Landscape after accession: the effects of agricultural and rural policies on farming – results of a case study conducted in Western-Hungary
ABSTRACT

The paper aims at giving insight into the social aspects of the changes in farming structure using the results of a case-study analysis conducted in the Zalaszentgrót district, as a part of a wider research. It argues that large scale farms could benefit the most from EU accession, while the interests of medium and small scale farms were less regarded, which resulted in the polarization of agriculture: land, different knowledge forms used in agricultural production, and subsidy use accumulated at large farms, while medium size farms stagnate. Another, newly emerged group of farms are the social farms. These farms are also heavily subsidized by the Hungarian government.

As a result of it both social farms and large farms are dependent on state subsidies, and on the changes of EU and national policy changes. According to a case-study the CAP favours large-scale agriculture; these farms benefit the most from the SAPS, they are the typical winners of the EARDF subsidies, and rent land from the state. Local governments use social farms to handle local social problems, partially caused by the collapse of socialist type agriculture, the concentration of land and decrease of employment. The paper argues that the dependency on different subsidies makes the beneficiaries fragile, and forces the medium size farms to a hard competition.
1. INTRODUCTION

Different scientific and policy papers analyse the effect of policy-making on the changes of agricultural land-use and farm structure in the European Union. Most of the policy analysis are broad and based on quantitative methods, while scientific papers apply both qualitative and quantitative methods, but has narrower focus. Maybe the most fashionable topic is the analysis of the factors influencing the adoption of agri-environmental schemes (Prager et al. 2015), and the factors effecting farm abandonment. This paper aims at giving insight into the social aspects of the changes in farming structure focusing on large and medium scale farms and a special farm type, social farms; this latter started to spread in the last five years, when the Hungarian government started to subsidize it from different sources.

The restructuring of the Hungarian agriculture is described by (Kovách 2012), and in a more recent research by Kovács (2016). The work of Swain (2013) draws the Eastern-European context of the post-communist rural landscape. Swain argues that in most countries the state left alone local governments in the nineties and former cooperative leaders became the green barons of the nineties. Although already his data show, only in the late nineties became clear that the double character of the Hungarian agriculture (Valuch 2001:190, Kovách 1988) will appear again. While there is some literature on the agriculture of the nineties (Juhász-Mohácsi 1996, 1999, Csite-Kovách 2002), there is less information on the post-accession period. Usually farms are classified as subsistence farms, part-time farms, family farms and agricultural companies, although the changes of the last two decades made the picture more colourful. One of the most important phenomenon, that integrator companies became the most important mediators among the farms, input material producers, banks (and other financial institutions), and trading companies (Kelemen and Megyesi 2007: 3).

The changes of the post-accession period were analysed mostly by agricultural economists (Csáky-Jám-bor 2013, Popp-Jámbor 2015); or using only certain and limited aspects (Jehlicka-Smith 2011) the present paper aims at discussing the social consequences of the post-accession period.

1 The work on this study was supported by the Bolyai Postdoctoral Scholarship of the Hungarian Academy of Sciences.
The paper is based on a case study conducted in a Western-Hungary district, the Zalaszentgrót district. During the research semi-structured interviews were conducted with 35 farmers, consultants, local majors and civic activists. Statistical data are used to contextualize the results of the qualitative case-study.

According to our case-study there are five main farm types in the case study area: large farms, conventional medium size farms, innovative medium size farms, social farms and subsistence farms. In the paper the situation of the latter one will not be analysed. There are three large-scale agricultural companies in the case-study area; these farms benefit the most from the SAPS, they are the typical winners of the EARDF subsidies, they can buy the most recent technology, rent land from the state, and can employ highly educated professionals thus reach high yields; employment in the large-scale farms decreases continuously. At the other end local governments use social farms to handle local social problems, partially caused by the collapse of socialist type agriculture, the concentration of land and decrease of employment. Social farming aims at providing agricultural activity or employment to the poorest local social groups (Csoba 2010, Váradi 2015). As result of the agricultural and rural policies of the last decade, both social farms and large farms became dependent on state subsidies and as a consequence of it on the changes of EU and national policy changes.

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2 The paper is based on the case studies of the “Living from the land” (OTKA 100682) project supported by Hungarian Scientific Research Fund OTKA, and supported by the European Union and the State of Hungary, co-financed by the European Social Fund in the framework of TÁMOP 4.2.4. A/2-11-1-2012-0001 ‘National Excellence Program’.
2. THEORETICAL BACKGROUND

THE OBJECTIVES OF EU AGRICULTURAL AND RURAL POLICIES

The objectives of the Common Agricultural Policy (CAP) changed profoundly during its half-century-long history. After the introduction of the Single European Act, the focus of the CAP changed. The main reason for it was that the system was unsustainable from economic aspects because of trade conflicts, budgetary difficulties, and over-production, from environmental aspects (intensive use of pesticides and fertilizers, animal health problems) and also from social aspects (the out-migration from rural areas did not slow down, agricultural activity declined). In 1992, the MacSharry reform aimed at solving these problems and challenges. It started the shift from product support (through prices) to producer support (through income support) (Oostindie et al., 2010). The reform had aimed at reaching economic objectives by improving “the competitiveness of EU agriculture, stabilise the agricultural markets, diversify the production”, and also at balancing EU expenditure on agriculture; the main tool was direct payments, instead of price support. It also had environmental objectives; the main tools to reach them were: compulsory set-aside, agri-environment programmes, afforestation, and social components, like early retirement, or diversification (EU-portal).

