
Support for Farmers' Cooperatives

Case Study Report
**The role of post-
socialist
production
cooperatives in
Bulgaria**

Ivan Boevsky
Markus Hanisch
Julian Sagebiel



The 2011-2012 project „Support for Farmers’ Cooperatives (SFC)“ has been commissioned and funded by the European Commission, DG Agriculture and Rural Development.

Contract Number: 30-CE-0395921/00-42.

The SFC project is managed by Wageningen UR’s Agricultural Economics Research Institute LEI and Wageningen University. Project managers: Krijn J. Poppe and Jos Bijman.

Other members of the consortium are:

- Pellervo Economic Research PTT, Finland: Perttu Pyykkönen
- University of Helsinki, Finland: Petri Ollila
- Agricultural Economics Research Institute, Greece: Constantine Iliopoulos
- Justus Liebig University Giessen, Germany: Rainer Kühl
- Humboldt University Berlin, Germany: Konrad Hagedorn, Markus Hanisch and Renate Judis
- HIVA Katholieke Universiteit Leuven, Belgium: Caroline Gijssels
- Rotterdam School of Management, Erasmus University, The Netherlands: George Hendrikse and Tony Hak

How to cite this report:

Boevsky, I., M. Hanisch, and J. Sagebiel (2012). Support for Farmers’ Cooperatives; Case Study Report: The role of post-socialist production cooperatives in Bulgaria. Wageningen: WageningenUR.

Disclaimer:

This study, financed by the European Commission, was carried out by a consortium under the management of LEI Wageningen UR. The conclusions and recommendations presented in this report are the sole responsibility of the research consortium and do not necessarily reflect the opinion of the Commission or anticipate its future policies.

Support for Farmers' Cooperatives

Case Study Report

The role of post-socialist production cooperatives in Bulgaria

Ivan Boevsky

University of Sofia, Bulgaria

Markus Hanisch

Humboldt Universität zu Berlin, Germany

Julian Sagebiel

Humboldt Universität zu Berlin, Germany

November 2012

Corresponding author:

Markus Hanisch
Humboldt Universität zu Berlin
Department for Agricultural Economics
Division of Cooperative Sciences
Luisenstr. 53
10117 Berlin,
Germany
E-mail: markus.hanisch@hu-berlin.de

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 Bulgaria is a collaboration between researchers of the Bulgarian Institute for Agricultural Economics in Sofia and researchers at the Humboldt-Universität zu Berlin. Concepts and questionnaires have been developed together. 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 APCs under study and a list of experts who enriched this report with their comments.

Table of Contents

1. Introduction.....	1
1.1. Analytical framework.....	3
1.2. Method of data collection	3
1.3. Structure of the report.....	3
1.4. Brief review of the literature on farm structures.....	4
1.4.1. The explanation of Bulgarian farm structures.....	4
1.4.2. Micro farms.....	5
1.4.3. Large farms.....	5
1.4.4. Service provision.....	8
1.4.5. APCs and their treatment in the “size versus efficiency debate” in agricultural economics.....	9
2. Description of Case APC 1, Municipality Silistra, North-East Bulgaria	12
2.1. Facts & Figures of the APC	13
2.2. Relevant Support measure affecting structure and strategy.....	15
2.3. Strategy of the cooperative with regard to the study topic.....	15
2.3.1. Other than agricultural services	15
2.3.2. Employment.....	16
2.3.3. Credit.....	17
2.3.4. Agricultural services and market access	17
2.3.5. Main Hypotheses/summary	18
3. Description of APC 2, Municipality Yakimovo, North-West Bulgaria	19
3.1. Facts & figures of the APC	19
3.2. Relevant support measure affecting structure and strategy.....	20
3.3. Strategy of the cooperative with regard to the study topic.....	20
3.3.1. Other than agricultural services	20
3.3.2. Employment.....	21
3.3.3. Credit.....	21
3.3.4. Agricultural services and market access	21
3.3.5. Main Hypotheses/summary	22
4. Analysis by comparison	23
5. Discussion.....	25
References.....	26
Appendices	29

List of Abbreviations

APC	Agricultural Producer Cooperative
EU	European Union
ESU	European Size Unit
GDP	Gross Domestic Product
GVA	Gross Value Added
NMS	New Member States
SFC	Support for Farmers' Cooperatives
SAPARD	Special Accession Programme for Agriculture and Rural Development
TKZS	Communist Agricultural Productive Cooperative

1. Introduction

Bulgaria entered the European Union (EU) on 1st January 2007. Since the year 2000 growth has accompanied national development with a stagnating period in 2010 and recovery on its way since 2011 (six per cent annual growth from 2004 to 2008, 2011, two per cent). Currently, seven per cent of the country's labour force is employed in agriculture contributing about five per cent to national gross domestic product (GDP) (Central Intelligence Agency, 2012). Official numbers are difficult to interpret. In 2010 the country experienced an official rate of unemployment of roughly ten per cent on average with highest rates experienced in the rural area (up to 50 per cent). There, more than one Million small and micro-farms (<5 ha) buffer the effects of unemployment contributing to minimum incomes and livelihoods for many subsistence oriented farms of rural residents including a considerable amount of retirees. At the same time a number of large farm firms have emerged as a result of the post socialist restructuring of agriculture.

The Bulgarian agricultural sector shows a declining tendency in terms of the share of gross value added (GVA) of the sector within the national GDP in the last 15 years. It decreases from about 26 per cent in 1996 to about five per cent in 2010. Apart from proportional growth of other sectors, one reason for the decline was the liquidation of large unproductive farms due to rising input prices (energy, seedlings, fertilizers, etc.). Restitution of land and the discharge of labour into other sectors have led to a high land fragmentation and the existence of many small farms which are often run as part time subsistence farms.

Thus after 1990, the privatization of assets and the restitution of farm land in real boundaries have resulted in a dual agricultural structure (Mishev & Kostov, 2003, Koteva et al., 2011). On one side, there are small scale farms (subsistence and semi-subsistence managed by individuals who often hold a membership in an agricultural producer cooperative (APC) in the region (Boevsky, 2006)). The group of semi-professional farmers is huge in numbers but operating a relatively small amount of the land (Yanakieva et al., 2012). On the other side, there are the large scale farms (production cooperatives and companies e.g. agro-firms and investor owned firms) which are relatively small in number (0.5 per cent of farms) but managing about 50 per cent of the total utilized land (Yanakieva et al., 2012). Since the year 1990, large scale enterprises have dominated agricultural production and the regional economies in which they operate. An important share of these large scale farms are APCs owned by residents still living in the area together with absentee land and asset owners from other rural regions or urban areas.

In the stakeholder meeting of this Support for Farmers' Cooperatives (SFC) project at the end of 2011, various stakeholders from CEECs participated. They suggested throwing more light on the role APCs play for agriculture and the rural economy in the new member states (NMS). The objective of this study is to assess the role of APCs for the development of markets, market access and for rural development in Bulgaria.

The overall research question is:

What is the role of APCs 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. Policy relevant hypotheses can be separated into themes which elaborate indicators for success, or, maybe more appropriate, regional importance.

- The first theme highlights the potential role of APCs as general regional service providers beyond their role as agricultural producers and agricultural service providers. The thesis here is that 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 likely 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. Where this is confirmed, the role of APCs for agricultural production and for the design of policies of rural development would have to be taken into account by policy makers. The thesis here is that APCs are relevant for the overall performance of agriculture in the region and for the development and continuation of the household farms 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.

This study is one out of six other studies analysing the roles of APCs in NMSs. The aim is to better understand the functions these larger enterprises fulfil for their regions. Overall, our main and superordinate hypotheses respectively 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, for operationalization purposes we developed subordinate hypotheses, which can be inferred more directly in guided interviews. These subordinate hypotheses for the first and second theme respectively are:

APCs as providers of other-than-agricultural production:

- a) APCs are important providers of other than agricultural services for their communities.
- b) APCs are important providers of access to the labour market e.g the most important employment providers in the community.
- c) APCs are important credit providers.
- d) APCs 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) APCs are important for the implementation of national and EU-level policies.

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

- g) APCs are important providers of agricultural market access for members and non-members in the region, inputs and retail segments are involved.

- h) APCs are key providers of rural services for part time agriculturists and smallholders.
- i) APCs provide access to inputs and processing for smallholders.

1.1. 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). While all aspects are important for understanding APCs our study will focus on the specific economic and institutional environment in which Bulgarian APCs operate.

