org/10.1006/jevp.1998.0078>.
- McKee, A. J. 2015. Legitimising the Laird? Communicative Action and the role of private landowner and community engagement in rural sustainability. *Journal of Rural Studies* 41:23-36. doi:<https://doi.org/10.1016/j.jrurstud.2015.07.003>.
- McMichael, P. 2014. Rethinking land grab ontology. *Rural Sociology* 79 (1):34-55. doi:10.1111/ruso.12021.
- Meinzen-Dick, R. 2014. Property rights and sustainable irrigation: A developing country perspective. *Agricultural Water Management* 145:23-31. doi:10.1016/j.agwat.2014.03.017.
- Mensah, A. H. 2017. Urban households' engagement in agriculture: implications for household food security in Ghana's medium sized cities. *Geographical Research* 55 (2):217-230. doi:10.1111/1745-5871.12205.
- Meyer, K., F. Böltken, F. Gödderz, and W. Neußer. 2003. *Lebensbedingungen aus Bürgersicht*. Bonn: Bundesamt für Bauwesen und Raumordnung.
- Migliore, G., F. Caracciolo, A. Lombardi, G. Schifani, and L. Cembalo. 2014. Farmers' Participation in Civic Agriculture: The Effect of Social Embeddedness. *Culture, Agriculture, Food and Environment* 36 (2):105-117. doi:10.1111/cuag.12038.
- Mishra, K., and A. G. Sam. 2016. Does Women's Land Ownership Promote Their Empowerment? Empirical Evidence from Nepal. *World Development* 78:360-371. doi:10.1016/j.worlddev.2015.10.003.
- Mitteldeutscher Rundfunk. 2018. "Leitbild Landwirtschaft" – Verbände verlassen Verhandlungstisch. <https://www.mdr.de/sachsen-anhalt/landespolitik/leitbild-landwirtschaft-kritik-verbaende-100.html>. Accessed 13.11.2018 2018.
- ML. 2016. Niedersachsen plant Pachtpreisbremse in der Landwirtschaft. 13.7.16. topagrar. <https://www.topagrar.com/news/Home-top-News-Niedersachsen-plant-Pachtpreisbremse-in-der-Landwirtschaft-3947136.html>. Accessed 28.06.17.
- Moore, J. 2000. Placing home in context. *Journal of Environmental Psychology* 20 (3):207-217. doi:<https://doi.org/10.1006/jevp.2000.0178>.
- Moreda, T. 2017. Large-scale land acquisitions, state authority and indigenous local communities: insights from Ethiopia. *Third World Quarterly* 38 (3):698-716. doi:10.1080/01436597.2016.1191941.
- Moroney, J. I., and R. S. Castellano. 2018. Farmland loss and concern in the Treasure Valley. *Agriculture and Human Values* 35 (2):529-536. doi:10.1007/s10460-018-9847-7.
- MULE. 2014. Bericht zur Lage der Landwirtschaft des Landes Sachsen-Anhalt 2014. Magdeburg: Ministerium für Landwirtschaft und Umwelt des Landes Sachsen-Anhalt.
- MULE. 2015. Regierungserklärung: Eine Politik der Verantwortung für eine zukunftssichere Landwirtschaft. Magdeburg: Ministerium für Landwirtschaft und Umwelt Sachsen-Anhalt. <http://www.presse.sachsen-anhalt.de/index.php?cmd=get&id=869989&identifier=c9a34cd53e0e55f1fde08fac58350da1>. Accessed 16.08.2018.

