Support for Farmers' Cooperatives

Case Study Report
The role of postsocialist
production
cooperatives in
East Germany

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Preface and acknowledgements

In order to foster the competitiveness of the food supply chain, the European Commission is committed to promote and facilitate the restructuring and consolidation of the agricultural sector by encouraging the creation of voluntary agricultural producer organisations. To support the policy making process DG Agriculture and Rural Development has launched a large study, "Support for Farmers' Cooperatives (SFC)", in order to provide insights on successful cooperatives and producer organisations as well as on effective support measures for these organisations. These insights can be used by farmers themselves, in setting up and strengthening their collective organisation, by the European Commission, and by national and regional authorities in their effort to encourage and support the creation of agricultural producer organisations in the EU.

Within the framework of the SFC project, this case study report on the role of post-socialist production cooperatives in East Germany has been written. Data collection for this report has been done in the spring of 2012.

In addition to this report, the SFC project has delivered 32 other case study reports, 27 country reports, 8 sector reports, 6 EU synthesis and comparative analysis reports, a report on cluster analysis, a report on the development of agricultural cooperatives in other OECD countries, and a final report.

The authors would like to thank the directors and managers of the two agricultural production cooperatives for their valuable time and openness, which made this case study possible. Further we thank the Directors of two German cooperative umbrella associations for their willingness to collaborate in this project and to share information on structure and strategy of their cooperatives.

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1. Introduction

1.1 Objective, research question and hypotheses

The German reunification has resulted in a dual agricultural structure. While western Germany is dominated by relatively small sized agricultural family farms the East German agricultural structure is characterized by much larger farm structures with a reasonably high percentage of corporations and so called Agricultural Producer Cooperatives (APC). The large farms in Germanys "Neue Bundesländer" are a result of the privatization of socialist agriculture after 1990. Since 1990 a tough restructuring process has taken place and has resulted in sizeable modern market oriented farms performing a multitude of tasks in the rural area. In the stakeholder meeting of this SFC project at the end of 2011 various stakeholders from CEECs suggested to throw more light on the crucial role APCs play for agricultural and rural development in the NMS.

The objective of this research is to assess the role of APCs for the development of markets, market access and for rural development in East Germany. The overall research question is: What is the role of Agricultural Producer Cooperatives for Regional Development?

In order to answer this question, together with the project consortium, nine hypotheses have been developed. In our report the relevance of these hypotheses will be analysed on the basis of qualitative inquiry by means of case studies and interviews. Hypotheses can be separated into two main themes which serve as indicators for success, or, maybe more appropriate, regional importance.

The first theme goes into the direction of APC as a regional service provider beyond its role as an agricultural producer. Many APCs in Central and Eastern European countries serve as a substitute or complement to public or communal provision of services, especially in the more remote regions of NMS, and hence may be regarded as important institutions for rural development and service provision. Where this is confirmed the role of APCs clearly goes beyond agricultural production and policies of rural development would have to take this role into account.

The second theme deals with the contribution of APCs to the livelihoods and well-being of local farmers, either as members or as non-members. Thus the role of APCs in agricultural service provision is analysed. Services like the provision of access to markets, processing, machinery warehousing and the provision of important inputs are considered. The thesis here is that APCs are relevant for the overall performance of agriculture in the region and agriculture of member farmers.

Finally we take a look at the role of APCs in bringing innovative technology and additional other-than-agricultural income generating activities into the regions either by means of participating in national or EU initiated project activities or in setting up own initiatives. Our study is one out of six studies analysing the roles of APCs in NMSs. Our aim is to better understand the functions these larger enterprises fulfil in their regions.

Overall, our main or superordinate hypotheses are:

- 1. Cooperatives contribute to regional development in particular as regards strengthening rural income and improving living conditions for the rural population.
- 2. Networks formed by cooperatives represent sometimes one of the main sources of social capital from which economic development can grow.

These hypotheses are too broad to be investigated with qualitative methods. Hence, we developed subordinate hypotheses, which can be inferred more directly in guided interviews. These subordinate hypotheses are divided into the first and the second theme.

Theme 1: APCs as providers of other-than-agricultural production:

- a) Agricultural Producer Cooperatives are important providers of other than agricultural services for their communities.
- b) Agricultural Producer Cooperatives are important providers of access to the labour market e.g the most important employment providers in the community.
- c) Agricultural Producer Cooperatives are important credit providers.
- d) Agricultural Producer Cooperatives render community services.
- e) Numerous local initiatives, for example in rural tourism and environmental protection, or technological innovation originate from agricultural cooperatives, often with public policy support.
- f) Agricultural Producer Cooperatives are important for the implementation of national and EU-level policies.

Theme 2: APCs as service providers to farmers as members or non-members:

- g) Agricultural Producer Cooperatives are important providers of agricultural market access for members and non-members in the region, inputs and retail segments are involved.
- h) Agricultural Producer Cooperatives are key providers of rural services for part time agriculturists and smallholders.
- i) Agricultural Producer Cooperatives provide access to inputs and processing for smallholders.

1.2 Analytical framework

There are at least three main factors that determine the success of cooperatives in current food chains. These factors relate to (a) position in the food supply chain, (b) internal governance, and (c) the institutional environment. The position of the cooperative in the food supply chain refers to the competitiveness of the cooperative vis-à-vis its customers, such as processors, wholesalers and retailers. The internal governance refers to its decision-making processes, the role of the different governing bodies, and the allocation of control rights to the management (and the agency problems that go with delegation of decision rights). The institutional environment refers to the social, cultural, political and legal context in which the cooperative is operating, and which may have a supporting or constraining effect on the performance of the cooperative. Those three factors constitute the three building blocks of the analytical framework applied in this study (Figure 1).

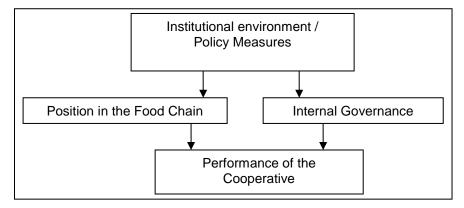


Figure 1: The core concepts of the study and their interrelatedness

1.3 Method of data collection

The case study is based on multiple data sources. First of all, secondary data was used such as academic literature, country reports of the Support for Farmers' Cooperatives project, popular press and electronic media, various archives and other sources of information. These sources helped to plausibilize the hypotheses which were generated during the stakeholder meetings and a project workshop in Leuven.

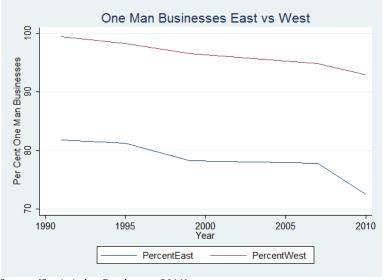
Additional information has been collected through personal interviews with cooperative stakeholders. For this particular study, the chairmen of two Agricultural Producer Cooperatives and directors of regional cooperative associations have been interviewed.

1.4 Structure of the report

Section 2 and 3 of this report are aimed to provide a full picture of the two APCs under study. The APCs will then be compared to each other in section 4. In section 5, we discuss the results with a special focus on the experience with APCs in the NMS in particular with Bulgaria because a similar study using same questionnaire and method has been conducted in Bulgaria. In section 6, conclusions are drawn on support measures and the effect of the European, national and regional policy measures on the development and operation of the APCs.

1.5 Brief review of the literature

The agricultural structure in Germany is rather diverse, with large functional and regional differences. The German south is dominated by small family farms, the north by larger farm firms and the east by large corporations and APCs (Statistisches Bundesamt, 2011), (Knickel, 2006)). In East Germany, about 1100 APCs cover 27.2 per cent of the total agricultural area (Bundesministerium für Ernährung, 2010). The average firm size in the new federal states (Neue Bundesländer) is 232.1 ha while it is 44.3 ha in the old federal states (Alte Bundesländer). In whole Germany there is a trend towards larger firms. The number of One-Man-businesses declined in both parts of the country (figure 2). In East Germany, the number of these businesses declined from 81.8 to 72.5 per cent. In West Germany the share was 92.9 per cent in 2010 (Statistisches Bundesamt, 2011). According to (Oostindie & Parrott, 2002), important drivers for rural development come from organic farming, high quality production including regional labels, diversification and landscape management (Oostindie & Parrott, 2002).



Source: (Statistisches Bundesamt, 2011)

Figure 2: One Man Businesses East vs. West

Federal State	Agricultural Firms		1	Area	Size per Firm
Bundesland	Number	Share in %	ha in	Share in %	
	in 1,000		1,000		
Baden-Württemberg	44.5	14.9	1,410	8.4	31.7
Bavaria	97.6	32.7	3,124	18.8	32.1
Brandenburg	5.6	1.9	1,324	7.9	236.4
Hessen	17.8	6.0	766	4.6	43.1
Mecklenburg-Vorpommern	4.7	1.6	1,351	8.1	287.4
Lower Saxony	41.7	14.0	2,577	15.4	61.8
North Rhine-Westphalia	35.8	12	1,463	8.8	40.9
Rhineland-Palatinate	20.6	6.9	705	4.2	34.2
Saarland	1.3	0.4	78	0.5	59.9
Saxony	6.3	2.1	913	5.5	144.9
Saxony-Anhalt	4.2	1.4	1,173	7.0	279.3
Schleswig Holstein	14.1	4.7	996	6.0	70.6
Thuringia	3.7	1.2	787	4.7	212.6
City States	1.0	0.3	25	0.1	25
Germany	300.7	100	16,77	100	55.9
			2		

Source: (Statistisches Bundesamt, 2010)