The priorities of Agenda2000 show that decision-makers became more aware of the importance of social and environmental aspects of farming in the EU: the main priorities of Agenda2000 are still important; and as impact assessments show, are still to be reached (The CAP towards 2020, The Common Agricultural Policy after 2013). The institutions established after the 2003 reform, for example the EARDF (European Agricultural Fund for Rural Development) are still important in agricultural and rural policies (Kengyel, 2008:79).

At the time of Hungary’s EU accession the priorities of the Common Agricultural Policy were the following:

- helps farmers produce sufficient quantities of food for Europe
- ensures this food is safe (for example through traceability)
- protects farmers from excessive price volatility and market crises
- helps them invest in modernising their farms
- sustains viable rural communities, with diverse economies
- creates and maintains jobs in the food industry
- protects the environment and animal welfare.

**IMPACTS AND EVALUATION OF THE POLICIES**

In the following I shortly review how different sources analysed agriculture and rural policies effect farming, and whether the above priorities could be met. First I shortly discuss scientific reports, and then an evaluation report of the European Commission (Evaluation of the structural effects of direct support).

Although there are several papers on the effect of agricultural and rural policies on farming (Walford 2002, Daugbjerg-Swinbank 2012 Celio et al. 2014), most of them focused only on selected aspects, like the adoption of agri-environmental schemes (Prager et al. 2015), on foresting arable crop lands (Duesberg et al. 2013, 2014), on exiting farming (Raggi-Sardonini-Viaggi 2013), or on factors effecting the spread of organic farming (Sutherland et al. 2012). There are fewer papers on the effects of rural and agricultural policies on land concentration, changes of farm structure.

Narrowing the search to Central-Eastern Europe, or to the new member states, economic analysis of the effects of EU accessions can be found (Csáky-Jámbor 2013, Popp-Jámbor 2015), and the effects of EU accession on rural communities and small or medium scale farms are rare. Of course the results of the economic analysis are indicative of the social effects as well.

Csáki and Jámbor (2013) analyse the effect of EU accession on new member states reviewing the changes of land use, agricultural trade, prices, and income; their analysis shows also the changes of farming structure. The analysis shows that in all new member states, the share of bigger farms (using more than 100 hectares) grow; in Hungary from 59.7% to 64.7% (Csáki-Jámbor 2013:335). Parallel to it product structure moved toward arable crop production, yields grow (although strongly effected by weather) and labour productivity grow as well. These results also show that farming structure became more concentrated (Csáki-Jámbor 2013:329) and the employment capacity of agriculture declines. Also the Agricultural Census data support it; having a closer look at the land-use data, one can see that the share of the largest farms decreased, while the land used by farms between 50-1000 hectares increased between 2001 and 2010 (Megyesi 2017).
Csáki and Jámbor argue that the New Member States used most of the non-direct payments on competitiveness enhancement and agri-environmental measures (2013:337). The authors argue that on the one hand subsidies helped the agriculture of the new member states, offered them a huge open market, but on the other, market competition increased, farmers had to learn in a very short time the new subsidy system, and small-scale, subsistence farmers could not benefit from the subsidy system, thus the final effects are still an issue (2013:340). This paper aims at giving insight into the social aspects of the changes in farming structure. It argues that large scale farms could benefit the most from EU accession, while the interests of medium and small scale farms were less regarded.

A report prepared for the European Commission evaluated the structural effects of direct payments (Evaluation of the structural effects of direct support⁴). The impact analysis published in 2013 analysed the effects from five different areas:

- on farm structure;
- on farming in marginal areas;
- on labour force use;
- on farm specialization;
- and on competitiveness.

According to the report direct payments led to the decrease of small farms and to the homogenization of farm-structure in the EU. Farms below 5 hectares are the most likely to exit (Report 2013:317), and although concentration is a general tendency, in the New Member States it is stronger than in the EU-15. Farming in marginalized areas slightly decreased in the analysed period (2003-2011).

Concerning the effects on labour force, the report is less categorical; although it registers the decrease of employment in agriculture, the relationship between direct payments and the agricultural employment is not clear according to the report (Report 2013:320). The report argues that direct payments had a positive effect on “growing importance of farms managed by young farmers” and “did not have any impact on the relative importance of family labour and on part-time farming” (Report 2013: 321). Direct payments led to specialization as the paper says, and probably increased competitiveness in certain member states. In the following this paper aims at analysing how these processes look like from below. How direct payments and EU agricultural policies effected farming at the micro level.