## Bibliography

- MULE. 2016. Bericht zur Lage der Landwirtschaft Sachsen-Anhalt 2016, ed. Ministerium für Landwirtschaft und Umwelt des Landes Sachsen-Anhalt. Magdeburg: MULE,.
- MULE. 2017. Pachtpreise landwirtschaftlicher Grundstücke. Salzlandkreis. [https://mule.sachsen-anhalt.de/fileadmin/Bibliothek/Politik\\_und\\_Verwaltung/MLU/MLU/03\\_Landwirtschaft/Pachtpreise/Pachtpreise\\_2017/Landpacht\\_2017\\_SLK.pdf](https://mule.sachsen-anhalt.de/fileadmin/Bibliothek/Politik_und_Verwaltung/MLU/MLU/03_Landwirtschaft/Pachtpreise/Pachtpreise_2017/Landpacht_2017_SLK.pdf). Accessed 21.01.2019.
- MULE. 2018a. Leitbild „Landwirtschaft 2030 Sachsen-Anhalt“. Magdeburg: Ministerium für Umwelt Landwirtschaft und Energie des Landes Sachsen-Anhalt.
- MULE. 2018b. Stärkung der Attraktivität und Zukunftsfähigkeit ländlicher Räume. <https://mule.sachsen-anhalt.de/landwirtschaft/laendlicher-raum/>. Accessed 15.01.2019.
- MW. 2019. Hochschulen in Sachsen-Anhalt. Ministerium für Wirtschaft, Bildung und Digitalisierung Sachsen-Anhalt. Magdeburg. <https://mw.sachsen-anhalt.de/themen/hochschulen/hochschulen-in-sachsen-anhalt/>. Accessed 15.03.2019.
- NABU. 2003. Flurbereinigung und Naturschutz. Naturschutzbund Deutschland. Bonn.
- Netz, J. 2018. Grundstückverkehrsgesetz Agrarstrukturverbesserungsgesetz Baden-Württemberg. Rechtsprechungsreport Januar 2018. Bad Emstal: JN Agrarrecht.
- Neu, C. 2005. Landwirtschaftliche Unternehmen. In *Handwörterbuch zur ländlichen Gesellschaft in Deutschland*, eds. S. Beetz, K. Brauer and C. Neu, 136-146. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Neu, C. 2015. Urbanisierung, Peripherisierung und Landflucht 3.0. Sozialwissenschaftliche Perspektiven auf die Veränderung von Stadt und Land im demographischen Wandel. In *Landflucht 3.0. Welche Zukunft hat der Ländliche Raum?*, ed. H. Quandt-Stiftung, 18-33. Freiburg: Herder.
- Ngo, M., and M. Brklacich. 2014. New farmers' efforts to create a sense of place in rural communities: insights from southern Ontario, Canada. *Agriculture and Human Values* 31 (1):53-67. doi:10.1007/s10460-013-9447-5.
- Nkegbe, P. K., H. Alhassan, M. B. Abu, Y. Ustarz, E. D. Setsoafia, and S. Abdul-Wahab. 2018. Rural non-farm engagement and agriculture commercialization in Ghana: complements or competitors? Ghana: PAGE policy analysis on growth and employment.
- NordNordWest. 2008. Germany location map. [https://commons.wikimedia.org/wiki/File:Germany\\_location\\_map.svg](https://commons.wikimedia.org/wiki/File:Germany_location_map.svg). Accessed 17.12.18.
- Nunnally, J. C. 1967. *Psychometric theory*. New York: McGraw Hill.
- Obach, B. K., and K. Tobin. 2014. Civic agriculture and community engagement. *Agriculture and Human Values* 31 (2):307-322. doi:10.1007/s10460-013-9477-z.
- Odening, M., and S. Hüttel. 2018. Müssen landwirtschaftliche Bodenmärkte vor Investoren geschützt werden? Eine ökonomische Perspektive. Berlin: DFG Research Unit 2569 FORLand.
- Paasche, B. 2016. Warum Fachkräfte in der Landwirtschaft fehlen. Pressemitteilung 04/16, ed. IAMO. Halle (Saale): Leibniz-Institut für Agrarentwicklung in Transformationsökonomien.
- Pambo, K. O., R. M. Mbeche, J. J. Okello, G. N. Mose, and J. N. Kinyuru. 2008. Intentions to consume foods from edible insects and the prospects for transforming the ubiquitous biomass into food. *Agriculture and Human Values* 35 (4):885-898.
- Papon, K. 2015. Tabuthema Geld. Frankfurter Allgemeine Zeitung. 08.08.2015. <https://www.faz.net/aktuell/finanzen/meine-finanzen/ueber-geld-spricht-man-nicht-tabuthema-unter-deutschen-13738804.html>. Accessed 26.3.19.
- Parkins, J. 2015. Industrial agriculture and community outcomes: A preliminary study of Goldschmidt's hypothesis in rural Canada Alberta: University of Alberta.
- Pedroli, B., T. Pinto Correia, and J. Primdahl. 2016. Challenges for a shared European countryside of uncertain future. Towards a modern community-based landscape perspective. *Landscape Research* 41 (4):450-460. doi:10.1080/01426397.2016.1156072.
- Penalver, E. M. 2009. Land Virtues. *Cornell Law Review* 94 (4):821-888.

