

The Role of Social Capital in Agricultural and Rural Development: Lessons Learnt from Case Studies in Seven Countries

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Abstract

The importance of social capital for agricultural and rural development is explored in this paper through the analysis of seven comprehensive case studies that have been carried out in the framework of the European RETHINK research programme. The case studies are based on rather different initiatives at the interface between agricultural and rural development in Germany, Spain, Italy, Lithuania, Latvia, Denmark and Israel. The case studies represent a broad spectrum of socio-economic and agricultural contexts and focus on the role of social capital for development. We explore how social capital materialises in the context of rural areas, and what nuances it acquires in different rural environments. The case studies are used to better understand, and to illustrate, different expressions of social capital in different situations. Within the broad notion of social capital, we pay particular attention to trust, cooperation, sense of community, and culture and tradition. All four dimensions play a critical role in agricultural and rural development as they affect how people relate to each other, organise themselves and interact for development.

Introduction

The potential role of Social Capital in agricultural and rural development

Social capital has emerged in the last decades as a much-discussed and critiqued topic in government, the private sector and academic circles (Edwards and Foley 1997; Portes 1998). As social capital is a heterogeneous and multidimensional concept, it

is not surprising that it has been approached from very different perspectives and disciplines (Lin 2001; Durlauf and Fafchamps 2004). Some see it as a key concept related to success or having a happy and satisfying life (Baker 2000; Grootaert and Van Bastelaer 2002). Others refer to the intangible resources that reside in relationships, enabling the creation of value, the achieving of goals, and getting things done.

The notion of social capital can be seen as the opposite of individualism that is so deeply rooted in western societies. Individualism means that everyone succeeds or fails because of *own* actions and abilities. The social capital concept, in contrast, emphasises the nature and role of relationships, and how these play a key role as hidden resources in being successful in all areas of life – work, family, community (Coleman 1988; Baker 2000).

Social capital has also become an important analytical concept, and a policy tool, in local development. Social capital can foster (local) development (Lin 2001; Midgley 2013). Here the focus is on how it affects the capabilities of people to organise themselves *for* development (Woolcock 1998; Guenther and Falk 1999; Portes and Landolt 2000). It is in this way also directly related to the main challenges faced by the international community: to reduce rural poverty and hunger (FAO 1998; Serageldin 1998; United Nations 2005). Most poor people (more than 800 million) live in rural areas and their capacity to organise themselves might well be their most important resource (Sen 1981; FAO 1998; Legatum Institute 2015).

Authors such as Van der Ploeg and Marsden (2008), Falk and Kilpatrick (2000), Karlsson and Stough (2012), Bebbington (1999) and Phillips (2015) have emphasised the important role of social capital in integrated rural development strategies. Van der Ploeg and Marsden (2008) and Von Münchhausen and Knickel (2010) conceptualised social capital as one of the key building blocks of what they called the ‘rural web’ and argued that these building blocks need to come together in order to respond to the challenges faced by rural economies to improve the sustainability of rural livelihoods and their prosperity (Van der Ploeg 2008; Von Münchhausen and Knickel 2010; Rivera *et al.* 2018). Against this background, it is not surprising that social capital plays an important role in agricultural as well as in integrated rural development strategies, and that even the World Bank is engaging in social capital building (Bebbington 1999; Dasgupta and Serageldin 2000; Falk and Kilpatrick 2000; Paldam 2000; Harris 2002; Van der Ploeg and Marsden 2008; Karlsson and Stough 2012; Phillips 2015; De los Ríos *et al.* 2016).

While it is undisputed that the notion of social capital is critically important in many ways, above all by providing a useful framework for development, a more differentiated account is needed. The two main reasons are:

- There is a tendency to idealise communities, emphasise their strengths and assume that they are well integrated and united when, in fact, they are comprised of different statuses, classes and other circumstances that may hinder social capital. Indeed, most rural communities experience rivalries, tensions and conflicts difficult to overcome (Shortall 2004; Midgley 2013).
- Authors also agree that social capital is difficult to build, and easy to destroy

(Putnam *et al.* 1994; Colletta and Cullen 2000). Even the most optimistic authors highlight that the building of social capital is long-term, and that the recognition of its impact in community development takes even longer (Durston 1998; Colletta and Cullen 2000).

This paper is to contribute to a more differentiated understanding of the role of social capital in agricultural and rural development. It aims to grasp what social capital means in more practical terms, for rural people and farmers, and how it works, and materialises in agricultural and rural contexts. Building on a better understanding, we are interested in learning how it can best be strengthened and built. The related analyses are based on seven comprehensive case studies in seven different countries.

Different attributes of Social Capital

Our basic understanding of social capital dates back to the 1980s and the work of Pierre Bourdieu (1984), James Coleman (1988) and Robert Putnam (1994). Since then, many authors have continued their work (Fukuyama 1995; Portes and Landolt 1996; Knack and Keefer 1997; Woolcock 1998; Foley and Edwards 1999; Paxton 1999; Lin 2001; Knickel and Maréchal 2018; Rivera *et al.* 2018). One result of this more recent work was the creation of different definitions leading to different ways of operationalising the concept, with less and less consensus on which specific aspects of interaction and organisation merit the label of social capital (Serageldin 1998):

- Fukuyama (1995) practically equated social capital to trust.
- Pamela Paxton (1999) and others stated that social capital consisted of objective and subjective associations between individuals that must be reciprocal.
- Knack and Keefer (1997) adopted two measures, trust and a composite index of norms of civic cooperation, while Paldam (2000) developed the notion of a 'trust-cooperation complex'.
- Van der Ploeg and Marsden (2008), and Von Münchhausen and Knickel (2010) emphasised the interplay of social capital with other elements such as endogeneity, novelty production, institutional arrangements, the governance of markets and sustainability.