3. RESEARCH QUESTIONS & METHODS GROUND

The factors influencing farmers’ decision-making was analysed in several scientific papers (Lieskovsky et al 2015). Lieskovsky and his co-authors analysed the factors influencing the abandonment of traditional small-scale agricultural lands in Slovakia. This process accelerated after the collapse of the cooperatives, although small-scale arable lands, orchards, vineyards, or pastures were not cultivated by former cooperatives. The abandonment of these plots was related on one hand to geographical factors (to slope steepness) and to social, economic factors (Lieskovsky et al 2015: 79). They found that law financial profit is the most important factor, followed by the lack of interest to farm these areas, further factors were: the difficulties to acquire proper technology, personal health problems, and the “help of local community in farming”. The authors argue that the implementation of the CAP resulted the strengthening of large-scale intensive farming. Similar argumentations can be found in other papers (Angus et al 2009, Renwick et al, 2013). These papers do not analyse the mechanisms which brings us to these results. In an earlier paper I analysed the factors influencing farmers’ agricultural practices (Megyesi 2016) and argued that available resources (financial capital, land and subsidies), knowledge and networks (market relations, kinship) define farming methods. In this paper I analyse how policy interventions influence farming activity and farmers’ strategies. The analysis is segmented according to the priorities of the CAP: the paper does not analyse deeply the economic priorities: effects on price volatility and market crises, or food-production (traceability) but focuses on social dimensions of farming: on farm modernization, the effect of CAP on the sustainability of rural communities, on rural livelihood, job creation, health, animal welfare and environmental aspects of farming.

To understand the above relationship between rural and agricultural policies and farming the following research questions were formulated:

- What are the effects of the policy interventions on rural livelihood?
  - What are the effects of the policy interventions on employment in the analysed farms?
  - Are there young farmers in the CSA, and how do they think of their own future?
- How different farms are affected by policy interventions?
- What are the future plans of the different farmers?
The different farm types are analysed according to their land-use, agricultural methods, knowledge use, and market relations.

The presented case study is based on quantitative, qualitative and anthropological methods: secondary data analysis, document-analysis, semi-structured interviews, transect walking and participatory observation (Kvale 1994, Yin 1994, Gerring 2007). In the introductory part we used the data from the agricultural census, the data on subsidies from the Hungarian Rural Development Office and the results of a survey conducted among the farmers of the micro-region\(^5\). The description of the different farm-types is based on semi-structured interviews conducted with producers, local decision-makers, and members of local civic associations. Transect walking and participatory observation served mainly as triangulation method to understand the possible contradictions emerged during the interviews. During the research more than 35 interviews were conducted between the September of 2013 and the March of 2015.

\(^5\) “Living from the land” (OTKA 100682) project; supported by Hungarian Scientific Research Fund OTKA).
4. THE CASE STUDY – ZALASZENTGRÓT MICRO-REGION

The following chapter presents an overview of the case-study area and the five, most typical farm types. The overview is based on different statistical data, and helps us to describe the environment under which the different farms operate. Farms are characterised

4.1. OVERVIEW OF THE CSA

To describe the CSA we used the data from the Agricultural census (ÁMÖ 2011), the data on subsidies of the Agricultural and Rural Development Agency (ARDA), survey data and earlier papers (Váradi 2008, Megyesi 2016). The lands of the district are of low quality, despite it, most of the lands are plough lands (73.5%), and large-scale production of cereals sunflower and corn is typical in the area. The role of animal husbandry declined in the last decades, orchards disappeared, and can be found now only as household activity (Gyarmati 2005, Bíró et al 2012, Szijártó 2008). Wineries seem to spread again, but their importance in local agriculture is still low. Parallel to these phenomena the role of agriculture in employment dropped to 7.1% by 2011. According to the data of the Agricultural Census, the proportion of private farms is higher in the CSA than the county or country average (ÁMÖ 2011, Megyesi 2016), and the average farm size is smaller both in the case of private farms and agricultural companies than the country average. Despite these data large scale farming is characteristic in the district. Analysing the data on Single area payment scheme (SAPS), one can draw a rather unbalanced picture about local land-use. As the table below shows less than 5% of the farms use more than 100 hectares arable land, but these farms use more than half of the subsidized lands.
4.2. FARM TYPES

According to the ARDA data there are 484 farms in the area, despite it the Agricultural Census found in 2011 2321 farms, while experts estimate the number of farms around 1000 in the CSA; “approximately 200 of them are bigger ones” – as an expert of the Agricultural Chamber told, this number equals the number of farms with more than 5 hectares of land receiving SAPS. In the following we present the typical farms of the micro-region and analyse their land-use, how they built on subsidies and bank loans to develop the farm, their agricultural methods, their knowledge use (Tovey 2008, Kelemen et al 2008), their employment practice, their wider local and national market relations, input and output material networks, their future plans. The more detailed description of the farms can be found in Megyesi (2015b). The research found five farm-types in the case-study area: large farms, conventional medium size farms, innovative medium size farms, social farming (Rácz 2013) and small-scale, subsistence farms.