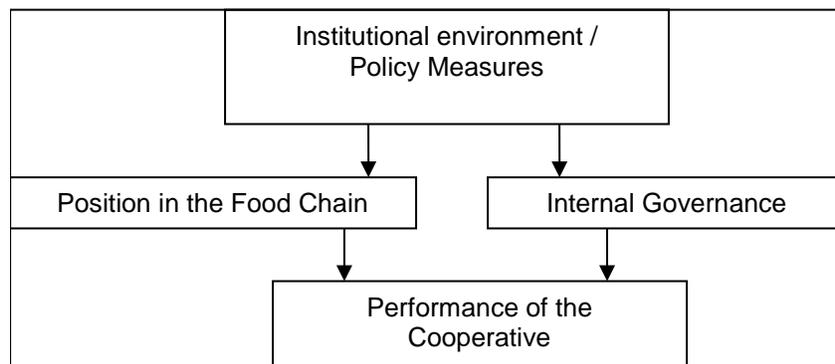


Figure 1: The core concepts of the study and their interrelatedness

1.2. 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 SFC project, popular press and electronic media, various archives and other sources of information. These sources helped to make the hypotheses plausible which were generated during the stakeholder meetings and a project workshop in Leuven. Additional information has been collected through face-to-face interviews with cooperative stakeholders. For this particular study, the chairmen of two APCs and the directors of the regional cooperative associations have been interviewed.

1.3. 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 the same questionnaire and method has been conducted in Germany. 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.

1.4. Brief review of the literature on farm structures

1.4.1. The explanation of Bulgarian farm structures

The agricultural structure in Bulgaria is rather bipolar, with large functional and regional differences. Subsistence and semi-subsistence farms are important elements of Bulgarian agriculture: Several studies focusing on their nature (Sarris, Doucha, & Mathijs, 1999, Kopeva, Doichinova, & Madjarova, 2001, Mishev & Kostov, 2003, Aleksiev, 2003, Eastwood, Lipton, & Newell, 2010, Bachev, 2008, Koteva, 2010, Nikolov et al., 2011) have revealed that they are mostly not registered entities (“physical persons”), labour-intensive, under-capitalized, lacking modern technology, dependent on larger farms, prevalent in all fields of production (except arable crops), riddled by restricted access to finance and credit (except members of credit cooperatives), consuming more than half of the farm’s total output, having low seasonal cash-flow and an in generally limited earning potential.

	Number farms with utilized agricultural area			
	2003	2005	2007	2010*
Physical persons	648,274	515,300	476,956	350,900
Sole traders	2,870	2,158	1,828	2,200
Cooperatives	1,973	1,525	1,156	900
Companies	1,331	1,312	1,763	3,600
Others	360	234	217	300
Total	654,808	520,529	481,920	357,900
	utilized agricultural area (ha)			
Physical persons	879,677	914,739	1,033,468	1,222,900
Sole traders	340,861	354,596	408,786	538,300
Cooperatives	1,169,309	890,870	726,305	640,700
Companies	469,197	522,559	781,884	1,145,600
Others	45,433	46,624	100,300	73,400
Total	2,904,479	2,729,390	3,050,744	3,620,900

Source: (Ministry of Agriculture and Forestry Bulgaria, 2005), (Ministry of Agriculture and Forestry Bulgaria, 2006), (Ministry of Agriculture and Food Bulgaria, 2008), (Ministry of Agriculture and Food Bulgaria, 2011)

Table 1: Distribution of farms according to their legal status and utilized agricultural area 2003 to 2010

The existence of small-scale farms in Bulgaria is to a certain extent a heritage of the communist era when agricultural workers employed by the state and communist agricultural cooperatives were allowed to manage small plots for their family consumption. After 1990 the number of these farms increased, due to the collapse of the non-farm sector in rural areas.

Using the European size unit (ESU) definition, the small-scale farms can be distinguished in three groups: subsistence farms (below one ESU), semi-subsistence farms (between one and four ESU) and small scale commercial farms (between four and eight ESU). In Bulgaria, APCs cover about 18 per cent of the agricultural land while larger companies work 32 per cent of the land and sole traders together with individual farmers work on the rest of the land. Large farms work half of the

land but contribute with only 0.5 per cent to the total numbers of farms. Individual farms are in general less than ten ha in size and in most of the cases run semi-professional or on the basis of subsistence orientation often by retirees.

1.4.2. Micro farms

Apart from authors highlighting the role of APCs, (Abele & Frohberg, 2003; Kostov & Lingard, 2004), (Bachev, 2008), (Koteva, 2010), (Davidova, 2010) pointed out the significant role of subsistence and semi-subsistence farms in Bulgarian agriculture, rural development and society. Subsistence and semi-subsistence farms act both as a buffer and safety-net for Bulgarian households struggling with low income and limited off-farm employment. (Hanisch, 2003) explains their existence with “the high cost of using the market mechanism” for smaller farmers. As such, strategies to forego specialization are considered an effective way to minimize transaction costs in a situation of transition of farm structures (Hanisch, 2003 p.261).

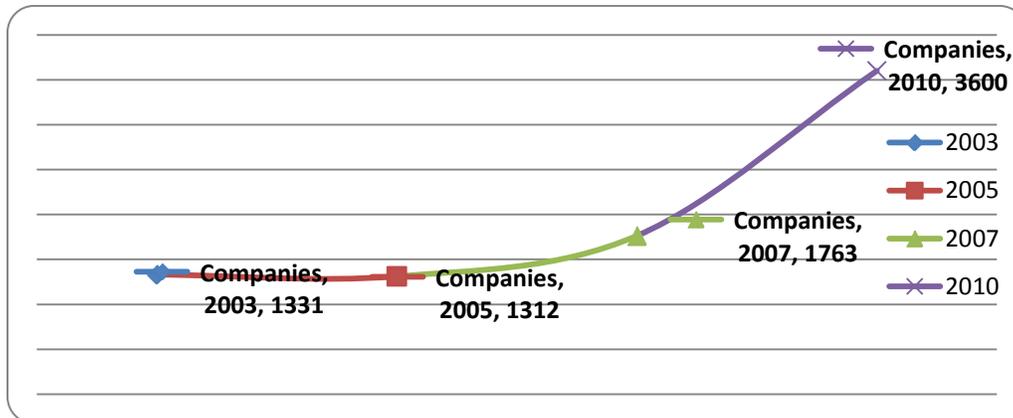
(Fritzsich, Wegener, Buchenrieder, Curtiss, & Gomez y Paloma, 2010) identify four types of semi-subsistent farms: (1) rural diversifiers characterized by highest share of non-farm income and relatively high education, (2) rural pensioners are old, manage small entities and have a high share of household members beyond working age, (3) farmers are operating the largest farms and they seem mainly commercial, and (4) rural newcomers are young but with limited education and very low income. This typology and the above mentioned show that subsistent and semi-subsistent farms are not by definition poor and unwilling to develop. As soon as subsistence and semi-subsistence farms start to grow and their farm output increases, the question arises how they can acquire farm inputs and gain access to markets. The continuation of collectively owned farms (APCs) can be regarded as a strategy of small farmer owners to secure machinery- and other services needed to maintain small scale subsistence oriented farming. If this holds true than small farmers may profit from membership in a producer organization or market access and service providing APC.

1.4.3. Large farms

Large scale farms are predominantly (1) production cooperatives and (2) companies (agro-firms, investor owned firms). These holdings are registered entities. Registration in the Bulgarian agriculture is a specific feature due to the still very vague registration process (Burrell, 2010) and to the farmers’ unwillingness to register.

Companies

The number of companies has increased while the number of APCs has decreased over the last decade. Most of the companies started as family and partnership businesses (some of these entities credited by the APCs) in the beginning of transition by young generation entrepreneurs - former managers of public farms, individuals with high business spirit and know-how etc. In addition, some state companies were taken over by the former managers and registered as shareholdings.



Source: (Ministry of Agriculture and Forestry Bulgaria, 2005), (Ministry of Agriculture and Forestry Bulgaria, 2006), (Ministry of Agriculture and Food Bulgaria, 2008), (Ministry of Agriculture and Food Bulgaria, 2011)

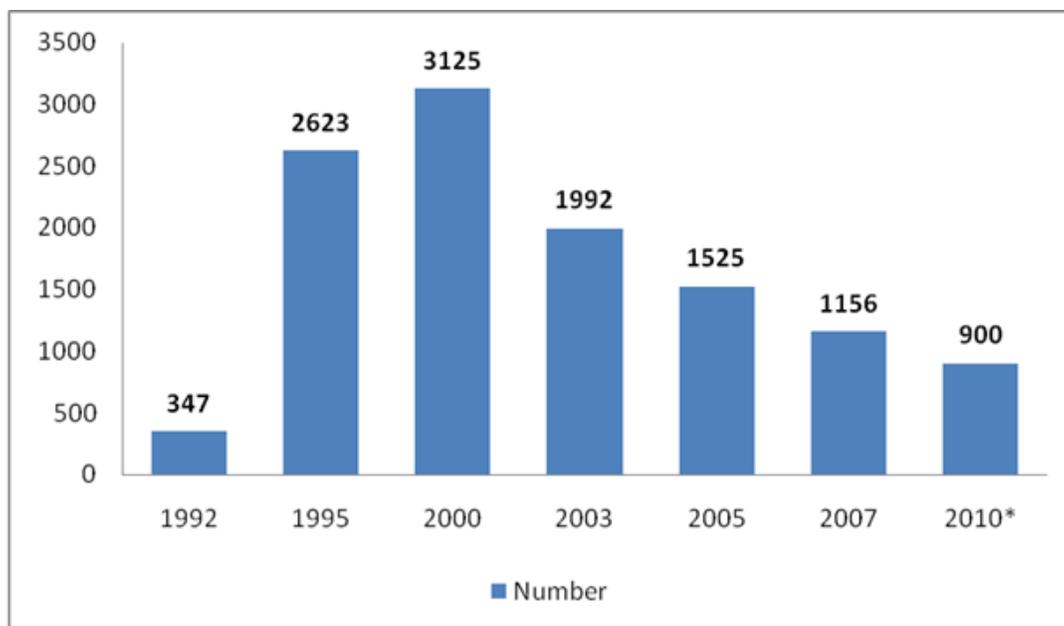
Figure 2: Development of the Number of Companies