Table 1 presents an overview of the different attributes that authors have used when conceptualising social capital.

Relations between people and interests are key

More generally accepted, and applicable, is the notion that social capital is expressed in the links between people that know each other (Putnam *et al.* 2003), and in the sharing of common interests (Cohen and Prusak 2001). Agricultural communities, in particular, tend to have a common history and shared life experiences from which they have built relationships and generated knowledge.

Social capital is rooted in social relations among people who want to achieve shared goals. Understanding social capital therefore requires an understanding of social relations: their formation, transformation, vulnerabilities, and resilience (Reimer 2004; Reimer *et al.* 2008; Snider *et al.* 2017). These relations are commonly divided into two groups:

- *Bonding* social capital, which refers to the interactions between members of the same group and is manifested as loyalty and trust within families and close related people. Bonding social capital is characterised by homogenous groups, in-group trust and collective action (Snider *et al.* 2017).
- *Bridging* social capital, which refers to interactions between people from different groups and implies trust in others, vertical social networks and inclusion (Svendsen and Svendsen 2009). Heterogeneity of group members, out-group trust, inclusive collective action and procurement of information from diverse sources are therefore key elements.

Rationale of this paper and research questions

From the introduction and review of previous work, three main points emerge:

- First, there is a far-reaching consensus that social capital plays a critical role in agricultural and rural development as it affects how people relate to each other,

Table 1: *Attributes that different authors have used when conceptualising social capital*

Author/year	Attributes used to conceptualise social capital
Cohen and Prusak (2001), Snider <i>et al.</i> (2017)	Common interest
Knack and Keefer (1997), Kliksberg (1999a), Paldam (2000), Midgley (2013), Peter <i>et al.</i> (2015)	Co-operation
Kliksberg (1999a)	Values and traditions
Putnam (1994), Fukuyama (1995), Knack and Keefer (1997), Woolcock (1998), Kliksberg (1999), Paldam (2000), Knack (2002), Legatum Institute (2015), Midgley (2013)	Trust
Paxton (1999)	Reciprocal associations
Münchhausen and Knickel (2010), Herran (2015)	Endogeneity and shared values
Serageldin (1998), Baker (2000)	Shared values
Alfaro (2006), Snider <i>et al.</i> (2017)	Shared knowledge
Snider <i>et al.</i> (2017)	Shared past experience, common present and future

organise themselves and interact for development.

- Second, there are different understandings on what social capital means practically, and this implies different views on whether and how social capital can be 'built' or enhanced.
- Third, a few attributes tend to be more often connected with social capital. They are: trust and the quality of relations, common interest and cooperation, sense of community, and culture and tradition.

The aim of this paper, and research questions, follow on from this. The aim is to explore how social capital materialises in the context of agricultural and rural development. In the analysis and discussion, we will pay particular attention to trust, cooperation, sense of community, and culture and tradition. We will examine how they materialise and interact in different situations.

The two related research questions are: (1) What nuances does social capital, and specifically trust, cooperation, sense of community, and culture and tradition, acquire in the context of agricultural and rural development? (2) Can social capital be 'built' (or enhanced) in different agricultural and rural environments, and if yes, how?

Our basic assumption in the analysis and discussion corresponds with Serageldin and Grootaert (1998) who argued that the different definitions of social capital should not be seen as alternatives, but rather as different manifestations of social capital present in a society. A brief introduction and operationalisation of each of the four attributes is provided in the relevant Sub-sections of Section 4. *Analysis and discussion of results.*

Empirical basis and methodology

The empirical basis of this paper are seven case studies that have been carried out in the framework of the European RETHINK¹ research project in the period 2014–2016. The aim of the project was to spark a rethinking of the links between farm modernisation, rural development and resilience.

The seven case studies that are central to the project represent diverse pathways to modernisation, their role in rural development, as well as the diverse characteristics that can contribute to an enhanced resilience. All case studies are at the interface between agricultural and rural development. The cases are in Germany, Spain, Italy, Lithuania, Latvia, Denmark and Israel (Knickel *et al.* 2018).

The main criteria used in the selection of the case studies are (Rivera *et al.* 2018):

- The relevance and richness of available information: The case studies can help rethinking the links between farm modernisation, rural development and resilience and relevant data are available or can be obtained with given resources.
- Viability: The case study could be broadly analysed from the available data and had the sufficient national resources for further data collection and analysis.

Maturity: The case studies are developed enough to provide meaningful insights.

Learning: These insights can be expressed in broader terms.

The main cross-cutting themes in RETHINK's programme were: resilience, prosperity, governance and knowledge and learning. Each of the altogether fourteen case studies focused on the analysis and discussion of at least two of these cross-cutting themes.

The seven case studies analysed in this paper were selected because:

- In the case study analysis, in particular of the prosperity theme, social capital elements played a role in achieving prosperity and well-being (Rivera *et al.* 2018).
- Sufficiently detailed data was collected to allow a meaningful data-based analysis on social capital.
- The seven case studies represent a range of agricultural and rural contexts, including different forms of organisation and co-operation, thereby illustrating different realities.