Table 1: Number and Size of Agricultural Firms by Federal States (Bundesländer)

ze in ha Agricultural Firms		Area	
Number in 1,000	Share in %	ha in 1,000	Share in %
75	24.9	399.8	2.4
63.4	21.1	951.4	5.7
76.7	25.5	2,563.9	15.3
51.9	17.3	3,650.3	21.8
33.8	11.2	9,206.8	54.9
300.7	100	16,772.3	100
	Number in 1,000 75 63.4 76.7 51.9 33.8	Number in 1,000 Share in % 75 24.9 63.4 21.1 76.7 25.5 51.9 17.3 33.8 11.2	Number in 1,000 Share in % ha in 1,000 75 24.9 399.8 63.4 21.1 951.4 76.7 25.5 2,563.9 51.9 17.3 3,650.3 33.8 11.2 9,206.8

Source: (Deutscher Bauernverband, 2012)

Table 2: Agricultural Firms in Germany by Size

APCs emerged after the reunification as the followers of the former large state owned agricultural firms and socialist production cooperatives (LPG) (Laschewski, 1998), (Eisen & Hagedorn, 1997)). During the socialist era, the LPGs played a major role in rural development. They served as the dominant provider of community services and as the central investor in local infrastructure. Tasks which in the West were usually carried out by service providers from communal governments in the rural areas of Eastern Germany were often carried out by LPGs (Laschewski & Siebert, 2004, Zierold, 1997). From 1990 onwards, the East German countryside struggled with the transformation process from a planned economy to a market economy (Hagedorn & Mehl, 2000, Fink, Grajewski, Siebert, & Zierold, 1994), accompanied by dramatic rural employment reductions and agricultural intensification (Dunford, 1998). This has speeded up the emigration of younger people and structural changes in agriculture (Bundesinstitut für Bau, 2000, Siebert, 1999). Hand in hand with structural changes in the agricultural sector of East Germany went the reduction of rural service provision in the communities (Herrenknecht, 1995, Rodewald, 1994,) where many voluntary organisations shut down (Berking, 1995) and local participation in the maintenance of agricultural and rural services became lower (Hainz, 1999).

Today in the more remote regions of East Germany, APCs are struggling with increasing competition on the land market and the loss of a qualified labour-force (Pletsch, 1998). In order to overcome these challenges, APCs have continuously extended their fields of activity to more

market and service oriented strategies often including non-agricultural activities (Pletsch, 1998) (p.248) gives some arguments for an extension of activities for APCs from a managerial perspective

- Globalisation and demographic change provides new opportunities to rural regions and increasing potential for value addition in the area of services. This opportunity can be best exploited by cooperatives especially APCs as they can exhibit advantages of a diversified portfolio of activities due to economies of scale.
- Large APCs with many members have to deal with heterogeneous member interests. In order to overcome conflicts of interest, a multifunctional operation can be useful to offer diverse benefits to member-owners.
- Many services require particular local knowledge. APCs due to their policies to employ
 members from the region often inherit this knowledge and hence, have competitive and
 comparative advantages.
- The improvement of labour productivity in the agricultural sector challenges APCs. Reduced labour requirements would mean reduced members. The provision of services can help creating employment opportunities for farmers and young people in the region. 55 per cent of all farmers in Germany have a significant non-agricultural income (Knickel, 2006).
- The provision of services and in general the extension to non-agricultural fields ensures sustainable company existence.

There have been several policy driven initiatives for rural development (e.g. LEADER, LEADER PLUS, Regionen Aktiv). In the literature, these policy programs have been criticised. Many of the programs have aimed to establish participation and cooperation and should have led to modernisation and rural development (Knickel, 2006).

However, much rural development still relies on local initiatives of individuals or APCs rather than being motivated by policies (Knickel, 2006, Laschewski & Siebert, 2004). Policies originating from the EU or national level are reported to be little effective. (Becker, 2001) and (Beetz, 2001) argue that the programs are often too large and too complex and the relationship between professionals and development experts and the local community is too loose. Bottomup approaches, regarded as a precondition for success, in practice are often not encouraged. One example is the LEADER II project (Bruckmeier, 2000), which according to (Bruckmeier, 2000), did not increase bottom-up and local participation although it was successful in improving the local infrastructure. (Knickel, 2006) examines the "Regionen Aktiv Program", where all actors should "transform their competing interests into cooperative arrangements" to create win-win situations. (Bundesministerium für Ernährung, 2008). He concludes that, although the project can be regarded as a success, the focus of such programs should much more encourage bottomup processes and participation. Another point of criticism stems from current direct payments from national and EU governments. These are, in a way, crucial for the survival of the APC but an alteration in terms of careful reductions can also make the APC more productive. Hence, authors conclude that new EU level policies of rural development and agriculture need thorough examination regarding the stimulus created for existing structures in agriculture (Pletsch, 1998). Already more than 10 years ago, Balmann (Balmann, 1999) suggested moving away from subsidies as these would lead to path dependency and less structural change. Policies should instead advocate off-farm activities, which could then be supported by APCs. This would provide a more natural way to participate in economic growth (Balmann, 1999 p.22).

When analysing the role of relatively large APCs, for agricultural development the review of the theoretical literature on the efficiency of large versus small farms is unavoidable. The theoretical discussion on the efficiency of large agricultural firms has a long tradition in agricultural economics. Neoclassic approaches include (Peter, 1994), (Helmcke, 1996; Kirschke et al., 1998), who find L-shaped average cost curve declining up to a limit of 400 ha. Schmitt (Schmitt, 1989, Schmitt, 1991, Schmitt, 1997) argued that family farms have competitive advantages to larger farms e.g. due to low transaction costs, increased flexibility (e.g. no fixed wages) or diseconomies

of scale. In contrast, (Peterson, 1997) and (Deininger, 1995) claimed that there are no significant economies of scale in the agricultural sector, and (Beckmann, 2000) even found that non-family farms incorporate agency and monitoring costs that would offset the economies of scale, wherever they are present.

Apart from these rather theoretical treatments approaches, there exists little or mixed empirical evidence on the issue for the case of East Germany. Consequently (Hagedorn, 1991) argues that the optimal size and form should be reviewed in an "empirical experiment". (Thiele & Brodersen, 1999) conducted an efficiency analysis between East and West German agricultural firms and concluded that some APCs are too large due to diseconomies of scale but are more efficient compared to the West German counterparts. Similar results are found by (Balmann, 1999). (Tanneberger, 2006) contests the transaction cost argument and found in a representative study in East Germany that large agricultural firms, especially with various activities and diversity of assets (which include a large share of APCs), have more efficient management activities. He recommended that existing agricultural firms should be motivated to enlarge the scope and size of activities. Further, he found that "the regional dominance and persistence of large-scale enterprises in the East German agrarian sector hast not only historical and social, but also economic causes" These findings seem to have discouraged a more fundamental discourse among agricultural scientists. (Forstner, 2001) concludes the debate claiming that each organisational form could perform efficiently.

Even if larger farm corporations were to be found less efficient, the thesis would ignore recent interpretations which claim that APCs are rather consistent of an agglomeration of family farms than with the idea of industrialized agricultural structures. Thus the idea of several resource and land owning families working together in the farm of an APC securing their employment would come close to the idea of a producer group instead of being treated as a farm factory.

As such APCs represent organizations in pursuit of benefits for their member families like for example (Schmidt & Günther, 2003), (Leopold, 2003). (Strecker, Strecker, Elles, Weschke, & Kliebisch, 2010) (p.347) provide some advantages:

- Adjustment of quality to market requirements
- Increased ability to deliver by supplying demand orientated quantities
- Improved market access and access to marketing streams
- Improved ability to sell by incorporation of experts
- Aiding buyers of agricultural products with procurement problems
- Provide the organisational, personal, and contractual requirements for the development of special programs e.g. quality programs.

It is also argued that in an APC, horizontal cooperation can be linked to vertical cooperation e.g. by extending the activities of the APC to sch by the stable and persisting agricultural structure in East Germany ((Schöne, 2002), (Wissing, 2002). APCs often reach a critical size for direct relationships with processing industries and subcontractors (Tanneberger, 2006).

APCs as large agricultural firms have further benefits including price and marketing advantages (Schultz, 1995; Peter, 1994, Roth, 1995). (Hanisch, 2003) in accordance to (Deininger, 1995) analyses APC in the Eastern European context and summarizes the advantages and disadvantages of APCs:

Size Economies of scale, closed input-production output chain supervision cost Risk Provide insurance, more equitable distribution of shrinking resources Technology Rapid dissemination of new technology, coops as early member investors a adopters Public Goods Education, streets, irrigation, health Services APCs form the nucleus for the Avoids the evolution of supergraphs of particular supergraphs are supergraphs as a supergraphs of particular supergraphs are supergraphs.	isadvantages
resources Technology Rapid dissemination of new technology, coops as early adopters Public Goods Education, streets, irrigation, health Services APCs form the nucleus for the Avoids the evolution	•
technology, coops as early member investors a adopters rewarded according Public Goods Education, streets, irrigation, health Services APCs form the nucleus for the Avoids the evolution	ır/management
health Services APCs form the nucleus for the Avoids the evolution	estors are not
	for rent seeking
emergence of agricultural commercial service service cooperatives organisation due to monopolies	service

Source: (Hanisch, 2003)

Table 3: Advantages and Disadvantages of APCs

The table contents underpin the thesis that APCs may provide advantages that go beyond scale advantages in agricultural production.

A theoretical discussion on the advantages of APCs in transaction costs was persistent at the end of the 1980s, where several authors provided arguments why APCs have institutional advantages compared to other organisational forms and also to family farms ((Bonus, 1986), (Ben-Ner, 1987), (Hansmann, 1988), (Hansmann, 1996), (Alchian & Demsetz, 1972) are among the first to apply the transaction cost argument (Coase, 1937, Williamson, 2002, Williamson, 1981, Williamson, 1983) to cooperatives and (Allen & Lueck, 1998) find it especially true in the agricultural sector. (Valentinov, 2007) analyses the advantages of APCs as a supplement to family farms from an organisational perspective. He argues that specific advantages of family farms remain with the co-existence of APCs, based on the organisational attributes of the agricultural sector, e.g. high asset specificity, inelastic demand for inputs and outputs, land as a production factor, natural risks etc. (p.60).