Farms which cannot provide the living at least for one person are defined as small-scale farms. In the case of arable crop farms it is over 50 hectares in the CSA according to the interviewees and experts, and around 5 hectares in the case of vineyards and orchards. The quantity of used land is also an important factor; although the EU uses 100 hectares as cut-off point between medium and large scale farms, in our case 300 hectares seems to be the real limit between the medium and large-scale farms, as it will be shown.
later. There were several local initiatives over Hungary in the last five to start some kind of social farming (Rácz 2013); some of them were subsidized by the START Public Employment Programme\textsuperscript{6}, the Social Land Programme, or from LEADER or other EU-sources. In this paper an initiative subsidized by the Social Land Programme\textsuperscript{7} and another one by the START Public Employment Programme (Márkusz-Tóth 2010) will be analysed.

4.2.1. LARGE FARMS (600)

According to the ARDA data and the interviews, there are six large scale farms in the CSA: a limited company: the former State Farm, an animal husbandry company and four arable farms. Beside of the former state farm, four large farms are owned by local families and one of them is owned by a German farmer. All of them uses more than 300 hectares, or receive more than 30 million HUF as animal-welfare subsidy. The following table shows the large farms of the CSA.

1. Table: Large farms of the CSA

<table>
<thead>
<tr>
<th>Name</th>
<th>Settlement</th>
<th>Sum subsidies (M huf)</th>
<th>Land SAPS (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pig Farm Ltd.</td>
<td>Pakod</td>
<td>216,8</td>
<td></td>
</tr>
<tr>
<td>former State Farm.</td>
<td>Türje</td>
<td>216</td>
<td>1280</td>
</tr>
<tr>
<td>HBM Kft. &amp; H család</td>
<td>Zalabér</td>
<td>182</td>
<td>1200</td>
</tr>
<tr>
<td>Sz. Gy.&amp; Kaiser Ltd.</td>
<td>Tekenye</td>
<td>47,1</td>
<td>393</td>
</tr>
<tr>
<td>A. H. (the „German”)</td>
<td>Mihályfa</td>
<td>25</td>
<td>??? (252,46)</td>
</tr>
<tr>
<td>D-család</td>
<td>Nagygörgő</td>
<td>14</td>
<td>~450</td>
</tr>
</tbody>
</table>

(data source: SAPS according to the ARDA (2012) locals and documents)

Even from the ARDA data, it is clear that the land-use and subsidy use of the large farms is not simple: even large farms share land among different partner companies, family members, thus in most cases the SAPS data and the data provided by the interviewees are different. Beside of the above mentioned reason, there are other reasons for this difference: large scale farms offer machinery services for smaller farms, integrate their production by providing input materials, or buying up raw-products, and usually the boarders are not clear between business relationship, close cooperation based on kinship or neighbourhood and complete integration of the smaller farm into the bigger farm. For example one of the largest farms use around 1300 hectares of land, provide services on around 800 hectares and buys up raw material (grain, corn

\textsuperscript{6} http://kozfoglalkoztatas.kormany.hu/,
\textsuperscript{7} http://www.emet.gov.hu/hatter_1/szocialis_foldprogram/,
and sunflower) from more than 2000 hectares. The state farm has long term land-hiring contracts with the state. The family owned large farms mostly use land of the owners, family members and private persons.

According to the interviews, large farms use EARDF subsidies to finance farm-development; bank loans are used as working capital loans. “Almost all of the developments are financed from the EARDF projects – says one of the managers – maybe 10% of our developments are financed from the profit of the farm; we would like to minimize our bank loans.”

While the former state farm employs around 65 people, among them university graduates, the family owned large farms have fewer employees, and these employees are less educated. The former state farm has the best yields in the CSA. It has two main reasons: on the one hand they have highly educated professionals (we have an agricultural engineer specialized in plant-protection and several other engineers) and on the other hand they use modern agricultural methods.

Large farms had possibility to invest in modern machinery, which increases the security of production, the owners have scientific agricultural knowledge from different universities, and also practical local knowledge; most of them learned modern agricultural methods as a member of the former socialist type cooperative, or an employee of the former state farm. Large farms has own plant-protection specialists or hire them if needed.

As mentioned above even large farms employ mostly un-skilled workers, although as an interviewee told “to be able to use a modern agricultural machine you need knowledge in informatics and not in machinery”. Most of the employees are work in animal husbandry and in maintenance, but employment capacity of the large farms remained low in the last decade. Paper works are made by the female members of the family – except for the case of the former state farm; as Csurgó wrote as well.

These farms have weak connections to local markets; most of them sell the products at the national markets for whole-salers and at the Central-Eastern-European markets. They tender both buyers and input material providers.