Joint ventures with non-agrarian and foreign capital started to appear as well. The specific mode of privatization of farmland and other agrarian assets as well as the EU pre- and after- accession programs facilitated a fast consolidation of fragmented land ownership and agrarian assets in these farms. Companies are strongly profit oriented and invest in farm specific assets and innovations. Furthermore, they are able to invest considerable relation-specific capital (information, expertise, reputation, lobbying, bribing) for dealing with funding institutions, agrarian bureaucracy, and market agents at national or even at international scale. Consequentially, they are relatively easy to organise and have the political power to lobby in their best interests (Bachev, 2008).

Farm companies are commonly specialized enterprises. They are mainly specialized in cereals (wheat, oil seeds) production but there are also a number of good examples in fruit, grape, greenhouse, essential oil plants, mix (crop-livestock), and vertically integrated (farming-processing-marketing) activities. These farms increasingly incorporate new kinds of activities and involve novel types of organizations (including ventures with non-agrarian actors and foreign capital).

Cooperatives:

Figure 3 describes the development of APCs in Bulgaria. APCs have been the dominating form of enterprise in agriculture in the 1990's. They coexisted during this period with subsistence and semi-subsistence farms. The figure shows that these types of cooperatives faced rapid development in the 1990's. They emerged during and after the liquidation of the former communist agricultural productive cooperatives (TKZS). Table 3 shows that the main function of the production cooperatives is still the organization of the agricultural production. The additional functions in table 2 show a clear trend in the direction towards multifunctional agricultural activities by most of the APCs and follow the pre-communist tradition of multi- and all-functionality of agricultural cooperatives (about tradition see section 3.3).



Source: own compilation

Figure 3: Number of APCs from 1992 - 2010

Not all of the existing 900 production cooperatives in Bulgaria are members of regional and national associations as by the Bulgarian Cooperative Act they are not obliged to participate in secondary and tertiary cooperative associations. This means that participation in associations is voluntary in contrast to for example in Germany where cooperatives are by law obliged to be a member in a regional association. At the end of June 2011, 687 production cooperatives were members of the National Association of Agricultural Cooperatives.

Sector	Cereals, dairy, fruits, vineyard, beekeeping, poultry
Main and additional functions	Main function: organizing production; Additional functions*: providing farm machinery service, supply farm inputs, warehousing, milling, oil pressing, providing food for members' households, extension service, lease-in small plots from members consolidate this plots in big plots and lease-out (release) the consolidated agricultural area to other firms
Diversity of function and products	(1) Economic (Organizing production, providing farm machinery service, supply farm inputs, warehousing, milling, oil pressing, providing food for members' households, extension service) (2) Rural development (cooperation with the municipality or village administration in deferent projects) Social services (social and health security), Cultural services (organizing cultural events in the village)
Position and function in the food chain	Production and logistics
Type of members	Primary members
Geographical scope	Local (village, municipality)
Financial/ownership structure	Participation share cooperative
Legal form	Cooperative

Source: own compilation

** The additional services are provided in different mix with the main function within the particular production cooperative.*

Table 2: Characteristics of APCs

1.4.4. Service provision

During the socialist era, the collective farms 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 were often carried out by sizeable collective farms aggregated in 269 Agro-Industrial Complexes by the end of 1989 (Hanisch, 2003).

From 1990 onwards, the Bulgarian countryside struggled with the transformation process from a planned economy to a market economy (Swinnen, 1997). Restructuring was accompanied by a loss of assets and a dramatic reduction of rural employment. This has speeded up the emigration of younger people and structural changes in agriculture. These changes went hand in hand with the reduction of rural service provision in the communities. Today APCs in most NMS like Bulgaria are struggling with increasing competition from other farm types 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. For the example of APCs in East Germany, (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.

1.4.5. **APCs and their treatment in the “size versus efficiency debate” in agricultural economics**

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, there exists little or mixed empirical evidence on the issue for the cases of APCs in NMS. For example (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 some MS has not only historical and social, but also economic causes” (Davidova, Fredriksson, & Bailey, 2009) and (Bavorova, Curtiss, & Jelinek, 2005) analyse the efficiency of sizeable farms in Poland and Czech Republic, respectively and come to similar results. These findings seem to have discouraged a more fundamental discourse among agricultural scientists. (Forstner, 2001) concludes the debate for the analysis of farm structures in East German agriculture 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 to be regarded as the agglomeration of family farms instead of being looked upon as highly industrialized agricultural structures. Thus the idea of several resource and land owning families working together in the form of an APC flexibly securing their employment would come close to the idea of a multi-family producer group instead of being treated as a farm factory.

As such APCs would 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) provides 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 has recently also been argued that in an APC, horizontal cooperation can be linked to vertical integration e.g. by extending the activities of the APC to processing (Strecker 2010 #37). Thus APCs would enable farmers to combine important the advantages of family farming with benefits typical for large firms. Authors argue that this argument provides a transaction cost explanation as to why -after 20 years of operation- APCs would still “resist to go away” (Schöne, 2002), (Wissing, 2002). (Tanneberger, 2006) provides an additional argument claiming that APCs survive because compared to family farms APCs often reach a critical size for engaging in direct bargaining relationships with much larger processing industries and subcontractors (Tanneberger 2006 #45, 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 as follows:

Attribute	Supposed Advantages	Supposed Disadvantages
Size	Economies of scale, closed input-production output chain	Management Control, labour supervision cost
Risk	Provide insurance, more equitable distribution of resources	Risk of labour/management shrinking
Technology	Rapid dissemination of new technology, coops as early adopters	Disincentive to invest since member investors are not rewarded accordingly
Public Goods	Education, streets, irrigation, health	Justification for rent seeking
Services	APCs form the nucleus for the emergence of agricultural service cooperatives	Avoids the evolution of commercial service organisation due to regional monopolies

Source: (Hanisch, 2003)

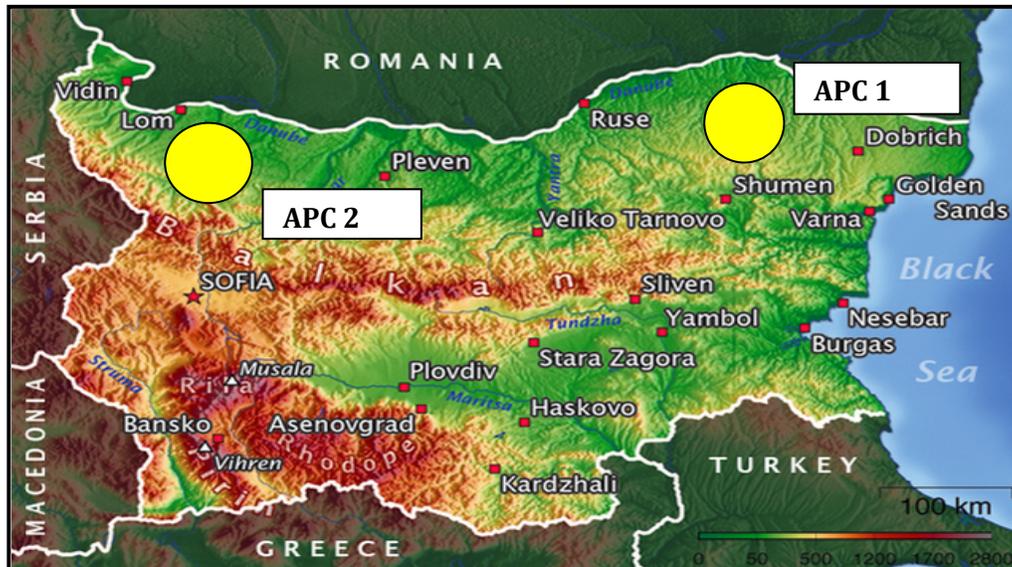
Table 3: Advantages and Disadvantages of APCs

The highly bipolar farm structures in Bulgaria together with the arguments discussed in the literature underpin the thesis that APCs may provide important agricultural and non-agricultural services, opportunities for small farmer’s access to the market for land, agricultural inputs and products and to the rural labour market.