The analysis of the data was carried out through four main steps: (1) in-depth content analysis of the case-study reports; (2) extracting of text/information where social capital played a role using NVivo Software; (3) coding and analysis of the extracted text using different key words; (4) grouping of key words by the four social capital elements (trust, co-operation, culture and tradition and sense of community) and analysis; (5) comparative analysis and discussion in the light of previous research.

The approach used for data collection was sufficiently adaptable given that different types of knowledge and data were available in different forms in each of the case studies. Generally, the teams used primary and secondary data, expert interviews and consultations with key actors. The interviews and consultations focused on local, regional and national level actors in agriculture and rural development ('practitioners'). The main respondents and participants in consultations included farmers and representatives of farmers' associations, other rural entrepreneurs and actors (including processors, retailers, and technology developers), policymakers, and advisors. Focus groups were used to complement the individual interviews and to clarify different views and interpretations.

Table 2 shows the main actors involved in each case study, as well as the main methods used for data collection.

Throughout this article, practitioners are quoted (based on the interviews) in order to support and illustrate arguments and nuances, and to comprehend the discussion.

Table 3 gives an overview of all case studies analysed for this paper including some key features of the social capital elements examined. The seven case studies cover a range of initiatives and situations, providing insights into the different roles the social capital elements play in different contexts and for different actors.

Table 2: *Methods used for data collection in the seven case studies*

Country of CS	No. of semi-standardised interviews	Interviewees	No. of workshops or focus groups	Participants in workshops and focus groups
Spain	38	Farmers; management team and associates of cooperative; chain partners; regional and local government representatives	1	Farmers; management team and associates of cooperative; chain partners; regional and local government representative; researchers; managers from other co-operatives
Germany	7	Farmers; regional farmers' association; renewable energy consulting; regional agricultural office; LEADER team; representatives of H-O-T Bioenergy Region; Ministry of Agriculture; researchers involved in accompanying the Bioenergy Regions programme	1	Farmers; farmers' association; renewable energy consulting; LEADER team; representative of H-O-T Bioenergy Region
Denmark	51	Farmers; land owners; stakeholder partnership group with local citizens and municipal workers; external expert who has been crucial for the initiative	1	Board members and former president of initiative; municipal employee, researchers

Country of CS	No. of semi-standardised interviews	Interviewees	No. of workshops or focus groups	Participants in workshops and focus groups
Israel	68	Farmers; farmers' association; regional Agricultural Committee; chain partners	4	Farmers; Arava R&D experts; regional Agricultural Committee; input suppliers; processors; marketing companies; Regional Council; representatives of Arava Development Company; policy makers
Italy	22	Farmers; processors; local advisors; consortium inspectors; president of consortium; representatives of Regional Breeder Association; researchers	1	Farmers; processors; local advisors; consortium inspectors; president of consortium; representatives of Regional Breeder Association; researchers
Lithuania	180	Professional advisors; farmers; chain partners; agricultural companies; consumers	-	n.a.
Latvia	20	Farmers	3	Farmers; local agricultural advisors; local municipality representatives; agricultural advisors; researchers; farmer organisations; Ministry of Agriculture; local and regional municipalities and administrations
Total	369		11	

Source: Own elaboration based on case studies.

Table 3: *Short characterisation of the social capital dimension in the seven case studies*

Case study	Role of social capital
Germany (Peter <i>et al.</i> 2015)	The case-study focuses on the role that rural areas and agriculture can play in the transition towards a low-carbon, resource-efficient economy. The social capital dimension is in this case study expressed in cross-sectoral management, new territorial-level arrangements, new forms of governance and the valorisation of different kinds of knowledge. The analysis compares the key features of an eco-economy with those of a bio-economy.
Denmark (Pears <i>et al.</i> 2015)	The case-study focuses on the rural landscape as the spatial framework for agricultural and rural development. It explores how collaborative strategies can contribute to the design of agricultural landscapes that are more attractive and provide more services. It also asks how these landscapes can contribute to the development of rural communities.
Spain (De los Ríos <i>et al.</i> 2015)	The case-study analyses the evolution of the Camposeven cooperative. The cooperative emphasises the use of sustainable horticultural techniques, ways of working together that are based on trust and transparency, prioritising quality over quantity, and the use of a diverse range of marketing channels and partners, and of knowledge networks that have allowed the cooperative to be successful.
Latvia (Šūmane <i>et al.</i> 2015)	The analysis focuses on how modernisation influences the resilience of farming systems and the prosperity of farmers and the connections with rural communities and their well-being. It identifies organisational innovations and initiatives that have been put in place to try to reshape the local agricultural and food markets. In the analysis diverse forms of market, territorial, social and political involvement are identified that ensure farm development while at the same time contributing to viable and sustainable rural communities.