## Bibliography

- Penker, M. 2006. Mapping and measuring the ecological embeddedness of food supply chains. *Geoforum* 37 (3):368-379. doi:10.1016/j.geoforum.2005.09.001.
- Petrescu-Mag, R. M., D. C. Petrescu, and I. V. Petrescu-Mag. 2017. Whereto land fragmentation – land grabbing in Romania? The place of negotiation in reaching win-win community-based solutions. *Land Use Policy* 64:174-185.
- Pfusterschmid, S. 2016a. Auswirkungen des Agrarstrukturwandels auf soziale, ökologische und ökonomische Verhältnisse. In *Lebensentwürfe im ländlichen Raum. Ein prekärer Zusammenhang?*, eds. R. Egger and A. Posch, 297-313. Wiesbaden: VS Verlag für Sozialwissenschaften.
- Pfusterschmid, S. 2016b. Landwirtschaft und Gesellschaft. *Lernweltforschung* 18:297-313. doi:10.1007/978-3-658-10524-2\_14.
- Pierenkemper, T. 2010. *Wirtschaftsgeschichte: Die Entstehung der modernen Volkswirtschaft*. Akademie Studienbücher. Berlin: Akademie-Verlag.
- Pohlars, A. 2018. Das Hipsterdorf in der Uckermark. 04.10.2018. Tagesspiegel. <https://www.tagesspiegel.de/themen/tagesspiegel-berliner/berlins-13-bezirk-das-hipsterdorf-in-der-uckermark/23122020.html>. Accessed: 5.3.2020.
- Preissel, S., P. Zander, and A. Knierim. 2017. Sustaining Farming on Marginal Land: Farmers' Convictions, Motivations and Strategies in Northeastern Germany. *Sociologia Ruralis* 57:682-708. doi:10.1111/soru.12168.
- Quinn, C. E., and A. C. Halfacre. 2014. Place Matters: An Investigation of Farmers' Attachment to Their Land. *Human Ecology Review* 20 (2):117-132.
- Rao, J. 2018. Fundamental Functionings of Landowners: Understanding the relationship between land ownership and wellbeing through the lens of 'capability'. *Land Use Policy* 72:74 - 84. doi:<https://doi.org/10.1016/j.landusepol.2017.12.033>.
- Raymond, C. M., G. Brown, and D. Weber. 2010. The measurement of place attachment: Personal, community, and environmental connections. *Journal of Environmental Psychology* 30 (4):422-434. doi:<https://doi.org/10.1016/j.jenvp.2010.08.002>.
- Richardt, A.-S. 2016. Relations and Areas of Interaction Between Landowners in a Peri-Urban Area. In *Metropolitan Ruralities*, 93-123. Research in Rural Sociology and Development: Emerald Group Publishing Limited.
- Riensche, S. 2017. Pachtpreise für landwirtschaftlich genutzte Flächen seit 2013 um 19% gestiegen. Wiesbaden: Statistisches Bundesamt. [https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/zdw/2017/PD17\\_30\\_p002pdf.pdf?\\_\\_blob=publicationFile](https://www.destatis.de/DE/PresseService/Presse/Pressemitteilungen/zdw/2017/PD17_30_p002pdf.pdf?__blob=publicationFile). Accessed: 7.11.18.
- Riger, S., and P. J. Lavrakas. 1981. Community ties: Patterns of attachment and social interaction in urban neighborhoods. *American Journal of Community Psychology* 9 (1):55-66. doi:10.1007/BF00896360.
- Rodriguez Castro, L. 2017. The Embodied Countryside: Methodological Reflections in Place. *Sociologia Ruralis* 58 (2):293-311. doi:10.1111/soru.12172.
- Salamon, S. 2003. From hometown to nontown: Rural community effects of suburbanization. *Rural Sociology* 68 (1):1-24. doi:10.1111/j.1549-0831.2003.tb00126.x.
- Sargeson, S. 2018. Grounds for self-government? Changes in land ownership and democratic participation in Chinese communities. *The Journal of Peasant Studies* 45 (2):321-346. doi:10.1080/03066150.2016.1197909.
- Scannell, L., and R. Gifford. 2010. Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology* 30 (1):1-10. doi:10.1016/j.jenvp.2009.09.006.
- Scannell, L., and R. Gifford. 2017. The experienced psychological benefits of place attachment. *Journal of Environmental Psychology* 51:256-269. doi:10.1016/j.jenvp.2017.04.001.
- Schierholz, A. 2018. Weil er nicht kirchlich ist. Bauer am Harz verliert 100 Hektar Ackerland 25.07.18. Mitteldeutsche Zeitung. <https://www.mz-web.de/landkreis-harz/weil-er-nicht-kirchlich-ist-bauer-am-harz-verliert-100-hektar-ackerland-31009390>. Accessed 5.11.18.
- Schlager, E., and E. Ostrom. 1992. Property-Rights Regimes and Natural Resources: A Conceptual Analysis. *Land Economics* 68 (3):249-262.