Among others, these are the subject of the case study based empirical analysis documented in the next sections. The case APCs are located in relatively remote regions with income and employment patterns below national average and a comparatively poor level of private and public service provision. We expect that potential contributions to service provision and improved market access as hypothesized in the introduction to this study can best be observed under conditions in which problems of poor service infrastructure and difficult access to markets are immanent. In this regard

our study area represents a purposive sample in which our choice was guided by the problem to be addressed.

Figure 4 shows the location of the study areas and of the two APCs in the North-East and North West of Bulgaria. In the next section we will provide case study evidence from both regions. After that we will compare the two cases with each other on the basis of the raised hypotheses and research questions. After that we will classify our cases and draw conclusions for agricultural policies and further research on the issue.



Source: own compilation and <http://www.bgbeach.info> (20.06.2012)

Figure 4: Location of the studied APC

2. Description of Case APC 1¹, Municipality Silistra, North-East Bulgaria

The results of this case are based on a 180 minutes face-to-face interview with the chairwoman of the APC as well as on a 130 minutes interview with the mayor of a village. The interviews were based on the in the introduction explained hypotheses in a more elaborated form and a questionnaire (see appendixes). The first respondent, 64 years old, is currently the chairwoman and managing director of APC 1 She had studied agricultural sciences in Sofia, Bulgaria. After her student time she held different positions as: mayor of the municipality, chairman of the agricultural complex TKZS, as managing director of an agricultural research institute and chief economist of an agricultural industrial complex. After the collapse of the communist regime she was one of the new-founder-members of the APC and became an employee in the administration. Since 1995 she has been the chairwoman of the APC.

The respondent knows the APC and its whole history from the beginning in 1929. She, as well as all members of the APC, is very proud of the long and successful history of their cooperative which is well documented in a framed “hall of fame” collage of the APC’s founders hanging from the wall of the main office.

The second respondent, 56 years old, is currently the mayor of the village where the APC is located. She had studied Bulgarian language and Bulgarian literature in Sofia, Bulgaria. After her study time she became a teacher of Bulgarian language. Since 2003 she has been a mayor of the village (currently her third term). She reports that the region has a rich cooperative tradition going back to the beginning of the 20th century.



Photo: Ivan Boevsky

Figure 5: Cooperative tradition: The founders of the APC 1 in 1929

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

2.1. Facts & Figures of the APC

The headquarters of APC 1 is situated near the administrative centre of the Silistra province. Due to its close proximity to the regions capital it belongs also to the Silistra municipality. The village has 1,271 inhabitants and its land area covers about 36 square kilometres. The Silistra province itself belongs to the North-Central Region of Bulgaria (NUTS-2) and is bordering to Romania. It has one of Bulgaria's lowest economic development and activity coefficients: The unemployment rate compared to the 10.2 per cent country average is very high (47.4 per cent). The region generated compared to the 4,590.68 € Bulgarian average a GDP contribution per capita of only 3,028.51 €² (Ministry of Regional Development and Public Works Bulgaria, 2010).

The Silistra province has a relatively developed road infrastructure (higher than average) and the province's border to the North is the Danube river. The quality of the rural roads is higher than average and thus is acceptable, which cannot be said for road quality in most of the other parts of the country. The region's relative remoteness explains the high importance of the agricultural sector. Thus, agriculture is the main source of income not only for the village, but for a significant proportion of the working population in the urban and rural area. The climate is temperate continental. Typical for the region is the hot summer with dry periods in July and August. The mean precipitation is 502 mm/m², which is below country average. Agricultural land in this area is in the highest category of fertility (category 2-3).

In Bulgaria, soviet type agricultural structures were dissolved in the 1990's. Land was restituted in physical boundaries, assets were privatized and distributed among members of the socialist collective farms on the basis of former asset contributions and lifetime labour input (Hanisch, 2003). The APC 1 was re-founded in the early spring of 1993 on the basis of pooling members' asset shares as well as labor input share from the TKZS. APC 1 launched with 447 members and their land shares (average age of members in 1993 was about 56 years). Today, APC 1 consists of 1,300 members (average age about 44 years³) of which 103 are employed by the APC. The increase has to do with the number of heirs of the founding members. Many of the founding members of the APC had more than one heir which has over time resulted in the rapid increase in membership.

About 1,100 of the 1,300 members belong to the group of mainly subsistence oriented farmers among which 621 are residents of the village (predominantly subsistence and semi-subsistence farmers) and 473 of the farming members live in the near town. 158 members are living outside the municipality, 37 are living abroad. The residency of the rest of members which consist of only a small percentage of members remained unclear.

The APC 1 is a 100 per cent members-leaseholders cooperative. 2,850 ha land are leased in from the members on the basis of leasing contracts and 150 ha belong to the APC. Almost all members are leaseholders. Only few members (machinery workers) are not leaseholder yet. The cooperative stimulates them buying land. The strategy of the APC is the continuation of traditional service orientation of collective farms in the region. The objective is to provide a complete set of services for the region. APC 1 offers to the members agricultural services including seeding to harvest, agricultural machinery services and the production of local seeds varieties for members and other agriculture related services (land management including land consolidation and administrative

² Exchange rate: EUR 1 = BGN 1.9558 (European Central Bank, 1st June 2012)

³ The average age of the members decreases significant due to replacement from the very old members (between 70 and 80 years old) with their successors whose age is between 40 and 50 years. This process of rejuvenation has led to increases of the total number of the members, because often one old member has more than one successor to become a member. Another result from this process is that the land in the APC becomes more fragmented.

services for land parcel exchange among members, extension services, transportation, storage, and, if desired, the marketing of agricultural products). The focus of activity of APC 1 remains in the agricultural production. The APC grows: Barley – 200 ha, sunflower – 400 ha, rape – 300 ha, corn – 400 ha, coriander – 150 ha, fennel – 100 ha, maize – 50 ha, apricots – 130 ha, plums – 20 ha, peaches – 10 ha, cherry – 10 ha and bee families – 500. In general, the APC retails its own products but also grants access to its own marketing channels for members and non-members providing fruits of equal quality than the quality of fruits produced by the APC.

APC 1 provides access to members to cheap agricultural inputs, retails fruits and other agriculture produce on behalf of members, provides storage for produce when needed, and sometimes organizes transportation. For member-farmers growing cereals and oil crops, the following machinery services are offered: Soil preparation, sowing, fertilizing, spaying for pest and harvesting. For member-farmers growing fruits, tobacco, and pumpkins, the following machinery services are offered: tillage, fertilizing, and spraying.

The management differentiates cost wise between members and non-members. Members can receive extension services from APC experts. A declared objective of the APC management is to change the behavioural pattern of member-farmers towards a more sustainability-oriented agricultural production because the chairwoman regards this as an investment onto the APC's future.

The APC is in the procedure of certification for organic production and helps its semi-subsistence member-farmers to acquire access to the market for organic products by means of organized member certification, facilitated by the APCs own certification process. In the past, the APC operated a mill but has given up this processing activity.

Due to the high fragmentation of land titles the management sees it as an important contribution to development to invest in land consolidation and in the consolidation of member's land titles by means of the exchange of land titles wherever this is useful. Members benefit from this service and the value of their land increases with consolidation. The APC complies with standards of certification and good agricultural practices. In the near future it will become the regions first certified organic producer. The EU direct payments amount in the year 2011 to 478,000 €. Aggregate wages per year per person come up to 4.200 € which is higher than the average wage in agriculture.

	APC 1	APC 2
Foundation	1993	1992
Founder-members	447	620
Members in 2012	1,300	1,536
Average age of members	44	60
Employees (of these members)	103 (103)	87 (72)
Grassland		139 ha
Total agricultural land	3,000 ha	3,150 ha
of which: wheat	1,000 ha	1,000 ha
Rape	300 ha	365 ha
Barley	200 ha	300 ha
Sunflower	400 ha	900 ha
Lucerne	100 ha	100 ha
Corn	400 ha	300 ha
Oats	-	50 ha

Coriander	150 ha	-
Fennel	100 ha	-
Maize	50 ha	-
Apricots	130 ha	-
Plums	20 ha	-
Peaches	10 ha	-
Cherry	10 ha	-
Triticale	-	50 ha
Forage maize	-	150 ha
Melons/watermelons	-	35 ha
Bee families	500 families	-
Number of cows	-	250 heads
Number of sheep	-	745 heads
Agricultural land owned by the members	2,850 ha	3,160 ha
Agricultural land leased in	2,850 ha	3,000 ha
Agricultural land leased out	0	0
Total number of farm leases	0	0
Total turnover (% agriculture)	Only from agriculture	Only from agriculture
EU Subvention	478,000 €	480,000 €
Aggregate Wages	4,200 €	2,400 €

Source: Face-to-face interviews with APC 1 and APC 2

Table 4: Facts and figures of the two cases

2.2. Relevant Support measure affecting structure and strategy

As in the second case, the APC 1 benefited from the Special Accession Programme for Agriculture and Rural Development (SAPARD) in the pre-accession period and from the EU Measure 121 when Bulgaria becomes an EU-member. In 2011, the APC has received 478,000 € direct payments. The impact of the EU support can be seen in differences between the old equipment which is still in use and the new one as well as the fields and fruit gardens on the figures. Thus, direct payments together with pre-accession aid and measures to replace agricultural machinery (EU Measure 121 and 123⁴) have shown huge positive effects for the overall development of the APC and its region.