In the next section we will provide information about two cases of APCs in the federal state of Saxony-Anhalt. The first APC represents a larger APC with a focus on agricultural production and agricultural services. The second case represents an APC which has integrated a completely new activity, the production of energy and heat into its production orientation. Both cases are successfully operating APCs following most different strategies.

2. Description of the first case

The results of this case are based on a personal interview in May 2012 with the chairman of the APC. ¹ An interview team from the Humboldt Universität zu Berlin met a representative of the APC for a duration of approximately 150 minutes. The interview was based on the above mentioned hypotheses in a more elaborated form and a questionnaire (see appendix). The respondent, 57 years old, is currently the chairman of the APC. He had studied agricultural sciences in Halle, Germany until 1983 and afterwards became member and employee in the predecessor firm which was a "Landwirtschaftliche Produktions Genossenschaft" (LPG). After reunification of Germany, the manager of the LPG offered to the respondent to take over the management of the LPG and to form an APC. The respondent was responsible for the restructuring process and knows the APC very well.

2.1 Facts & Figures of the APC

The APC 1 is situated in the east of Saxony-Anhalt close to the border to Lower Saxony. The agricultural land in this area is among the most fertile soils in Germany. The APC took up operations directly after the reunification of Germany and originated from a former LPG. It was founded in 1990 with 256 members. Today, retirement and resettlement has reduced the number of members. Currently, there are 108 members with an average age of 47 years. 25 of the APC's members are full-time employed. The other members are retired. In addition there are also five full-time employees and one apprentice, who are not members. The APC has developed several other employment generating branches in order to increase the productivity of agriculture. Today only about 30 per cent of the employees are working in the agricultural sector. The others are involved in non-agricultural activities and administration. In order to increase incentives for members, the APCs pays annual dividends of six to twelve per cent per cooperative share which amount to 2,518 € per share.

The APC has partially taken over the structure of Raiffeisen warehouses and rural supplies cooperatives known from West German agriculture. Thus, the management sees an important function of the cooperative in the provision of services to agriculture. The APC offers typical services like agricultural machinery services for land owners and leaseholders in the region, the marketing of agricultural products, and seed processing for members and non-members. However, due to the size of the cooperative the APC is able to combine production as its main area of business with agricultural services. In addition the APC performs other-than-agricultural services like operating a filling station, a building centre, a garage performing car maintenance and repair services, storage services, and a minor appliance rental shop. Today these non-agricultural activities create about 30 per cent of the turnover and contribute to 20 per cent of the total profit.

The total agricultural area of the APC is 1,959.9 ha of which 1,191 ha are used for wheat, 265 ha for rape, 255 ha for barley, 131 ha for sugar beets and 12 ha for corn. 565 ha are owned by the cooperative, the rest is leased in mainly from private owners. In total there are about 400 farm lease contracts from different owners. Thus, working the land cooperatively in on the basis of own land and leased land contributed to the consolidation of otherwise fragmented land use.

The APC is active a series of local initiatives like elder care, the renovation of the local castle in order to increase the attractiveness for tourists, the sponsoring of all active sports and cultural local clubs with a lump sum of $200 \, €$ per year for each club and provides small services for free to the community. The total equity share capital is $85,000 \, €$ and the equity ratio is 80.6 per cent. Since 2004, the APC is a certified agricultural firm. The EU subsidy is $655,000 \, €$ per year and the aggregated wages per year come up to $181,000 \, €$.

⁻

¹ For reasons of data protection all provided information has been completely made anonymous by the authors.

	APC 1	APC 2
Foundation	1990	1990
Members in 1990	256	27
Members in 2012	108	9
Average age of members	47	43
Employees (among these members)	31 (25)	13 (7)
Apprentices	1	3
grassland	-	139 ha
Total agricultural land in ha	1960 ha	505.5 ha
of which: wheat	1191 ha	37 ha
rape	365 ha	-
barley	255 ha	42 ha
sugar beets	131 ha	-
corn	12 ha	-
rye	-	153 ha
Number of cows	-	153 heads
Number of cattle	-	170 heads
Agricultural land owned by the	565 ha	87.9 ha
members		
grassland	139 ha	21.1 ha
Agricultural land leased in	1389 ha	nm
Agricultural land leased out	0	nm
Total number of farm leases	400	nm
Total turnover (% agriculture)	(30%)	nm
Total profit (% outside agriculture)	(20%)	(80%)
Equity Capital	85,000€	
Equity Ratio	80.6%	
EU Subsidy	655,000 €	200,000 €
Aggregate wages	181,000 €	

Source: Guided interviews from APC 1 and APC 2

Table 4: Factsheet of Cases

2.2 Relevant support measure affecting structure and strategy

The APC receives EU subsidies of 655,000 €. The subsidies play a crucial role for the development of the APC, as it sums to a large share of total turnover. A limitation of subsidy payments (Kappungsgrenze) on the basis of 300,000 € as currently discussed by EU-decision makers would not negatively affect the cooperative as long as top-ups based on employment costs are considered. The chairmen explained that he regards the proposal to apply size limits as a first step towards further reductions of subsidies. He mentions that he finds it not justified to treat larger agricultural firms different to smaller ones. Especially APCs, which can be regarded as successful multifamily farms should not be discriminated against. Firstly he states that such a rule is contradicting the idea of direct payments. Secondly, he does not see a difference in how the land is got to be treated with respect to environmental and landscaping issues between smaller and larger firms. Finally, the cooperative is purposefully and obviously successfully contributing to local employment. He claims that most of the modern family farms and corporations cannot afford to follow such goals. Apart from direct payments, there are no relevant EU policy support measures benefitting the cooperative.

2.3 Strategy of the cooperative with regard to the study topic

In this subsection each hypothesis will be elaborated with respect to the relevance for the APC.

Other than agricultural services

It was hypothesised that "APCs are important providers of other-than-agricultural services for their communities", that "APCs render community services" and that "numerous initiatives, for example in rural tourism and environmental protection, originate from APCs, often with public policy support". In this case, it turned out that the APC is involved in many other-thanagricultural services as well as in community services. However, the APC did not participate significantly in initiatives with policy support like the Leader and Leader plus initiatives, neither do any of such initiatives originate from the APC. The APC generates a larger share of income from non-agricultural commercial activities including a garage and a building centre. These commercial activities are important for the region and would most likely not be provided by other private or public actors. In the future the APC is considering expanding the commercial activities e.g. by setting up a sports restaurant. The idea behind this has to do with finding the best use for a building no longer in use in the village. Profit maximization is clearly not the main objective of this future project. The APC wants to provide something to the village. Apart from its commercial activities, the APC participates actively in the community. The APC sponsors the local soccer club, a school and a nursing home. These support measures sum up to around 3,000 € per year. Additional, the APC is supporting the "Schlossverein", a local community initiative to preserve the nearby cultural heritage. The respondent mentions that there is no public money to maintain the cultural heritage in the area. Generally, the APC is willing to provide community services that cannot be provided by the municipality, given the budget restrictions. One important aspect for the APC to remain involved in community activities is the rather bad reputation of agriculture in the public opinion fuelled by incorrect reporting in the press and television. The respondent explains that consumer do not understand the connection between agriculture and products in supermarkets anymore and that people complain about dust and noise from tractors when doing bicycle tours at the countryside. He criticises that agriculture is not sufficiently explained and appreciated by the public and that politicians are part of the problem in this regard. Whenever there is an opportunity to work on the overall reputation of agriculture the chairman tries to influence public opinion by involvement in local cultural and sportive activities because he considers this a responsibility for larger enterprises.

Employment

After the foundation of the APC, agricultural production became less labour intensive and the demand for labour decreased in the APC and in the region. As a result, high unemployment rates and emigration emerged (see section 1.5). The APC tried to counteract by getting involved into other-than-agricultural activities. Currently, 70 per cent of the APC's employees do not work in the agricultural sector. Thus, among other reasons the adverse situation on the labour market was a reason for the APC to provide these activities. The APC was examined in its role as a local employer. The hypothesis states that "APCs are the most important employment providers in the community". In our case it holds true that the APC is the most important employer in agriculture in the direct neighbourhood of the village. It definitely belongs to the largest agricultural employers within a 20 km circuit. Even though there is a clear commitment to the jobs maintenance for members, the APC also employs five non-members with full time jobs and takes one apprentice each year. The wages are above the average tariff for agricultural employment. The respondent further elaborates that many people in the region were unemployed if the APC would not have been there. Further, emigration to the larger cities would be the result. For example, the APC's building centre provides employment in the region. If it would close down, the closest building centre is 25 km away in Wolfenbüttel. If not for employment in the community, people would migrate to these towns to find jobs. Another fact is that many residents lack mobility to shop outside the community. In this regard the building centre, the filling station and the machine rental are well appreciated by locals.

As already mentioned the APC is among the larger agricultural employers in the region and the largest one in the village. However, large other-than-agricultural industries are the main employers in the area.

The respondent mentions that from the beginning the aim of the APC has never been to accumulate profits rather than to provide employment to members at "fair" wages and to make the APC sustainable for the future. The reduction of employees over the last 20 years is reported to have been a challenge for the management. Unavoidable technological progress has triggered the continuous search for new employment and income generating activities of the APC which has resulted in the structure of the APC as it is today. The respondent is worried about meeting increasing qualification requirements for the operation of modern machinery. This is one of the reasons why the APC invests in education. The apprentices are later on encouraged to work in the APC.

Credit

There are no credit services from the APC. It is not planning to provide credits in the future to members or to non-members.

Agricultural services and market access

The hypotheses "APCs are important providers of market access for members and non-members in the region, inputs and retail segments are involved", "APCs are the key providers of rural services for agricultural smallholders including extension", and "APCs provide access to processing for smallholders" have been investigated in the interview.