Case study	Role of social capital
Lithuania (Atkočiūnienė <i>et al.</i> 2015)	The case study focuses on how farmers, rural citizens and consumers strive to maintain local added-value in the food sector. The focus is on higher value-added production and the role and organisation of farmers' markets. The case study explores farmers' attitudes and the potentials for joint action in conjunction with changing consumer preferences and purchasing behaviour.
Israel (Hurwitz <i>et al.</i> 2015)	The empirical analysis focuses on farming and rural entrepreneurs in the Arava region. The region was undergoing a major crisis that led to a reconsideration of some long-standing perceptions and motivations regarding the potentials of the region, sources of income and the roles of different actors. The analysis examines, and informs, the new directions for agricultural and rural innovation that individual farmers and regional institutions have begun developing.
Italy (De Roest and Ferrari 2015)	The case-study analyses an outdoor pig farming system in Tuscany, which is based on a local pig breed, the Cinta Senese. The related newly established high value-added food chains combine traditional artisanal methods with contemporary management, modern technologies and marketing. The products add to the region's gastronomic richness and are a source of local prestige and pride. Cooperation along the newly established value chains, trust and common goals play a central role in the initiative.

Source: Own compilation based on Knickel *et al.* (2018).

Analysis and discussion of results

Based on our seven case studies, we will in this section explore how social capital materialises in different initiatives at the interface between agricultural and rural development. We will investigate the nuances that social capital, and specifically trust, cooperation, sense of community, and culture and tradition, acquire in different situations. A closely related question will always be whether and how social capital can be 'built' (or enhanced) in support of agricultural and rural development. To focus

the discussion, only the most revealing case studies are referred to in the particular sub-sections.

Table 4 provides a summary overview on how social capital and the four elements we are focusing on played out differently across the case studies.

Trust and the quality of relationships

Trust is commonly defined as the firm belief in the reliability, truth, or ability of someone or something. It is a key element for the creation of strong interpersonal relationships – in public and private spheres – in turn promoting collaboration and cooperation (Dei Ottati 1987; Tisenkopfs *et al.* 2008). Trust can be considered as both, a precondition and an outcome of social capital (Tisenkopfs *et al.* 2008; Fisher 2013). Putnam (2001) states that ‘*trustworthiness lubricates social life*’, alluding to the fact that it facilitates practices of co-operation and reciprocity among individuals, fostering interest in maintaining relationships to achieve common goals. Reimer *et al.* (2008) emphasises that trust tends to be a matter of shared perspectives, and that lower levels of trust can be expected in relations characterised by asymmetrical levels of knowledge or power.

Our case studies support the view that trust can be a precondition and an outcome of social capital. In particular the Spanish, Danish and German case studies demonstrate that when trust exists, co-operation, as well as participation in collective action becomes easier and more sustainable, thus influencing positively local governance and outcomes.

The Spanish case-study (De los Ríos *et al.* 2015) provides a convincing example of what *bonding* social capital means in practice. Trust, according to the main actors in the cooperative, acted as engine for its creation and enhances the functioning and success of the cooperative since then. A quote from one of the farmers involved illustrates this:

Now we perform much better in social and economic terms compared to when we worked individually ... making compromises has become much easier (Farmer)

Trust means that members of the cooperative can rely on each other, including on processors, distributors, researchers etc. with whom the cooperative maintains close trust-based relationships.

The culture of co-operation and mutual trust is extremely favourable. There is even enough trust as to not need to attend the assemblies (Farmer)

The case-study supports Putnam’s (2001) finding that social capital facilitates practices of co-operation and reciprocity among individuals, fostering interest in achieving common goals. The negative side-effect is that the existence of an established trust base, makes it extremely difficult for other farmers to enter. The competition with those outside the co-operative is nicely illustrated by the following quote:

Table 4: Summary overview on how social capital played out differently across the case studies

CS	Trust	Cooperation	Sense of community	Culture and tradition
Spain	Trust is a precondition for the functioning of the co-operative in many respects. At the same time, it is difficult for other farmers to join. Trust contributes to an internal governance structure that increases resilience. It fosters the exchange of information and mutual learning.	Co-operation plays a central role in the success of the cooperative. Camposeven participates in diverse networks with universities, research institutes and platforms fostering the integration of relevant expertise and experiences. Farmers are also involved in informal networks through which information and knowledge are shared.	Camposeven members have a very strong sense of community. They seem themselves as part of a common project, sharing the same goals, sharing machinery or information, and accepting late payments. Outside of Camposeven, a strong competition between farmers is dominating.	Agriculture is central to Murcia's heritage as the region is known as European orchard. People in the region feel close to agriculture, as either their parents or grandparents were farmers. Farmers in Murcia are well respected by society, fostering their engagement and contributing to the renewal of the farming community.
Denmark	The creation of a trust-based dialogue platform where farmers and municipality are exploring, and developing, common interests is of major importance. The trust-based dialogue between stakeholders enables decision-making in a complex and potentially conflictual situation.	The intensive cooperation between the landowners and the municipal authorities is an important part of resolving problems and pursuing common longer-term plans and projects. A strong network of actors that are interested in jointly pursuing landscape-related projects for the common good plays a central role.	The strong sense of community is closely connected with the creation of the trust-based dialogue platform and intensive co-operation. The sharing of goals reinforces the feeling that all involved are directly or indirectly benefiting from the joint projects.	A culture and tradition of open attitudes towards collaboration supports the more recent developments. Farming is respected and protected by society even with strong pressures on land use. The co-operation and mutual trust have resulted in less rigid regulatory conditions and an approval of projects that otherwise would not have been possible.