When planning the future farm managers consider the changes of agricultural and land markets, and the possible future of SAPS and EARDF. The plans are for the next two or five years, but can change quite rapidly, as policy decisions directly influence farm profitability – as an interviewee argues. “If the SAPS or the milk-quota subsidies are maximized, or even the agri-environmental subsidies will not be available for us, then the company will be loss-making; the owners will not accept it and we will have to stop developments.”

Some of the large farms entered also agri-environmental programmes. The reason for it was to gain higher subsidies; environmental concerns did not appear in the decision. The increased administration causes no problem for them; they have the necessary managerial knowledge to make the administration.
4.2.2. MEDIUM SIZE FARMS

Farms using less than 300 hectares land and more than 50 hectares, or receiving a maximum of 20 million Huf subsidies are labelled as medium size farms in the case of arable crops farms; in the case of vineries the limit is around 5 hectares according to the interviewees. Analysing the SAPS data of the ARDA, it is difficult to precisely give the number of medium size farms. There are 39 farms between 50 and 300 hectares, but some of them belong to large farms presented above. There are another 46 farms between 20-49.9 hectares land: most of them are not independent farms, but cooperate to some extent with other smaller farms. Table 2 presents the most important characteristics of the bigger medium size farms according to the interview and the document analysis.

### 2. Table: Medium size farms of the CSA

<table>
<thead>
<tr>
<th>Name</th>
<th>Settlement</th>
<th>Sum subsidies</th>
<th>Land SAPS (ha)</th>
<th>Other, non-farm activity (M Huf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hun D.</td>
<td>Zalaszentgrót</td>
<td>31</td>
<td>220,20</td>
<td>n.d.</td>
</tr>
<tr>
<td>T. D.</td>
<td>Zalaszentgrót</td>
<td>36</td>
<td>217,41</td>
<td>Pensioner, former manager</td>
</tr>
<tr>
<td>H.I.</td>
<td>Zalaszentgrót</td>
<td>12</td>
<td>189,66</td>
<td>no</td>
</tr>
<tr>
<td>Xné T. M.</td>
<td>Mihályfa</td>
<td>8</td>
<td>174,45</td>
<td>active in local life</td>
</tr>
<tr>
<td>B-család</td>
<td>Zalaszentgrót - Kehidakustány</td>
<td>24</td>
<td>174,12</td>
<td>active in local life, tourism</td>
</tr>
<tr>
<td>S.P.</td>
<td>Zalaszentgrót</td>
<td>14</td>
<td>152,31</td>
<td>n.d.</td>
</tr>
<tr>
<td>H. V.</td>
<td>Türje</td>
<td>17</td>
<td>151,72</td>
<td>Pensioner non-local</td>
</tr>
<tr>
<td>S. L.</td>
<td>Mihályfa</td>
<td>9</td>
<td>138,63</td>
<td>n.d.</td>
</tr>
<tr>
<td>dr. N.-né J.</td>
<td>Zalaszentlásló</td>
<td>19</td>
<td>136,01</td>
<td>tourism</td>
</tr>
<tr>
<td>T. Gy.</td>
<td>Türje</td>
<td>19</td>
<td>120,02</td>
<td>vinery</td>
</tr>
<tr>
<td>K. K.</td>
<td>Batyk</td>
<td>8</td>
<td>112,53</td>
<td>n.d.</td>
</tr>
<tr>
<td>dr. F. G.</td>
<td>Zalaszentgrót</td>
<td>27</td>
<td>111,63</td>
<td>practitioner</td>
</tr>
<tr>
<td>id. S. B.</td>
<td>Ohid</td>
<td>10</td>
<td>105,55</td>
<td>dairy</td>
</tr>
<tr>
<td>N. L.</td>
<td>Zalaszentgrót</td>
<td>10.2</td>
<td>99.07</td>
<td>agricultural services</td>
</tr>
</tbody>
</table>

(data source: SAPS according to the ARDA (2012) locals and documents)
The table shows that in the case of medium size farms both non-farm activity and farm diversification have importance. On the one hand there are farmers who have other source of income: pensioners, practioners, majors or agricultural consultants, and on the other there are farmers who offer agricultural services (harvesting and soil cultivation), tourism services or process food to increase farm-income. Most of the medium size farms are family based, although there are some founded by former colleagues. In this farms the head of the family decides about farming methods, crops, the timing of the different agricultural activities, about the purchase of the input materials, and in several times about the selling of the products. This is a close, but informal cooperation. There is another type of cooperation: integration, this latter is an open, but formal cooperation between the farms.

Medium size farms has less machinery, their machines are less up-to-date, have no employed agricultural engineers for the different tasks: „I try to solve soil cultivation with private companies; I bought a sprayer, so I can do it myself, but again I have to hire harvesting services” – says a local farmer. These factors make farming more vulnerable, they cannot react quickly to the changes of the weather or the market. Most of their developments are from own resources; it has several reasons. EARDF subsidies modern, expensive machines which are unnecessary in the medium-size farms, they do not have regular contacts with consultants and do not know about proper tenders, sometimes the tender makes the development more expensive.