2.3. Strategy of the cooperative with regard to the study topic

2.3.1. 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”.

⁴ Measure 121 “Modernization of Agricultural Holdings” provided finance for investments in agricultural holdings ranging from small items (e.g. wooden fruit boxes) to large investments (e.g. biogas installations, tractors). The total EU Budget for measure 121 is 11.1 billion € (European Court of Auditors (2012)). Measure 123 “Adding Value to Agricultural Forestry Products” aims at improving the processing and marketing of primary agricultural products of small and medium enterprises in the food processing sector. Both measures fall under Priority Axis 1 of the Rural Development Program (Directorate-General for Agriculture and Rural Development (2009)).

The APC 1 runs the village bakery and provides bread. It provides maintenance services for the facilities of two kindergartens in the village as well as supplies it with bakery products, fruits and honey on production costs. It provides maintenance services for the facilities of the village school, financial support and stipends for successful students of socially disadvantaged parents from the village, financial support and sometimes even medical treatment for members. It provides winter services, road services, public infrastructure maintenance services, roads cleaning, maintenance of monuments and village parks and sport facilities. It sponsors the football club of the village, maintains and co-finances the community cultural centre, provides clearance of road and street side shrubs, financial support and maintenance of the two clubs for senior members, and financial and organizational support for the annual village fair. Currently the APC is renovating an old facility in the centre of the village to create a help desk for members as well as for non-members.

The APC provides members (production cost price) and non-members (reasonable price) with bakery products, mainly bread, as well as finances the cost of four old members for living in the home for old people. In the past, it has financed and organized funeral services. The APC helps out in the case of environmental disasters on the territory of the municipality with the cleaning of the river bed after floods. In May 2012, the APC participated with six trucks, seven tractors, fuel and with the members, living in the municipally in a national voluntary action "Clean Bulgaria for a day". Over the last three to four years, the APC has been constantly working on its image as a provider of environmental services and environmental protection and works towards the ideal of a socially and environmentally responsible enterprise.

The APC is active in tourism, too: It organizes trips for tourists to visit the apricot gardens of the APC as well as to visit the monuments around the village. With the renovated restaurant in the center of the village the APC tries to bring more tourists to the region. Tourist groups visiting the APC's gardens are usually brought to the village restaurant.

However, the APC did not participate significantly in initiatives with EU-policy support but many initiatives originate from the APC and its members, or are created in cooperation with the village mayor. The mayor of the village declared that there is a clear difference between the behaviour of the APC and the behaviour of larger tenants and corporations with regard to their attitude and care about the village community. She indicated that both cooperatives in the community essentially helped in giving needed services to the community.



Photos: Ivan Boevsky

Figure 6: Sport facilities and road services equipment of the APC 1

2.3.2 Employment

APC 1's policy is to accept only members of the APC as fulltime workers and complement the workforce by up to 150 seasonal workers of which 50 belong to the Roma ethnic minority. Even for

the process of hiring seasonal work there exist clear principles prioritizing members and people from the nearby region.

Our hypothesis states that “APCs are the most important employment providers in the community”. APC 1 is the largest agricultural employer in the region. The member employment policy shows that the APC feels responsible for employment of its members. In our interview the mayor as well as the APC manager stated that many people would become unemployed if the APC would have to close one day. The tenant operating on the community area cultivates only cereals and needs less work because of the intense use of labour saving crops and technology. Cooperative wages for agricultural labour are clearly above the regional wages for agricultural employment.

2.3.3. Credit

The manager stated: “Credit services are forbidden by law for non-financial institutions. Our APC only provides commodity credit to our member-farmers when they buy input from the APC and pay it back after selling the products.” As such, the APC is believed to provide important short term pre seasonal credits to its members.

2.3.4. 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 1 is involved in many agricultural activities. As the largest agricultural firm in the municipality, modern high-end technical equipment and machinery is present. Subsistence and semi-subsistence farmer-members and small non-member farmers in the region, who do not have modern machinery benefit from the availability of machinery services.

The highest demand for services exists for machinery services. The APC provides services from sowing to harvesting. Usually this is done through a so called “inscript arrangement”. Land owners decide how much land is leased to the APC and how much land is retained for own cultivation. Land rent is the result of land rental payments of the APC to the land owner member minus a fee for machinery services on land which is not leased out to the APC.

Often the APC is completely responsible for all agricultural activities on privately used land including storage, distribution and sometimes even marketing. Like this, even absentee members from other regions benefit from land ownership. By means of inscript contracts, members can speculate on agricultural prices without harming the APC or being harmed by the APC’s price policy (Hanisch, 2003). Another example of agricultural service provision is the processing of the seeds of members. This service is used by the members, but also non-members from the community have access to it. The service is used to 80 per cent by members and to 20 per cent by non-members. For member-farmers the service is provided on the basis of production costs plus a five per cent service charge. For non-members, a catalogue based on market prices from other regions applies.

Member-farmers enjoy temporal priority for ploughing and harvesting services as compared to non-members i.e. the member-farmer receives the service first and then the non-member farmer receives services. Another important service for the farmer-members is the land management provided by the APC that includes land consolidation and land exchange for members and non-members. Repair of small machinery is also offered by the APCs workshops. The APC, hence, is a relevant service provider for smallholders in the community. However members clearly enjoy priority treatment while extension services are even exclusively provided to member-farmers.

2.3.5. Main Hypotheses/summary

Our main hypotheses were: “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 has an important role in the region’s agricultural and overall development. The APC’s role clearly goes beyond its function as an agricultural producer. With more than 100 member employees, 150 seasonal employees, a full range of agricultural services including extension, and seasonal credit, the APC provides important services for agricultural development in general and for the many active smallholders in the region in particular.

In providing another full set of community services including the operation of a bakery, winter road services and road maintenance, funeral service, the maintenance of parks and monuments, the maintenance of the kindergartens, sports facilities etc., the APC seems to continue the tradition of its cooperative predecessors reaching back to the year 1929.

The APC also performs important functions in land consolidation, certification, and towards the goal of making the village in which it operates and the small farms of its members more environmentally aware and “greener”. Strong ties between local politicians, members and non- members of the farm have been developed over the last 20 years. As a whole the APC appears to be “owned” not only by its members but also by the wider public in the community. EU pre-accession policy and the measures for the renovation of farm equipment 121 and the measure 123 have helped the APC management to generate an overall supportive and positive image of the APC in the community. As a large recipient of direct payments and as a beneficiary of several EU policies, the APC is able to successfully provide a number of other-than-agricultural services without which the quality of life of the residents and the members would be worse.

The APC is the initiator of several initiatives including environmental activities, certification activities, social and cultural initiatives. As such it appears to be very well linked to “people and politics” in the nearer and wider sphere of the APC. In summary, the APC provides a case in which all hypotheses derived from literature and project meetings can be accepted.

3. Description of APC 2, Municipality Yakimovo, North-West Bulgaria

The results of the second case are based on a 180 minutes interview with the chairwoman of the APC, and a 30 minutes interview with the mayor of the village where the APC is located. Both interviews were based on the above mentioned hypotheses in more elaborated form and a questionnaire (see appendixes). The first respondent is currently the chairwoman and managing director of the APC 1. She has graduated in agricultural sciences, and afterwards became the head of the agricultural production unit. Later on, she became the chairwoman of an Agro Industrial Complex. Before 1989, she was also a political secretary. She has been a member founder and chairman of the APC 2 since its creation in 1992.

The second respondent was involved in the operation of the mill in the village before he was elected mayor in the last local election in 2011. It is evident that he knows a lot about the APC and has developed close ties with the first respondent. His parents are founder-members of the former cooperative.

3.1. Facts & figures of the APC

The APC 2 is located in a small village, about 15 kilometres away from the next town and about 35 kilometres from the administrative centre of the Montana province. The village belongs to the North-Western Region, which is known as the poorest region of Bulgaria and as one of the poorest regions in the EU 27. The village has 1,035 inhabitants, about half of them belonging to the Roma ethnic minority. The region borders Romania to the north and Serbia to the west. It has an official rate of unemployment of eleven per cent (2010), GDP per capita is 2,841.97 € per year. The unemployment rate in the APC's village currently amounts to 22 per cent.