CS	Trust	Cooperation	Sense of community	Culture and tradition
Germany	Trust is both a precondition and a result of the collective actions that are launched by municipalities, rural entrepreneurs and farmers in the district. Trust-relations are reinforced by commonly perceived needs to adapt and a common understanding of the new opportunities that a sustainable bioeconomy provide.	Co-operation in the region across sectors facilitates projects that could not be pursued on an individual level. Networking and knowledge exchange are particularly important when major communal level investments are needed. The resulting diversification contributes significantly to household incomes and income security.	Key actors in the district have a strong sense of community that is built on trust, interpersonal relationships and very good communication structures. Key actors see the strong sense of community that characterises the region as a strength and a <i>modus operandi</i> .	People are used to collaborating. Change in the structure of farms, and farming practices, followed a conventional model over a long time, focus has now shifted to a new understanding of innovation, with more attention paid to new forms of organisation and different understandings of modernization.
Italy	Trust and an open attitude towards cooperation in this regional quality production and value-added initiative are fundamental to the creation of good local governance structures that in turn are key to overcoming conflicts and crises.	The consortium acts as a formal network related to the breeding, rearing and marketing of the traditional 'Cinta Senese' pig breed. The association also encourages collaboration with other areas where extensive, outdoor pig farms are located.	The regional-level activities related with 'Cinta Senese' complement and need each other thereby creating a community identity. Farmers share goals and projects, which fosters a strong sense of community.	The 'Cinta Senese' breed represents traditional farming in Tuscany. Local citizens are proud of the products which also attract tourism. The community benefits in multiple ways, and farmers are respected in society.

CS	Trust	Cooperation	Sense of community	Culture and tradition
Latvia	Due to forced collectivism, there is a lack of social skills and trust. Trust needs to be rebuilt and nurtured. Direct selling and closer relations between producers and consumers based on fair prices supports trust-building. Trust-based relations also provide access to a wider pool of knowledge and information.	Co-operation is mainly informal and relating to the exchanging of ideas, seeds, mutual borrowing or sharing machinery. Mutual support is particularly popular among small-scale farmers. A minority of them is engaged in formal cooperation when such benefits as better market access or better prices can be achieved.	Rural communities in the case-study are very individualistic, and the sense of community tends to be low.	Farming is hardly acknowledged by society. Many farmings-related and rural networks are informal, aiming to keep local control over food production and maintain food diversity. Governmental support for new investments and entrepreneurial activities tends to be limited.
Lithuania		Small farms are involved in dense local, national and civic networks. This provides them with opportunities for gaining information, learning and for participating in rural development activities.	Rural communities in the case study are very individualistic, and the sense of community tends to be low. However, the rapidly changing economic and policy environment for farmers fosters participation in networks and a sense of community.	
Israel	People are living, and organised, in Moshavs (communities) which are based on, and foster, mutual trust and co-operation. The relative isolation of the region, and need for each other, also contribute to trust building.	The communities are characterised by a strong cooperation in formal and informal networks. The culture of social interaction enables informal knowledge exchange between farmers and other actors in the region, also extending to new entrepreneurs coming to the area.	The relative isolation of the region creates a very strong sense of community. Social involvement is therefore very high. Farmers increasingly recognise the need for more integrative cross-sectoral networks for example with tourism.	People need to go through an acceptance procedure before they can settle and join the community. Culture therefore affects the types of entrepreneurship that can be created around farming, and in this way the further development of the communities.

It is important to select well who you trust, otherwise you end up getting deceived and getting new ideas stolen from you (Farmer)

That trust is also an invaluable asset for the internal functioning and governance mechanisms is illustrated in both, the Danish and Spanish case studies: the Spanish case representing *bonding*, and the Danish case (Pears *et al.* 2015) representing *bridging* social capital. A significant difference between the two case studies is that in the Spanish case-study trust was a precondition while in the Danish case study, trust had to be completely rebuilt. In the Danish case, trust was built between farmers and the municipality through the creation of the Oddebæk Stream Association (OSA), where both groups are represented. This association emerged from the shared need to respond to the current land availability crisis. The need to co-ordinate interests acted as a catalyst for this association. The governance within the OSA is structured by a trust-based type of dialogue that stakeholders consider crucial in enabling smooth and fair decision-making processes. A quote from an interview with a municipal worker illustrates this:

I had a meeting. I never thought I would experience. ... The advisor said: 'We need to find out what disagreements we have to overcome to get an environmental approval of the new business plan. After that the advisor didn't speak at all, because my colleague and I took over the conversation, and just agreed on the rest (Member of OSA)

The trust-based co-operation of very different stakeholders in the Danish case results in benefits for all involved: The municipality has gained an array of experimental, landscape-related environmental projects, where the landowners voluntarily accepted and engaged in the process. Farmers, benefit from less rigid regulatory measures and the feasibility of projects aimed at an expansion of agricultural production facilities.

The Lithuanian and Latvian case studies (Atkočiūnienė *et al.* 2015; Šūmane *et al.* 2015) illustrate that the experience of forced collectivism during the Soviet period, has led to a lack of social skills and trust, and that trust needs to be gradually rebuilt and nurtured. At the same time, it is clear from the case studies that many farmers are confronted with an increasing need for new knowledge in particular in marketing, management and production technologies. Renewal is needed in order to be competitive at local, national and international levels. Access to new knowledge can be achieved much easier in co-operation and exchanges with others. Building trust is key for these exchanges to happen successfully and sustainably. The rebuilding of trust also concerns the relations between farmers, processors, retailers and consumers (Atkočiūnienė *et al.* 2015; Šūmane *et al.* 2015).