The group of medium size farms is very heterogeneous; this heterogeneity can be reduced if we differentiate two groups: conventional medium size farms and innovative medium size farms. The differentiation is based on the product-structure and the markets of the farms. While conventional farms produce raw materials and sell the products to integrators and whole-salers, innovative farms seek to produce special processed products, for niche-markets.

**Conventional medium size farms** are usually bigger than the innovative medium size farm, and has 80–200 hectares of land, they rent private lands and has medium term contracts (5 year typically). They use the agricultural methods of the eighties, learned in the former cooperative. Most of them have agricultural education, in several times out-of-date scientific knowledge and used to work for one of the former cooperatives, or the state farm. The main decisions are made by the farmer; they consult experts or specialists if necessary. As I wrote they produce the most common arable crops: wheat, corn, sunflower or rape, and sell them as raw material for integrator companies, which provide them also with input materials, financial and machinery services if they need it; according to our interviews these relationships are very strong. Only the biggest ones have one or two employees, usually the farmer himself does soil cultivation and the wives are responsible for the paper-work (Csurgó 2002); (I found only in one case a female farmer).
By the end of the nineties these farms reached their present size. This group of farms is vulnerable and dependent on the integrator companies, rapid changes of the market, thus their future plans are uncertain, sometimes pessimistic, although in several cases farm-inheritance is secured.

Innovative medium size farms are certified organic farms, active in small-scale food processing, in tourism, but also bee-keepers and certain wineries belong to this group of farms. These farms are more labour intensive, but use less land, typically not more than 100 hectares. In several cases these farms need special machinery, thus they have their own machines. Farmers are actively involved in different projects, have challenging future plans, almost half of them are female, they have a university degree, usually in agriculture and they are locals. They chose agricultural methods consciously; as a goatkeeper says: “I choose intensive keeping technology, because this variety needs it, and I choose this variety because it gives the best quality milk”. The quotation shows that their decision on farming method is based on economic reasons. Farmers use a reflected and up-to-date scientific knowledge combined with a deep local (tacit) knowledge. These farms have no employees outside the family.

Their market relations are heterogeneous: some of them sell their products locally: on the local market, from the farm-gate, but if necessary they travel to markets within the country: “I deliver the milk and the cheese once a week, on Wednesday, then on Thursday I am at the local market, on Saturday in the county capital; if I cannot sell everything we eat it ourselves, or I give it to friends” – says one of them. Others use conventional marketing channels as well: “we sell the calves to whole-sale, and I think he sells them at the Southern markets, I do not know.”

There were several initiatives in the CSA to foster small-scale food processing locally. Probably these initiatives helped younger and more educated farmers with less financial resources and land to look for new opportunities and it lead to the appearance of innovative medium-size farms.

4.2.4. SOCIAL FARMING

There are two social farms in the CSA: both of them gained subsidies from the Social Land Programme\(^8\), from other EU resources (like the LEADER and the Social Renewal Operational Programme) and by the START Public Employment Programme\(^9\). The two realized programmes are quite similar: both have a community garden, where public employees work, and an initiatives which aims at engaging families in agriculture activity. First I shortly present the differences of the programmes, then their common features and their wider effects on local communities.

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\(^8\) http://www.emet.gov.hu/hatter_1/szocialis_foldprogram/,
\(^9\) http://kozfoglalkoztatas.kormany.hu/,
One of the programmes is based on a START Public Employment Programme; it was initiated by a local civic association. The association used to organize public work in the CSA, and had agricultural similar initiatives since its founding. Although in 2013 they worked with more than 200 families in fourteen settlements, presently the programme reaches 45 families on 5 settlements and financed by a LEADER project, while another part of the programme is financed by the START Public Employment Programme farming on 0.8 hectares with four public employees, but in a cross-border project they plan to extend the programme and plant an orchard with endemic fruit-trees: “if we win, we will extend the programme”.

The other program was initiated by the mayor, an enthusiastic local small-scale farmer. They also founded a social cooperative, the latter gained subsidies from the START Public Employment Programme, and they also plan to develop farming activity using different EU-subsidies for it. At the moment they use around 10 hectares land with 8 public employees and engage in farming around 25 families. They produce arable crops, different vegetables and fruits, and also process them. Arable crops are sold to the locals, and to the neighbouring hunting company, vegetables, fruits and processed foods are used by the local kitchen and sold locally. They plan to start animal breeding as well.

In both settlements where the analysed social land programmes operates agriculture is dominated by large farms; the cooperatives went bankrupt 20 years ago, small scale farming almost disappeared. There are almost no work places locally, thus young people left the area.

The participants of the programme use their own land, or land rented by the local government from locals. Trainings are important part of both social land programmes:

“We provide professional supervision; it is a learning process, most people already forgot about farming.”

“Members of the initiative has to participate at trainings on animal breeding, and they can receive young animals only after it, and we continuously control their activity.”