## Bibliography

- Schmitte, H. 2014. Grundbuch wie berichtigen? 30.05.2014. Wochenblatt für Landwirtschaft und Landleben. <https://www.wochenblatt.com/frage-und-antwort/recht/erben-und-vererben/grundbuch-wie-berichtigen-8808460.html>. Accessed 8.11.19.
- Schoster, E. 2018. Die Landesgesellschaft Sachsen-Anhalt als privatwirtschaftliches Dienstleistungsunternehmen zur Unterstützung der Strukturpolitik des Landes im ländlichen Raum. In *Guest Lecture Natürliche Ressourcen, Agrar- und Umweltpolitik I*. Martin-Luther-Universität Halle-Wittenberg, Halle.
- Schreiber, J. B., A. Nora, F. K. Stage, E. A. Barlow, and J. King. 2006. Reporting Structural Equation Modeling and Confirmatory Factor Analysis Results: A Review. *The Journal of Educational Research* 99 (6):323-338. doi:10.3200/JOER.99.6.323-338.
- Schrödter, M., and M. Altermann 2016. 100er Boden – bestbewerteter Boden in Deutschland. [https://www.bmel.de/DE/Landwirtschaft/Pflanzenbau/Boden/\\_Texte/Boden.html?docId=7627442](https://www.bmel.de/DE/Landwirtschaft/Pflanzenbau/Boden/_Texte/Boden.html?docId=7627442). Accessed 23.10.2018.
- Schubert, C. 2018. Soziale Innovationen im ländlichen Raum. Zivilgesellschaft und kommunale Verwaltungsstruktur als begünstigende und hemmende Faktoren. In *Soziale Innovationen lokal gestalten*, eds. H.-W. Franz and C. Kaletka, 367-383. Sozialwissenschaften und Berufspraxis. Wiesbaden: Springer Fachmedien.
- Schumann, H. 2013. Die deutschen Agrarriesen. 12.08.2013. Der Tagesspiegel. <https://www.tagesspiegel.de/politik/konzernlandwirtschaft-auf-dem-vormarsch-die-deutschen-agrarriesen/8621950.html>. Accessed 5.3.2020.
- Siegmund, K. 2015. Kaufwerte und Pachtpreise 2013. Kaufpreise teilweise explodiert - Pachten moderater gestiegen. *Bodenmarkt* 7:4-8.
- Simonson, J., C. Vogel, and C. Tesch-Römer. 2016. Freiwilliges Engagement in Deutschland. Zusammenfassung zentraler Ergebnisse des Vierten Deutschen Freiwilligensurveys Berlin: Bundesministerium für Familie, Frauen und Jugend.
- Simonson, J., C. Vogel, and C. Tesch-Römer. 2017. Zentrale Ergebnisse des Deutschen Freiwilligensurveys 2014. In *Freiwilliges Engagement in Deutschland*, eds. J. Simonson, C. Vogel and C. Tesch-Römer, 21-27. Berlin: Springer VS.
- Specht, J., K. Wenz, A. M. Häring, and C. L. Braun. 2013. Wandel im ländlichen Raum: Von Wandlungsprozessen zu neuen Kompetenzbedarfen. Eberswalde: Hochschule für Nachhaltige Entwicklung Eberwalde.
- Spellerberg, A. 2016. Siedlungsstruktur und Bevölkerungsdichte. In *Datenreport 2016*, eds. G. Dallinger, K. Hänsel, M. Petter, M. Bünning, A. Juckel and J. Schupp. Bonn: Statistisches Bundesamt.
- Stadt Halle. 2019. Bevölkerungsentwicklung (ausgewählte Jahre). <https://m.halle.de/de/Verwaltung/Statistik/Bevoelkerung/Bevoelkerungsentwick-06050/>. Accessed 31.10.2019.
- Statistisches Bundesamt. 2014. Land- und Forstwirtschaft, Fischerei. Kaufwerte für landwirtschaftliche Grundstücke 2013. Wiesbaden.
- Statistisches Bundesamt. 2016a. Arbeitsmarkt. Registrierte Arbeitslose, Arbeitslosenquote nach Gebietsstand. <https://www.destatis.de/DE/ZahlenFakten/Indikatoren/LangeReihen/Arbeitsmarkt/Ir arb003.html>. Accessed 05.02.17 2017.
- Statistisches Bundesamt. 2016b. Bodenfläche nach Art der tatsächlichen Nutzung. Wiesbaden.
- Statistisches Bundesamt. 2016c. Exporte aus Deutschland nach Güterabteilungen (Top 15) im Jahr 2016 (in Milliarden Euro). <https://de.statista.com/statistik/daten/studie/151019/umfrage/exportgueter-aus-deutschland/>. Accessed 15.01.2018.
- Statistisches Bundesamt. 2017a. Agrarstrukturerhebung 2016 (endgültige Ergebnisse): 9 600 landwirtschaftliche Betriebe weniger als im Jahr 2013. [https://www.destatis.de/DE/ZahlenFakten/Wirtschaftsbereiche/LandForstwirtschaftFischerei/LandwirtschaftlicheBetriebe/ASE\\_Aktuell.html](https://www.destatis.de/DE/ZahlenFakten/Wirtschaftsbereiche/LandForstwirtschaftFischerei/LandwirtschaftlicheBetriebe/ASE_Aktuell.html). Accessed 04.07.17.
- Statistisches Bundesamt. 2017b. Land- und Forstwirtschaft, Fischerei. Kaufwerte für landwirtschaftliche Grundstücke 2016. Wiesbaden.