Common interest and cooperation

Co-operation means that different actions made by different people or organisations are coordinated through a negotiation process, either formal or informal. For this, it is necessary that each of the parties consider the preferences and interests of others

and adapt their behaviour in pursuit of the common interest (Afonso-Gallegos *et al.* 2013). To co-operate is to assume responsibilities, share, complement, help, participate and negotiate. It is about maximising strengths, making better use of opportunities, and better protecting against threats (Afonso-Gallegos *et al.* 2013).

In our seven case studies, we can distinguish different forms of cooperation serving different purposes. In the German case study, the common objective for the rural community is to increase the use of bioenergy and to have a more stable, more sustainable and cheaper heating network. A formal cooperation agreement was established between the community and bioenergy providers which allows to source almost all heat from a local heating network based on residual heat from biogas production. Additionally, the village community decided to set up a plant for wood chip production in order to be able to cover peaks in heat demand during winter. The outcome is that the village has become one of the first zero-emission municipalities that covers its demand 100 per cent from renewable energy, and to achieve all this at a much lesser cost (Peter *et al.* 2015).

In the Italian case (De Roest and Ferrari 2015), farmers also participate in informal networks through events such as the annual agricultural fairs as well as weekly farmers' markets. Some of these informal networks have nothing to do with the core goals of the 'Cinta Senese' initiative, as for example local hunter's networks. These informal relationships still have a positive impact on the community, as they improve wider co-operation, for example in managing wild fauna in areas with extensive outdoor pig farming.

Informal co-operation can also function as a buffer against competitive behaviour. As competition increases in importance, a key condition to stimulate a local community's co-operation is to have a higher degree of self-governance with higher levels of self-organisation. An example for this is the case of the Arava valley in Israel (Hurwitz *et al.* 2015). Their relative isolation has allowed them to create a strong community with their own governance structures which in turn is the base on which cooperation is built. The 'returning sons' who came back to the Arava testified that the ability to rely on this communal network was one of the reasons for their return as it made them feel supported and accompanied. If ever they want to try out a new practice or technology or start growing a new crop, they can learn from other farmers in the community.

The OSA association in Denmark and Camposeven co-operative in Spain are excellent examples of formal cooperation initiatives. The OSA is a formal network through which agreements between farmers, landowners and public or governmental organisations are developed, potential problems are resolved, and desired projects realised (Pears *et al.* 2015). Camposeven also co-operates actively with other organisations, such as the European Platform Food for Life, which has led to a number of innovations. Co-operation partners include the Technical University of Madrid, providing students with a test field for research.

Co-operation allows us to be innovative and competitive (Farmer)

That the sharing of common interests and objectives is not enough to achieve formal co-operation, is shown by the Latvian and Lithuanian case studies (Atkočiūnienė *et al.* 2015; Šūmane *et al.* 2015). Culture, traditions and social status also play a very important role, often inhibiting cooperation (Shortall 2004; Midgley 2013). In both cases, hardly any farmers are involved in formal cooperatives or networks. The long-time of superimposed collectivism means that mistrust in collective management is very pronounced, and that farmers are reluctant to formally co-operate. It is a priority for them to keep personal control over their work and its organisation. This very attitude means that sometimes they have less possibilities for joint investments as well as less chances to benefit from common ideas and joint projects for their development. Collective marketing, for example, could help to develop niche production and or higher value-added food chains, but this idea remains largely underutilised. The reluctance of farmers to cooperate hinders obtaining better prices, thus missing an opportunity for an improved and more secure income.

Nonetheless, even if formal types of cooperation and networks are not present in Latvia and Lithuania, informal networks are common. Smaller farms in particular are involved in informal networks, which provide them with opportunities to gain information, and to learn to participate in community-level activities. Many of those networks have no strict rules or functions, and they consist of ad hoc relations that are activated when needed.

Culture and traditions

Culture and traditions transcend across all the dimensions of social capital, and of a society. If integrated adequately in the development of new activities, they may contribute significantly to the success of initiatives and the improvement of their impact (Sastre and Fernández 2013). Chang (1997) notes that values play a crucial role in determining whether there will be progress. Culture can also be a key factor in social cohesion and in fostering a sense of community, as people can recognise each other's qualities, grow together and develop collective self-esteem. Stiglitz (1998) and UNESCO (2009) argue that preserving cultural values is very important for development, as such values serve as a cohesive force at times when many others are flagging. Kliksberg (1999a) stresses that strengthening and reasserting culture and traditions, can set free the energy needed in difficult situations and times of change.

The Italian case-study (De Roest and Ferrari 2015) stands out as the one where cultural values and traditions are particularly valued, thereby enhancing the whole community's development, and involvement in such development. The 'Cinta Senese' pig breed represents Tuscan traditional farming par excellence. Its products match regional gastronomic traditions. Consequently, for the local population, Cinta Senese products represent an element of prestige and pride they want to consume and perpetuate. For tourists, it represents an extra element of interest and cultural and gastronomic richness that complements the list of products typical of this area. These values strengthen farm and community persistence and promote individuals' care for each other.