Both programmes are supervised by a local agricultural engineer, but the participants are non-skilled permanently unemployed people. The participants working as public employees are usually under-educated people, with almost no other possibility to find job. Although the programme organizers express their aim that they would like to use elements of local, traditional agricultural knowledge, when choosing plant species, or agricultural methods, in most cases they use modern technology (pesticides, artificial nutrients, and modern varieties), local traditional knowledge appears only rarely in choosing the plots.

In both case state and EU subsidies are essential; without them the programmes would have never been started, and although the mayors and the leaders of the programme are satisfied with the results, they are
sceptical that they could continue the social land programmes without subsidies. The subsidies cover the wages of the social employment and the costs of input materials in almost all cases. Administrative costs are covered by the organizer institutions: the local governance or the civic association.

Although originally the two programmes co-operated, and the administrative, or management costs could be reduced by cooperation, minor conflicts make the earlier cooperation impossible.

Both initiative aims at processing fresh vegetables and fruits in local school-kitchens, sell the rest at local farmers market, or donate them to local people as a part of the social-care system. The different social land programmes provide a basic living for the few, who are selected to participate, but strengthen the dependency of the participants on the local decision-makers, and sometimes increases local inequalities, as the poorest groups are not involved in the initiatives; this processes lead to the development of a rural precariat. The presence of the social land programmes at local markets challenges also local small and medium size farms; these has to compete with them, although they cannot get any subsidies and has to pay more for labour force.
5. COMPARATIVE ANALYSIS

In the following the paper compares the presented farm types according the analytical aspects: land-use, agricultural methods, use of subsidies and bank loans to develop the farm, knowledge use (Tovey 2008, Kelemen et al 2008), employment policy, local and national market relations, input and output material networks and future plans.

Most of the large scale farms rent most of their land, medium farms use the land of the owner or the land of the owners’ family, they are more dependent on soil quality than the bigger farms, and has typically smaller plots. Social farms use locals smaller lots and the land of the local government.

The product structure is quite similar in the case of the large scale and the conventional medium scale farmers: they produce wheat, corn and sunflower. In the case of the innovative farms, product structure is really heterogeneous: they produce different kinds of vegetables, arable crops, and has animal husbandry as well. Social farms aim mainly to supply local needs, thus produce vegetables, and fruits typically (although not exclusively).

The agricultural methods of the four analysed farm types are basically different: large farms use modern methods: they invest in modern machinery, in up-to-date varieties, in fertiliser, different pesticides and fungicides to achieve the best possible results; they can employ professional agricultural engineers for their different branches. Large scale farm can reach the newest scientific results, and usually use them together with the existing local knowledge.

Medium size farms, as I wrote above have less resources, and although the product structure of a conventional medium size farm is quite similar to the product structure of a large farm, the methods, and consequently the yields are different. The machinery is older, and a medium size farm always has to be ready to repair the tractor, in several cases they cannot afford to buy high quality seeds and use their own, they also use older and sometimes less effective nutrients, or plant protection methods. To sum up conventional medium size farm use the agricultural methods of the late eighties (which are still modern methods), but their access to the most recent findings of agricultural sciences is limited.
The agricultural methods used by the innovative medium size farms are not homogenous. Some of them use organic methods, others modern (conventional) methods adopted according to the local environment. Reflection on local characteristics and on the needs of the farmer or the market is very typical in the case of the innovative farmers. The knowledge use among this group of farmers is also heterogeneous, although a deep knowledge of the local environmental circumstances is typical.

Social farms need less machinery, these are less dependent on it; they usually also use similar knowledge as conventional medium size farms together with local knowledge.

Subsidies play an important role in the case of the large scale farms: most of the developments are based on it, and also their future plans are based on the availability of the subsidies. Social farms are also dependent on subsidies, as I presented above. Medium scale farms reported to use mostly own resources to invest; subsidies of the EARDF are uncertain, project management is difficult, and the carrying out the project is risky. Bank loans are not popular in any of the farms; they try to avoid it if possible.

As product structure became simple and animal husbandry decreased employment decreased as well. Large farms are still the most important employers, although social farms continuously gain importance. Medium size farms rarely employ people not belonging to the family.

The market relations of the large, conventional medium, innovative medium and social farms differ a lot: large farms have strong and stable market positions, integrate input and output material networks across country borders; they are the interface between local products and large-scale food processors, local farmers and input material suppliers. Conventional medium size farms usually sell their products to a bigger farm or an integrator company. Innovative farms use market niches: sell their products at local farmers’ markets, from the farm gate, or using the Internet. They also build on local initiatives and try to find contacts to similar producers outside the micro-region. The products of social farming are consumed by the participants, or at the local institutions, and donated to locals, only a minor part is sold at local markets.

Large farms and innovative medium scale farms have the most optimistic future plans, although both large farm managers and conventional medium size farmers think that agricultural and local policy making is unpredictable and makes planning difficult.