There are no industrial enterprises on the territory of the municipality. Before 1990, there were some big Agro Industrial Complexes and our interviewees were proud to mention that almost 25 per cent of all eggs in Bulgaria before 1990 were produced in the territory of the municipality and that the majority of the population of the municipality has formerly worked in this industry. Today, the main occupation of the population of the municipality is agriculture and livestock breeding. More than 60 per cent of the land is cultivated, but there is also a significant quantity of uncultivated land. The soil is fertile (category 2 and 3), predominantly carbonate black soils, and the topography is mainly flat and slightly hilly, which benefits advanced agriculture. The climate is moderate-continental, characterised by cold winters and hot summers.

Agriculture is, therefore, at least as important in this village as it is in the village of the first case. Thus the APC occupies a dominant role in the area economic and social life, and its role is enhanced even more as there is no other big agricultural company or cooperative in the area.

The APC 2 was founded in 1992 on the basis of pooling members' asset shares as well as labor input share from the former TKZS with around 620 founder-members and members' restituted land (average age about 56 years). Currently, it has 1,536 members. 651 come from the village itself and 885 live outside the village. The members from the village are predominantly subsistence and semi-subsistence farmers while those from outside are mostly employed elsewhere, with over 100 members living abroad. The total agricultural area is 3,150 ha. 1,000 ha are used for wheat, 300 ha for barley, 900 ha for sunflower, 100 ha for Lucerne, 300 ha for rape, 300 ha for corn, 50 ha for oats, 50 ha for triticale, and 150 ha for forage maize. In addition, there are 745 sheep, and 250 cows. Another 35 ha of melons and water melons are dedicated to members' self-consumption and individual marketing.

The APC is the biggest employer not only in the village territory, but in the whole territory of the municipality as well. There are two tenants in the village territory with significantly less farm land: 200 ha and 273 ha. The APC itself owns no land at the moment. On the land market there are first signs of activities of external investors aggressively bidding for land which, in the eyes of the management, poses a threat to the existence of the APC.

Many landowners are active on the land market. Among them are some of the APC's members who either wish to become independent farmers in the future or plan to sell to investors as soon as prices are agreeable. As a consequence, the APC management has decided to buy land for about 500,000 € in order to secure the physical basis and the APCs boundaries. This necessity of course causes a heavy financial burden.

3.2. Relevant support measure affecting structure and strategy

The APC is reported to have benefited from the SAPARD programme in the pre-accession period and from Measure 121 after Bulgaria became an EU-member. In the year 2011, the APC has received 480,000 € direct payments. The impact of the EU-support measures can already be observed by the over the last years increasing amount of modern equipment and machinery.

The APC has focused its investments on new machinery and production innovations and the provision of support to the community. Regarding direct payments and the future strategy vis-à-vis EU policies the management receives advice from the National Association of Cooperatives.



Photos: Ivan Boevsky

Figure 7: New machinery was bought after the APC benefited from direct payments, pre accession support programs and measure 121.

3.3. Strategy of the cooperative with regard to the study topic

3.3.1. Other than agricultural services

It was hypothesised that “APCs are important providers of other-than-agricultural services for their communities” and that “APCs render community services”. In this case it turned out that the APC is very important for the existence of the village and the community. A major fact in this regard is, of course, the poor economy, the high percentage of unemployment as well as the social condition in the region itself.

The APC 2 provides maintenance services for many local facilities with social functions. The APC is supporting the village school and kindergarten with coal for heating during winters. Especially during the exceptionally cold last winter, this kind of help was crucial for the continuation of the operation of these public facilities. The APC, furthermore, provides milk to the kindergarten. The village itself benefits from the APC's road maintenance. The mayor confirmed that the machines

from the APC helped with levelling and gravel placement in order to improve the road infrastructure of the village. Further, the APC cleans the village parks, green zones, sport facilities and provides street lightning. There is a community centre and a church which benefit from the APC's support in kind (food and beverages) but also in terms of financial support. The APC bakery and the APC canteen are important providers of low cost food.

These functions could not be provided by other actors. The village major himself has no tax income. He fully depends on the subsidy from the municipal budget. This subsidy is very small and it is impossible to provide even the basic needs of the community. The mayor reports that the APC is the most important asset of the locality preventing people from migrating out of the area. Without the APC "the community will suffer, the people will migrate, in the village only the elderly will stay", the mayor explains. Both interviews in the village show that most "other-than-agricultural services" were initiated by the APC itself as well as in cooperation with the mayor of the village.

3.3.2. 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 by far the biggest employer in the village and one of the biggest in the municipality. It employs 87 fulltime workers. It does not employ seasonal workers, as the crops do not require extensive manual labour and there are no fruit trees. The wages are low but still above the average wages in the area which can be seen in the aggregated wages figure. The employees perform various tasks depending on the seasonal requirements and the requirements during harvesting. It was mentioned that few people performed administrative tasks in the APC and most of them are either in the field, at the dairy farm or with the sheep. Currently the APC finances study-stipends for three young people from the village (they are studying agricultural sciences, agricultural economics and agricultural machine engineering). In exchange for receiving stipends, after the completion of their study, they have promised to work at the APC for a duration of five years. The role of the APC as an employer is probably the most important one. The first respondent states that tenants, present in the village and in the municipality, do not employ more than five workers. The APC provides income for about 100 families.

3.3.3. Credit

There are no credit services provided by the APC.

3.3.4. Agricultural services and market access

Market access is indeed crucial for agricultural activities at the levels of the rural communities. Our cases strongly support the three hypotheses in this regard: 1) that "APCs are important providers of market access for members as well as non-members in the region", 2) that "APCs are the key providers of rural services for agricultural smallholders including extension", and 3) that "APCs provide access to processing for smallholders".

The APC 2 purchases all inputs required by the farmer-members. It retails a large amount of their agricultural production, it stores production if necessary, and it provides all transportation and complete packages of machinery services. This includes soil preparation, sowing, fertilizing, spaying for pest and harvesting as well as all tillage, fertilizing, and spaying for pest for the member-farmers growing melons and honey melons. Furthermore, the APC provides information regarding agricultural production to its members free of charge. The chairwoman explains that "they come into the office and receive extension services, buy inputs or receive advice if problems with production for the market or production for subsistence occur".

Thus in the rural community with high levels of poverty, the APC is essential for economic and social stability.

3.3.5. Main Hypotheses/summary

The two main hypotheses were that “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”. Also in our second case the APC is an essential ingredient of the life of the community. It is the sole provider of agricultural services, it grants market access for members via transportation and storage, and it carries out all sorts of machinery services for land owning member-households. The APC is by far the largest employer in the village, one of the biggest in the municipality and it supports more than 100 families with stable incomes.

Concerning social capital, the APC appears to be an integrative factor that holds the community together. It participates in many aspects of the daily life: it provides maintenance of the road infrastructure, heating during winters, affordable food, and money for local festivities and funerals. Being asked about a hypothetical scenario in which the APC would have to close down, the interviewees draw a rather pessimistic scenario of village development.

4. Analysis by comparison

The two APCs are of similar size but differ in terms of agricultural production orientation. Both are big and their main activity is agricultural production. Apart from the regular areas of production like corn, wheat barley, and sunflowers, horticulture and bee keeping represent labour intensive branches of agriculture (the first case, APC 1). In the second case, APC 2, dairy production and sheep represent particularly labour intensive branches of agricultural activities. Both APCs are important providers of agricultural services and non-agricultural services. In the first case, the APC collaborates with another APC in providing services to the community. The APC of the second case is the sole provider of other-than-agricultural services to the community. Both enterprises are the largest employers in their regions. Both APCs provide a major asset for the communities in which they are working with respect to the stabilization of rural incomes, service infrastructure and with respect to the attractiveness of the location for the residents.

Hypotheses	Details	APC 1	APC 2
Characteristics of APC	Size, role in region, main activities	3,000 ha, large APC, agriculture production is main activity. Extremely important in the region. The biggest agricultural enterprise in the region.	3,150 ha, large APC, agriculture production is main activity. Extremely important in the region. The biggest agricultural enterprise in the region.
APCs are important providers of other than agricultural services for their communities	Public services	Significant provider of social, cultural, community and public services, important for the normal functioning and existence of the community and partly for the municipality as whole. APCs continue the traditional role of the farm collective for the municipality and local economy.	The significant provider of social, cultural, community, public and sport actions. Those are important for the normal functioning and existence of the community and partly for the municipality as whole. Provides milk and coal for heating the kindergarten.
	Commercial activities	Maintains own bakery that provides members (production cost price) and non-members (reasonable price) with bread.	Maintains own bakery and canteen, provides members (production cost price) and non-members (reasonable price) with bread.
	environmental	Landscape management, helps for free during environmental disasters in the territory of the municipality, trend to be greener.	Not at the moment
APCs are most important employment providers in the	Agricultural jobs	103 fulltime member-employees	87 fulltime member-employees, no seasonal workers

community	Other jobs	150 seasonal workers, 50 of them Roma people	No
	Education	Finances the education of young people.	Finances the education of young people
	Wage rate	Higher than average in region.	Higher than average in region.
APCs are important credit providers	Agricultural credits	Commodity credits for inputs	No
	Other credits	No	No
	Credit volume	No	No
APCs render community services.	Community services	Whatever needed by the community	Whatever needed by the community
	Alone or with others	Together with the other APC operating in the village	Sole provider
Numerous initiatives, for example in rural tourism and environmental protection, originate from agricultural cooperatives, often with public policy support.	Number of initiatives	Most of the initiatives	Most of the initiatives
	EU support	Rather no	Rather no
	National government Local government		
APCs are important providers of market access for members and non-members	Post reform initiatives	Only	Only
	Market access to inputs	Yes, for members and non-members, lower prices for members	Yes, for members and non-members, lower prices for members
	Market access to retail	Yes for members and non-members, if needed	There is no demand from the members.
		Rent or exchange due to land consolidation	Rent or exchange due to land consolidation