Likewise, the Italian case shows that the culture and traditions of a particular area also have an effect, particularly, on the way farmers are viewed by the rest of the community. The relationships between people in turn will determine the type of activities and networks that may result from them and will therefore also have an effect on the way the area develops (Tisenkopfs *et al.* 2008; Sastre and Fernández 2013). In areas where farming is not acknowledged, as is the case of Latvia (Šūmane *et al.* 2015), farmers see themselves hindered in terms of their adaptability and persistence. Probably related, they also do not count on enough governmental support for new investments and new entrepreneurial activities. In areas where farmers are respected, and the importance of their work is acknowledged, farmers see their capacities reinforced and supported. The Spanish Camposeven case recently closed an agreement with the local football and basketball teams to provide them with organic fruit and vegetables, providing a great illustration of this point (De los Ríos *et al.* 2015).

That culture and traditions can also dictate the type of entrepreneurship that can or cannot be pursued, can be observed in the Arava case (Hurwitz *et al.* 2015). Traditions may even impede someone becoming a farmer or may influence which type of product or what type of farming an individual will carry out. Most Moshavim (plural of Moshav) are composed of communal properties managed through joint operations. According to farmers, this traditional community structure provides them stability and is key in their success as farmers producing for international markets. However, this same fact, may also inhibit innovation and new ideas that require to do things differently. When culture and traditions require conformity with old practices, these can create resistance to change and therefore hinder innovation (a point for example supported by the work of Sastre and Fernández 2013). In the Italian case-study, pig breeders whose work is very much grounded in traditions, did express concern that this could, at some point in the future, limit their development trajectories (De Roest and Ferrari 2015).

Sense of community

Sense of community is the way individuals interact and relate to others in communities (Pooley *et al.* 2005). McMillan and Chavis (1986, p. 9) define sense of community as '*a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together*'. Sense of community allows us to understand the individual's connection to the community, which is central to the social capital concept (Pooley *et al.* 2005; Vera-Toscano *et al.* 2013). Bengoa (2006) argues that sense of community seems to play a greater role in rural communities.

Through the different case studies, we can see that the stronger the sense of community, the more resilient and open to cooperation communities are, thus enhancing rural communities' potential and development. In the case of the Arava (Hurwitz *et al.* 2015), the actors involved in the case-study emphasised that the relative isolation of the region fostered the creation of a very strong sense of community, and

that this is connected with mutual solidarity, trust and responsibility. The massive return of third generation residents to the region is considered a reflection of this social strength. Residents of the Arava attest that the region's source of strength is its strong sense of identity, which has played a major part in the ability to persist, adapt and prosper.

The ability to persist, adapt and prosper fostered by a sense of community is also acknowledged by the actors involved in the German case study (Peter *et al.* 2015). Farmers in the case study felt that sense of community is not only an intangible advantage, but rather a *modus operandi*: regional actors are characterised by a practice- and implementation-oriented 'hands-on' mentality, mobilising the capacities necessary for realising ideas, as well as by a 'culture of co-operation'. This mentality becomes apparent in the implementation of joint projects, in which farmers are well-acknowledged and serve as active partners for instance in elaborating a business plan for a shared local heating network.

The Camposeven co-operative managed to create a community of farmers minimising direct competition as all producers work for the same cooperative with the same shared goals. This sense of community feeling allows them to be more effective and innovative as they feel at ease and motivated to work harder.

Our case studies also show that an overly pronounced sense of community might lead to an exclusion problem: Where sense of community becomes too predominant, people may become wary of whatever comes from outside the community, causing rejection, and thereby possibly inhibiting further innovation and development. In the Arava case, for example, until very recently, the great majority of the farmers were exclusively focused on producing peppers (Hurwitz *et al.* 2015). However, a major crisis has forced them to look for alternative solutions and they have now started exploring possibilities for diversification such as seaweed for medical purposes or crops for ethanol production.

Conclusions

In this article, we explored how social capital materialises in the context of agricultural and rural development. The seven case studies that we examined, help to better understand different expressions, and distinct roles, of social capital in diverse situations. In the analysis and discussion, we paid particular attention to four elements of social capital: trust and the quality of relationships, common interests and co-operation, sense of community, and culture and tradition. The case studies show that all four dimensions play in various ways a very significant role in agricultural and rural development initiatives. The seven case studies also showed how closely agricultural and rural development are related, and how much the one influences the other.

The following conclusions are structured by the two main research questions that oriented the analysis and the four elements of social capital that we focused on.

Nuances of Social Capital in the context of agricultural and rural development

In our seven case studies, we found very different expressions of social capital. Often it was trust and the quality of relationships that played a central role. Vivid examples are the case studies in Spain, Denmark, Germany, Italy and Israel. Interestingly, in the same case studies, common interests and co-operation also played a key role.

In those cases where trust-based relations are strong, as in the Spanish and Italian cases, all actors involved highlighted this as their main success factor. In particular the Spanish case-study shows that trust contributes to good local governance, and vice versa. The same case study also illustrates that trust and a sense of community are key to overcoming conflicts and crises by promoting both individual engagement, as well as co-operation and collective action. A good balance between individual engagement and collective action, tends to contribute to lasting initiatives with shared common objectives that in turn reinforce the sense of belonging of all involved. The Spanish, Italian and German case studies illustrate this finding.