The APC is involved in many agricultural activities. As one of the large agricultural firms in the region, modern high-end technical equipment and machinery are present. Small farmers in the region, who do not have this endowment, rely on the APC in many ways. Most dominant are the machinery services. The APC provides machinery services including service from sowing to harvesting. Usually this is done through a management contract (Bewirtschaftungsvertrag) where the APC is completely responsible for all agricultural activities, including storage, distribution and marketing. Another example is the production of cereal seeds. This service is provided to the members, but also non-members have access to it. The yearly processing sums up to 120 tons of seeds which is equivalent to seeds production for 600 ha of land.

Rental and repair of larger and small machinery is also offered. The APC hence is a relevant service provider for smallholders, but extension is not provided. Also improved market access is provided by the APC. For example, the APC has a warehouse in which members can store products until sold and the APC has a long term delivery contract with a nearby mill connected to the cookies industry. The APC negotiated special conditions and price guarantees. Thus, increased planning security is provided to those members who still are involved with agricultural production, to those members and non-members who own or lease land without working it and to those non-members relying on services like seeds production and machinery services. Concerning inputs, the APC is also well connected to the market due to the large quantities and many years of experience.

Main hypotheses/summary

The above elaborated sub-hypotheses are crucial to investigate the two main hypotheses "APCs contribute to regional development in particular as regards strengthening the low income sector and improving living conditions for the rural population" and "Networks formed by cooperatives represent sometimes one of the main sources of social capital from which economic development can grow". In the above analysis it turned out that the APC plays an important role in the region for agricultural services, other-than-agricultural services and employment. However, credit provision and involvement in the implementation of EU policies could not be confirmed. Nonetheless, it is obvious that the activities of the APC play a crucial role in rural

development of the region. In addition, the APC has an impact on non-member households by rendering agricultural services, employment or infrastructure like a building warehouse, a filling station or small machinery leasing station. The APC is a main employer in the region, pays above average wages and invests in education of the local youth.

Concerning social capital, the APC participates actively in the community. The respondent is concerned about the future of the region and the local agriculture. The APC participates and financially supports community facilities and is involved in the conversation of cultural heritage. A scenario without the APC would most likely result in negative impacts on the region. The respondent thinks that if the APC gave up operations the land would be bought up quickly because it is rather fertile, but most other activities including services and infrastructure maintenance are connected to the employment of members. Thus, the incentive to play an active role in the community in his view has to do with the particular member-ownership and the related rights of the members. Neither family farms nor large investor owned firms would be involved so much in the community.

3. Description of the second case

As with the first case the results are based on a 180 minutes personal interview. It was carried out in May 2012 with the chairman of the APC. The interview followed the same guidelines as case 1. The respondent, 62 years old, is currently the chairman of the APC. He had studied agricultural sciences in Leipzig and Halle, Germany in the 1970s and has been member in the LPG since 1980. The designated chairman, who was also present during the interview, will follow up managing the APC. This is why he was also present.

3.1 Facts & Figures of the APC

The APC 2 is located in the north-west of Lower Saxony. The agricultural land is qualitatively below average with no access to groundwater and an average rainfall of 557 mm. The APC was founded in 1990 as a follow up firm of two LPGs with 1.1 Million € liabilities. The former LPGs had 126 members altogether and by 1990 it was newly founded on the basis of assets owned by 27 of the former members. By 2012, the number of members has reduced to nine of which two members are retired. The average age of the members is approximately 43 years. The APC has ten full time employees of which seven are members and three apprentices. The total agricultural land is 505.5 ha and grassland comes to 139 ha. The total land owned by individual members is 99 ha. The rest of the land had been bought within the last 20 years. Much of the land is no longer cultivated by the APC and leased out. The remaining area is used as grassland for the 153 cows and 170 cattle. The milk quota is about one million litres.

The number of agricultural services declined within the last years. Currently there is a harvester-thresher service with a total supply of 450 ha for nearby smallholders. Further, the APC provides drying and transportation services for agricultural products. Until 2010, many other services including transportation and road services in winter times were offered by the APC. The services offered earlier were stopped because the APC has shifted its production orientation step by step towards energy production. In 2009, the APC built a biogas plant, which today demands most of the APC's capacity. This plant profitably supplies electricity to the grid and heating to the village. More than 80 per cent of all village households are connected to a local warmth delivery system established by the cooperative. Heat supply and system maintenance are carried out through a recently founded cooperative in which local households participate as members. Additionally, three solar photovoltaic plants with a total capacity of 107 KW have been installed. About 80 per cent of the profit comes from the biogas plant. In future, the APC also plans to operate a wind turbine.

3.2 Relevant support measure affecting structure and strategy

The APC receives EU subsidies of 200,000 €. This contributes, however, less than ten per cent to the total turnover. Apart from the subsidy, the APC is not involved in any support measures on EU level. On the national level, the APC strongly depends on the Renewable Energy Law (Erneuerbare Energien Gesetz EEG) in Germany which is meant to trigger the reform of the energy sector towards higher shares of renewable energy. The EEG provides price top-ups for the feeding-in of kilowatt-hours into the grid and makes the biogas plant of the APC profitable. The frequently discussed limitation of direct payments based on a maximum payment of 300,000 € has little relevance for the contemporary profitability of the APC. When respondent was asked about his opinion on current agricultural policies, he mentioned the land set-aside (Flächenstilllegung), a policy that forces agricultural firms to lay a certain percentage of agricultural land fallow. The respondent complained that policies like this one are not made on the ground, leaving opinions from farmers like him unheard. He "feels excluded" from political decision making processes in the EU. Given the current situation in the world, countries like Germany cannot afford to lay agricultural land fallow. He also mentioned anxiety about the recent national discussion to withdraw subsidies on renewable energy production. Such a change of the law (EEG) would make the APC, which has successfully managed to set up a very

innovative decentralized structure of renewable energy on the basis of widespread participation of residents, bankrupt.

3.3 Strategy of the cooperative with regard to the study topic

Other than agricultural services

It was hypothesised that "APCs are important providers of other-than-agricultural services for their communities", that "APCs render community services" and that "numerous initiatives, for example in rural tourism and environmental protection, originate from APCs, often with public policy support". As land quality is poor and rainfall scarce agricultural income has been fluctuant and steadily declining. Accordingly, the APC management had to decide whether to continue or to halt operations. In order to stabilize employment of members and to continue operations the APC decided to set up a biogas plant in 2009. The biogas plant has a capacity of 1.1 MW which is fed into the grid in accordance to the EEG.

In order to make the plant more efficient, the waste heat is being used for drying of agricultural outputs during the vegetation period and, more importantly, for domestic heating in the nearby village. The domestic heating is organized through a heat cooperative (Wärmegenossenschaft) initiated through the APC. All beneficiaries of the village are members of this cooperative and participate in the decision making process. In total, more than 80 per cent of the village households participate. The timing of the investment was ideal because most of the member households had invested into modern central heating systems in their houses right after German reunification. These systems were written off by the year 2008 so that the offer to become a member of a warmth network coincided with village household's needs to buy a new heating system.

Household cost for heating has reduced by 40 per cent since the establishment of the biogas plant. This concept of a collaboration between a consumer cooperative and an APC has created attention in whole Germany and the village is now officially announced as a showcase example and is one out of two so called "bioenergy villages (Bioenergiedorf)" in Saxony Anhalt. The respondent is actively busy with promoting this concept by holding regular meetings and speeches, inviting school classes, tourist groups and foreigners from a multitude of countries etc. Today, the APC is generating 80 per cent of its total turnover from the biogas plant. The respondent stated that the biogas plant was completely initiated from the APC without support from regional or state governments. Yet, the EEG initiative of the German government is an important support measure and crucial for the future profitability.

As the operation of the biogas plant is rather labour-intensive, all employees are involved. Apart from its large involvement in service giving until the year 2009 (winter road services, transportation of milk and feedstuffs, machinery services) there is hardly scope for further activities. In summer, the use of warmth provides cheap drying services for agriculturists of the region. The APC is not involved in other commercial activities like a petrol station, garage, or tourism. However, the APC via its involvement in the production and delivery of warmth is actively participating in the community. One example is the assistance of local festivals with technical support. It also provides financial backing to public facilities like the home association (Heimatverein) and supplies the local kindergarten with heat free of cost. In the future, the APC is planning to operate a wind turbine.

Employment

The APC was examined in its role as a local employer. The hypothesis states that "APCs are the most important employment providers in the community". The APC is comparatively small in size and among the medium employers in the region. The APC has a rather labour intensive production function, which justifies the role as a large employer even with an agricultural land area of 505.5 ha. The wages for all employees are above average tariff and will even rise in the

future due to a lack of qualified labour. The APC is also employing three apprentices, who will be part of the APC later on. In the village there are no further options for apprentices while in the region, there are other APCs that provide apprenticeships. Although the total number of employees decreased over time, there has never been a single dismissal of an employee over the last 20 years.

Credit

As in Case 1, there are no credit services in the APC. Yet, the APC has organized a company pension scheme (Betriebliche Altersvorsorge) four years ago together with a major German insurance company, one of the biggest insurance companies in Germany. This scheme is valid for all members of the APC and is financed from the APC's profit. The idea is to smoothen retirement for long term employees without having to transform the cooperative and distribute its assets among the few remaining members.

Agricultural services and market access

The hypotheses "APCs are important providers of market access for members and non-members in the region, inputs and retail segments are involved", "APCs are the key providers of rural services for agricultural smallholders including extension", and "APCs provide access to processing for smallholders" have been investigated during the interview.

The APC was actively involved in several agricultural services until 2010. These services included plough, harvester-thresher, straw and hay press, liquid manure transport service, potato transportation service, drying plant for ecological companies and corn drying plants (approx. 1500 tons per year). Additionally, the APC used to provide a complete agricultural service for land owners. With the initiation of the biogas plant the APC lacked capacities so that most of these services had to be abandoned. Only drying services and the harvester-thresher are offered in this year. The harvester thresher service is provided to neighbouring APCs and to smallholders (ca. 100 ha), which do not have such machinery. The APC has market access to many important input and retail markets.