## Bibliography

- Statistisches Bundesamt. 2017c. Landwirtschaftliche Betriebe. Ausgewählte Merkmale im Zeitvergleich. Agrarstrukturerhebung. <https://www.destatis.de/DE/ZahlenFakten/Wirtschaftsbereiche/LandForstwirtschaftFischerei/LandwirtschaftlicheBetriebe/Tabellen/AusgewaehlteMerkmaleZV.html>. Accessed 07.11.18 2018.
- Statistisches Bundesamt. 2017d. Statistisches Jahrbuch 2017. Wiesbaden.
- Statistisches Bundesamt. 2018a. Anzahl der Arbeitskräfte in der Landwirtschaft in Deutschland in den Jahren 2010 bis 2016 (in 1.000). <https://de.statista.com/statistik/daten/studie/663368/umfrage/anzahl-von-arbeitskraeften-in-der-landwirtschaft-deutschland/>. Accessed 15.10.18 2018.
- Statistisches Bundesamt. 2018b. Anzahl der familienfremden und nicht-ständigen Arbeitskräfte in der Landwirtschaft in Deutschland von 2010 bis 2016 (in 1.000). <https://de.statista.com/statistik/daten/studie/153147/umfrage/saisonarbeitskraefte-in-der-landwirtschaft-in-deutschland-seit-1999/>. Accessed 15.10.2018.
- Statistisches Bundesamt. 2018c. Land- und Forstwirtschaft, Fischerei. Kaufwerte für landwirtschaftliche Grundstücke 2017. Wiesbaden.
- Statistisches Bundesamt. 2019. Statistisches Jahrbuch 2018. Wiesbaden.
- Statistisches Landesamt Sachsen-Anhalt. 2018a. Bevölkerung und Erwerbstätigkeit. Bevölkerung der Gemeinden. Stand 31.12.2016. Halle (Saale).
- Statistisches Landesamt Sachsen-Anhalt. 2018b. Erwerbstätigkeit im 1. Quartal 2018 leicht gestiegen, ed. Statistisches Landesamt. Halle (Saale).
- Stedman, R. C. 2003. Is It Really Just a Social Construction?: The Contribution of the Physical Environment to Sense of Place. *Society & Natural Resources* 16 (8):671-685. doi:10.1080/08941920309189.
- Stegger, U., W. Stolz, and J. Bug. 2014. Ackerbauliches Ertragspotential der Böden in Deutschland. Hannover: Bundesanstalt für Geowissenschaften und Rohstoffe.
- Steinführer, A. 2015. Bürger in der Verantwortung. Veränderte Akteursrollen in der Bereitstellung ländlicher Daseinsvorsorge. *Raumforschung und Raumordnung* 73 (1):5-16. doi:10.1007/s13147-014-0318-3.
- Stewart, C., and A. D'Amore. 2018. Land prices vary considerably between and within Member States. Eurostat press release 21.03.2018, Luxembourg. <http://ec.europa.eu/eurostat/documents/2995521/8756523/5-21032018-AP-EN.pdf/b1d0ffd3-f75b-40cc-b53f-f22f68d541df>. Accessed 16.08.2018.
- Stofferahn, C. W., C. A. Fontaine, D. J. McDonald, M. Spletto, and H. Jeanotte. 1991. Growth fundamentalism in dying rural towns: Implications for rural development practitioners. *Agriculture and Human Values* 8 (25):25-34. doi:10.1007/BF01591840.
- Sumner, J., H. Mair, and E. Nelson. 2010. Putting the culture back into agriculture: civic engagement, community and the celebration of local food. *International Journal of Agricultural Sustainability* 8 (1-2):54-61. doi:10.3763/ijas.2009.0454.
- Swain, N. 2013. Agriculture 'East of the Elbe' and the Common Agricultural Policy. *Sociologia Ruralis* 53 (3):369-389. doi:10.1111/soru.12016.
- Tackmann, K. 2015. Bund drückt sich bei der Bodenpolitik um seine Verantwortung. Berlin: Die Linke. 24.2.2015. <https://kirstentackmann.de/bund-drueckt-sich-bei-der-bodenpolitik-um-seine-verantwortung/>. Accessed 16.2.2020.
- Teklemariam, D., H. Azadi, J. Nyssena, M. Haile, and F. Witlox. 2015. Transnational land deals: Towards an inclusive land governance framework. *Land Use Policy* 42:781-789. doi:10.1016/j.landusepol.2014.09.021.
- Tesser, L. M. 2014. East-Central Europe's new security concern: foreign land ownership. *Communist and Post-Communist Studies* 37:213-239.
- The Land Matrix Global Observatory. 2018. Get the Detail: By target region. [www.landmatrix.org](http://www.landmatrix.org). Accessed 22.02.2018.
- Theesfeld, I. 2016. The Impacts of Liberalized Land Markets on the Resource Water: A Property Rights Approach. In *Schriften der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaus e. V.*, 355-366. Gießen: Landwirtschaftsverlag GmbH.