Farmers who are linked to other stakeholders via trust-based relationships have access to a wider pool of knowledge and other resources that can be deployed. In particular the Spanish, German and Israeli case studies show that the capacity for learning, and being part of knowledge networks, are the cornerstones of successful development. A continuous engagement in learning, according to the case studies in Latvia, Spain and Israel, raises awareness on environmental, technical, economic and social issues, and contributes to a more balanced development. This in turn allows farmers to be more competitive, and increases their confidence in their ability to adapt, to innovate and to collaborate. The cooperation with universities and research institutes in the Spanish, German and Israeli cases, provide great illustrations. In situations where formal knowledge institutes only partly respond to small farmers' knowledge needs, such as the Latvian and Lithuanian cases, informal knowledge exchanges serve as valuable source of inspiration and innovation (a point that is elaborated in more detail by Šūmane *et al.* 2018).

Common interests and co-operation, that have been found to be very important in previous research, also played an important role in our case studies. Both seem essential for collective development, and positive outcomes. Trust stimulates the creation of strong bonds between groups of actors, and this in turn provides the foundation for sustainable co-operation. The Danish case-study provides a great example for facilitation and success in cooperation projects that cut across sectors and diverging interests.

Case studies such as the Italian, Spanish and Israeli, show that engagement in producer groups and other forms of collective action is an important success factor. In two of our case studies – Latvia and Lithuania – the lack of co-operation hampered farm development.

Co-operating in both formal and informal networks helps to elaborate and implement new strategies and approaches. However, in particular the Latvian case-study shows that there is no one way of co-operating. All forms of co-operation can be valid depending on the context in which they occur. What matters is that there are positive

repercussions from this co-operation for all involved, individuals and the community as a whole.

In difficult economic contexts, such as the Spanish and Israeli cases, cooperation seems to become more a necessity, thereby, in the ideal situation, lessening the tendency to compete against one another. The actors involved in both case studies highlight the importance of being part of networks of producers, co-operatives, intermediaries, processors, wholesalers etc., because it allows them to adapt and to make a better use of the diversity of opportunities this generates.

Culture and traditions, and the values that come with both, also affect the way in which people interact and cooperate. It may sometimes inhibit innovative ideas, for example when having to conform to well-established practices as was the case in Israel. Generally, however, cultural capital can contribute to maintaining interest in an area, which in turn may foster the promotion of entrepreneurial activities and innovation amongst those that want to stay and live in that territory. The Italian case study provides an illustration of the positive role of, in this case, culinary traditions.

The sense of community was particularly important in the Italian and Israeli case studies. A sense of community also helps to more closely coordinate different economic, social and environmental activities. In particular the Danish, German and Italian case studies show that a better coordination, and sometimes integration, of different household and communal or local level activities can be a very important success factor.

Being part of the community and participating in community life encourages people to look beyond their individual benefits and relate themselves and their activities with broader community goals and wellbeing. The creation of local markets that serve local communities in the Italian, Latvian and Lithuanian case studies are an example. Such markets tend to create strong bonds between consumers and producers, enhance the capability to collaborate, and contribute to flourishing rural communities. All of this also contributes to enhancing the attractiveness of a region for incoming people and businesses, thereby counteracting demographic change.

Can Social Capital be 'build' in support of agricultural and rural development?

Based on our seven case studies, and the rather context-specific data that we analysed, we can only derive an initial understanding of the processes that are underlying social capital building. The related analysis can therefore just be seen as exploratory. And yet, two conclusions seem possible (and these conclusions are also supported by other authors referred to in Sections 1 and 4):

- First, social capital plays a very important role in agricultural and rural development. From the four elements that we examined, the ones that were most often referred to by the actors involved in the case studies were trust and the quality of relations, common interests and cooperation. Sense of community, and culture and tradition are also appearing as critical elements in development, but probably less frequently and in less tangible ways. That sense of community can be key for

flourishing rural areas is for example shown by the Spanish, Italian and German case studies. The Israeli case study, in particular, shows that cultural values, and tradition, contribute to strengthening the sense of community by contributing to a common identity.

- Second, it is therefore very clearly worth investing in social capital building. All case studies show how different elements of social capital can enable, and reinforce, each other. The more recent reorientation in EU agricultural research funding, and agricultural and rural development support, and the emphasis on multi-actor projects, with the establishment of thematic networks and operational groups are also, very clearly, investments in social capital building. Our analysis shows that both, relationships and knowledge, are tools that can be used to foster development. This is a finding that is in line with for example research carried out by Alfaro (2006) and Kliksberg (1999a, 1999b).

It is also obvious that social capital, and in particular trust and the quality of relationships, but likewise sense of community, and certainly culture and tradition, cannot just be 'built'. All of these, grow and manifest themselves over rather long periods.

And yet, actions can be taken to enhance trust building or strengthen the sense of community. Interventions promoting intergroup encounters can reinforce trust and help to minimise the reluctances that exist because of cultural differences and traditions. Some rural development measures, including in particular the LEADER programme, are meant to foster social capital building through dedicated programme elements, including cross-regional and cross-national exchanges. The problem is of course that social capital is relatively difficult to measure and not suited to the indicator-based approaches currently used in the Common Agricultural Policy.

Note

¹ RETHINK is a transdisciplinary research project supported by the European Commission and funding bodies in 14 countries under the umbrella of FP7 and the RURAGRI ERA-NET. Its aim has been to identify and better understand the conflicting goals and potential synergies facing rural areas, while explicitly recognising the complexity of the challenges and the diversity of different rural localities (Knickel *et al.* 2018).

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