Main hypotheses/summary

The above elaborated hypotheses are crucial to investigate the two main hypotheses "APCs contribute to regional development in particular as regards strengthening the low income sector and improving living conditions for the rural population" and "Networks formed by cooperatives represent sometimes one of the main sources of social capital from which economic development can grow". This case, similar to case 1, partly confirms the hypotheses. It is obvious that the biogas plant has drawn nationwide attention, also from politicians, and plays a crucial role for the development of the region. However, as there are limited capacities, further other-than-agricultural and agricultural services diminished. The APC is involved in community based activities and actively participates e.g. by providing biogas meetings. Also the agricultural services and the APC's role as the initiator of innovative technology (biogas, photovoltaic plant, wind turbines in the future) an important employer and as initiator of a pension fund scheme for members seem to be important for the development of the local economy and the region.

4. Analysis by comparison

In order to compare the two cases, we will first report similarities and differences. Then, in table 1, we compare the cases for each hypothesis, based on the findings in sections 2 and 3. Lastly, we will discuss the results of the two cases in a comparative manner in relation to the hypotheses.

4.1 Similarities

The two APCs can be regarded as most different among the successful cases under the common restructuring process in East Germany. Both APCs emerged after the reunification and underwent dramatic structural changes. Both APCs are integrated in the community and actively participate and support selected activities. Also from a legal perspective, the APCs are similar as registered cooperatives (eingetragene Genossenschaft eG). The respondents of both APCs complained about the critical situation of agriculture in East Germany, especially its low profitability and agreed that further commercial and non-agricultural activities are the only way to keep the APCs, and thus the local agriculture, alive. These objectives are in line with EU-policy agendas on the activity mix in the common agricultural policy. Neither of the APCs is very much involved or interested in actively participating in policy initiatives or EU-policy induced projects of regional development. Concerning employment, both APCs are an important and very reliable employer in the region, and pay wages above the average. APCs in Germany do not provide credit or extension services to members or member farms even though they have often done so in the past in the NMSs and in developing countries. Both chairmen shared preoccupation with their future needs for qualified labour because qualified labour is leaving the rural area. In order to countervail this trend, both APCs have early recognized the importance of education. The APC 1 employs one and the APC 2 three apprentices. The chairmen plan to employ the apprentices with full time jobs in the future. In the pace of technological innovation and structural change, both enterprises have reduced labour in agriculture and replaced it with machinery. Both cooperatives have extended their activities to non-agricultural ones in which a majority of member employees is working.

4.2 Differences

The two APCs went on different paths after foundation in 1990. The first case, APC 1, is the larger APC in terms of employees and agricultural area (1960 ha vs. 505.5 ha), and carries out diverse agricultural and non-agricultural activities. The second case, the APC 2, is rather small in size and is today specialized on the biogas plant, which is crucial for the financial stability. While both APCs are financially successful, they developed rather different strategies to keep track with technological innovation and the declining profitability of agriculture. The APC 1 heavily invested into high tech agricultural machinery to increase labour productivity. In order to keep member employees employed new areas of activities were developed which became profitable over the years. The APC 2 worked on the basis of unfavourable natural conditions. As a strategy to prevent exit the management decided to set up the biogas plant to generate additional income. APC 1 still generates a large share of income from agriculture and agricultural services to others, but has widened its portfolio with a diversified field of activities. This is consistent with the finding of (Pletsch, 1998) (see section 1.5), stating that APCs extend their services to survive in the less attractive East German agricultural sector. The strategy of APC 2 can be described as a shift from agriculture to energy in which agricultural production plays a role. Although the biogas plant is a complement to agriculture, it is regarded as the future of the village. The chairman mentioned that, in the future, most resources, not only of the APC, are to be shifted to biogas production and other sources of renewable energy so that the energy related activities can be expanded.

Hypotheses	Details	Case 1	Case 2
Characteristics of APC	Size, main activities, role in region	Large APC, agriculture is main activity. Important in the region	Small APC, biogas is main activity. Important in the region
Agricultural Producer Cooperatives are important providers of	Public services	No	Winter service (Winterdienst) until 2010)
other than agricultural services for their communities	Commercial activities	Building centre, Repair shop, garage, sports restaurant(future), small appliance rental shop	Biogas plant, heat cooperative
Agricultural Producer Cooperatives are most	Agricultural jobs	Full time jobs	Full time jobs
important employment	Other jobs	Full time jobs	Full time jobs
providers in the community	Education	One apprentice per year	Two to three apprentices per year
	Wage rate	Above average	Above average
Agricultural Producer Cooperatives are	Agricultural credits	No	No
important credit	Other credits	No	No
providers	Credit volume	-	-
Agricultural Producer Cooperatives render	Community services	Support of local clubs	Support of local clubs
community services.	Alone or with others	Alone	Alone
	Policy support	No	No
Numerous initiatives, for example in rural tourism	Number of initiatives	No	2
and environmental protection, originate from agricultural cooperatives, often with public policy	EU support National government Local government	No	Biogas plant, solar photovoltaic
support.	Post reform initiatives	No	Biogas plant, solar photovoltaic
Agricultural Producer Cooperatives are	Number of policies implemented	No	No
important for the implementation of national and EU-level	Implemented alone or with others	No	No
policies	Policy level	-	-
Agricultural Producer Cooperatives are	Market access to inputs	Yes	Yes
important providers of market access for members and non-	Market access to retail	Yes	Yes
members in the region, inputs and retails	Ability to rent, sub rent	Yes, machinery	Yes, machinery

segments are involved.			
Agricultural Producer Cooperatives are the key	Extension	No	No
providers of rural services for agricultural smallholders including	Rural services	Yes, complete agriculture, proceeding	Yes, complete agriculture, proceeding
extension	Smallholders benefit	Yes, machinery, processing	Yes, machinery, processing
Agricultural Producer Cooperatives provide	Free access/ better conditions	Yes	Yes
access to processing for smallholders	Scope of processing		

Source: own compilation based on guided interviews

Table 5: Comparison of Cases

4.3 Evaluation of APCs

Both APCs can be taken as examples of successful agricultural restructuring in the form of an APC after reunification. As cooperatives, the APCs played and still play a unique role in the community. Further, the cases show how agricultural activities can successfully be extended by other-than-agricultural activities and hence add value to the community. As they are among the larger agricultural employers and as they are not based on shareholder value orientations they can be assumed to provide important contributions to their respective local economies.

The two cases were chosen in a way that they are different in size and orientation, yet successful. It came out that both small and large APCs are able to successfully cope with current agricultural challenges and adapt to changing surroundings, political, social and environmental. In this case study, the smaller APC specialized on biogas as a means to couple agriculture with new incentives for renewable energy provision which made it financially sound and to maintain the APC as an important member of the community. The larger APC's strategy is diversification. Several agricultural and non-agricultural services are offered while only some of them need to be profitable. The focus is again on successfully maintaining labour for members and the APC as a whole as an important part of the community. Through their many services, there is a tight connection to the farmers in the region. This again is an important fact when evaluating the APC's role in the community. The disappearance of APCs would probably mean a less integrated community and may foster increased emigration. Emigration is often driven by limited job opportunities. Unlike investor owned firms, APCs do not maximise profits, yet the welfare of their members. The two cases in this study are in line with cooperative theory as both chairmen emphasised the continuity of APCs as their major goal. They understand the APC as a body with social responsibility and are trying to provide maximum benefits to the community and its members. Policy wise, the two cases do not display significant involvement. It did not come out that APCs are particularly important for the implementation of EU policies neither do they adopt their strategies according to current policies.

5. Discussion

This study belongs to a series of case studies on the role of APCs in EU agriculture. In this study we have asked in how far German APCs contribute to:

- rural service provision
- to the access of members and non-members to the market
- to particular types of processing
- to the generation and maintenance of rural employment
- to local initiatives regarding environmental protection, infrastructure and tourism
- to the overall networking between their localities and the region and within the region
- to the well-being of their communities

In our two cases, we show that – just like in the other NMS of the European Union – the about 1,100 APCs in East Germany are the result of the restructuring process in post socialist agriculture after the year 1990. As such they share important similarities with the other APCs in Europe: (1) they survived the period of transformation and are an established structure in the agricultural economy, (2) they belong to the largest agricultural farms in the country, (3) they work an important share of agricultural land and (4) they are important players on the markets for agricultural labour and services.

Different to APCs in other countries is the environment in which APCs in Germany operate. The length of the period of membership in the EU differs because EU-policy effects of the CAP came immediately with German reunification. Another difference relates to the relatively higher per capita GDP level in Germany, extra agricultural income opportunities within the country and the established social network securing pensions for agricultural retirees. In this regard, the environment in which German APCs operate is definitely different compared to the environments effective in most other NMS.

We find that our two cases represent two typical ends of a continuum of possible trajectories between "agricultural focus strategies complemented by services" and "off farm income strategies" for APCs after 1990. We claim that both strategies are motivated by pressures on the management resulting from the particular ownership and control structure as a producer cooperative in which a considerable share of the farm's owners are at the same time employees of the farm. We also claim that these trajectories may exemplify important strategies of APCs in the other member states of the EU in the future.

APC 1 "Focus on agriculture" started with about 250 members and represents a relatively large APC with about 2,000 ha of land under cultivation. Today, it has 108 members. Over the last 20 years, the APC has increasingly focussed on higher productivity in its agricultural production. As such it represents a very modern agricultural enterprise considerably benefitting from direct payments and favourable natural conditions for agricultural production (land quality). The many other activities of the APC rather complement this focus on agricultural production and are based on niche opportunities in its particular market environment and – more importantly – on making the best out of the particular talents of their member-owner-employees. The reasoning behind the firm's complementary strategy of differentiation is straightforward: Over the last 15 years, the APC has neither dramatically grown in terms of agricultural land nor laidoff a single member worker below retiree age. Giving services to other agriculturists, the operation of a filling station, the setting up of a car mechanical workshop, the processing of members' seeds, the operation of a building shop and the operation of storage and small machinery rentals today employ 2/3 of the APC's employees and service provision satisfies the purpose to keep member workers employed in a situation characterized by technological innovation and in which less and less work is needed in agricultural production. A side effect of the many initiatives to keep workers employed is that the cooperative as it stands today largely

contributes to the provision of a valuable infrastructure for rural residents who benefit from the workshop, building shop, filling station and other services of the APC.