## Bibliography

- Theodori, G. L., and A. E. Luloff. 2000. Urbanization and Community Attachment in Rural Areas. *Society & Natural Resources* 13 (5):399-420. doi:10.1080/089419200403839.
- Tiemeyer, A. 2019. Demonstranten fordern "enkeltaugliche Agrarpolitik". RBB 24. <https://www.rbb24.de/wirtschaft/thema/2019/gruene-woche/beitraege/berlin-brandenburg-anti-agrar-demo-haben-es-satt-gruene-woche.html>. Accessed 23.09.2019.
- Tietz, A. 2015. Überregional aktive Kapitaleigentümer in ostdeutschen Agrarunternehmen: Bestandsaufnahme und Entwicklung. Braunschweig: Johann Heinrich von Thünen-Institut.
- Tietz, A. 2017a. Überregional aktive Kapitaleigentümer in ostdeutschen Agrarunternehmen: Entwicklungen bis 2017. Braunschweig: Thünen-Institut.
- Tietz, A. 2017b. Überregional aktive Kapitaleigentümer in ostdeutschen Agrarunternehmen: Entwicklungen bis 2017. Braunschweig Johann Heinrich von Thünen-Institut.
- Tietz, A. 2018. Der landwirtschaftliche Bodenmarkt - Entwicklung, Ursachen, Problemfelder. *Wertermittlungsforum* 36 (2):54-58.
- TUBE, and NordNordWest. 2012. Location map and map of administrative divisions of Saxony Anhalt. San Francisco: Wikimedia Commons. Accessed 17.12.18.
- TUBS. 2011. Germany in the European Union on the globe (Europe centered). [https://de.wikipedia.org/wiki/Datei:Germany\\_in\\_the\\_European\\_Union\\_on\\_the\\_globe\\_\(Europe\\_centered\).svg](https://de.wikipedia.org/wiki/Datei:Germany_in_the_European_Union_on_the_globe_(Europe_centered).svg). Accessed 17.12.18.
- Turrini, T., and E. Knop. 2015. A landscape ecology approach identifies important drivers of urban biodiversity. *Global Change Biology* 21 (4):1652-1667. doi:10.1111/gcb.12825.
- van der Ploeg, J. D., J. C. Franco, and S. M. Borras Jr. 2015. Land concentration and land grabbing in Europe: a preliminary analysis. *Canadian Journal of Development Studies* 36 (2):147-162. doi:10.1080/02255189.2015.1027673.
- Verderey, K. 2003. *The vanishing hectare*. Ithaka: Cornell University Press.
- Visser, O., N. Mamonova, and M. Spoor. 2012. Oligarchs, megafarms and reserves: understanding land grabbing in Russia. *The Journal of Peasant Studies* 29 (3-4):899-931.
- Visser, O., and M. Spoor. 2011. Land grabbing in post-Soviet Eurasia: the world's largest agricultural land reserves at stake. *The Journal of Peasant Studies* 28 (2):299-323.
- Von Braun, J., and R. Meinzen-Dick. 2009. "Land grabbing" by foreign investors in developing countries: risks and opportunities. *IFPRI Policy Brief* 13:1-9.
- Walker, A. J., and R. L. Ryan. 2008. Place attachment and landscape preservation in rural New England: A Maine case study. *Landscape and Urban Planning* 86 (2):141-152. doi:10.1016/j.landurbplan.2008.02.001.
- Weingarten, P. 2010. Agrarpolitik in Deutschland. *Politik und Zeitgeschichte* 5 (6):6-17.
- Weiß, W., A. Wolz, T. Herzfeld, and J. Fritzsche. 2013. Sozialökonomische Effekte des demographischen Wandels in ländlichen Räumen Sachsen-Anhalts. Halle: IAMO.
- Welsh, R. 2009. Farm and market structure, industrial regulation and rural community welfare: conceptual and methodological issues. *Agriculture and Human Values* 26 (1-2):21-28. doi:10.1007/s10460-008-9184-3.
- Wester-Herber, M. 2004. Underlying concerns in land-use conflicts—the role of place-identity in risk perception. *Environmental Science & Policy* 7 (2):109-116. doi:10.1016/j.envsci.2003.12.001.
- White, B., S. M. Borras Jr., R. Hall, I. Scoones, and W. Wolford. 2012. The new enclosures: critical perspectives on corporate land deals. *The Journal of Peasant Studies* 39 (3-4):619-647.
- Wiesinger, G. 2005. Landwirtschaft zwischen Tradition und Moderne - Über den Struktur und Wertewandel in der bäuerlichen Lebenswelt. *Jahrbuch der Österreichischen Gesellschaft für Agrarökonomie* 10:165-180.
- Wightman, A. 2013. *The Poor Had No Lawyers*. Edinburgh: Birlinn Limited.
- Wilson, G. A., and F. Dünckmann. 2009. From "weak" to "strong" multifunctionality? - A research framework for assessing farm-level multifunctional pathways in the UK and Germany. *RURAL* 3:15-34.
- Windsong, E. A. 2014. Insights from a Qualitative Study of Rural Communes: Physical and Social Dimensions of Place. *Society & Natural Resources* 27 (1):107-116. doi:10.1080/08941920.2013.840816.