Agricultural and rural policies have an effect on each farm types. The main effect is manifested through the subsidy system and the regulations concerning land-use. Land-use regulation effects differently large and medium size farms. While large farms have long-term land rental contracts with the state, (conventional) medium size farmers have 5-year long contracts, typically with private persons. Most of the innovative farms use own or family owned lands.
The availability of EARDF subsidies show, that development policy favours large farms; as an interviewee told: “both the calls favour bigger and brand new machines and the dealers are interested in selling more expensive machines with higher profit rates.” In addition to it, EARDF projects are typically managed by independent agencies, which also prefer to work with larger farms. Medium size farms are less active in projecting: on the one hand they can hardly finance it: one single project needs all the available resources; on the other hand the necessary managerial knowledge is missing also. Finally projects cause too big financial and management risks for medium size farms.

Social farms have a special position in the subsidy system: the programmes are partly financed by EU Funds (Social Renewal Operational Programme and LEADER) and by the Hungarian National Employment Fund (the Start Public Employment). Local governments do not have to compete for the resources, only comply with the parameters.
6. COMPARATIVE ANALYSIS

There are only three large farms, receiving more than 100 million Huf subsidies or using more than 1000 hectares of land, in the case-study area, and three other family farms using 300-500 hectares of land and receiving around 20-30 million Huf subsidies. These farms hire highly educated employees, use projects to modernize their production infrastructure, but their future is dependent on the changing agricultural and rural policies.

Most of the conventional middle-size farm has no employees, mostly family members work in the enterprise. These farms produce arable crops, using the technology of the eighties and facing problems caused by improper production infrastructure (old machines, obsolete technology, low quality seeds). Most of them is not active in development projects, and have land rental contracts with private persons, thus they are less dependent on policy changes.

Innovative middle size farms are also based on family work-force, but they produce special products, using a special knowledge: there are certified organic farmers, goat keepers, pumpkin oil producers among them. They sell their products at niche-markets, use their own land, thus they are the least dependent on the changes of agricultural or rural policies.

Social farms aim at reaching self-provisioning at the individual and at the local, settlement level, but, the initiatives are un-sustainable economically without the regular state subsidies. These farms provide a very low income for the poorest social groups and parallel to it challenge local horticultural farmers by producing mostly vegetable using the cheap labour force of the public employees and the subsidized input materials. Parallel to it such initiatives do not offer long-term employment (Csoba 2010, Cseres-Molnár 2014), are not attractive to the young and educated locals and do not solve issues like local food sovereignty.

After analysing the social dimensions of farming in the case study area: farm modernization, the sus-
tainability of rural communities, rural livelihood, job creation, we found that there is concentration of land-use, and parallel to it a concentration of knowledge and subsidies: while on the one hand large and bigger middle size farms use most of the land, are able to use projects and subsidies and hire educated employees, on the other hand local landless people use a small proportion of land, have no access to proper knowledge and subsidies. These processes result in re-building of the dual character of the Hungarian agriculture known from the nineteenth century, middle twentieth century capitalist agriculture and the socialist times cooperatives and household farming. Nowadays large farms, the former state farms and family farms represent one end, while social farms employing poor land-less people in a precarious position represent the other end.

Our result partially support Csáki-Jámbor claims, that “small farms are generally too small and farmers are inexperienced and lack resources, while large farms still have some heritage of the collective farming system with some embedded inefficiencies” (2013: 334) our case showed that even medium size farms are inexperienced and lack resources, but large farms do not have the heritage of the collective farming and do not preserve its inefficiency. Inefficiency is present much more in middle size conventional farms, which lack proper machinery and modern, broad and deep scientific knowledge. As we wrote the typical middle-size farmer works alone, he is older than fifty years old, has experiences from the socialist type cooperatives, and almost no possibilities to get retraining, thus he has an out-of-date and partial knowledge.

Large farms were modernized and became efficient, it has two accompanying phenomena: they employ the younger generation, but their employment capacity decreased in the last one and half decade. Our results do not support the findings of the EU Report on the effects of direct payments: there are almost no young farmers in the case-study area, farm inheritance is questionable in several cases and quite uncertain in the case of the medium size farms. Also competiveness increased mainly in the large farms.

Land is maybe the most limited resource of the post-accession period. Large farms secured for themselves land-use thorough long-term land rental contracts, several times with the state, they successfully re-build their markets, became integrator of smaller farms, but are also successful in project, thus large farms are the winners of the post-accession period. As we argued above, exactly these features make them vulnerable and exposed to policy changes. The uncertain and quick changes of agricultural policies make their future plans uncertain.

Innovative medium size farms are also on the bright side; but the back-ground is different: they can benefit from the special scientific and managerial knowledge of the farmers and from answering new market demands.

The unbalanced availability of EU subsidies, policies which do not resonate to the needs of medium size farms, the rapid and unpredictable changes of rural and agricultural policies are real barriers for the medium size farms to produce high quality agricultural products, ensure rural livelihood, increase rural employment, and contribute to agri-environmental aims.
REFERENCES