The management of the cooperative has characterized the particular challenge of running an APC as the challenge to find agreeable solutions to increasing labour productivity in modern agriculture without compromising on profitability. The particular ownership structure of the APC does not allow the management to simply lay off work if no longer needed. Thus the task of cooperative management is described as a trade-off between profitability and social responsibility vis-à-vis owner employees. At the same time concern for the image of modern type agriculture and concern for the quality of life in the community motivate activities of the APC in social and cultural initiatives.

The second case "Focus non-agricultural" exemplifies a somewhat different trajectory of APC development. The APC 2 started with just a fraction of the original membership of the former socialist agricultural producer cooperative and with less than 700 ha has always been below the average size of East German APCs.

Working on less favourable natural conditions, the APC management also had to develop nonagricultural strategies to secure employment of members and non-members. At the beginning, these strategies followed-up the wide range of traditional functions of cooperatives in the rural areas of the former GDR including road services, transportation, supply of foodstuff and inputs and repair and maintenance services for community based machinery and equipment. Long standing ties with the community and the village were kept over the years. However the APC could not profitably maintain this variety of services and new strategies to secure profitability and member employment were developed until 2008. In this year, the APC changed its focus and launched biogas production in order to benefit from subsidized feed-in tariffs granted on the basis of Germany's Renewable Energies Law (EEG). Ever since, a consequential investment into the production of renewable energy has taken place. At the same time the APC made use of its good relationship to the community and the local residents. The APC management initiated the foundation of a local Heat Users Cooperative in which more than 80 per cent of the households of village benefit from the APCs heat delivery by means of individual heat exchangers and a heat pipeline. In summer, the heat of the biogas plant of the APC is used for drying of agricultural produce from the region and for drying of bio-matter for the plant itself. In winter members realize a 40 per cent decrease of expenditures for heating. In the future a photovoltaic plant and investment in a wind turbine will supplement the portfolio of income generating activities of the APC in which primary agricultural production today generates less than 50 per cent of the APC's turnover.

Thus in APC 2, since 2008 the portfolio of activities has dramatically changed and so have the incentives for member-owners. Since 2011, the current management has recruited a much younger deputy manager who will take over business operations as soon as the current manager reaches age of retirement. Also in this case members' interests to sustain their own employment have had a lasting grip on the differentiation of the APCs activities. The village has increased its attractiveness for tourism by large since the realisation of the energy cooperative. It functions today as an official showcase example for innovative links between agriculture and energy production for the different ministries of the federal state of Saxony-Anhalt.

Though following very different strategies both APCs exemplify how this new type of rural cooperative works. Both cooperatives have benefited largely from EU subsidies just like any other type of agricultural firm in Germany has. However, the ways in which subsidies were used to smoothen structural change and as a follow the ways in which cooperatives adapt to structural change in agriculture appears somewhat different to the structural adaptation processes known from large agricultural corporations, which we assume may adapt easier by laying off work when productivity increases.

The hypotheses that APCs play a role as agricultural and rural service providers, as larger employers, as organizations benefitting the communities in which they operate and as initiators of infrastructure projects and for other innovation processes could be largely confirmed. With regard to the CAP and the discussion to restrict subsidies on the basis of a 300,000 € cut the direct impact on APCs may remain small if not negligible as long as the cost for wages top up direct payments. However, interviewees are sceptic about this policy proposal because they cannot see a link to the idea of direct payments and − maybe more importantly − because the idea behind the cut which has been reported as an initiative to avoid the support for so called farm factories cannot apply to the particularities of the APCs in East Germany. As such, it is highly recommendable to not only consider the cost of wages but to make an exception for APCs just in the same way as there has been made an exception for Producer Cooperatives in other regulations like for example in the milk package. Such an amendment would probably lead to an immediate change in the public opinion regarding the usefulness of the limitations for direct payments because it would carry the message that the Commission can differentiate between industrialized corporations in agriculture and the current meaning of the APC.

References

Alchian, A. A., & Demsetz, H. (1972). Production, Information Costs, and Economic Organization. *The American Economic Review*, *62*(5), 777–795.

Allen, D. W., & Lueck, D. (1998). The Nature of the Farm. *The Journal of Law and Economics*, 41(2), 343–386.

Balmann, A. (1999). *Path Dependence and the Structural Evolution of Family Farm Dominated Regions* (Organized Session Papers). Warsaw.

Becker, K. (2001). Unsere Lösung - Ihr Problem. Berliner Debatte Initial, 12(6), 52-64.

Beckmann, V. (2000). *Transaktionskosten und institutionelle Wahl in der Landwirtschaft: Zwischen Markt, Hierarchie und Kooperation*. Berlin: Ed. Sigma.

Beetz, S. (2001). Woher die Menschen und wohin mit dem Land? Berliner Debatte Initial, 12(6).

Ben-Ner, A. (1987). Producer Cooperatives: Why Do They Exist in Capitalist Economies. In W. W. Powell (Ed.), *The Nonprofit Sector. A Research Handbook*. New Haven: Yale University Press.

Berking, H. (1995). Das Leben geht weiter: Politik und Alltag in einem ostdeuschen Dorf. *Soziale Welt*, 46, 342–353.

Bonus, H. (1986). The cooperative association as a business enterprise: a study in the economics of transactions. *Journal of Institutional and Theoretical Economics*, *142*, 310–339.

Bruckmeier, K. (2000). LEADER in Germany and the Discourse of Autonomous Regional Development. *Sociologia Ruralis*, 40(2), 219–227. doi:10.1111/1467-9523.00144

Bundesinstitut für Bau, S.-u. R. (2000). Raumordnungsbericht 2000.

Bundesministerium für Ernährung, L. u. V. (2008). So haben ländliche Räume Zukunft: Ergebnisse und Erfahrungen des Modellvorhabens Regionen Aktiv. Bonn.

Bundesministerium für Ernährung, L. u. V. (2010). Ausgewählte Daten und Fakten der Agrarwirtschaft 2010.

Coase, R. (1937). The Nature of the Firm. *Economica*, 4(16), 386–405.

Deininger, K. (1995). Collective Agricultural Production: A Solution for Transition Economies. *World Development*, *23*(8), 1317–1334.

Deutscher Bauernverband. (2012). Situationsbericht 2011/12: Trends und Fakten zur Landwirtschaft. Berlin.

Dunford, M. (1998). Differential development, institutions, modes of regulation and comparative transistions to capitalism: Russia, the Commonwealth of Independent States and the former German Democratic Republic. In J. Pickles & A. Smith (Eds.), *Theorising transition. The political economy of post-communist transformations.* London;, New York: Routledge.

Eisen, A., & Hagedorn, K. (1997). *Genossenschaften in Mittel- und Osteuropa: Selbsthilfe im Strukturwandel*. Berlin: Edition Sigma.

Fink, M., Grajewski, R., Siebert, R., & Zierold, K. (1994). Rural Women in East Germany. In D. Symes & A. J. Jansen (Eds.), *Agricultural restructuring and rural change in Europe.* Wageningen: Agricultural University.

Forstner, B. (2001). Zukunftsfähigkeit der ostdeutschen Landwirtschaft: Betriebsstrukturen. In Agrarsoziale Gesellschaft (Ed.), *Schriftenreihe für Ländliche Sozialfragen: Vol. 137. Landwitschaft in Ostdeutschland - stabile Strukturen oder mitten im Umbruch* (pp. 32–69). Göttingen.

Hagedorn, K. (1991). Gedanken zur Transformation einer sozialistischen Agrarverfassung. *Agrarwirtschaft*, 40, 138–146.

Hagedorn, K., & Mehl, P. (2000). Social Policies for German Agriculture. In S. Tangermann (Ed.), *Agriculture in Germany* (pp. 135–167). Frankfurt am Main: DLG.

Hainz, M. (1999). *Dörfliches Sozialleben im Spannungsfeld der Individualisierung*. Bonn: Forschungsges. für Agrarpolitik und Agrarsoziologie.

Hanisch, M. (2003). *Property Reform and Social Conflict: A Multi-Level Analysis of the Change of Agricultural Property Rights in Post-Socialist Bulgaria*. v. Aachen: Shaker.

Hansmann, H. (1988). Ownership of the Firm. *Journal of Law, Economics, & Organization, 4*(2), 267–304.

Hansmann, H. (1996). *The ownership of enterprise*. Cambridge, Mass: The Belknap Press of Harvard University Press.

Helmcke, B. (1996). Zur Bedeutung der betrieblichen Flächenausstattung für die Produktionskosten im Marktfruchtbau. Aachen: Shaker.

Herrenknecht, A. (1995). Der Riß durch die Dörfer - Innere Umbrüche in den Dörfern der neuen Bundesländer. In Agrarsoziale Gesellschaft (Ed.), *Kleine Reihe. Dorf- und Regionalentwicklung in den neuen Bundesländern* (pp. 50–64). Göttingen.

Kirschke, D., Odening, M., Doluschitz, R., Fock, T., Hagedorn, K., Rost, D., & Witzke, H. von. (1998). *Weiterentwicklung der EU-Agrarpolitik: Aussichten für die neuen Bundesländer*. Kiel: Vauk.

Knickel, K. (2006). Agrarwende: Agriculture at a Turning Point in Germany. In D. O'Connor, H. Renting, M. Gorman, & J. Kinsella (Eds.), *Driving rural development* (pp. 82–110). Assen: Van Gorcum.

Laschewski, L. (1998). *Von der LPG zur Agrargenossenschaft: Untersuchungen zur Transformation genossenschaftlich organisierter Agrarunternehmen in Ostdeutschland.* Berlin: Ed. Sigma.