Source: own compilation based on guided interviews

Table 5: Comparison of Cases

5. Discussion

After 1992, a dual agricultural structure characterizes the rural area of Bulgaria. Privatization of assets and restitution of land has led to millions of land owners. Land owners have to decide which agricultural contract will best suit their opportunities on the land market and their talent as a farmer. Sole ownership often coupled with subsistence oriented farming, leasing out to tenants or larger corporations or leasing out to APCs are the alternatives. However, these alternatives do not necessarily have to be exclusive. The membership in an APC often goes hand in hand with small land owners' access to important agricultural and non-agricultural services for their micro-farm activities. APCs in our case studies offer the opportunity for hundreds of members to continue a pattern of farming that originates from the times of socialist agriculture in which all labourers of the farm collectives at the same time produced an important share of their food at home in so called garden farms.

APCs in our cases must be understood as organizations of small land owners in Bulgaria in a situation in which the countryside suffers from unemployment and structural change. As such, APCs provide the villages with a whole package of required services reaching from agricultural services to services for the community. At the same time, a considerable amount of income is generated in a more and more professionalizing agriculture thereby securing profits on the basis marketable produce but also securing access to most important direct payments.

Over the last few years, pre accession subsidies and direct payments are known to have considerably contributed to the modernization not only of the companies and tenant farms but also of these APC structures which are believed to provide a unique net of safety for a rather poor and aging rural population.

At the same time, a minimum of social and economic infrastructure and employment is maintained largely on the basis of the contributions of the APCs. Almost all hypotheses (with credit giving as an exception for the second case) as raised at the beginning of this paper can be accepted for the cases under study.

One particularly important aspect for the future of rural development in Bulgaria will be the extent to which APCs are enabled to secure their own land. In one of the cases the pressure is already high enough to motivate large investment in buying land.

Other things equal, large companies and tenant farms may realize advantages at the land market in terms of liquidity and access to capital because they operate on a much more focused leaner structure. In the current EU-policy debate, in which economic objectives and social objectives of agricultural policy are often conflated, policy makers may consider in how far the objectives of "greening" may be a more relevant one than objectives of socially sustainable rural development including concerns for social cohesion and safety. Where the latter is a priority it is, at least on the basis of the analysed cases, rather obvious that the rate by which the development of the companies is currently developing will have a lasting grip on the APCs competitiveness on the land market. Where APCs end up as the losers of this competition in the future, the question will have to be answered as to who will take over the multiple social and economic functions of the APCs in the Bulgarian villages. Thus, programs or investment schemes easing the capital access of APCs which intend to secure their land may become a policy priority on the national or the EU level.

References

- Abele, S., & Frohberg, K. (Eds.). (2003). *Subsistence agriculture in Central and Eastern Europe: How to break the vicious circle?* Halle (Saale): IAMO.
- Aleksiev, A. (2003). Environmental impacts of the CAP on semi-subsistence farming in Bulgaria. In R. Kraemer (Ed.), *EU: CAP and Enlargement - an Opportunity for Nature and Environment?: International Conference, 19-21 February 2003, Potsdam, Germany. Conference Proceedings*. BfN (Federal Agency for Nature Conservation).
- Bachev, H. I. (2008). *Governance of Bulgarian Farming* (MPRA Paper). Munich. Retrieved from <http://EconPapers.repec.org/RePEc:pra:mprapa:7818>
- Balman, A. (1999). *Path Dependence and the Structural Evolution of Family Farm Dominated Regions* (Organized Session Papers). Warsaw.
- Bavorova, M., Curtiss, J., & Jelinek, L. (2005). *Czech Agricultural Associations and the Impact of Membership on Farm Efficiency* (94th Seminar, April 9-10, 2005, Ashford, UK No. 24430). Retrieved from <http://ideas.repec.org/p/ags/eaee94/24430.html>
- Beckmann, V. (2000). *Transaktionskosten und institutionelle Wahl in der Landwirtschaft: Zwischen Markt, Hierarchie und Kooperation*. Berlin: Ed. Sigma.
- Boevsky, I. (2006). *Challenges and perspectives of the Bulgarian cooperative system in the lights of the forthcoming Bulgaria's EU accession*. Sofia.
- Central Intelligence Agency. (2012). *The World Factbook*. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/index.html>
- Davidova, S. (2010). *Semi-subsistence farming in Europe: Concepts and key issues* (Background Paper prepared for the seminar "Semi-subsistence farming in the EU: Current situation and future prospects").
- Davidova, S., Fredriksson, L., & Bailey, A. (2009). Subsistence and semi-subsistence farming in selected EU new member states. *Agricultural Economics*, 40, 733–744. doi:10.1111/j.1574-0862.2009.00411.x
- Deininger, K. (1995). Collective Agricultural Production: A Solution for Transition Economies. *World Development*, 23(8), 1317–1334.
- Directorate-General for Agriculture and Rural Development. (2009). *Report on Implementation of Forestry Measures under the Rural Development Regulation 1698/2005 for the Period 2007-2013*. Retrieved from http://www.google.de/url?sa=t&rct=j&q=&src=s&source=web&cd=5&sqi=2&ved=0CHQQFjAE&url=http%3A%2F%2Fec.europa.eu%2Fagriculture%2Ffore%2Fpubli%2Fforestry_rurdev_2007_2013_en.pdf&ei=BMngT-_GAYvLtAaVsdCsCA&usg=AFQjCNFIKqTYE9hVtfQt_246hPgfztWFrA&sig2=sqdYPwdGD8PI5grFWYI79g
- Eastwood, R., Lipton, M., & Newell, A. T. (2010). Farm Size. In P. L. Pingali & R. E. Evenson (Eds.), *Handbook of agricultural economics* (pp. 3323–3397). Amsterdam [etc.]: Elsevier.
- European Court of Auditors. (2012). *Targeting of aid for the modernisation of agricultural holdings: (pursuant to Article 287 (4), second subparagraph, TFEU). Special Report: Vol. 8*. Luxembourg: Publications Office of the European Union.
- Forstner, B. (2001). Zukunftsfähigkeit der ostdeutschen Landwirtschaft: Betriebsstrukturen. In Agrarsoziale Gesellschaft (Ed.), *Schriftenreihe für Ländliche Sozialfragen: Vol. 137. Landwirtschaft in Ostdeutschland - stabile Strukturen oder mitten im Umbruch* (pp. 32–69). Göttingen.
- Fritsch, J., Wegener, S., Buchenrieder, G., Curtiss, J., & Gomez y Paloma, S. (2010). *Economic prospect for semi-subsistence farm households in EU New Member States. JRC scientific and technical reports*. Luxembourg: Publ. Office of the European Union.