## Bibliography

- Wirth, P., V. Elis, B. Müller, and K. Yamamoto. 2016. Peripheralisation of small towns in Germany and Japan – Dealing with economic decline and population loss. *Journal of Rural Studies* 47:62-75. doi:10.1016/j.jrurstud.2016.07.021.
- World Bank. 2018. Europäische Union: Verteilung der Erwerbstätigen auf die Wirtschaftssektoren in den Mitgliedsstaaten im Jahr 2017, ed. Statista.
- Wöllert, R., and G. Janßen. 2016. Bauernland in Bauernhand. <https://www.abl-ev.de/themen/bodenpolitik/>. Accessed 1.3.2020.
- World Bank. 2014. Europäische Union: Verteilung der Erwerbstätigen auf die Wirtschaftssektoren in den Mitgliedsstaaten im Jahr 2014. <https://de.statista.com/statistik/daten/studie/249086/umfrage/erwerbstaetige-nachwirtschaftssektoren-in-den-eu-laendern/>. Accessed 20.02.17.
- World Bank. 2018. Europäische Union: Verteilung der Erwerbstätigen auf die Wirtschaftssektoren in den Mitgliedsstaaten im Jahr 2017. <https://de.statista.com/statistik/daten/studie/249086/umfrage/erwerbstaetige-nachwirtschaftssektoren-in-den-eu-laendern/>. Accessed 18.12.18.
- World Bank, FAO, IFAD, and UNCTAD. 2010. The Principles for Responsible Agricultural Investment (PRAI). <http://unctad.org/en/Pages/DIAE/G-20/PRAI.aspx>. Accessed 06.07.17.
- Wynveen, C. J., I. E. Schneider, S. Cottrell, A. Arnberger, A. C. Schlueter, and E. Von Ruschkowski. 2017. Comparing the Validity and Reliability of Place Attachment Across Cultures. *Society & Natural Resources* 30 (11):1389-1403. doi:10.1080/08941920.2017.1295499.
- Zander, K., F. Isermeyer, D. Bürgelt, I. Christoph-Schulz, P. Salamon, and D. Weible. 2013a. *Erwartungen der Gesellschaft an die Landwirtschaft*. Braunschweig: Thünen-Institut.
- Zoomers, A. 2010. Globalisation and the foreignisation of space: seven processes driving the current global land grab. *The Journal of Peasant Studies* 37 (2):429-447. doi:10.1080/03066151003595325.