Laschewski, L., & Siebert, R. (2004). Social Capital Formation in Rural East Germany. In H. Goverde, H. de Haan, & M. Baylina (Eds.), *Power and gender in European Rural Development* (pp. 20–31). Aldershot, Hants, England; Burlington, VT: Ashgate.

Leopold, S. (2003). Milch aus dem gemeinsamen Stall: Eifelbauern gründen eine Agrargesellschaft. *Neue Landwirtschaft*, (9), 10–15.

Oostindie, H. & Parrott, N. (2002). Farmers attitudes to rural development: Results of a transnational survey in six EU countries (IMPACT Working Paper). Wageningen.

Peter, G. (1994). Eine Ermittlung der langfristigen Durchschnittskostenkurve von Marktfruchtbetrieben anhand des "economic engineering" Ansatzes. Göttingen.

Peterson, W. L. (1997). *Are Large Farms More Efficient?* (Staff Papers No. 13411). Retrieved from http://ideas.repec.org/p/ags/umaesp/13411.html

Pletsch, J. (1998). *Thüringer Agrargenossenschaften als Sach- und Dienstleister*. Giessen: Fachverl. Köhler.

Rodewald, B. (1994). Glasow - Ein Dorf im Schatten der Grenze. In FAA (Ed.), *Dörfer Heute* (pp. 443–468). Bonn.

Roth, A. (1995). Ausgewählte Unternehmensstrategien in juristischen Personen der Landwirtschaft der neuen Bundesländer unter besonderer Beachtung steuerlicher Aspekte. Halle.

Schmidt, H., & Günther, P. (2003). Gemeinsam wird's billiger - durch horizontale Kooperation Kosten sparen. *Neue Landwirtschaft*, (6), 24–26.

Schmitt, G. (1989). Farms, farm households, and productivity of resource use in agriculture. *European Review of Agricultural Economics*, *16*(2), 257–284.

Schmitt, G. (1991). Why is the agriculture of advanced Western economies still organized by family farms? Will this continue to be so in the future? *European Review of Agricultural Economics*, 18(3-4), 443–458.

Schmitt, G. (1997). Unvollkommene Arbeitsmärkte, Oppertunitätskosten der Familienarbeit und Betriebsröße. *Berichte der Landwirtschaft*, *75*(1), 35–65.

Schöne, U. (2002). Rechtsformwechsel: Für und Wider. Neue Landwirtschaft, (8), 16–18.

Schultz, O. (1995). *Angebot, Nachfrage und Vermarktung der landwirtschaftlichen Produkte in den neuen Bundesländern* (Schriftenreihe des Bundesminsteriums für Ernährung, Landwirtschaft und Forsten Reihe A No. 447). Münster.

Siebert, R. (1999). Wandel Ländlicher Räume - Soziale Rahmenbedingungen für die Landwirtschaft. In Aktionsbündnis Ländlicher Raum (Ed.), *Ländliche Räume, Landschaft und Landwirtschaft 2010* (pp. 7–15).

Statistisches Bundesamt. (2010). *Titelbild: Land- und Forstwirtschaft, Fachserien Ausgewählte Zahlen der Landwirtschaftszählung/Agrarstrukturerhebung* (Fachserie No. 3/1).

Statistisches Bundesamt. (2011). *Agrarstrukturen in Deutschland Einheit in Vielfalt: Regionale Ergebnisse der Landwirtschaftszählung 2010.* Stuttgart.

Strecker, O., Strecker, O. A., Elles, A., Weschke, H. D., & Kliebisch, C. (2010). *Marketing für Lebensmittel und Agrarprodukte* (4th ed.). Frankfurt am Main: DLG.

Tanneberger, T. (2006). *Untersuchungen zur Managementeffizienz von Genossenschaften und Kapitalgesellschaften in der Landwirtschaft Ostdeutschlands*. Berlin: Logos-Verl.

Thiele, H., & Brodersen, C. M. (1999). Differences in Farm Efficiency in Market and Transition Economies: Empirical Evidence from West to East Germany. *European Review of Agricultural Economics*, 26(3), 331–47.

Valentinov, V. (2007). Why are cooperatives important in agriculture? An organizational economics perspective. *Journal of Institutional Economics*, *3*(01), 55.

Williamson, O. E. (1981). The Economics of Organization: The Transaction Cost Approach. *The American Journal of Sociology*, 87(3), 548–577.

Williamson, O. E. (1983). *Markets and Hierarchies: Analysis and antitrust implications Williamson* (Paperback ed.). New York, N.Y: Free Press.

Williamson, O. E. (2002). The Theory of the Firm as Governance Structure: From Choice to Contract. *Journal of Economic Perspectives*, *16*(3), 171–195.

Wissing, P. (2002). Stabil und Nachhaltig: Agrargenossenschaften im "Grünen Bereich". *Neue Landwirtschaft*, (4), 16–19.

Zierold, K. (1997). Veränderungen von Lebenslagen in ländlichen Räumen der neuen Bundesländer. In A. Becker (Ed.), *Regionale Strukturen im Wandel* (pp. 501–567). Opladen: Leske + Budrich.

Appendices

Hypotheses and Questionnaire for Case Studies "The Role of Post-Socialist Agricultural Production Cooperatives in Bulgaria and East Germany"

A. Hypotheses

11 Hypotheses can be subdivided into two fields of subordinated hypotheses and two superordinate hypotheses. The superordinate hypotheses are answerable based on the subordinated hypotheses. The following pages provide details on each of the subordinated hypotheses and relevant questions/aspects. We are able to answer our hypotheses, if we can answer the "relevant aspects to be asked". From the hypotheses, the questionnaire is constructed as in Section B:

I. COOPs as providers of more than agricultural production

a. Agricultural Producer Cooperatives are important providers of other than agricultural services for their communities.

Aspect	Definition	Relevant aspect to be asked	
		(mostly estimations of interviewees needed)	
Other than agricultural services	Private services like Kindergarten, Petrol station, Bakery in which the coop is not, partly or fully involved?	How many different services exist in the community and in how many of those the coop is involved?	
Provider	Dimension 1: only the cooperative, the cooperative in collaboration with other firms, government, the cooperative facilitating services of other actors Means of provision: as a facilitator, initiator, support, cooperation and?	Of those services the coop is involved in, to what extent is the coop involved? How is the involvement utilized? How does the community/ government/ firms/ other actors participate in those services?	
Important provider	Share of APC-services against total services. Number of services (total vs. coop services), involvement of coop per service.	What value for the community does the provision of those services contain?	
Communities	All inhabitants Members Agricultural members and non-members Socially backwards Dimension 2: Scope of beneficiaries	See fact sheet of ACP Who is the beneficiary of the service? What part of the community/region etc. is covered by the service?	

b. Agricultural Producer Cooperatives are most important employment providers in the community.

Aspect	Definition	Relevant aspect to be asked
Employment	Agricultural jobs	What agricultural and non-agricultural jobs are offered
	Short term	
	Long term	
	High qualified jobs	
	Low paid jobs	
	Regional jobs	
Most important	share of overall jobs in the region, job security, social benefits, salary compared to	How many jobs in the community are provided by the APC compared to
	average, length of contracts, jobs would diminish if APC was not there	all jobs in the community?
		Would these jobs be offered by another actor (government or private) if
		the APC was not there? How many jobs could remain if the APC would
		not be there?

c. Agricultural Producer Cooperatives are important credit providers.

Aspect	Definition	Relevant aspect to be asked
Credit	Agricultural credits	What is the credit portfolio?
	Non-agricultural credit	Who can get a credit?
	High volume credit < 10000 euro	What are the length and amount ranges for credits
	Low volume credit	
	Long term credit	
	Short term credit	
Provider	only the APC	Who provides the credit? What is the Role of the APC in credit
	the APC together with other firms, government	provision?
	as a facilitator	
Important	other options of credit exist, further services like consultancy, insurances,	Could people from the community get credit under the same condition
providers	share of credit provided,	from other credit providers?
	credits to non-trustworthy people	Would credits be available if the APC was not there?

d. Agricultural Producer Cooperatives render community services. (covered in Hypothesis a)

e. Numerous initiatives, for example in rural tourism and environmental protection, originate from agricultural cooperatives, often with public policy support.

Aspect	Definition	Relevant aspect to be asked
Numerous	Share of total initiatives	How many initiatives like rural tourism and environmental protection
	Share of activities of APC	have been carried out within the last year? (until now?)
Initiatives	rural tourism, environmental protection, other than agricultural services, credit	What initiatives the APC has been involved in
Public policy	Local government	How many of these initiatives have been supported by other (political)

support	German government	actors? Who were these actors?
	EU support	
	Support from government near organisations	
Originate	has been established by coop post reform	Would these initiatives have taken place without the APC? Have these
	has been initiated by coop recently	initiatives been initiated by the APC alone? Was any of these initiatives
	has been established due to APC specific subsidy	already in practise before the APC entered the community
	initiative from APC members	

f. Agricultural Producer Cooperatives are important for the implementation of national and EU-level policies.

Aspect	Definition	Relevant aspect to be asked
implementation	conducted by APC alone conducted together with private companies support to conducting actor	Has the APC implemented national or EU policies? Will the APC implement these policies in the (near) future?
national policies	policies implemented by the country government which are relevant for agriculture and rural areas	Has the national government ever contacted the APC to implement a policy?
EU policies	policies implemented by the EU which are relevant for agriculture and rural areas	Has the EU government ever contacted the APC to implement a policy?
important	other actors are not able to provide the implementation APC has advantages to other actors without APC, policy could not have been implemented	Could other actors implement these policies as well? What was the reason that the APC implemented it? Did the APC implemented it alone or together with other actors? give examples?

II. COOPs provide benefits to farmers as members or non-members

g. Agricultural Producer Cooperatives are important providers of market access for members and non-members in the region, inputs and retails segments are involved.