- 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.
- Helmcke, B. (1996). *Zur Bedeutung der betrieblichen Flächenausstattung für die Produktionskosten im Marktfruchtbau*. Aachen: Shaker.
- 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.
- Kopeva, D., Doichinova, J., & Madjarova, S. (2001). *Rural development in Bulgaria – A brief outline*. Sofia.
- Kostov, P. & Lingard, J. (2004). *On the nature of Bulgarian subsistence agriculture* (Others No. 0409009). Retrieved from <http://ideas.repec.org/p/wpa/wuwpot/0409009.html>
- Koteva, N. (2010). *Development of Bulgarian Farms*. Sofia.
- Koteva, N., Popov, R., Slavova, Y., Mitova, D., Ivanov, B., Boevsky, I., ... (2011). *Assessment of the competitiveness of Bulgarian farms*. Sofia.
- Leopold, S. (2003). Milch aus dem gemeinsamen Stall: Eifelbauern gründen eine Agrargesellschaft. *Neue Landwirtschaft*, (9), 10–15.
- Ministry of Agriculture and Food Bulgaria. (2008). *Structure of Agricultural Holdings in Bulgaria Crop Year 1006/2007* (Statistical Bulletin No. 55). Sofia.
- Ministry of Agriculture and Food Bulgaria. (2011). *Census of Agricultural Holdings in the Republic of Bulgaria in 2010: Preliminary Results* (Statistical Bulletin No. 170). Sofia.
- Ministry of Agriculture and Forestry Bulgaria. (2005). *Agricultural Census in Bulgaria 2003 Results*. Sofia. Retrieved from <http://www.mzh.government.bg/mzh/ShortLinks/SelskaPolitika/Stat/AgroStat.aspx>
- Ministry of Agriculture and Forestry Bulgaria. (2006). *Structure of Agricultural Holdings in Bulgaria Crop Year 2004/2005: Final Results* (Statistical Bulletin No. 100). Sofia.
- Ministry of Regional Development and Public Works Bulgaria. (2010). http://www.mrrb.government.bg/index.php?lang=bg&do=reg_bg&type=68.
- Mishev, P., & Kostov, P. (2003). Decision making patterns of subsistence farmers in Bulgaria. In S. Abele & K. Frohberg (Eds.), *Subsistence agriculture in Central and Eastern Europe. How to break the vicious circle?* (Vol. 22, pp. 71–85). Halle (Saale): IAMO.
- Nikolov, D., Yanakieva, I., Mladenova, M., Atanasova, M., Boevsky, I., Boyukliev, O., & Ivanova, E. (2011). *Socio-economic problems of the semi-subsistence farms in Bulgaria*. Sofia.
- 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.
- Roth, A. (1995). *Ausgewählte Unternehmensstrategien in juristischen Personen der Landwirtschaft der neuen Bundesländer unter besonderer Beachtung steuerlicher Aspekte*. Halle. Retrieved from http://books.google.de/books?id=_q-gHAAACAAJ
- Sarris, A. H., Doucha, T., & Mathijs, E. (1999). Agricultural restructuring in central and eastern Europe: implications for competitiveness and rural development. *European Review of Agricultural Economics*, 26(3), 305–329. doi:10.1093/erae/26.3.305

- 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. doi:10.1093/erae/16.2.257
- 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. doi:10.1093/erae/18.3-4.443
- Schmitt, G. (1997). Unvollkommene Arbeitsmärkte, Opportunitätskosten der Familienarbeit und Betriebsgröße. *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 Bundesministeriums für Ernährung, Landwirtschaft und Forsten Reihe A No. 447). Münster.
- Strecker, O., Strecker, O. A., Elles, A., Weschke, H. D., & Kliebisch, C. (2010). *Marketing für Lebensmittel und Agrarprodukte* (4th ed.). Frankfurt am Main: DLG.
- Swinnen, J. F. M. (1997). *On Liquidation Councils, Flying Troikas and Orsov Cooperatives: Political economy of agrarian reform in Central and Eastern Europe*. Aldershot, Hants, UK ;, Brookfield, Vt., USA: Ashgate.
- 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. Retrieved from <http://ideas.repec.org/a/oup/erevae/v26y1999i3p331-47.html>
- Wissing, P. (2002). Stabil und Nachhaltig: Agrargenossenschaften im "Grünen Bereich". *Neue Landwirtschaft*, (4), 16–19.
- Yanakieva, I., Popov, R., Atanasova, M., Malamova, N., Yovchevska, P., Ivanov, B., ... (2012). *CAP and the Bulgarian rural development*. Sofia.

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 questionnaire is 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	Public services like road maintenance, 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 Short term Long term High qualified jobs Low paid jobs Regional jobs	What agricultural and non-agricultural jobs are offered
Most important	share of overall jobs in the region, job security, social benefits, salary compared to average, length of contracts, jobs would diminish if APC was not there	How many jobs in the community are provided by the APC compared to 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 Non-agricultural credit High volume credit < 10000 euro Low volume credit Long term credit Short term credit	What is the credit portfolio? Who can get a credit? What are the length and amount ranges for credits
Provider	only the APC the APC together with other firms, government as a facilitator	Who provides the credit? What is the Role of the APC in credit provision?
Important providers	other options of credit exist, further services like consultancy, insurances, share of credit provided, credits to non-trustworthy people	Could people from the community get credit under the same condition from other credit providers? 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 Share of activities of APC	How many initiatives like rural tourism and environmental protection 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 support	Local government German government EU support Support from government near organisations	How many of these initiatives have been supported by other (political) actors? Who were these actors?
Originate	has been established by coop post reform has been initiated by coop recently has been established due to APC specific subsidy initiative from APC members	Would these initiatives have taken place without the APC? Have these initiatives been initiated by the APC alone? Was any of these initiatives already in practise before the APC entered the community

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 ability to buy inputs, machinery ability to rent, sub rent etc. land	Does the APC help farmers to access the market? In which markets do the farmers get support for access from the APC? 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 access always vs. limited timings	Who has access to these activities? What are the conditions for access?
processing	all agricultural work that involves the steps after harvesting e.g. oil press, raw material packaging, transforming raw materials	What processing activities are handled by the APC?
smallholders	small farms	Will smallholders have advantages or disadvantages over larger farmers when it comes to processing?

III. Overall Hypothesis

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

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.)
	D	ID		
1. Attributes Interviewee				
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?	e			
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? (<i>If possible ask for numerical values</i>)	b			

2.2. How many members (farmers and non-farmers) does the APC have?	b			
2.3. Is it among the larger or the smaller agricultural enterprises of this region? How does it compare?		b,g, h,i		
2.4. Is it among the smaller or the larger employers of the region? How does it compare?	b	a,g, h,i		
2.5. How many people are employed in the APC? Please elaborate on their status of employment?	b			
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 of the APC?	g,h, i	b,c		
2.12. How would you define the community where the APC is working in.		all		
3. Agricultural Services				
3.1. Please elaborate on the kind of agricultural and marketing services the APC provides for its members. What services are provided, how are they organized and what services do the farmers handle on individual base? <ul style="list-style-type: none"> • Input purchase • Retailing • storage • provision of transportation of products • provision of packaging • provision of processing • provision of machinery service • extension • consulting 	g,h, i	b		

<ul style="list-style-type: none"> • 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, i	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 which the APC provides including those with limited involvement of the APC. Who are the beneficiaries for each service provided? <ul style="list-style-type: none"> • social services (kindergarten) • community services • help desks, information centers • provision of private goods (bakery, patrol station) 	a	b,c, e		

<ul style="list-style-type: none"> • local energy production/provision • public services (maintenance of streets, street lighting) • non-agri. credit services/consultancies • environmental protection • tourism • ... 				
<p>4.2. Of all these services, to what extent is the APC involved? How do the community/government/ firms/other actors participate in those services?</p>	a	b		
4.3. Who initiated these services?	e,a, f			
4.4. Are any of these services supported by the national or EU government or other actors? Are any of these services part of a national or EU policy? Please elaborate on the involvement of these actors.	e,a, f			
4.5. Are there any other actors in the community initiating these services? Were any initiatives already in the community before the APC started operating?	e,a, f			
5. Credit				
<p>5.1. Does the APC provide credit services? What is the role of the APC in credit provision?</p> <ul style="list-style-type: none"> • only the APC provides • APC together with other firms, government • APC acts as facilitator 	c	a		
<p>5.2. Please elaborate on the credit portfolio</p> <ul style="list-style-type: none"> • Agricultural credits • Nonagricultural credit • High volume credit < 10000 euro • Low volume credit • Long term credit • Short term credit 	c			
5.3. For whom and under which conditions a credit can be	c			

provided?				
5.4. Who else is offering credits in the community? How does it compare?	c			
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 agricultural policy/other policy area?	f,h	b,c, g,i		
6.3. Does the APC get national agricultural support which other firms don't? Since when? What are the impacts?	f,g	b,c, h,i		
6.4. Are there any EU or national initiatives/policy, which the APC is implementing? Has it happened in the past? Will it happen in the future? Please elaborate.	f,g, h,i	b,c		
6.5. Are there any EU or national policies implemented in the community independent from the APC?	f			
6.6. What is the current EU subsidy status in the community? Since when? What are the impacts?	f			
6.7. How will this status change in the near future? What will be the impact?		b,c, f,g, h,i		
6.8. If you were to craft the next generation of support measures , what would you support and why?		b,c, f,g, h,i		
6.9. What is bad with current agricultural policy? Give examples.		b,c, f,g, h,i		
6.10. What is particularly good with current agricultural policy? Give examples.		b,c, f,g		
6.11. If you were to advise the EU. Why should APCs be supported and how?		a,b, c,f, g,h, i		
7. Check against without APC scenario				

7.1. How would agriculture in this region look like if the coop had to close down tomorrow?	g,h, i	b,c		
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? Please elaborate.	b			
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 by other actors? Which ones? <ul style="list-style-type: none"> • social services (kindergarten) • community services • 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 ... 	a,e	b		
7.7. What would be the impact on the community if the other than agricultural services provided by the APC would be discontinued?	a	b		
7.8. Would credits be available? Would it be more difficult to get a credit?	c			
7.9. Would agricultural services be continued? Would market access be more difficult (high transaction costs) for farmers?	g,h, i	b,c		
7.10. What would be missing?	g,h, i	a,b, c		
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.