## **Annex**

### **Data CD**

The data is organized in the form of the following folders:

1. Qualitative research
  - a. Questionnaire (in German)
  - b. Coding guide (in German)
  - c. Coding table for each village (in German) (anonymized)
  
2. Qualitative research
  - a. Questionnaire (in German)
  - b. Coding key (in German)
  - c. Data

### **Vita and Publications**

### **Declaration under Oath**

## Vita and Publications

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**Ramona Bunkus, M.Sc.**

15.06.1986 born in Wolfenbüttel, Germany

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### ACADEMIC BACKGROUND

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since 2015 **PhD Student at Martin-Luther-University Halle-Wittenberg, Institute of Agriculture and Nutritional Science, Department of Agricultural, Environmental, and Food Policy**  
PhD Thesis: Who farms the fields? New concepts of land grabbing in developed countries.

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04/2011 - 03/2014 **Master of Science in Integrated Natural Resource Management**  
**Humboldt-University Berlin**  
Thesis: The relation between scientific insights and politically desired outcomes in Implementation Processes of European Water Framework Directive. Case study at the Wupper river basin with the use of scale theory.

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09/2012 - 01/2013 **Erasmus-Semester abroad**  
**Swedish Agriculture University SLU, Uppsala**  
Master Program "Environmental Communication and Management"

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10/2006 - 03/2011 **Bachelor of Science in Human Geography and Philosophy**  
**Potsdam University**  
Thesis: Berlin as "Toilet Capital of the World"? Privatization of public toilets by Wall AG and its consequences for users and the city.

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### WORK AND RESEARCH EXPERIENCE IN SCIENCE

---

10/2019 - 09/2020 **Research Associate**  
**Federal German Environmental Agency, Dessau**  
Department for Climate Protection, Section Renewable Energies.  
Responsible for topic Biomass

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04/2015 - 04/2019 **Research Associate**  
**Martin-Luther-University Halle-Wittenberg, Institute of Agriculture and Nutritional Science, Department of Agricultural, Environmental and Food Policy**  
Teaching of Bachelor- and Master Students, lecture and tutorials

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12/2010 - 07/2013 **Research Assistant**  
**Leibnitz Institute for Regional Development and Structural Planning, Erkner**  
Project about Implementation of European Water Framework Directive

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PEER-REVIEWED PUBLICATIONS

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Bunkus, R. and I. Theesfeld (2018): Land Grabbing in Europe? Socio-Cultural Externalities of Large-Scale Land Acquisitions in East Germany. *Land* 7(3), 98. doi:10.3390/land7030098

Bunkus, Ramona; Soliev, Ilkhom and Insa Theesfeld (2020): Density of resident farmers and rural inhabitants' relationship to agriculture: Operationalizing complex social interactions with a Structural Equation Model. *Agriculture and Human Values* 37, 47–63. doi:10.1007/s10460-019-09966-7.

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CONFERENCE CONTRIBUTIONS

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Bunkus, R. and I. Theesfeld (2018). "Land Grabbing in Europe?" Poster presented at the 58. Jahrestagung der Gesellschaft für Wirtschafts- und Sozialwissenschaften des Landbaus e. V. (GEWISOLA). Kiel, Germany: September 12 - 14, 2018.

Bunkus, R. (2017). How many farmers do you know in your village? Perception of agricultures' provision of common goods influenced by landownership and residency: case study in Saxony-Anhalt, Germany. XVI Biennial IASC-Conference 'Practicing the Commons: Self-Governance, Cooperation, and Institutional Change', 10-14th, July 2017, Utrecht, Holland.

Bunkus, R. and I. Theesfeld (2016). Socio-cultural externalities of European large-scale land deals and concentration processes. IASC European Conference "Commons in a Glocal World - Global Connections and Local Responses", 10-13th, May, 2016, Bern, Switzerland

Bunkus, R. and I. Theesfeld (2015). From the economic to the cultural dimension of large-scale land acquisition in Europe. Interdisciplinary Workshop "Large-Scale Land Acquisition between Resource Conflicts and Sustainable Rural Development", University of Freiburg and Centre for Development and Environment (CDE) University Bern, 17th November, 2015

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## **Eidesstattliche Erklärung/ Declaration under Oath**

Ich erkläre an Eides statt, dass ich die Arbeit selbstständig und ohne fremde Hilfe verfasst, keine anderen als die von mir angegebenen Quellen und Hilfsmittel benutzt und die den benutzten Werken wörtlich oder inhaltlich entnommenen Stellen als solche kenntlich gemacht habe.

I declare under penalty of perjury that this thesis is my own work entirely and has been written without any help from other people. I used only the sources mentioned and included all the citations correctly both in word or content.

Ramona Bunkus

Braunschweig, 30.08.2020