Aspect	Definition	Relevant aspect to be asked
market access	ability to sell agricultural products	Does the APC help farmers to access the market? In which markets do
	ability to buy inputs, machinery	the farmers get support for access from the APC?
	ability to rent, sub rent etc. land	Is the APC marketing the products for farmers?
		Is the APC acting as a facilitator for market access?
inputs	seeds, fertilizers	Does the APC provide access to all inputs for agricultural production?
retail	selling the products to local processing industry or small local shops	Does the APC provide access to retail markets for members and/or for
		non-members?
members	full member ship in the APC, all agricultural activities is connected to the APC	
non-members	farmers from the community who are not (regularly) involved in the activities of the	
	APC	
important	handling the market access	Would farmers be able to access these markets without the APC?
providers	supporting farmers in gaining access	Would access to markets without the APC come at high costs?

h. Agricultural Producer Cooperatives are the key providers of rural services for agricultural smallholders including extension.

Aspect	Definition	Relevant aspect to be asked
rural services	services linked to agriculture	What rural services are provided by the APC
agricultural smallholder	family size farms	Who can access these services
extension	training	Is extension offered by the APC
key providers	existence of alternatives demand from farmers, esp. smallholders	Who else in the community is offering rural services? Which rural services are not provided by the APC? Would these rural services pertain if the APC would shut down?

i. Agricultural Producer Cooperatives provide access to processing for smallholders.

Aspect	Definition	Relevant aspect to be asked
access	free usage vs. fee	Who has access to these activities?
	access always vs. limited timings	What are the conditions for access?
processing	all agricultural work that involves the steps after harvesting e.g. oil press, raw material	What processing activities are handled by the APC?
	packaging, transforming raw materials	
smallholders	small farms	Will smallholders have advantages or disadvantages over larger farmers
		when it comes to processing?

III. Overall Hypothesis

j. <u>Cooperatives contribute to regional development in particular as regards strengthening the low income sector and improving living conditions for the rural population.</u>

k. Networks formed by cooperatives represent sometimes one of the main sources of social capital from which economic development can grow.

B. Questionnaire

Guidelines:

- Gather as much information on the APC and the interviewee as possible, and show the interviewee that you are also an expert in the field. DO NOT give the impression that the topic is new for you.
- Make sure that all hypotheses are covered. You do not have to ask questions in the same order and you can leave out a question if it has been answered before (but document it. E.g. in question 1.7 question 5.3 is already answered, make a note at question 5.3 referring to 1.7)

• You can politely interrupt the interviewee if she is explaining irrelevant topics.

Introduction: Introduce yourself and briefly the objectives of the study,

Timing (90 min),

Thanks for helping us,

Humboldt-Universität zu Berlin,

(get into a conversation via facts you already know, please confirm)

Subtheme ranked order	Linked to Hyp.		Interviewee statements (make notes on additional page and references to notes here!)	Note down your own observations while statement given (anger, laughter, severe, doubt, etc.)
1. Attributes Interviewee	D	ID		
1.1. Please state your full name and year of birth.				
1.2. What is your current position in the APC?				
1.3. For how many years have you been working for the APC?				
1.4. What is your professional background?				
1.5. Do you know about the history of the APC and can describe it in few sentences?	е			
2. General attributes of the APC				
2.1. How many farmers are member of this APC? How does it compare to the total number of farmers in the region? (If possible ask for numerical values)	b			

2.2. How many members (farmers and non-farmers) does	b		
the APC have?			
2.3. Is it among the larger or the smaller agricultural		b,g,	
enterprises of this region? How does it compare?		h,i	
		ĺ	
2.4. Is it among the smaller or the larger employers of the	b	a,g,	
region? How does it compare?		h,i	
l segient then deed it company to		,.	
2.5. How many people are employed in the APC? Please	b		
elaborate on their status of employment?			
State of the state of employment.			
2.6. How many of the employees are members of the APC?		b	
2.7. How much land if any is owned by the APC?			
2.8. How much land is leased-in?			
2.9. How many leaseholders are there?			
2.10. How many leaseholders are members of the APC?			
2.11. What are the main branches and agricultural activities	g,h,	b,c	
of the APC?	i		
2.12. How would you define the community where the APC		all	
is working in.			
3. Agricultural Services			
3.1. Please elaborate on the kind of agricultural and	g,h,	b	
marketing services the APC provides for its members. What	i		
services are provided, how are they organized and what			
services do the farmers handle on individual base?			
Input purchase			
Retailing			
• storage			
provision of transportation of products			
provision of packaging			
provision of processing			
provision of machinery service			
extension			

 consulting labeling/certification purchase and rent of agricultural land marketing of products market information/consulting market access 3.2. Are those services handled within the structure of the APC? Are some of the services carried out by other firms/actors (outsourcing)? 	g,h,	b	
3.3. Which of the services provided could be accessed by non-members? How does the access differentiate between members and non-members?	g	h,i	
3.4. What is the demand from members and non-members for these services?	g	c,h,i	
3.5. Are there any rural services which are not provided by the APC (but should be there or are provided by other actors)	g,h		
3.6. Do services regarding market access differ between small and large farmers?	g		
3.7. Do non-members in the region benefit from the APC? How do they benefit?	g	b,h, i	
3.8. Does the APC provide access to processing for smallholders?	i	g,h	
3.9. What is the role of the cooperative in terms of land consolidation?	g	c,h	
4. Other than agricultural services			
4.1. Please elaborate on all other than agricultural services	а	b,c,	
which the APC provides including those with limited		е	
involvement of the APC. Who are the beneficiaries for each			
service provided?			
social services (kindergarten)			
community services	1	1	

 help desks, information centers provision of private goods (bakery, patrol station) local energy production/provision 			
public services (maintenance of streets, street lighting)			
non-agri. credit services/consultancies			
environmental protection			
• tourism			
4.2. Of all these consists to what system is the ADC		la	
4.2. Of all these services, to what extent is the APC involved?	а	b	
How do the community/government/ firms/other actors			
participate in those services?			
4.3. Who initiated these services?	e,a,		
4.5. Who initiated these services:	f,a,		
4.4. Are any of these services supported by the national or	e,a,		
EU government or other actors? Are any of these services	f		
part of a national or EU policy? Please elaborate on the			
involvement of these actors.			
4.5. Are there any other actors in the community initiating	e,a,		
these services? Were any initiatives already in the	f		
community before the APC started operating?			
5. Credit			
5.1. Does the APC provide credit services?	С	а	
What is the role of the APC in credit provision?			
only the APC provides			
APC together with other firms, government			
APC acts as facilitator			
5.2. Please elaborate on the credit portfolio	С		
A swip sulta una la mandita			
Agricultural credits			
Nonagricultural credit Nonagricultural credit Nonagricultural credit Nonagricultural credit			
High volume credit < 10000 euro Lawy rolume credit			
Low volume credit			

a Long torm gradit		1		
Long term credit Chart target and life				
Short term credit				
5.3. For whom and under which conditions a credit can be	С			
provided?				
5.4. Who else is offering credits in the community? How	С			
does it compare?				
6. Policy linkages and impacts				
6.1. How well is the APC connected to local politics?	f,h	b,c,		
		g,i		
6.2. How well is the APC management connected to national	f,h	b,c,		
agricultural policy/other policy area?	,	g,i		
6.3. Does the APC get national agricultural support which	f,g	b,c,		
other firms don't? Since when? What are the impacts?	1,9	h,i		
6.4. Are there any EU or national initiatives/policy, which the	f,g,	b.c		
APC is implementing? Has it happened in the past? Will it	h.i	5,0		
happen in the future? Please elaborate.	11,1			
6.5. Are there any EU or national policies implemented in the	£			
·	I			
community independent from the APC?				
6.6. What is the current EU subsidy status in the community?	T			
Since when? What are the impacts?				
6.7. How will this status change in the near future? What will		b,c,		
be the impact?		f,g,		
		h,i		
6.8. If you were to craft the next generation of support		b,c,		
measures , what would you support and why?		f,g,		
		h,i		
6.9. What is bad with current agricultural policy? Give		b,c,		
examples.		f,g,		
		h,i		
6.10. What is particularly good with current agricultural		b,c,		
policy? Give examples.		f,g		
6.11. If you were to advise the EU. Why should APCs be		a,b,		
supported and how?		c,f,		
I I TO TO TO TO	l	- 1-1	1	

		g,h,	
		'	
7. Check against without APC scenario			
7.1. How would agriculture in this region look like if the coop	g,h,	b,c	
had to close down tomorrow?	i		
7.2. Would members realize a similar income?	b,g	c,h,i	
7.3. Would the jobs of the APC be covered by other actors?	b		
Please elaborate.			
7.4. Would employees find work elsewhere?	b,g	h	
7.5. Would land prices climb or fall?		c,g,	
		h	
7.6. Would the other than agricultural services be captured	a,e	b	
by other actors? Which ones?			
social services (kindergarten)			
community services			
help desks, information centers			
provision of private goods (bakery, patrol station)			
local energy production/provision Public particles (continued and provided an			
public services (maintenance of streets, street lighting)			
non-agri. credit services/consultancies onvironmental protection			
environmental protectiontourism			
7.7. What would be the impact on the community if the other	а	b	
than agricultural services provided by the APC would be			
discontinued?			
7.8. Would credits be available? Would it be more difficult to	С		
get a credit?			
7.9. Would agricultural services be continued? Would market	g,h,	b,c	
access be more difficult (high transaction costs) for farmers?	i		
7.10. What would be missing?	g,h,	a,b,	

	i	С	
8. Adjourn			
8.1. Ask for possibilities to ask few additional questions by			
telephone in case something is missing			
8.2. 8.2 Say thank you for the great opportunity to speak			
8.3. 8.3 Ask for names of other experts who now best current			
status of support for APCs and practical relevance of support			
for APCs (name of expert)			

D= direct link to hypotheses ID= indirect link to hypotheses

Annotations

Please ask questions and take notes on how they are answered

Please avoid suggestive questions! Let interviewees answer!

Please make use of additional expertise from the region/the ministry

Please provide a C L E A N documentary of this interviewing activity and record the interview as backup.

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